

FLIGHT PLAN: Managing the Risks in Aviation Security



**Report of the
Advisory Panel**

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CATSA Act Review Examen de la
Loi sur l'ACSTA

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TO THE HONOURABLE
MINISTER OF TRANSPORT

Dear Minister:

We, the Members of the Panel, have the honour to submit to you, pursuant to Section 33 of the *Canadian Air Transport Security Authority Act*, the report of the *Canadian Air Transport Security Authority Act Review Advisory Panel*.

Respectfully submitted,

Reg Whitaker
Chair

Jacques Bourgault

Chern Heed

Canada

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Chapter One

REVIEWING CANADIAN AVIATION SECURITY

1.1 INTRODUCTION

The security of Canadians has always been a leading national concern. Since the events of September 11, 2001, and the emergence of a terrorist threat that has struck in the past and could strike again into the very heart of North America, the safety and security of Canadians has become an urgent priority for their government. Among the most highly visible targets for terrorist attack are aircraft carrying large numbers of people. Americans vowed after 9/11 that never again would they allow commercial airliners to be used by terrorists as weapons to kill thousands of people. Canadians remember the terrorist bombing of Air India Flight 182 in 1985 that took hundreds of lives of innocent people, most of them Canadian citizens. And Canadians too have vowed: “never again.”

The prevention of air terrorism is by no means a simple matter. It is highly complex. It involves different levels of government jurisdiction – federal, provincial and municipal – as well as foreign countries, international organizations and business in an increasingly global economy. It involves not only security, but also the commercial concerns of airline companies, the airports and the sectors of the economy that depend on air transport. It involves the travel plans of Canadians, who live in an increasingly mobile society. It involves the rights and liberties of Canadian citizens, and how much citizens may be prepared to give up in exchange for the promise of greater security. It involves difficult public policy questions.

And it involves assessing threats that are always changing, always adapting to the security measures devised to prevent those threats from being realized. It is a tall order.

In attempting to fill that order, much has been accomplished over the past few years of which Canadians can be proud. This is due, in no small part, to the commitment and collaboration demonstrated by the key aviation security partners: Transport Canada, CATSA, the airport authorities, the air carriers, the RCMP and local police forces.

Much remains to be done. This report points to the unfinished agenda.

1.1.1 Canadian national security policy and the civil aviation sector

According to Canada's National Security Policy, "there can be no greater role, no more important obligation for a government, than the protection and safety of its citizens."¹

In a world of increasing 'connectedness,' threats to the safety and security of Canadians are often borderless, more so than in the past. Protection from these threats requires a "more integrated approach to national security – integrated inside the Government of Canada and with key partners."² National security is also closely linked to international security, which points to the need for countries to work closely together for a unified approach. The National Security Policy identifies three core national security interests that Canada should advance: protecting Canada and the safety and security of Canadians at home and abroad; ensuring that Canada is not a base for threats to our allies; and contributing to international security.

Aviation security – security of aircraft, airports and all elements of the aviation sector – is a key component of Canadian national security. The use of hijacked aircraft as weapons of mass destruction in the tragic events of September 11, 2001, has framed our understanding of the contemporary terrorist threat. The Madrid train bombing of 2004 further highlighted the vulnerability of the transportation sector, as did the suicide bomb attacks on London's urban transit system in 2005 and, more recently, in August 2006, the alleged plot in the U.K. to blow up at

¹ *Securing an Open Society: Canada's National Security Policy* (April 2004).

² *Ibid.*

least 10 U.S.-bound aircraft. But terrorist threats to aviation were apparent well before September 11, 2001.

1.1.2 Canadian aviation security prior to 1985

In the late 1960s and 1970s, hijacking of commercial aircraft emerged as the terrorist tactic of choice. In the early 1970s, in response to growing threats to civil aviation, member states of the International Civil Aviation Organization (ICAO) adopted Annex 17 to the Convention on International Civil Aviation.³ Annex 17 requires each member country to designate an appropriate authority to develop national objectives, policies and programs for the prevention of unlawful acts that threaten the safety of civil aviation. Since that time, Annex 17 has been updated several times in response to emerging threats and events.

The Government of Canada designated Transport Canada as its aviation authority and developed an airport policing and security program based on the ICAO-recommended security specifications and practices for international airports. In 1972, the *Criminal Code of Canada* was amended to include, as indictable offences, aircraft hijacking, endangering the safety of aircraft in flight and the taking on board of offensive weapons and explosive substances. Aviation security provisions were added to the *Aeronautics Act* in 1973 and regulations were developed requiring operators of Canadian aircraft to search persons, their belongings and cargo as a condition of carriage. Operators of foreign aircraft were made subject to the same requirements in 1976. The *Aeronautics Act* and its regulations underwent major revisions in 1985, and again after September 11, 2001, and continue to be updated to accommodate the changing requirements in aviation security.

Prior to 1985, air carriers were responsible for the security of their aircraft, while Transport Canada was responsible for the establishment of overall security standards for airports and airlines and, in its capacity as owner and operator of major airports, for providing aviation security equipment and facilities at airports. Particular attention was paid to carry-on items – that is, items brought on board aircraft. Transport Canada, through its aviation security regime, provided and maintained the hand-held metal detectors, walk-through metal detectors and X-ray devices used in screening.

³ For a fuller discussion of ICAO Annex 17, see Chapter 2.

1.1.3 The Air India Flight 182 tragedy and its impact

On June 23, 1985, the terrible human cost of air terrorism was brought home to Canadians. Air India Flight 182, en route from Toronto to Delhi, was destroyed off the west coast of Ireland by a bomb that claimed the lives of 329 innocent people, most of them Canadian citizens. On the same day, two baggage handlers were killed in Tokyo's Narita Airport by a second bomb in transit from Vancouver and destined for another Air India flight. To this day, the Air India bombing retains the dubious record for the largest number of casualties incurred in any aircraft bombing, exceeding the 270 people killed, on board and on the ground, when a bomb destroyed Pan Am Flight 103 over Lockerbie, Scotland in 1988.

These events transformed Canada's civil aviation program and generated new approaches to protecting passengers, airports and aircraft. As an immediate response to the Air India Flight 182 disaster, significant improvements were made to Canada's aviation security regime, including more rigorous measures to screen passengers and their carry-on baggage, and the physical inspection or X-ray of all checked baggage on international flights. In addition, 26 explosive detection units, which were in the final stages of testing and development at the time of the Air India and Narita Airport bombings, were quickly acquired and deployed, along with additional carry-on luggage X-ray units and hand-held and walk-through metal detectors.

The Air India and Narita Airport events led to a thorough review of Canadian aviation security, and additional measures were introduced, including:

- Passenger/baggage reconciliation⁴ on international flights – a measure later extended to include domestic flights;
- More stringent security controls on passengers, carry-on baggage, checked baggage, cargo and mail;
- The purchase of additional X-ray detection equipment and explosive vapour detectors for inspection of carry-on and checked baggage;
- Strengthening of the pre-board screening training program and the introduction of a certification program for airport screening personnel;

⁴ Air carriers must reconcile baggage and passenger information to ensure that no bag is placed on the aircraft if the passenger does not board.

- Enhanced training for airport security personnel and air crew;
- Enhanced procedures for handling bomb threats and improved search procedures;
- Comprehensive background checks for airport workers;
- Tightened access-control measures at airports;
- The consolidation of the security functions in Transport Canada by the creation of a dedicated Security and Emergency Preparedness Directorate; and
- The overhaul of the regulatory framework, including the creation of new regulations.

1.1.4 The challenge of September 11, 2001

However welcome these remedial security measures were at the time, and however appropriate to the specific challenge posed by the Air India Flight 182 disaster, the events of September 11, 2001, made it clear that much more had to be done to respond to a new and even deadlier generation of terrorists and terrorist threats.

Aircraft are a preferred target of terrorists because they offer a particularly large number of potential victims contained in a small area. The attacks of 9/11 demonstrate that a large aircraft loaded with fuel can be converted into a lethal weapon of mass destruction in the hands of hijackers who succeed in seizing the controls. Yet the high threat level associated with air travel is paradoxical: according to comparative safety data, for example, aircraft have one of the lowest accident rates of any mode of transportation. However, when accidents do occur, their high visibility draws public attention and concern that are disproportionate to the actual safety record. Terrorists target aviation because they perceive a very high propaganda return from a successful attack. Following the events of September 11, 2001, commercial air traffic volumes fell sharply in North America, only returning to their former levels in 2004. The shock value of the four hijacked aircraft caused severe losses and created havoc in the airline industry, effects that were attributable to a somewhat exaggerated perception in the short run of the risks associated with air travel.

Nevertheless, strong public concern over air safety and air security brings benefits. Public expectations for safety and security are high and exacting. Governments are required to give priority to implementing security

measures in this sector. Passengers are willing to undergo a certain amount of inconvenience in return for assurances of security.

This is the context for the measures taken by the Government of Canada after September 11, 2001. We now turn to a survey of these measures.

1.2 THE CANADIAN AIR TRANSPORT SECURITY AUTHORITY AND AVIATION SECURITY

In the immediate aftermath of 9/11, the Canadian aviation security system underwent its most significant change. Literally overnight, it became an urgent priority for the Canadian government to enhance the country's counter-terrorism capabilities and preparedness, including putting a renewed focus on aviation security. The federal Budget of December 2001 contained a \$2.2-billion package of new funding for civil aviation security improvements. The Budget also announced the creation of the Canadian Air Transport Security Authority (CATSA). On March 27, 2002, the *Canadian Air Transport Security Authority Act* received Royal Assent, giving rise to the establishment of CATSA as a new Crown corporation on April 1, 2002.

CATSA became responsible for several core aviation security functions, including those associated with the screening of passengers and their onboard and checked baggage. Transport Canada concentrated its focus on the policy and regulatory aspects of aviation security. Close cooperation between the Department and CATSA was a primary necessity while the new Authority was being established.

In addition to CATSA, Budget 2001 funded several other aviation security initiatives. These included additional Transport Canada security inspectors for each region of Canada; aircraft security modifications, such as reinforced cockpit doors; and the purchase of additional explosive detection systems for screening baggage at airports. The Budget also provided for increased police presence and security at airports, as well as an expanded program of armed police officers on aircraft. Another

initiative instituted random secondary searches of passengers prior to boarding flights to the United States.

Budget 2001 also created the Air Travellers Security Charge (ATSC), to be paid by air travellers at a level sufficient to fund the enhanced air travel security system. The ATSC revenues flow to the government's Consolidated Revenue Fund and not directly to CATSA, which receives its funding through yearly appropriations.⁵

Further indication of the government's intent in strengthening civil aviation security was contained in the *Public Safety Act, 2002*, passed in May 2004. This Act was designed to enhance Canada's capacity to prevent terrorist attacks and included provisions for a more secure environment for air travel. Substantive amendments were made to civil aviation security through the *Public Safety Act* and provisions of the existing *Aeronautics Act*. Among other things, authority was provided to the Minister of Transport that allowed for detailed security regulations. The Minister was also granted authority to make confidential security measures; to grant, suspend and cancel security clearances; to require air carriers and operators of aviation reservation systems to provide passenger information to the Minister; and to delegate authority to give emergency directions to address immediate threats to security.

Under the *CATSA Act of 2002*, CATSA was assigned responsibility for effective, efficient and consistent screening of persons accessing aircraft or restricted areas through screening points, the screening of the property in their possession or control, and the screening of the belongings or baggage they give to the air carrier for transport. The Act also requires that the Authority carry out its mandate "in the public interest, having due regard to the interest of the travelling public."⁶ Its jurisdiction extends to 89 airports across Canada as designated by Transport Canada (see Appendix D). The legislation permits CATSA to enter into agreements with airport operators for the purposes of contributing to the costs of policing; all eight active Class 1 airports (the largest in Canada), as well as nine smaller airports, are included under this program. CATSA also may enter into financial agreements with the Royal Canadian Mounted Police (RCMP) for the Canadian Air Carrier Protective Program (CACPP) that deploys armed police officers (or air marshals) on selected flights.

⁵ See Chapter 8 for further discussion of the ATSC in relation to this review.

⁶ *Canadian Air Transport Security Authority Act*, section 6.

The legislation allows the Minister of Transport to assign other air transport security functions to CATSA. In November 2002, the Minister of Transport assigned to CATSA responsibility for random screening of non-passengers accessing restricted areas at airports. A non-passenger is anyone whose workplace is an airport, who visits an airport to provide a service or deliver goods, or who passes through an airport and requires access to its restricted areas. (The screening is similar to what is experienced by passengers.)

A second function assigned by the Minister to CATSA is the development and implementation of the Restricted Area Identification Card (RAIC) program. All non-passengers requiring access to restricted areas of an airport must carry a Restricted Area Pass (RAP). The RAIC is designed to augment the security of the RAP by employing biometric identifiers linked to a centralized database, as well as providing tracking of cardholders.

CATSA's responsibilities may thus be broken down into six main elements:

1. Pre-board screening (PBS) of passengers and their carry-on baggage;
2. Hold bag (checked baggage) screening (HBS);
3. Random non-passenger screening (NPS) at major airports;
4. Airport policing contributions program;
5. Canadian Air Carrier Protective Program (CACPP); and
6. Restricted Area Identification Card (RAIC) for major airports.

In a relatively short period, CATSA has achieved a great deal when measured against the security situation prior to its inception. Security screening contracts have been concluded with service providers employing over 4,000 screening officers at all 89 designated airports and screening over 37 million passengers per year. CATSA has established *Standard Operating Procedures* and operational plans for all 89 airports. It has developed and implemented national training programs for screening officers and has adopted a common uniform across the country. The screening program for 100 per cent of checked baggage was implemented one year ahead of schedule. Advanced explosives detection equipment has been deployed in all 89 airports. Over 700,000 non-passengers are screened yearly, and the biometric RAIC pass is in the process of implementation. A Security Communications Centre has been created at CATSA headquarters to capture and analyze security incidents in real time on a national basis.

1.3 THE ADVISORY PANEL'S MANDATE AND THE REVIEW PROCESS

Built into the *CATSA Act* (section 33) was an obligation for the Minister of Transport to review the provisions and operation of the legislation and to report to Parliament on the results during the fifth year after the Act was enacted. Accordingly, on November 23, 2005, the Minister of Transport announced the appointment of a three-member Advisory Panel to conduct independent study and analysis, to undertake consultations and to prepare a report with recommendations and observations. This report contains the results of the review, along with our recommendations. Our recommendations are also listed for convenience in Appendix A.

The Advisory Panel has been tasked to:

- Examine the provisions and operation of the *CATSA Act* to ensure that the legislation provides a sound and adequate statutory basis for CATSA's aviation security mandate;
- Provide advice on future aviation security requirements and other developments that may impact on CATSA's future operations;
- Examine whether Canada has learned all it can in the area of aviation security stemming from the Air India Flight 182 bombing; and
- Report to the Minister on other important issues that come to its attention.⁷

The element of the Panel's mandate related to Air India stems from one of the recommendations contained in *Lessons to be Learned*, the 2005 report by the Honourable Bob Rae on outstanding questions regarding the bombing of Air India Flight 182 in 1985. The Minister of Transport tasked the Panel with determining whether further changes in practice or legislation are required to address the specific aviation security breaches associated with Air India Flight 182, particularly those relating to the screening of passengers and their baggage. The Commission of Inquiry into the Investigation of the Bombing of Air India Flight 182, with the Honourable John C. Major, Q.C., as Commissioner, was established on

⁷ The Minister's Terms of Reference for the Panel are provided in Appendix B.

May 1, 2006, and is conducting hearings at the time of writing. The Advisory Panel will be addressing this portion of its mandate in a separate report that will be made available to the Commissioner in the course of his inquiry.

In the course of the Panel's work, we consulted with a broad range of stakeholders across Canada, including CATSA and Transport Canada officials, and many others representing air carriers, airport operators, security service providers, industry and consumer associations, air travellers, labour organizations, law enforcement agencies, academic experts, freight forwarders, provincial and territorial governments, and other federal government departments and agencies. A series of public consultation sessions was held in five cities across Canada (Toronto, Vancouver, Calgary, Montreal, and Halifax) between April and June 2006. Individuals and groups were invited to present their views to us in these locations. A list of the organizations we met with can be found in Appendix C.

A *Consultation Guidance Document* was produced to provide background information and assistance to stakeholders. It contained a list of questions to help elicit responses on key issues that the Panel felt needed to be explored. A *CATSA Act Review* website was also established to help communicate with industry and the public on our consultation process and to provide information on how to make a submission.

More than 40 written submissions were received from a variety of stakeholders representing industry associations, air carriers, airports (both large and small), labour representatives, groups representing persons with disabilities, provinces and territories. The submissions may be found on the website, at <http://www.tc.gc.ca/tcss/CATSA>.

In addition, Panel members toured some two dozen airports, from the largest in Toronto to small and remote ones in every province and territory of Canada. To gain an international perspective, we visited Washington, D.C., London, Brussels and Tel Aviv, where we toured airports and consulted with airport operators, aviation security experts and government officials.

To aid in our understanding of some of the more technical issues, experts were asked to prepare research papers on subjects dealing with the aviation regulatory framework, aviation security, governance and government organizational models, and performance measurement.

We are greatly appreciative of the excellent cooperation extended by CATSA and Transport Canada during our review. Requests for information were always met in a most professional and courteous manner. We were provided with numerous informative briefings that served to deepen our knowledge of the subject. We were able to discuss the issues freely and frankly with both CATSA and Transport Canada. All this helped pave the way for our consultations with the countless other stakeholders we encountered who operate within our airports and the airline industry. The dedication of stakeholders to this subject, and the importance they placed on it, were evident in the submissions we received and the participation at our meetings.

We would also like to express our appreciation to the *CATSA Act* Review Secretariat for their commitment and dedication. Their assistance was invaluable to us in the completion of our task.

Our conclusions and recommendations reflect our discussions with all the players and stakeholders we met. But as an independent, arm's-length advisory panel, we always sought to keep the public interest in mind, rather than the interests of any particular organization or group. We are pleased to report that the key aviation security partners (Transport Canada, CATSA, airports, airlines, RCMP and local police forces) are responding to the challenge of protecting Canadians with diligence and dedication.

It was evident from our consultations that cooperation between CATSA and airports, airlines and other air transportation stakeholders is a crucial element in maintaining and enhancing aviation security. The Minister may rest assured that CATSA is on track with its mission, in concert with Transport Canada and with the other players and stakeholders. Our recommendations should help to further empower and equip CATSA and its partners to cope with the challenges of the future. We thank all those who contributed to our work.

Chapter Two

PROTECTING CANADIAN AIR TRAVELLERS

The Canadian public expects commercial air travel to be safe and secure. It is evident from the recovery of passenger volumes, following the dramatic decline after the attacks of September 11, 2001, that the Canadian travelling public is showing confidence in the security measures that have so far been implemented. Canadians are also aware of the ever-changing threats posed to civil aviation by terrorists and terrorist networks operating on a global scale, and of the need for resilience and resourcefulness in anticipating and countering these evolving threats.

The travelling public is not exclusively concerned with security, but wishes to see security as part of an efficient and comfortable air travel system. The Panel heard concerns about long lines, bottlenecks and backlogged queues at the security screening checkpoints in Canadian airports, and we heard the concerns of passengers with disabilities and special needs. We also heard the concerns of the air carriers, the airport authorities and other stakeholders about the economic viability of the civil aviation sector and its ability to serve the public while retaining the highest standards of security. With an appropriate level of awareness on the part of both the public and the authorities, and the right mix of policies in operation, we believe that it is possible to serve both the requirements of security and the requirements of a viable and efficient civil aviation industry.

There is a considerable security agenda to fulfill in the uncertain world that faces us in the early 21st century. It is being addressed in the context of national security policies, as well as our international commitments.

2.1 CANADA'S AVIATION SECURITY AGENDA

The National Security Policy of 2004 proposed an agenda to protect Canadian air travellers in the new post-9/11 environment. Many of the steps set out in the Policy have already been acted upon. In the same year, the *Public Safety Act, 2002*, received Royal Assent. This statute, among other things, clarified and strengthened authorities for the RCMP, the Canadian Security and Intelligence Service (CSIS) and Transport Canada to request passenger information to assess threats to transportation security.

The National Security Policy also promised the development of strategies to enhance the security of air cargo. Budget 2006 followed through on this with the allocation of \$26 million over two years for the design and pilot testing of an air cargo security initiative, including the “development of measures to ensure cargo security throughout the supply chain, as well as the evaluation of screening technologies.”¹

Another step forward promised in the National Security Policy was a commitment to “work with the United States and with our G8 partners to develop further security measures, including co-operation on threat and vulnerability assessment methodology.”² Specifically cited was the assessment of “risks and effective countermeasures for potential attacks from shoulder-fired missiles” (MANPADS), a new threat that continues to draw the close attention of Canada and its allies. Clearly, these and other challenges remain outstanding.

¹ Budget 2006, May 2, 2006.

² Securing an Open Society: Canada's National Security Policy (April 2004).

2.2 THE INTERNATIONAL DIMENSION: ICAO

Canada is a contracting state to the Convention on International Civil Aviation that codifies the principles of international air navigation and supports the planning and development of international air transportation. Canada is a member state of the International Civil Aviation Organization (ICAO), with its headquarters in Montreal. The ICAO Council adopts standards and recommended practices concerning air navigation, prevention of unlawful interference and facilitation of border-crossing procedures for international civil aviation. In addition to national audits, ICAO also conducts periodic security audits of member states.

Annex 17 to the Convention on International Civil Aviation, entitled *Security: Safeguarding International Civil Aviation Against Acts of Unlawful Interference*³ lays out the minimum security standard expected of all contracting states. Under the Annex, each contracting state is required to establish a civil aviation security organization and to develop and implement regulations, practices and procedures to respond rapidly to security threats and to safeguard persons and civil aviation against acts of “unlawful interference taking into account the safety, regularity and efficiency of flights.”⁴

Annex 17 requires each member state to establish and implement a written civil aviation security program, and to ensure that airports and air carriers have written security programs that meet the requirements of the national program. Canada maintains that Transport Canada’s legislation, regulations and security orders offer the equivalent of a national aviation security program.

ICAO also produces the *Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference* (DOC 8973). This document provides detailed procedures and guidance on aspects of aviation security and is intended to assist states in the implementation of their respective national civil aviation security programs required by the specification in the Annexes to the Convention on International Civil Aviation. ICAO DOC 8973 is a guidance manual, not a standard or practice.

³ Convention on International Civil Aviation (“Chicago Convention”), Annex 17, *Security: Safeguarding International Civil Aviation Against Acts of Unlawful Interference*, Eighth Edition (April 2006).

⁴ Annex 17 – Eighth Edition (April 2006) 2.1.2.

Annex 17 encourages international cooperation and the exchange of information and intelligence on threats. Standard 3.1.3 specifies that “Each Contracting State shall keep under constant review the level of threat to civil aviation within its territory, and establish and implement policies and procedures to adjust relevant elements of its national civil aviation security programme accordingly, based upon a security risk assessment carried out by the relevant national authorities.”⁵ This is especially important, as it indicates two basic principles for national aviation security policy.

Firstly, any effective program must be intelligence-led, based upon up-to-date threat assessments and resilient enough to adapt to new threats as they emerge. Secondly, risk analysis and assessment are the basis for effective use of security resources. Annex 17 specifies a number of minimum security requirements that all states must meet, but in some cases, additional security measures need be triggered only when a national security risk assessment deems it necessary. A security risk analysis based on the best available intelligence can and should be used to indicate the most effective deployment of resources and security measures.

Under the Annex, contracting states are required to establish a national aviation security committee to coordinate the security activities of entities involved in the national civil aviation security program.⁶ Airports must also designate an authority for coordinating security procedures and establish a security committee at each airport to assist the authority. States should ensure that security requirements are integrated into the design and construction of new facilities and alterations to existing facilities.⁷ Airports must also have emergency plans to coordinate the response of all relevant agencies to an emergency, designate an emergency operations centre and a mobile command post, and periodically test these procedures by emergency exercises.⁸

Standards for pre-board screening of passengers and their carry-on luggage and the screening of hold baggage are specified.⁹ Of particular interest to Canada are those which deal with passenger-baggage reconciliation, an issue on which Canada took the initiative following

⁵ *Ibid.*, 3.1.3.

⁶ *Ibid.*, 3.1.5.

⁷ *Ibid.*, 3.2.

⁸ Annex 14 – Aerodromes, Chapter 9.

⁹ Annex 17 – Eighth Edition (April 2006) 4.4; 4.5.

the Air India Flight 182 disaster in 1985 to prevent the threat of bombs in unaccompanied hold baggage.¹⁰

ICAO requirements for quality control of screening personnel include security clearance procedures, performance standards, certification and periodic recertification of screening personnel, periodic “audits, tests, surveys and inspections” to verify compliance with the national security program, and the authority to require remedial actions where appropriate.¹¹

Annex 17 also stipulates that security controls be applied to cargo and mail prior to their being loaded onto an aircraft engaged in passenger commercial air transport operations.¹² As passenger aircraft are the primary means of cargo transportation in this country, the Panel considers the development of a security regime for cargo and mail air transport in Canada to be an urgent priority.

ICAO requires identification systems for authorized personnel to access restricted areas of airports, as well as checkpoints for verifying their identity when entering restricted areas.¹³ Random screening of persons and vehicles accessing restricted areas is also stipulated, the proportion to be based upon a risk assessment carried out by the appropriate national authority.¹⁴

Extracts from other annexes to the Convention relate to security of aircraft, including secured cockpit doors to prevent unauthorized entry by force;¹⁵ security of travel documents to gain entry to aircraft, including machine-readable digitized biometric indicators (face recognition, iris scan and/or fingerprint) embedded in documents;¹⁶ and airport perimeter security.¹⁷

In-flight security measures, including the handling of disruptive passengers and provision of armed in-flight security officers (air marshals), are discussed in Standard 4.7 of the Annex, while Standard 5

¹⁰ *Ibid.*, 4.5.3; 4.5.5.

¹¹ *Ibid.*, 3.4.

¹² *Ibid.*, 4.6.1.

¹³ *Ibid.*, 4.2.

¹⁴ *Ibid.*, 4.3.1.

¹⁵ Annex 6 – Operation of Aircraft, Part 1; Annex 8 – Airworthiness of Aircraft.

¹⁶ Annex 9 – Facilitation.

¹⁷ Annex 14 – Aerodromes, 9.10 & 9.11.

relates to management of response to acts of unlawful interference, such as dealing with a hijacked aircraft landing on national territory.

In summary, the five chapters of Annex 17, together with 12 relevant extracts from other ICAO annexes, instructions and procedures, form a comprehensive document available to states for implementation of the prescribed security measures.¹⁸ Transport Canada's regulatory framework for air transport and aerodromes and its confidential security measures are designed to comply with ICAO's security standards as set out in Annex 17. Canada meets the standards set by ICAO and, in some cases, exceeds them.

2.3 THE NORTH AMERICAN DIMENSION

For Canada, the North American context for aviation has special significance. The United States is by far Canada's largest air transportation market, with an estimated 19.8 million passengers travelling between the two countries in 2005 (31 per cent of the total Canadian air passenger traffic).¹⁹ In November 2005, the U.S. and Canada negotiated an Open Skies agreement, which liberalizes the previous 1995 Air Transport Agreement and creates a more open framework for air services between and beyond the two countries. The Open Skies agreement will enable U.S. and Canadian air carriers to pick up passenger and/or all-cargo traffic in each other's territory and carry it to a third country as part of a service to or from their home territory; operate stand-alone all-cargo services between each other's territory and third countries; and offer the lowest prices for services between each other's territory and a third country. The agreement will not, however, permit a U.S. carrier to carry domestic traffic between Canadian cities or vice-versa.

¹⁸ For example: Canadian Aviation Security Regulations (SOR/2000-111); Designated Provisions Regulations (SOR/2000-112); Airport Restricted Area Access Clearance Security Measures; Transportation Security Clearance (TSC) Program; Aerodrome Security Measures; Security Screening Order; other Orders and Interim Orders as provided, inter alia, in the *Public Safety Act*, 2002 (S.C. 2004, c. 15); Transportation Appeal Tribunal of Canada Certificate Regulations (SOR/2004-130); CATSA Aerodrome Designation Regulations (SOR/2002-180).

¹⁹ Transport Canada, *Transportation in Canada 2005: Annual Report*.

There are many close and special arrangements between Canada and the United States in aviation security matters, and it is a high priority of Canadian national security policy to ensure that the Canadian aviation sector is not viewed as a security threat to our neighbour. ICAO Annex 17 requires member states, whenever practicable, to accommodate requests from other states for additional security measures for specific flights.²⁰ After the events of September 11, 2001, the American government required special arrangements for foreign flights to Ronald Reagan Washington National Airport, including mandatory provision of air marshals, additional advance passenger information and extra security requirements for the preparation and take-off of aircraft. Canada has made adjustments to its aviation security regime to accommodate these requirements. Canada has also accommodated national airlines with special security requirements, including Air India and Israel's El Al.

Shortly after 9/11, on December 12, 2001, Canada and the United States signed the *Smart Border Declaration* and its *30-point Action Plan* to enhance the security of our shared border while facilitating the legitimate flow of people and goods. The *Declaration* includes elements relevant to aviation security, such as the development of common standards for biometric identifiers on travel documents (the NEXUS Air program uses biometric recognition technology to identify pre-approved, low-risk Canadian and U.S. travellers for facilitated entry to both countries).²¹ Also included are mutual recognition of each other's national aviation security standards and the coordination of measures essential to protecting the citizens of both countries. The *Declaration* shares and analyzes transborder and international passenger information and implements and extends the Pre-clearance Agreement signed in January 2001.

Cooperation has also been extended to Mexico, the third partner in the *North American Free Trade Agreement*. The *Security and Prosperity Partnership of North America*, between Canada, the United States and Mexico, includes a Security Agenda with two broad aims, each with relevance to aviation security: to secure North America from external threats and to prevent and respond to threats within North America.²²

²⁰ Annex 17 – Eighth Edition (April 2006) 2.4.1.

²¹ The Canada-U.S. Smart Border Declaration: 30-point Action Plan for Creating a Secure and Smart Border, December 2001.

²² Security and Prosperity Partnership of North America, *Security Agenda*, March 2005.

Since June 2005, the United States, Canada and Mexico have completed training on principles to protect aircraft from terrorism threats, on marksmanship skills and on emergency procedures. On March 31, 2006, in Cancun, Mexico, a *Leaders' Joint Statement on 'North American Smart, Secure Borders'* declared:

Our vision is to have a border strategy that results in the fast, efficient and secure movement of low-risk trade and travelers to and within North America, while protecting us from threats including terrorism. In implementing this strategy, we will encourage innovative risk-based approaches to improving security and facilitating trade and travel. These include close coordination on infrastructure investments and vulnerability assessments, screening and processing of travelers, baggage and cargo, a single integrated North American trusted traveler program, and swift law enforcement responses to threats posed by criminals or terrorists.²³

Several Canadian government departments and agencies, including Transport Canada, are working with U.S. and Mexican officials to achieve these goals.

2.4 ANATOMY OF CANADA'S AVIATION SECURITY SYSTEM

Transport Canada is the designated national civil aviation security authority (under ICAO Annex 17), and represents Canada in the development of ICAO standards. The Department has the lead role for developing aviation security policy (including the policy by which airports are designated and made subject to CATSA screening); develops the *Canadian Aviation Security Regulations* for Governor-in-Council approval; adopts security measures, orders, emergency directions and interim orders regarding aviation security; monitors the aviation industry to ensure compliance with the regulations; manages the airport restricted area security clearance program; and works with intelligence agencies²⁴ to provide intelligence information to CATSA, airport operators and air carriers. In the early 1990s, Transport Canada began to transfer operational responsibilities for airports to local airport authorities. Transport Canada is no longer the owner/operator of airports, but the

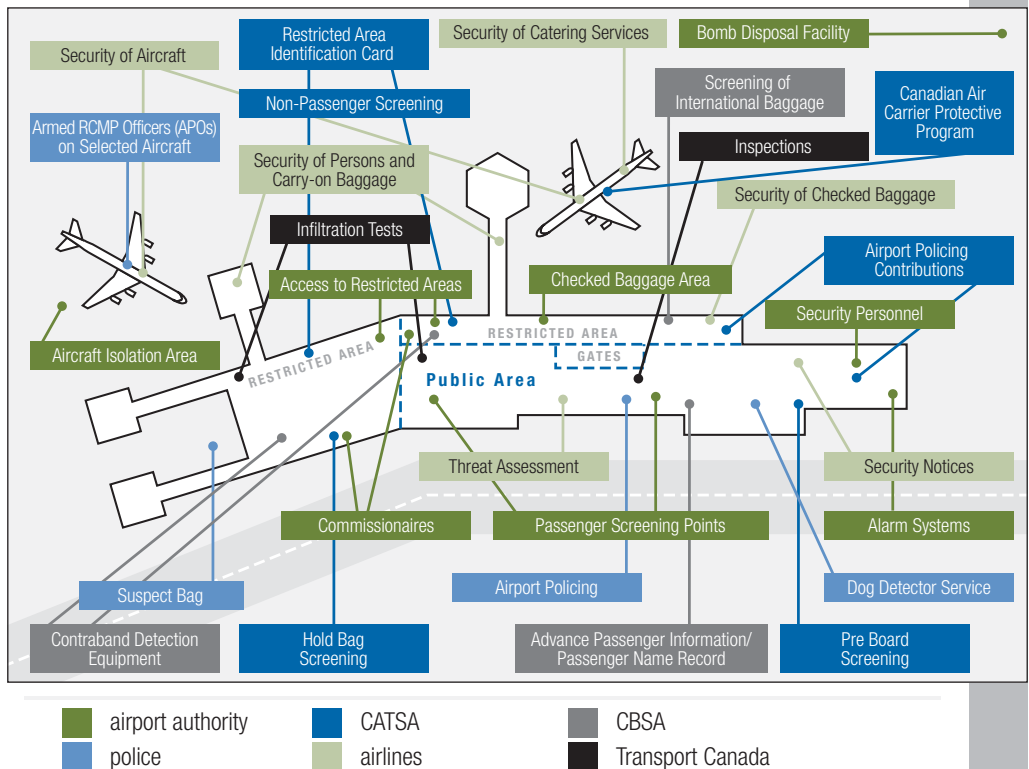
²³ Ibid.

²⁴ CSIS, the RCMP, and members of the Integrated Threat Assessment Centre (ITAC).

landlord, policy-maker, regulator and compliance monitor. The airport authorities are now partners in security, as well as in the other operational aspects of Canadian airports.

Responsibility for civil aviation security in Canada does not rest solely with Transport Canada, but is shared among several federal government departments and agencies, air carriers and airport operators. It is an integrated system involving various governmental and private sector organizations. A great number of government entities, as well as many tenants, from retail to general aviation and ground-handling service providers, have a role in airport security. For example, at Canada's busiest airport, Lester B. Pearson International Airport in Toronto, there are more than 45,000 employees with Restricted Area Passes. The task of developing and maintaining a security awareness culture with so many players is massive, but nevertheless essential for good airport security. The complexity is more evident when examining the different organizations involved in security at the airport level (see illustration 2.1).²⁵

2.1 The airport security environment



²⁵ CATSA's Story: Submission to the Advisory Panel on the CATSA Act Review, CATSA: Our Vision for Aviation Security (SL-811/e-06), page 6.

As one of the major players, CATSA is responsible for screening persons who access aircraft or restricted areas through screening points, the property in their possession or control and the baggage that they give to the air carrier for transport. CATSA manages funding agreements with the RCMP for the Canadian Air Carrier Protective Program and with airport authorities for enhanced airport policing. It also manages the acquisition, installation and maintenance of equipment required for security screening and is responsible for implementation of the Restricted Area Identification Card (RAIC) program.

Air carriers are responsible for ensuring the security of their aircraft, as well as the security of cargo, mail, catering and provisions carried on board. They must train their security personnel; institute procedures for the handling of threats to an aircraft or a flight; ensure the security of passengers, carry-on bags and checked baggage; and perform baggage reconciliation to ensure that bags are not loaded without the passenger being on the flight.²⁶

Airport operators hold important responsibilities for making airports secure and aviation security policies effective. They coordinate response to security threats, establish and maintain restricted areas of the airport and their pass systems and are responsible for physical security, including perimeter security. Airports provide facilities for pre-board screening (PBS) and hold bag screening (HBS) operations, and arrange for armed police response to these checkpoints. They ensure a police response capability for the various Canadian inspection services, and a presence in U.S. pre-clearance areas, as well as any other police services required. Airports are also responsible for developing, maintaining and exercising airport emergency plans and procedures.

The Royal Canadian Mounted Police (RCMP) is responsible for the Canadian Air Carrier Protective Program, which places specially trained police officers on board selected Canadian commercial aircraft. The RCMP provides policing at airports where it is the police of local jurisdiction. It is responsible for the investigation and prosecution of national security criminal offences, including terrorist acts, and it provides information about police record checks to Transport Canada for persons applying for an airport Restricted Area Pass.

²⁶ Certain unaccompanied bags may be allowed on flights if they are identified as such and subjected to additional screening (Annex 17, 4.5.3).

Local police forces provide armed response to alarms from the security screening points, armed police officers to stand by for departures for Ronald Reagan Washington National Airport and armed police presence at all U.S. pre-clearance locations at Canadian airports. They are responsible for investigating bomb threats on the airport premises, provide police response to Canadian Border Services Agency (CBSA) inspection points and carry out non-aviation-related activities at airports.

The Canadian Security Intelligence Service (CSIS) provides threat assessments to the Government of Canada, including Transport Canada, based on current intelligence and information drawn from a wide variety of sources. It is up to the recipient department to determine how it should respond to the assessment. Security assessments are provided to Transport Canada for persons applying for an airport restricted area pass. CSIS also maintains a presence at some airports for non-aviation security matters.

The Integrated Threat Assessment Centre (ITAC) is a functional component of CSIS. It is a community resource, staffed by representatives of a number of government departments and agencies, whose primary objective is to produce comprehensive threat assessments, focussed on terrorism, for timely distribution within the intelligence community. ITAC distributes its assessments to its core partners, including Transport Canada, and relies on them for further distribution to their key stakeholder.²⁷

The Canadian Forces, under the Department of National Defence (DND), are responsible for surveillance and control of Canadian territory and airspace, search and rescue, civil defence and protection of infrastructure. The Canadian Forces assist with emergency preparedness, are equipped to deal with terrorist threats in Canada, and support the civil authorities of other federal departments and agencies with respect to counter-terrorism.

Another player in Canada's aviation security regime is the Canadian Border Services Agency (CBSA), which is responsible for providing integrated border services that support national security and public safety priorities. CBSA is an important presence at all Canada's international airports, managing clearance for immigration and customs/excise programs for passengers arriving in Canada. It also uses advance passenger

²⁷ ITAC partners include: CSIS, RCMP, National Defence, the Communications Security Establishment (CSE), CBSA, Foreign Affairs and International Trade, Public Safety and Emergency Preparedness Canada (PSEPC), the Privy Council Office, Transport Canada, the Financial Transaction and Reports Analysis Centre of Canada (FINTRAC), Correctional Service Canada, the Ontario Provincial Police and the Sûreté du Québec.

information to identify high-risk travellers before they reach Canada, and detains and removes from the country those people who may pose a threat. The CBSA is developing pre-approval programs, such as CANPASS and FAST, and NEXUS jointly with U.S.A. Customs and Border Protection,²⁸ to facilitate the approval for entry of low-risk travellers who have agreed to undergo a background check. CANPASS Air kiosks are now in use at several airports across Canada.

Airport tenants, such as caterers, cargo handlers, retailers and fixed base operators, must ensure their facilities have a controlled security barrier to the airport restricted area. They are also responsible for ensuring that any persons entering the restricted area have the necessary authority and that any goods leaving their premises are safe to enter the restricted area.

In our many public consultations and bilateral meetings, there was near-unanimous opinion that the current division of responsibilities for aviation security should remain largely the same. However, we learned that the precise lines of responsibility among the different players in the process are not always clearly drawn and may need some adjustments. The present system, after all, is only a few years old, and has been under considerable pressure. In the circumstances, adjustments are inevitable and desirable.

Australia, in revamping its aviation security system from the previously dispersed responsibilities, shifted primary responsibility for airport security and counter-terrorism first response at the major airports to the Australian Federal Police. We did not see the need to have the RCMP take a similar role at Canadian airports at this time, but this could be considered in the years ahead, depending upon the evolution of the future threat environment.

As indicated above, Transport Canada has been designated as Canada's national civil aviation security authority. This resembles the situation in the United Kingdom, where the Department for Transport is the designated national authority, but differs from arrangements in the United States, where the Transportation Security Administration is part of the Department of Homeland Security, separate and distinct from the U.S. Department of Transportation.

One option this Panel considered was whether responsibility for aviation transportation security in Canada should be more appropriately assigned

²⁸ <http://www.cbsa-asfc.gc.ca/travel/programs-e.html>

to the Department of Public Safety and Emergency Preparedness, which was created after the events of September 11, 2001. The Senate Standing Committee on National Security and Defence has made such a recommendation.²⁹ However, we heard very little support and few compelling arguments for this idea from stakeholders or interested parties with whom we consulted publicly or privately, or in the submissions we received. The consensus appears to be that Transport Canada, with its wider mandate for the transportation sector as a whole, is the most appropriate authority for aviation security, permitting a better level of integration of security with more general transportation policy. Since one of the major themes of this report is the need to integrate security more seamlessly into the aviation sector as a whole, we see an advantage in Transport Canada retaining responsibility for aviation security, along with the other related aspects of aviation.

Recommendation 2.1

We recommend that responsibility for aviation security remain with the Minister of Transport.

2.5 RISKS AND LAYERS: ENVISIONING AVIATION SECURITY

Two phrases are most often employed to describe the Canadian aviation security system: that it is risk-based and that it is layered. These concepts cast light upon the nature of our security system; they offer standards to emulate but they can also serve to mislead if not properly understood.

²⁹ Standing Senate Committee on National Security and Defence, *Canadian Security and Military Preparedness*, Fifth Report (February 2002), Recommendation #13; *Canadian Security Guide Book*, Third Report (December 2004), pages 165-166. See also 'The holes that remain in our airline security,' *The Globe & Mail*, August 12, 2006.

2.5.1 Risk-based security

Risk is a function of the likelihood and feasibility of the threat, plus the vulnerability of and the impact on the target. Resources, financial and human, are not unlimited and should be allocated according to assessed risk. In some cases, administrative and political measures may lack sufficient legitimacy to be accepted.³⁰ Security measures taken should be proportionate to the risk.

As indicated earlier, ICAO prescribes a risk-based approach for member states in applying international security measures to their domestic situation. Domestic application of the measures “to the extent practicable” should be “based upon a security risk assessment carried out by the relevant national authority.”³¹ The Auditor General is equally insistent that a risk-based approach is required, and has indicated her disappointment that Transport Canada “has not fully implemented formal risk management.”³² In presentations to the Panel, CATSA referred to its concept of security screening as risk-based. It is widely understood that absolute security is an illusory goal; priorities must be established, and these should be based on assessments of the relative level of risk.

In our consultations, many stakeholders spoke favourably of risk assessment as the most appropriate method of applying security measures, often in the context of recommending a more risk-based approach for the screening operations managed by CATSA. For instance, many of our interveners advocated an approach to screening that would focus on higher-risk passengers, rather than on the objects carried by all passengers. It was argued that the vast majority of travellers do not present a security threat and, with appropriate personal information and background vetting, could be processed through a more streamlined screening process, such as a Registered Traveller Program.

³⁰ It is not unusual to find that while government has the legal capacity to take strong security measures, it may in practice be constrained by cultural and ethical considerations, or may lack the political resources to take action. For instance, sophisticated new screening equipment that produces a ‘nude’ image of passengers undoubtedly offers the promise of better security. But concerns over the invasion of privacy and expectations of public resistance have dampened official interest in purchasing such equipment.

³¹ Annex 17, Eighth Edition (April 2006) 2.2.2.

³² April 2005 Report of the Auditor General of Canada, National Security in Canada—The 2001 Anti-Terrorism Initiative — Air Transportation Security, Marine Security, and Emergency Preparedness.

To the extent that quantitative risk assessments³³ are feasible, they must be based on data that inspire confidence. But we have to ask: to what extent is such confidence justified? Risk assessments must come with very high standards of accuracy when the margin for error is so small.

Transport Canada and CATSA both speak of moving toward adoption of a Security Management Systems (SeMS) approach,³⁴ analogous to the Safety Management System (SMS) being put in place for aviation, marine and rail safety.³⁵ SMS is based on a less prescriptive, more results-based regulatory framework for safety purposes; proponents of SeMS similarly point towards a more results-based regulatory framework for security. SeMS is certainly a valid management objective, and we will examine it further in this report.

It must be noted, however, that the degree of certainty and confidence about what is required to maintain safety is greater than that regarding threats to aviation security. Paraphrasing the often-quoted words of former U.S. Defence Secretary Donald Rumsfeld, threats to safety are “known unknowns,” but threats to security are “unknown unknowns.” Threats to safety are malignant, the result of such measurable matters as design flaws, environmental stress, human error, etc. Threats to security are malevolent, by human design, and are calculated to evade detection and prevention.

In responding to malevolent threats, those responsible for maintaining security are often vulnerable to human error. Underestimating the threat before it actually materializes is a common reaction. The magnitude of the mistakes by both organizations and individuals that led to the fatal Air India Flight 182 bombing was revealed only in hindsight.

Once a malevolent threat has materialized, human error comes into play in different ways. There is a natural tendency in security planning to focus on past, and thus known, threats – to be reactive rather than proactive.

³³ We note with approval that Transport Canada has conducted at least one exercise in which aviation threats were assessed according to risk, measured quantitatively and ranked. We also note that this has yet to occasion further exercises along these lines.

³⁴ CATSA defines SeMS as “a systematic approach to setting annual security targets, clarifying security roles and responsibilities in an organization, assessing and managing risks, developing contingency plans, conducting audits, and measuring and evaluating performance on an ongoing basis.” (2005 Annual Report)

³⁵ Transport Canada refers to SMS as “a systematic, explicit and comprehensive process for managing safety risks,” providing for “goal-setting, planning and measuring performance.” (Transport Canada, *Safety Management Systems* (TP 13739))

Although the actions taken after the Air India bombing, the events of 9/11 and the recent alleged plot at Heathrow were appropriate responses to specific threats, we must expect that terrorists will be looking for new methods of attack calculated to evade the existing security controls. In short, the next terrorist threat will quite likely be the ‘unknown unknown.’ This puts pressure on the intelligence capacity for threat assessment.

We are also aware of criticism of the risk-based approach to security policy as providing a cover or excuse for inaction. Members of the Senate Standing Committee on National Security and Defence have expressed doubt that a risk-based approach is an adequate solution for what the Committee believes to be serious security shortcomings.³⁶ We do not entirely agree with this argument. The Senate Committee does have a valid point if risk assessment is superficially conducted or is used as an ex-post facto rationalization for inaction. However, government resources are not unlimited; security is not the only policy priority that the Canadian public expects; and all threats to security are not of equal magnitude and urgency. It is therefore imperative that careful risk assessments be made and resources deployed accordingly.

The Panel is of the opinion that a risk-based approach, such as the SeMS, is the necessary basis for any effective aviation security system, and we make a recommendation to this effect later on in the report. It is imperative, however, that risk assessments be based on solid data and on the appropriate level of intelligence. We are encouraged by the commitment of the Canadian government to a risk-based approach, but we would like to see more substantial evidence that this commitment is supported by effective and timely follow-through by CATSA and, in particular, by Transport Canada.

2.5.2 Layered security

The other phrase we heard most frequently describing the Canadian aviation security system is ‘layered.’ This is a relatively simple concept: security around airports and aircraft is multi-layered, so that if one layer is penetrated by a would-be terrorist, other layers will remain as barriers. An

³⁶ The Standing Senate Committee on National Security and Defence, *Fifth Report: The Myth of Security at Canada's Airports* (January 2003); Standing Senate Committee on National Security and Defence, *Canadian Security Guide Book, 2005 Edition: An Update of Security Problems in Search of Solutions* (December 2004).

example of layered security is the hold bag screening (HBS) process, in which bags may pass through five levels of searching, each more intrusive, ending with Level 5, where a passenger is summoned to witness their bag being opened for direct physical inspection. Another way of describing layering is to delineate the various authorities, each with specific security responsibilities, through which passengers and their luggage may proceed: advance intelligence; special security operations; airport operators; air carriers; CATSA; police with airport jurisdiction; and RCMP Aircraft Protective Officers. Another aspect of layering involves security checkpoints or barriers: airline ticket counters; pre-board and hold bag screening lines; non-passenger screening checks; departure gates; reinforced cockpit doors, etc.

Some observed that the layered model simply makes a virtue of necessity. The Canadian system has evolved in a series of reactions to attacks or threats. First there was the era of aircraft hijackings, followed by the bombing of Air India Flight 182, the commandeering of aircraft as weapons on September 11, 2001, and more recently, the August 2006 alleged terrorist plot at Heathrow. Each threat has brought forth a specific set of remedies, which remain as part of a cumulative system. These constitute 'layers' of security, but do not appear to add up to a coherent system by design. Again, the Canadian government has been reactive rather than proactive. There is also a danger of a lack of accountability arising from many layers of security.

Proponents of layering point to Israel as the model. Ben Gurion International Airport outside Tel Aviv features concentric circles of security, beginning with vehicle inspection and sniffer dogs at road-entry checkpoints to the airport; two circles of perimeter security with high-tech surveillance; behavioural profiling of passengers at airport entry and triage into three streams according to risk assessment; armed surveillance of the entire concourse; and so on.

The Israeli model – a kind of gold standard in aviation security – is not perhaps translatable into the very different Canadian environment. Israeli society has lived for many years with a threat environment that is almost unimaginably high by Canadian standards. As a result, Israelis have accepted levels of everyday security controls that would not be acceptable in Canada.

Boston Logan Airport was the starting point for the two flights that struck the Twin Towers on September 11, 2001, and has since adopted

some elements of Israeli-style layered security. Logan has gone to considerable lengths to respond to the grave flaws in its previous security regime revealed on that day. The authorities have developed a layered defence of their facility, instituting informal passenger interviews and even deputizing clam diggers who work in the surrounding shore area as additional eyes and ears of airport security.

Despite the Air India Flight 182 bombing over 20 years ago, and in the absence of a post-9/11 terrorist attack on Canadian aviation, we doubt that the Canadian public would be prepared to expend the resources, or give up the degree of privacy and civil liberties that would be involved in enacting a full Israeli-style layered security regime. An objective risk assessment of the threat to Canadian airports and Canadian flights is unlikely to conclude that an Israeli approach can be justified at this time, especially given the costs involved.³⁷

That being said, there is a lesson for Canada: wherever possible, multiple layers of security are desirable. The concept of layered security certainly presents significant advantages. Layering builds in redundancy, so that if one level fails, others may still come into play, and encourages resiliency and recovery in the face of threats and challenges. As well, layering answers to the ‘unknown unknown’ factor in threats to aviation, to the extent that different layers respond to different potential threats.

From time to time in our public consultations, we heard the suggestion that certain layers of security at Canadian airports were unnecessary, or not justified by risk analysis, and might be dispensed with in favour of concentrating resources on higher-risk threats. There are instances where such suggestions are justified, and later we make specific recommendations for dealing with them. But in the broader picture, we are reluctant to recommend removal of existing layers of security, unless the case is clearly demonstrable. The principle of layering, of building in redundancy, is a good one, and should be retained along with risk-based decision making. Both are required to maintain an acceptable level of security.

³⁷ The new Ben Gurion terminal is only two years old. Israeli authorities were able to insist that security considerations be ‘designed-in’ at every step of the planning and construction. The result is an extremely impressive security architecture. Comparability in Canada would require redesign and reconstruction of all major airports.

2.6 INTELLIGENCE

The Panel heard variable, even conflicting, views from players and stakeholders in the aviation and security fields concerning the timely provision of intelligence and threat assessments to CATSA, airport authorities and air carriers. Some believed there was insufficient intelligence provided to front-line personnel to support fully effective responses to security threats. Others asserted that the intelligence provided was robust and adequate. Still others suggested that while now adequate, greater access to intelligence in the future would be desirable and necessary to meet the multiple challenges of the evolving terrorist threat.

2.6.1 The intelligence function in the Government of Canada

Intelligence is a process traditionally shrouded in secrecy. Thus it is hardly surprising that there is a certain amount of confusion concerning the nature of intelligence, its uses and its place in the governmental structure. We begin with a brief sketch of the contemporary role of intelligence in the Government of Canada.

Although a growing proportion of intelligence in the contemporary ‘information age’ is drawn from open sources, intelligence as a specialized function within government is generally associated with the acquisition of information that is held in secret – that is, protected from outside scrutiny. Thus, intelligence may involve the acquisition of information protected by foreign states, or by non-state actors such as terrorist groups, through means usually described as ‘espionage’ – that is, penetrating secretive states or organizations either through human or technical means. Security intelligence is intelligence on threats to national security, defined in the *CSIS Act* as:³⁸

- (a) espionage or sabotage that is against Canada or is detrimental to the interests of Canada or activities directed toward or in support of such espionage or sabotage,
- (b) foreign-influenced activities within or relating to Canada that are detrimental to the interests of Canada and are clandestine or deceptive or involve a threat to any person,

³⁸ *Canadian Security Intelligence Service Act*, R.S., 1985, C-23, s. 2.

- (c) activities within or relating to Canada directed toward or in support of the threat or use of acts of serious violence against persons or property for the purpose of achieving a political, religious or ideological objective within Canada or a foreign state, and
- (d) activities directed toward undermining by covert unlawful acts, or directed toward or intended ultimately to lead to the destruction or overthrow by violence of, the constitutionally established system of government in Canada,

but does not include lawful advocacy, protest or dissent, unless carried on in conjunction with any of the activities referred to in paragraphs (a) to (d).

Intelligence as used by governments is best understood in terms of an intelligence cycle: the process by which information is acquired, converted into intelligence, and made available to policy makers and decision-making authorities. This comprises five distinct, though interrelated, steps: direction from the government; planning; collection; analysis; and dissemination. Depending on how they relate to this cycle, government departments and agencies may be seen mainly as producers or consumers of intelligence. Although the distinction is not hard and fast – producers are also consumers of other agencies’ and governments’ intelligence, and consumers may occasionally feed relevant information back to producers – it is important. When we examine the role of security intelligence in the aviation sector, the distinction between producers and consumers is key, especially when it is a matter of establishing the appropriate lines for the communication and dissemination of intelligence and defining the ‘need to know.’

In the post-9/11 environment, the Government of Canada has laid stress on the integration of intelligence operations and the wider sharing of timely intelligence. Integration is both horizontal and vertical, among producers and consumers.

Horizontal integration is exemplified in the Integrated Threat Assessment Centre (ITAC), mentioned earlier in this chapter. ITAC is based at CSIS but draws on a range of sources and serves the wider intelligence community with its security threat assessments, especially regarding terrorism. Transport Canada’s Security and Emergency Preparedness Directorate is represented on ITAC and disseminates ITAC assessments

to other players and stakeholders in the transportation community, including CATSA, as it considers appropriate.

Vertical integration is shown in the institutionalized channels through which intelligence is received by the many consumers of intelligence within government – for example, the channels through which CATSA receives security threat assessments via Transport Canada, which in turn are based on ITAC and CSIS reports.

It is characteristic of this integrated vertical chain that intelligence is filtered. Information regarding sources stays with the originating agency that is best situated to verify the reliability and protect the identity of the source. Information regarding methods of operation is usually filtered out. Individual officials are not given access to classified information for which they lack appropriate security clearance. There is a potential problem here: a decision not to disclose intelligence to a recipient is, in effect, also a decision defining the recipient's intelligence needs. The latter, however, is unable to assess the degree to which needs are or are not being fulfilled. ITAC is attempting to address this problem by making classified intelligence available in a usable form to public officials who may lack appropriate security clearance but need actionable intelligence to fulfill their obligations.

Intelligence shared between national or international agencies often comes with caveats, indicating that it should not be shared further, or only shared under carefully specified conditions. Honouring these caveats is essential for ensuring the continuing flow of intelligence. For instance, if a Canadian agency receives intelligence from a foreign source with caveats and restrictions on its further distribution, failure to comply could lead to the Canadian agency losing future access to valuable foreign intelligence.

Nevertheless, the new threat environment does require that front-line actors be provided with strategic, real-time, actionable intelligence capable of warning against and pre-empting attacks. There must be greater interactivity and information-sharing among the Transport Canada partners and stakeholders, certainly an intensification of existing sharing arrangements. This may imply a significant change to the current approaches to intelligence-sharing in Transport Canada. As some have put it, there is an urgency to move from the old 'need-to-know' principle to a new 'need-to-share' principle. The need for more information must be balanced with the requirements for protecting secret intelligence and honouring attached caveats.

2.6.2 CATSA's need for intelligence

CATSA has made clear a degree of dissatisfaction with its access to intelligence that it considers essential to its operations. We carefully considered CATSA's case. In discussions with the Panel, CATSA emphasized that intelligence is a necessary tool and a specific type of information that it requires to help it gain a more precise picture of what is on its radar screen. CATSA noted that intelligence facilitates time-sensitive, strategic and mission-critical decision-making, and increases its ability to respond effectively to terrorist threats and security concerns. By fully integrating intelligence into its risk management approach to security, CATSA maintained, it is better able to assess vulnerabilities and prioritize resource allocation with the overall result of enhancing effectiveness.

CATSA emphasized to the Panel that it is an intelligence consumer, not a covert intelligence gatherer. It depends on its security partners to provide it with the timely, accurate and service-oriented intelligence data it needs to manage day-to-day operations and plan long-term strategic policy. CATSA stated that it needs access to intelligence so that it can help its front-line screening officers to do a better and safer job.

CATSA is aware that there are often institutional limitations to sharing information and intelligence. However, it noted that it is a firm believer in the value of making intelligence accessible, stating that while there are risks to sharing intelligence, they are outweighed by the benefits.

The formal line of communication of intelligence to CATSA comes via Transport Canada's Security and Emergency Preparedness (SEP) Directorate. Recently, under a reciprocal exchange arrangement, a CATSA employee worked in the intelligence area at Transport Canada for six months, and vice-versa. We support these initiatives, and encourage further exchanges as a means of improving communication on intelligence issues.

CATSA identified three types of intelligence that it requires: actionable, issue-specific or tactical, and strategic.

Actionable intelligence is threat information that requires immediate response. This might involve intelligence concerning a threat against a specific national airline or flight. Such a threat against Air India by Sikh extremists was known in 1985, for example, yet failed to trigger the kind of security measures at the passenger and baggage screening points that

could have prevented the lethal attacks that did occur. Clearly, it is in the interests of the travelling public and national security for actionable intelligence to be provided to those who can act upon it. In the case of actionable intelligence concerning the possible threat of an improvised explosive device planted in hold baggage on a specific flight, CATSA should know and would be in a position to take precautionary action. However, in the case of threats associated with particular individuals or organizations, it is not clear how intelligence could be ‘actionable’ for CATSA screening officers.

At present, front-line CATSA personnel do not check passenger identity documents, and screening officers have no means of identifying dangerous passengers, as opposed to dangerous objects they may carry on their persons or in their luggage. The Panel heard recommendations from some airline operators that CATSA should undertake this task.

The next type of intelligence CATSA identified is what it calls ‘issue-specific’ or tactical. This might involve intelligence on new types of improvised explosive devices or new methods of concealing weapons. Here, CATSA’s case for full access to the best available intelligence is very strong. CATSA requires such intelligence, in the most up-to-date form, to do its job of passenger and baggage screening. We found little evidence, however, that CATSA was not in receipt of just this kind of intelligence, and in as timely a form as required. Occasional issues have arisen from CATSA’s desire to access intelligence on threats to other transportation systems. However, on tactical intelligence on specific aviation threats, we believe that CATSA now receives what it requires to do its job. When the alleged terrorist plot to simultaneously bomb a series of aircraft was identified by U.K. authorities in August 2006, Canadian intelligence officials were quickly briefed, and CATSA was notified so that it could effect immediate new provisions to ban liquids and gels from carry-on luggage.

The Panel noticed a certain disconnect between the general complaints we received concerning the lack of intelligence provided and the actual evidence of aviation security intelligence disseminated to front-line personnel. We were impressed with the comment made to us by a senior Transportation Security Administration official in Washington, whose job requires constant liaison with U.S. intelligence agencies. He reported receiving similar complaints of insufficient intelligence from screening officers and airports; however, when he examined the procedures being put in place in response to intelligence or information, it was clear the message was getting through, even though it may not have been flagged as

‘secret intelligence.’ We believe that the situation with regard to actionable and tactical intelligence making its way to the front lines may be similar in Canada.

Strategic intelligence is described by CATSA as the type of intelligence needed to enhance its understanding of all aspects of the terrorist threat, including motivating factors, ideological underpinnings, main objectives, financing, modus operandi and operational support base.

Strategic threat assessments regarding terrorism are, in the first instance, the job of CSIS, the RCMP and other intelligence producers, especially ITAC, which draws on all sources to analytically integrate intelligence on terrorism. To a limited extent, CATSA is a producer of tactical intelligence, but recognizes that it is mainly an intelligence consumer. CATSA has expressed a desire to be at the ITAC table along with Transport Canada and the other players. Given CATSA’s role as primarily a consumer rather than a producer of intelligence, we see no clear advantage to ITAC, or to the strategic intelligence community, that would accrue from CATSA’s participation at this time.

We note as well CATSA’s participation in international conferences on terrorism and aviation security, and the consultations the agency has held with experts on terrorism and counter-terrorism. While the desire to gain deeper knowledge of these matters is admirable, it must be borne in mind that Transport Canada is the designated Canadian national aviation security authority under ICAO, and that for purposes of disseminating strategic intelligence on terrorism, Transport Canada remains the appropriate channel from ITAC as the integrated analyst to CATSA as consumer.

Transport Canada is the key link in the aviation security intelligence chain. It is incumbent on the department to pass on to CATSA every type of intelligence that may be relevant to CATSA’s ability to perform its mandated tasks effectively. Transport Canada is also the appropriate recipient of any tactical intelligence collected by CATSA in the everyday performance of its duties. While we believe that CATSA does receive the intelligence it requires, we note its dissatisfaction in this regard, and urge closer cooperation between Transport Canada and CATSA in the sharing of intelligence relevant to CATSA’s mandate.

Recommendation 2.2

Transport Canada should ensure that CATSA continues to receive all the information and intelligence it requires at the national and local levels to perform its functions, including timely access to the best intelligence and actionable information from all sources on explosives, weapons and concealment techniques.

2.6.3 Widening the links

The sharing of intelligence beyond CATSA also needs to be addressed. In many cases, actionable intelligence on threats impinges directly on the responsibilities of airport authorities and air carriers. For instance, threats to specific aircraft or flights require immediate response from carriers. Threats to airport perimeters or facilities require immediate response from airports. Moreover, there is much to be said for keeping these players more broadly in the loop regarding changes to the threat environment, as opposed to leaving them in a reactive position at the last moment when a threat becomes imminent. In the course of our consultations, the Panel heard complaints from several airports that they had not been informed of critical incidents directly affecting their operations.

The availability of intelligence and threat warnings to all the front-line players is a key factor in promoting effective emergency response. We would stress the importance of integrating the roles of all the players in as seamless and cooperative a manner as possible.

2.7 COORDINATING SECURITY

The large number of players with a role in aviation security, as well as the particular and sometimes dramatic circumstances in which they operate, dictate a need for an effective structure and process that can lead

to the integration of security activities. In discussions with the airport authorities and the various police forces, it became evident that there is a lack of clarity, consistency and coordination of aviation security activities. The 2005 *Lessons to be Learned* report, by the Honourable Bob Rae, identifies similar issues from 1985 with respect to the bombing of Air India Flight 182. It is in the interests of all players that airports be secure.

2.7.1 Security Watch Program

There is an important need within the multi-layered approach to engage the entire airport community in an overall security culture in which all employees work together as the eyes and ears of aviation security. Even members of the community outside the airport should be encouraged to participate. An effective system would incorporate an integrated operational plan; timely and appropriate communication; operational cooperation; and accountability that would extend to all layers in the process. The Panel is of the opinion that airports of all sizes (and indeed all organizations involved in aviation security) should implement rigorous security awareness programs for all personnel working at the airport (essentially, airport-wide “Neighbourhood Watch” programs). These should be active programs, guided by airport security committees, which would allow the regular exchange of relevant intelligence information with front-line staff. The assessment of threats in such an environment would be proactive and methodical. The Panel was impressed by the *iWatch* Airport Security Action Program at Halifax International Airport, and notes that airports in several other Canadian cities, including Toronto, Calgary and Vancouver, have instituted similar airport watch programs. Security is indeed everyone’s business.

Recommendation 2.3

Airports of all sizes should implement rigorous security awareness programs (a type of airport security watch program) for all personnel working at the airport.

2.7.2 Airport Security Advisory Group

ICAO's Annex 17 requires contracting states to "establish a national aviation security committee or similar arrangements for the purpose of coordinating security activities...."³⁹ Transport Canada, as the national aviation security authority, serves the similar purpose of coordinating the national aviation security activities of the various entities involved. The Advisory Group on Aviation Security (AGAS), established by Transport Canada in 2005, plays an important consultative role at the national level. AGAS brings together government and aviation industry participants to exchange views on issues related to aviation security policy, strategy, regulatory and program priorities.⁴⁰

As outlined earlier, at the airport level, the responsibility for aviation security is divided among several organizations. The primary organizations are the airport operator, Transport Canada, air carriers, CATSA and the police of local jurisdiction. At the eight active designated Class 1 airports that have heightened security requirements, there is also a greater presence of RCMP officers dealing with non-aviation security matters. In addition, CSIS has offices on site at some international airports.

Under the *Canadian Aviation Security Regulations*, airports are required to have a security committee; however, existing committees vary in size, level of representation and effectiveness. The Panel concluded that a consistent approach is needed to ensure the systematic sharing of information and to provide a solid foundation for establishing common goals and procedures for the prevention of and response to aviation security incidents.

Our objective is to ensure that all those concerned with security in its widest sense have a good understanding of how they fit into the airport security regime and their role as part of the team. The importance of communication and information-sharing cannot be overstated.

³⁹ Annex 17 – Eighth Edition (April 2006) 3.1.5.

⁴⁰ The AGAS mandate is to "provide stakeholders information on current and emerging aviation security policy, regulatory and program priorities and initiatives," and to "receive high-level strategic advice from stakeholders related to aviation security policy, regulatory and program priorities." Chaired by the Director General of Transport Canada SEP, AGAS includes senior representatives from Transport Canada, representatives from the Canadian aviation industry, CATSA, aviation labour groups and federal government departments and agencies.

The Panel is therefore recommending that an **Airport Security Advisory Group** be established at each designated airport. This advisory committee would be chaired by the airport security manager or equivalent and would have representation from Transport Canada, CATSA, the local police force, CBSA, the air carriers, major ground handlers and airport tenants as a minimum. At Class 2 and Class Other airports, the group could consist of fewer members. The advisory group would be responsible for coordinating and consulting on the development and implementation of the airport's security plan, which will be discussed in detail in Chapter 4.

The Airport Security Advisory Group would also coordinate regular security operations and would plan and coordinate the airport security watch program. It would be expected to meet quarterly as a minimum, but more frequently if the situation demanded.

Recommendation 2.4

We recommend that each designated airport establish an Airport Security Advisory Group, to coordinate and consult on the development and implementation of the airport's security plan, to resolve general security issues, to promote security awareness and to encourage a collaborative approach to security issues.

2.7.3 Airport Security Committee

The Australian and U.K. governments, on the advice of the Right Honourable Sir John Wheeler,⁴¹ directed the establishment of a dedicated joint airport intelligence group at each major airport (equivalent to the Canadian Class 1 airports). The Airport Security Advisory Group recommended above would not have the ability to share secret and sensitive information because of its size and composition. In the Canadian context, it is therefore proposed that a high-level **Airport Security Committee** be established at each Class 1 airport (and some Class 2 airports, based on a risk assessment). The committee would comprise representatives of the key security and policing organizations and intelligence users in each airport (including Transport Canada, CATSA,

⁴¹ Rt. Hon. Sir John Wheeler DL, *An Independent Review of Airport Security and Policing for the Government of Australia*, September 2005.

local police, CBSA and, where present, the RCMP and CSIS). The airport's Chief Executive Officer or most senior security or operations official would chair the committee and each member would be security-cleared to allow for the sharing of classified information.

The Airport Security Committee would, among other things, facilitate better sharing of security/policing issues and intelligence information among the key airport security players, assessment of security threats and risks, and dissemination of appropriate information to front-line personnel. The Committee would also lead emergency response to security incidents at the airport. Smaller and more focused than the Airport Security Advisory Group, the Airport Security Committee would be responsible for gathering, interpreting, managing and disseminating to front-line personnel any important intelligence information relating to policing activities and security at each airport. This committee would be expected to have regular briefings and meetings.

A key role of the Airport Security Committee would be to coordinate the development and implementation of a Multi-Agency Threat and Risk Assessment (MATRA) for the airport, based on the U.K. approach. The MATRA system is designed to produce an accurate assessment of the threats to individual airports from crime and terrorism; to identify any gaps and overlap in existing security regimes; and to develop plans for the management of risks. The aim is to arrive at a security plan which is jointly owned and which can be routinely revisited to take into account future developments.⁴² The airport and CATSA would develop their security plans based on such MATRAs.

It should be mentioned here that there is also general concern about criminal activity at the major Canadian airports which, in the Panel's view, requires vigilance from a threat and risk perspective. In Canada, the Senate Committee on National Security and Defence has drawn attention, for a number of years, to the problem of inadequate criminal checks on airport employees and the possible infiltration of organized crime into airports.⁴³ In Australia, Wheeler noted: "Terrorism and crime are distinct, but potentially overlap. At its most basic, a culture of lax security or petty criminality can provide opportunities for terrorists to exploit weaknesses

⁴² Ibid., page 124

⁴³ Senate Standing Committee on National Security and Defence, *Canadian Security Guide Book 2005 Edition*, 145-7.

in airport security.”⁴⁴ The Airport Security Committee would provide a forum where a coordinated effort could help address this issue.

Recommendation 2.5

We recommend that an Airport Security Committee be created at each Class 1 airport to facilitate the sharing of intelligence information and to coordinate the development of airport-specific threat and risk assessments.

2.8 GAPS AND VULNERABILITIES IN THE AVIATION SECURITY SYSTEM

Among the most important matters to come to our attention during this review were indications of gaps and vulnerabilities that exist in our aviation security system. While many of the risks associated with civil aviation have been reduced to generally acceptable levels, security gaps still remain, making certain points in the overall system more vulnerable to attack.

2.8.1 Air cargo

Air cargo operations represent a major security gap, perhaps the single most significant gap that has been brought to our attention. Air cargo is largely unscreened at present, and this represents a serious vulnerability in the system. Any actual screening of cargo by X-ray or other detection equipment takes place at the discretion of the air carriers. This sector currently represents 6.2 per cent of our trade with the U.S. and 21 per cent of trade with other countries. The amount of cargo carried by aircraft is expected to double in the next two decades as a result of increasing trade

⁴⁴ Wheeler, op.cit., page ix

with Asia. It is costly to ship cargo by air, and speed is of the essence. The challenge is to screen time-sensitive cargo in such a way as to avoid delays. At present, airlines rely on 'known' or 'trusted' shippers. Cargo from known shippers is accepted for transport, while cargo from unknown shippers is subject to a minimum 24-hour hold. CATSA has no mandate to screen cargo, and has issued instructions to its screeners that its employees and screening equipment should not be used for this purpose.⁴⁵ In any event, the design, size and capacity of CATSA's existing equipment would preclude it from screening much cargo.

Air cargo, including mail, is transported in one of two ways. All-cargo or cargo-freight aircraft are dedicated to transporting cargo alone, carrying only the flight crew and no passengers. The large courier companies, for instance, have fleets of aircraft dedicated to transporting their own cargo. Cargo may also be carried on passenger flights. In Canada, this latter method of cargo transport is much more common: about 70 per cent of total air cargo traffic in Canada is carried on passenger flights.⁴⁶

The threat posed by unscreened air cargo varies with the type of transport. All-cargo flights pose a lesser risk, since the small number of crew on board and the difficulty of accessing the crew from the cargo hold make them a relatively unattractive target for terrorists. However, as large aircraft carrying considerable reserves of fuel, they could be commandeered and turned into suicide weapons, or used for the dispersal of chemical/biological weapons against heavily populated targets. This threat, however, is less significant in Canada than the threat posed by cargo carried on passenger flights.

Other countries have been moving quickly to fill this gap. The Panel was impressed with the air cargo screening program already in place in the U.K., with its process for certification and verification of the security practices of known shippers, including periodic inspections of their facilities.

The Transportation Security Administration in the United States has recently published a Final Rule on Air Cargo Security Requirements.⁴⁷

⁴⁵ We heard that in some smaller airports, CATSA has permitted its idle equipment to be used for screening some cargo at the request of the carriers. However reasonable, this is not according to policy, and does not take place at the larger airports.

⁴⁶ Economic Analysis Unit, Transport Canada.

⁴⁷ Federal Register (May 26, 2006). Part II, Department of Homeland Security: Transportation Security Administration, 49 CFR Parts 1520, 2540, 1542, et al., Air Cargo Security Requirements: Final Rule.

This rule will require the screening of all cargo that will be carried on board a passenger aircraft operated by a domestic or foreign air carrier. It also establishes a system to screen, inspect, or otherwise ensure the security of freight that is transported in all-cargo aircraft as soon as practicable. The Administration estimates that its rule will cost about \$2 billion (U.S.) to implement over 10 years. Of this amount, 75 per cent will be spent on screening cargo carried on passenger flights, even though this represents a much smaller proportion of total cargo in the U.S. than is the case in Canada.⁴⁸ This is a clear indication of how seriously the U.S. takes the threat of cargo on passenger flights.

In Canada, the CBSA implemented an Advance Commercial Information program in December 2005, requiring all air carriers and freight forwarders, where applicable, to electronically transmit air cargo data to the CBSA before loading cargo at a foreign port. This requirement allows the CBSA to identify threats to Canada's health, safety and security prior to the arrival of cargo and conveyances in Canada.⁴⁹ We urge the government to expedite a similar program for air cargo that is departing from Canada.

In Budget 2006, the Government of Canada followed up on the National Security Policy promise of 2004 and indicated a commitment to take action on the air cargo question:

“Opportunities also exist to reduce security risks to aviation while promoting trade, domestically and internationally. For this purpose, Budget 2006 allocates \$26 million over two years for the design and pilot testing of an air cargo security initiative. This work will include the development of measures to ensure cargo security throughout the supply chain, as well as the evaluation of screening technologies.”⁵⁰

Transport Canada has developed an Air Cargo Security Strategy and is consulting with stakeholders and initiating pilot programs to test various approaches. It is also working with the CBSA and others on supply chain security. We support the Government's initiative to develop effective measures to deal with this gap. However, in light of the gravity of the problem, the Panel is very concerned about the length of time it may take

⁴⁸ A recent article in the *Globe and Mail* (August 15, 2006) noted that about 25 per cent of all U.S. air cargo is transported by U.S. passenger aircraft.

⁴⁹ <http://www.cbsa-asfc.gc.ca/import/advance/menu-e.html>

⁵⁰ Budget 2006, Chapter 3 – Enhancing Cargo Security and Expediting Processing at the Border.

to implement effective solutions. Canada needs to do more. We urge Transport Canada to deploy its resources to develop an air cargo security regime as quickly as possible. CATSA would be an appropriate agency to oversee the operational aspects of a new regime. This could include validating shippers' screening practices and carrying out any residual screening of cargo.

We would particularly stress the importance of a program that certifies known shipper status according to specified standards and verifies, on a continuing basis, known shipper compliance with these standards.

Recommendation 2.6

We recommend that Transport Canada accelerate its work to develop a program for the security screening of aviation cargo.

2.8.2 General Aviation/Fixed Base Operations

The General Aviation (GA) sector, largely unregulated from a security point of view, may be a target for terrorists. Fixed Base Operations (FBOs) operate charters and corporate flights at airports. There is a reasonable expectation in many of these cases that crew and passengers are known quantities, and do not require full-scale, multi-level screening. However, there are a number of caveats to be considered. Many smaller air carriers are beginning to offer scheduled service as an alternative to the larger airlines that operate out of the main terminals. The Panel has noted the increasing popularity of such operations. As the number of passengers using an FBO increases, so does the threat.

Many of the aircraft used in GA and FBO operations are quite large and carry substantial fuel supplies. Terrorists could use such aircraft as suicide weapons, or for dispersal of chemical/biological weapons. In this regard, we welcome a 2005 Transport Canada proposal to expand screening requirements to additional commercial air operations.

There are also security issues around the deplaning at designated airports of unscreened passengers from non-designated airports and FBOs, a situation that occurs regularly in northern Canada. Passengers and their checked baggage transiting to scheduled flights should be subject to full screening if this has not been done at the point of origin. In some cases,

unscreened GA/FBO passengers mingle with screened passengers in the sterile area of an airport, or even on the airport tarmac. Physical separation of the two streams is required, but at smaller airports this rule is not always strictly observed. At one small regional airport, we were instructed that an ‘invisible line’ separates the two streams of passengers.

This is an area that requires closer attention and regulation. There are many small GA operations that pose little security risk, and would find stricter government regulation onerous and costly. There are also logistical issues concerning where the screening would actually be performed and by whom. But there are too many risks and too many questions surrounding the larger GA/FBO industry to allow it to carry on as it has in the past. As argued elsewhere in this report, if screening of passengers is extended to GA/FBO, CATSA would be the appropriate operational agency to oversee the work as part of its existing core role. The Authority could impose national standards and a training regime if appropriate, and provide oversight of private operators on a cost-recovery basis.

Recommendation 2.7

We recommend that screening of passengers be extended to Fixed Base Operations where the size of the operation warrants.

2.8.3 Difficult-to-detect substances

Experts have long known that certain substances, such as the liquid explosives believed to be part of the alleged bomb plot uncovered in the U.K. in August 2006, are difficult to detect using existing equipment. The prohibition of liquids, gels, aerosols and lighters from carry-on baggage was a necessary response to the threat. However, it could be argued that the particular threat of liquid-type explosives should have been foreseen and a contingency plan should have been in place to ensure proper coordination of the response.

New technologies are emerging to improve detection ability, but the costs of deploying new equipment are significant. As well, some new screening methods raise civil liberty and privacy concerns that will have to be

balanced against the potential security benefits. We urge the Government of Canada to make every effort to strengthen its research and development program and speed the process of adopting effective and reasonably non-intrusive new detection approaches for these substances, consistent with recommendations made elsewhere in this report.

We recommend that CATSA should be the government agency to take the lead in identifying the technologies and procedures needed to detect substances not readily detected using existing approaches. This would be part of its responsibility for the lifecycle management of its capital equipment, as described later in the report.

In the interim, however, the vulnerability remains. This places a burden of responsibility on CATSA and its screening officers to ensure that every effort is made to screen threats that may not be detected by current equipment. Inevitably, this entails inconvenience to the travelling public, as well as costs to air carriers and airports from longer queues, screening line delays and more security alerts.

2.8.4 Gaps and vulnerabilities at airports

It was brought to the Panel's attention by several stakeholders that air terminals themselves can be vulnerable to terrorist threat under certain conditions. Long line-ups and congestion at airline check-in or security counters create a target-rich environment, with a large number of people confined in a restricted area. Another situation of vulnerability could occur during a security screening breach. Passengers are routinely evacuated from the secure areas of airports when police are called to a security incident, which again creates congestion in the non-secure areas of the terminal and a possible target for terrorists. Solutions to this situation of vulnerability could be as drastic as redesigning a terminal building, or could involve integrating the security process into other layers, thereby reducing the number of passengers congregating in one location. Emergency evacuation procedures should also be reassessed by the appropriate authorities (the Airport Security Committees) to avoid the necessity of a crowd gathering in a small area.

Even at some of the largest airports, weaknesses in perimeter security (an airport responsibility) present security vulnerabilities, as the Senate Committee on National Security and Defence has repeatedly

emphasized.⁵¹ The Panel has concerns about how easy it seems to be for unauthorized persons to move into and within restricted areas of airports, especially the larger ones, where tens of thousands of long-term, temporary and casual workers, including cargo company employees, baggage handlers, plane groomers and catering and retail company employees, hold RAPs. This is a major lacuna in Canada's aviation security. Recent media reports have highlighted various places in a major airport which are unguarded, or where individuals are not challenged and screened, including the airport tarmac, aircraft hangars and catering facilities.⁵² Access points to the restricted areas – through air terminal buildings, from the ramp or apron where aircraft are loaded, through the outer perimeter that encloses the wider airfield, through airfield gates or tenant facilities, on foot or in a vehicle – must be rigorously secured at all times, and we encourage Transport Canada to work closely with airports to address this serious gap. Non-passenger screening is an essential element of securing the airport perimeter. Searching of vehicles, which is not currently one of CATSA's responsibilities, should also be an essential part of this screening function. Recommendations to address these areas appear later in this report.

Effective access control can be enhanced through implementation of the biometric Restricted Area Identification Card (RAIC), described further in Chapter 3, and an effective security awareness culture. The full implementation of the RAIC for all non-passengers is an important step in securing airside operations from penetration by unauthorized persons. Progress on the implementation of RAIC has been slowed by a lack of resources and lack of a regulatory framework. Budget 2006 included new funding to extend RAIC to Fixed Base Operations (FBOs) in 2006-07 and to airport perimeters in 2007-08, once the regulatory requirements are in place. Transport Canada and airport operators need to improve security at the perimeter access points to the restricted areas of Class 1 and 2 airports. In Class Other airports, where employees are generally known to one another, we consider that use of the RAIC for electronic entry to secure areas, together with enhanced security awareness, would provide an appropriate level of security.

⁵¹ Senate Standing Committee on National Security and Defence, Fifth Report: *The Myth of Security at Canada's Airports* (January 2003); Senate Standing Committee on National Security and Defence, *Canadian Security Guide Book, 2005 Edition: An Update of Security Problems in Search of Solutions* (December 2004).

⁵² *Journal de Montréal* reporting of September 10-11, 2006.

Another emerging threat to air security comes from outside the perimeter, and raises questions about how aircraft can be defended from external attack. Man-Portable Air Defence Systems (MANPADS) are lightweight, shoulder-launched weapons with the potential to bring down aircraft. They may be operated by a single individual in the vicinity of airports but beyond their actual perimeters, and have already been deployed, so far unsuccessfully, by terrorists outside Canada. MANPADs are difficult to detect and require more elaborate security measures than existing defences within airport perimeters. There is currently no serious threat from MANPADs in Canada, but they have been used against Israeli aircraft in Africa, and there have been reports of a foiled attack in Switzerland. Since this technique offers terrorists the opportunity to bring down aircraft without penetrating screening, it is likely that there will be future attacks employing MANPAD-like technologies. Research on counter-measures is under way in the U.S. and Europe, and Canada should be an active participant in such research.

It can confidently be predicted that each advance in the aviation industry will focus terrorist efforts on discovering and utilizing possible new security vulnerabilities that might result from new industry practices. It is just as certain that every advance in security will encourage the ingenuity of terrorists in finding ways to evade enhanced methods of detection and prevention. This is why it is imperative that every effort be made to close known gaps, as well as to anticipate future gaps before they open. Transport Canada should complete its projects to address the identified gaps in a timely fashion. We are confident that the proposals we have developed will expedite the department's work in making the necessary regulatory changes. The Panel recognizes that a perfect security system is unattainable without shutting down civil aviation as we know it. However, by assessing risk and taking the necessary steps to protect against unauthorized intrusions, we can achieve a workable and secure aviation security system.

Chapter Three

CATSA'S MANDATE

The *Canadian Air Transport Security Authority (CATSA) Act*¹ and its links to the *Aeronautics Act* provide CATSA's fundamental mandate. Its current mandate consists of both statutory provisions – related to *screening* and to *funding management* – and specific functions assigned separately by the Minister.

The statutory screening mandates are to provide screening of passengers and their on-board and checked baggage, known as pre-board screening (PBS) and hold bag screening (HBS). CATSA's funding mandates are to manage funding for the Canadian Air Carrier Protective Program (CACPP), and certain costs related to police response at airports.

The Minister assigned two further functions to CATSA in November 2002: the responsibility for developing and implementing “an enhanced restricted area pass system” – referred to as the Restricted Area Identification Card (RAIC) – and “a system for the random screening of non-passengers accessing airport restricted areas, along with items carried,” which is referred to as non-passenger screening (NPS), both functions “at the 29 major Canadian airports,” that is, the Class 1 and 2 airports only.²

It is clear from the analysis of both the *CATSA* and *Aeronautics Acts* that, as it is currently established, CATSA is a security screening organization and not a policing organization. CATSA executes screening functions to

¹ S.C. 2002 c. 9.

² Letter from the Minister of Transport to Mr. Brian Flemming, Chair of CATSA, November 8, 2002.

implement national transportation security policies according to security regulations, security measures and orders issued by the Minister.

Taken together, CATSA's current mandate has six elements – three related to screening, two to funding policing programs and one involving the special project for the restricted area card. The Panel's recommendations with respect to each element are discussed below. The manner in which CATSA's screening services are delivered is the subject of Chapter 5.

3.1 SCREENING

CATSA's statutory screening responsibilities to provide screening of passengers and their on-board and checked baggage (PBS and HBS) are set out in the *CATSA Act* as follows:

6 (1) The mandate of the Authority is to take actions ... for the effective and efficient screening of persons who access aircraft or restricted areas through screening points, the property in their possession or control and the belongings or baggage that they give to an air carrier for transport. Restricted areas are those established under the *Aeronautics Act* at an aerodrome designated by the regulations or at any other place that the Minister may designate.

CATSA is an "Agent of Her Majesty in right of Canada" (s. 5.2), and performs a "governmental function" (s. 6.3). Definitions are provided in the Act for key terms:

"Screening" means screening, including a search, performed in the manner and under the circumstances prescribed in aviation security regulations, security measures, emergency directions or interim orders made under the *Aeronautics Act*.

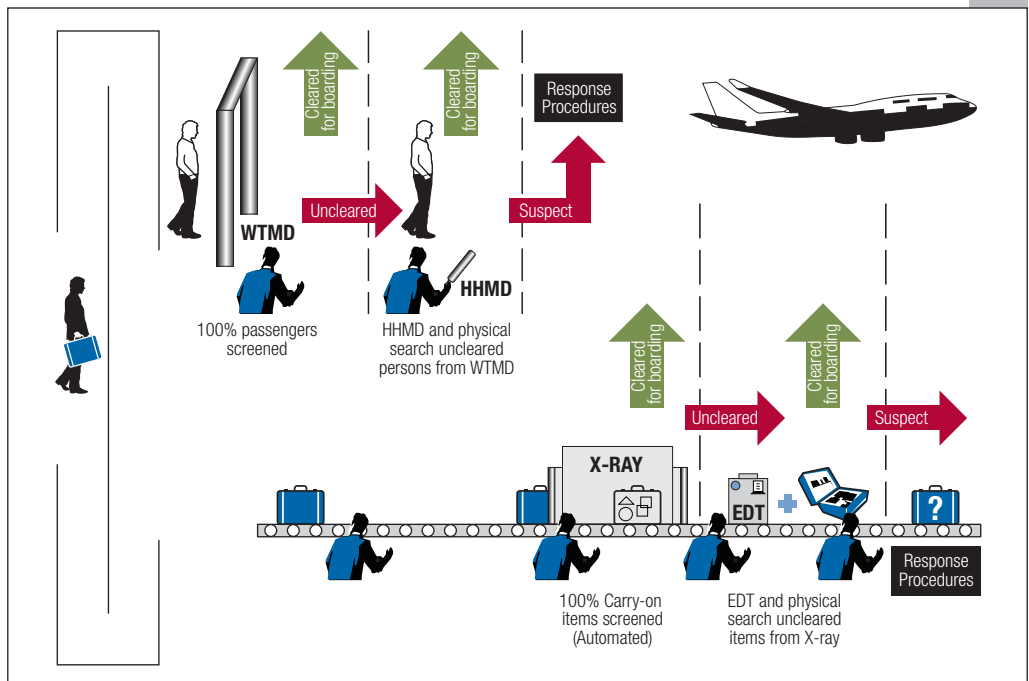
"Screening point" means a point where screening is delivered, either directly or through a screening contractor, by the Authority or by an authorized aerodrome operator acting on behalf of the Authority, in order to meet the requirements of aviation security regulations, security measures, emergency directions or interim orders made under the *Aeronautics Act*.

3.1.1 Pre-board screening (PBS)

The *CATSA Act* provides the mandate for CATSA to screen persons and their carry-on items at screening points, as required under ICAO Annex 17,³ and the manner in which this screening is to be performed is set out in aviation security regulations, security measures, emergency directions or interim orders made under the *Aeronautics Act*.⁴ That is, the *CATSA Act* sets out CATSA's responsibilities in broad terms, and the regulatory framework defines and focuses how these responsibilities shall be carried out. Currently, the regulatory instruments provide CATSA with authority to search only for prohibited items that might cause a threat to aviation security on persons, or inside their carry-on baggage.⁵

At the 89 designated Canadian airports, screening points for PBS are set up as outlined in illustration 3.1

3.1 Multi-stage process for pre-board screening



³ Convention on International Civil Aviation ("Chicago Convention"), Annex 17, Security: Safeguarding International Civil Aviation against Acts of Unlawful Interference, as amended December 2001 (Amendment 10), section 4.4.

⁴ Including any exemptions to this regulatory framework, as described in more detail in Chapter 4.

⁵ Screening officers are searching for weapons, improvised explosive devices, incendiaries and dangerous articles that could be used to commit an act of unlawful interference related to civil aviation.

All departing passengers are required to be screened before they may enter the airport departure lounge. They are first greeted by a screening officer who checks that they have a boarding pass, and they must then place their carry-on items, outer clothing and any objects in their pockets on a roller-belt for scanning. They then pass through a walk-through metal detector archway (WTMD in illustration 3.1). A screening officer will search them with a hand-held metal detector (HHMD) if the walk-through detector sounds an alarm or if they are selected at random. Depending on the results, a passenger may be further physically searched at the screening point or, if he or she prefers, in an enclosed private area. All carry-on possessions are initially screened through X-ray equipment. Again, items (including electronic articles) will be further searched if the screening officer observes a possible suspect item, or if it is selected at random. Further searching may be performed through physically opening the carry-on luggage, or with explosives-detecting trace equipment (EDT), often in the form of swabs that can pick up traces of dangerous chemicals. If a screening officer suspects that an item dangerous to aviation has been detected at any stage, he or she will call for emergency response. In some airports, doors or barriers are installed at screening points that can be closed automatically when an alarm is triggered to isolate a zone where a security breach may have occurred and to prevent passengers who have not been cleared from leaving the area. Pre-board screening is a fundamental component of overall aviation security, and the current mandate should be retained by CATSA.

The current regulatory framework does not allow CATSA to screen individuals on the basis of behaviour or identity, though the *CATSA Act* is broad enough for CATSA to be given this role if required in the future. In jurisdictions such as the United States and some European countries, the PBS functions may include screening of people in other ways – by checking boarding cards and other flight documents, and by identifying atypical behaviour patterns. Some stakeholders commented that new technologies for issuing boarding passes via the Internet or from automated self-serve kiosks might increase the risk of dangerous persons accessing restricted areas and aircraft. Others have suggested that confirmation of boarding passes or air travel documents should be integrated with other functions under CATSA’s mandate, to ensure that it takes place before passengers enter the departure area. This role is now

conducted by air carrier personnel at baggage check-in (if the passenger checks a bag) and at the departure gate.⁶

Considering the views submitted to us, as well as potential infringement of individual rights guaranteed by the *Canadian Charter of Rights and Freedoms*, the level of resources available, and space requirements at airports, the Panel has reservations concerning the introduction of behavioural analysis as a method of screening at this time. We are aware that this technique is being adopted in some other countries, and may be viable in Canada in the future; we discuss this issue further in Chapter 8. Adding confirmation of boarding passes or passenger identity to CATSA's pre-board screening responsibilities might become necessary in the future, but would require more resources (more personnel and equipment) and, to be conducted effectively, new training programs for screening officers. Introduction of analysis of atypical behaviour, or further checking of documents or identity, would be policy decisions requiring consultation with the Privacy Commissioner of Canada.

3.1.2 Hold bag screening (HBS)

Screening of checked baggage using explosives-detecting equipment, as required under ICAO Annex 17,⁷ has been in place for scheduled flights departing from all of Canada's designated airports since January 1, 2006. At the time of the Panel's Review, regulations covering HBS operations have not yet been finalized and brought into effect, so CATSA is delivering its HBS responsibilities, in part, under an exemption to the regulatory framework of the *Aeronautics Act*, as described more fully in Chapter 4.

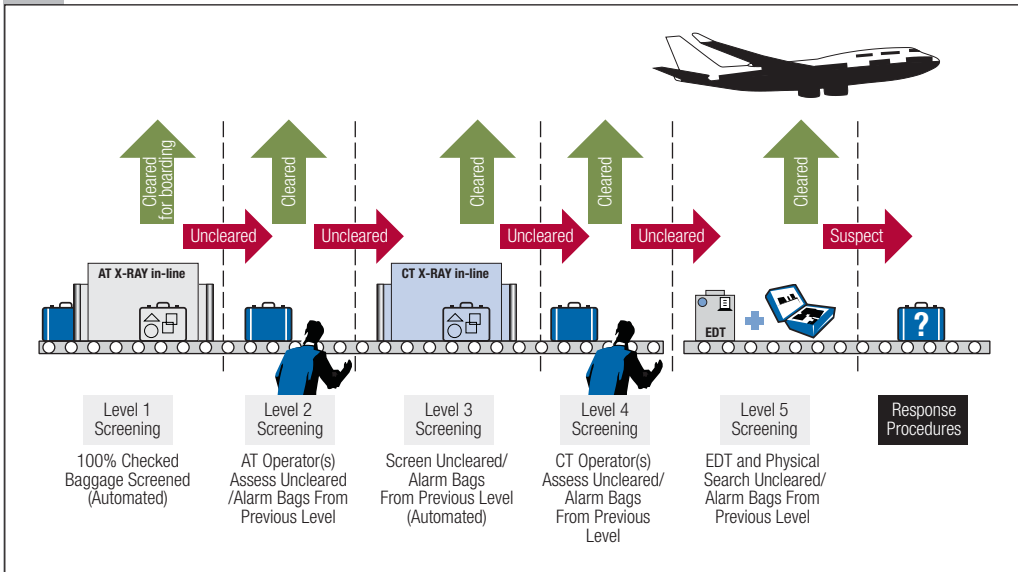
Transport Canada specified various configurations of equipment and screening processes for HBS, depending upon the volume of checked baggage passing through the airport and the space limitations in which the equipment was deployed. In some cases equipment is in full view of passengers, while in other cases it is behind or below the check-in area out of sight. CATSA and airport authorities had to enter into agreements

⁶ Screening officers ask for and hold boarding passes at pre-board screening points only when a passenger's carry-on item is undergoing secondary searching, to reduce the likelihood of the passenger leaving the screening point before the item has been cleared as safe. The screening officer does not verify any personal or flight-related information on the pass.

⁷ Convention on International Civil Aviation ("Chicago Convention"), Annex 17, Security: Safeguarding International Civil Aviation against Acts of Unlawful Interference, as amended December 2001 (Amendment 10), section 4.5.

within a very tight timeframe to install appropriate HBS screening equipment, in order to ensure that 100 per cent of checked baggage could be screened effectively in each of the 89 designated airports by January 1, 2006.

3.2 Multi-level process for hold bag screening



The implementation of HBS has made the processing of checked baggage more complex. The roles and responsibilities of the various participants are no less complex. Luggage becomes the air carrier’s responsibility after it is accepted from the passenger at check-in. It is then processed through the airport’s baggage handling system to CATSA’s HBS, which has up to five levels of in-line equipment and screening officers who review X-ray images from explosives-detection equipment and make decisions about possible suspicious bags (as shown in illustration 3.2). If a suspicious item in a piece of luggage cannot be resolved, the bag is removed from the baggage handling system to be opened and hand-checked. In Canada, the passenger must be paged and brought to a private room to witness the search.⁸ If a screening officer suspects that an item dangerous to aviation

⁸ Usually remotely, via closed-circuit video link.

has been detected at any stage, he or she must call for emergency response. Once cleared at any stage in the system, a piece of luggage continues on the airport's baggage handling system to be delivered to the baggage make-up area where the baggage handlers record the check-in number of each piece, sort it according to the flight for which it is intended, and transfer the luggage to the aircraft. Air carriers must reconcile baggage and passenger information to ensure that no bag is placed on the aircraft if the passenger does not board. Baggage reconciliation can be done manually, or through an automated system that links directly to the air carrier's departure control system.

HBS is and will remain a very important component of aviation security. This mandate is and should remain a core component of CATSA's mandate.

3.1.3 Non-passenger screening (NPS)

CATSA is also mandated to screen non-passengers entering restricted areas. Non-passengers are employees of airports, of airlines, of CATSA, of Canadian government agencies, of retailers and restaurants, or of service providers under contract to any of these. Although CATSA has the *screening* responsibility, airport operators are responsible for *controlling access* to the restricted area, and issue Restricted Area Passes (RAPs) to airport workers. All such personnel, whether they are mainly based at a specific airport, or are air crew or maintenance personnel who travel from one airport to another and must pass through the restricted area, are required under the *Aeronautics Act* and related regulations, measures and orders, to hold a Restricted Area Pass, which cannot be granted without valid transportation security clearance issued by Transport Canada. In some circumstances, new or short-term employees may work inside the restricted area before their security clearance has been processed and RAP issued, in which case they are given a temporary pass and must be escorted at all times by a RAP holder. However, under current regulations, a screening officer may not perform CATSA screening functions with a temporary pass, and must wait until his or her RAP is issued.

Current aviation security regulations require CATSA to screen non-passengers and their possessions on a random basis. They may be processed at temporary or permanent locations at entry points to restricted areas. Various configurations are used, including walk-through and hand-held metal detectors for workers, as at pre-board screening

points, and bags and tools may be checked with X-ray and/or explosives-detection trace equipment. Secondary searches may be used to check possible suspect items. A non-passenger who refuses to be searched is denied entry to the restricted area. At present, vehicles are not searched by CATSA screening officers when entering a restricted area through any access point.

As at any screening point, if a screening officer suspects that an item dangerous to aviation has been detected at any stage, he or she must immediately call for emergency response. In some airports, doors or barriers are installed at permanent screening points that can be closed automatically when an alarm is triggered to isolate a zone where a security breach may have occurred.

In some countries, such as the United Kingdom, all non-passengers at major airports must submit to screening whenever they enter a restricted area. Vehicles entering the restricted area are also screened. Some other countries, including the United States, are considering extending their current partial non-passenger screening function at large airports to screen all non-passengers. We have described in Chapter 2 how non-passenger and vehicle screening should be used together with much more rigorous access control at Canada's major airports and, in particular, how it should be extended to the outer boundaries of Class 1 airports. On the other hand smaller airports, including some Class 2s where non-passenger workers are generally well known to each other, should rely on active security awareness, rather than non-passenger screening, to achieve the same level of security.

This part of CATSA's mandate is of the greatest importance as part of the multi-layered approach to air transportation security, and should be retained and expanded.

3.1.4 Other screening functions

We have outlined in Chapter 2 several areas that we consider to be gaps in the present framework for aviation security, some of which require screening solutions.

Screening of *cargo* is not currently part of CATSA's mandate, and many industry stakeholders see cargo as a major gap within the air transportation security system, especially cargo carried on passenger

flights. Transport Canada is considering how best to address cargo security, and funding was announced for this project in Budget 2006.⁸ In the Panel's view, CATSA should be the organization to conduct screening-related operations as required under any new program.

Transport Canada is also considering how best to establish security screening for passengers and their belongings at fixed base charter and general aviation operations away from air terminal buildings. Again, in our view, CATSA is the appropriate organization to conduct and/or manage any third-party screening that may be required.

Recommendation 3.1

CATSA should retain its current screening mandates in the broadest sense of screening, that is, screening of people and things, and CATSA should be considered as the first option for all future aviation screening functions.

Recommendation 3.2

- (a) In Class 1 airports, CATSA should be continuously present at all entry points to the restricted areas of the airport to perform non-passenger screening, on a random basis.**
- (b) Non-passenger screening should be extended to include searches of vehicles entering restricted areas in Class 1 airports, and should be performed by CATSA, or under CATSA's oversight using CATSA's standards and procedures.**
- (c) Non-passenger screening should be discontinued in Class 2 airports once the RAIC, with biometric identifiers, is in place; CATSA should be prepared to implement NPS on an as-needed basis in Class 2 and Class Other airports, when threat analysis indicates a need.**

⁸ Budget 2006, Chapter 3 – Enhancing Cargo Security and Expediting Processing at the Border, May 2006.

3.2 FUNDING ROLE

3.2.1 The Canadian Air Carrier Protective Program (CACPP)

The *CATSA Act* gives CATSA responsibility for working with the Royal Canadian Mounted Police (RCMP) to provide on-board security services under the Canadian Air Carrier Protective Program:

28 (2) The Authority may enter into agreements with Her Majesty represented by the Minister of Public Safety and Emergency Preparedness or by the Royal Canadian Mounted Police for the provision of services, including services on aircraft, and may make payments in respect of those services.

The RCMP provides specialized Aircraft Protective Officers (APOs, sometimes called air marshals) on all aircraft destined for Ronald Reagan Washington National Airport, as well as on other selected Canadian commercial aircraft. Agreements have been concluded between CATSA and the RCMP and between CATSA, the RCMP and Transport Canada to fund the CACPP. According to those agreements, CATSA has no authority to direct or plan this program.

CATSA receives dedicated appropriations for the CACPP, and has the sole authority to authorize reviews of the expenditure of these funds. Reviews of the program are carried out periodically by an expert consultant. The arrangement is satisfactory so far as it goes, but CATSA's role in the process is relatively limited. A separate audit of the CACPP by the Auditor General, or by an external auditor, could serve as well or better than the present arrangement.

We note that the RCMP officials in charge of the CACPP program are satisfied with the current arrangements. Air carriers complain about the lost revenue and the problems involved with displacing passengers when seats are required for APOs, but otherwise recognize that armed on-board security officers are required for certain flights, as the CACPP provides. Since value added by CATSA to the substance of the program appears to be limited, and it does not fit well with the rest of CATSA's mandate, the Panel considers that it would be preferable for the government to provide funding directly to the RCMP, or for funding of the CACPP to be managed through Transport Canada. We would suggest that if an

alternative funding arrangement is adopted, any monies intended for the CACPP should be designated exclusively to that program.

Recommendation 3.3

- (a) **CATSA's mandate should be amended to remove responsibility for managing funding for the Canadian Air Carrier Protective Program. In the future, funding for the CACPP should be provided via appropriations directly to the RCMP or through Transport Canada.**
- (b) **An independent external audit of the CACPP should be conducted regularly by the Auditor General of Canada or an independent auditor, on a confidential basis.**

3.2.2 Airport police funding

Transport Canada regulates the Class 1 airport authorities to have protective policing and security arrangements covering four key areas: armed presence at U.S. pre-clearance inspection and at the departure gates for flights bound for Ronald Reagan Washington National Airport; response to Canada Border Services inspection points; response to alarms at airport pre-board screening points; and response to suspect bags at hold bag screening. There has been a significant increase in the number of law enforcement officers required to respond to alarms and threats at airports in the context of heightened security levels and awareness since September 2001. While no additional requirements were imposed under aviation security regulations, the sheer number of responses resulted in a significant increase in workload and resources.

Because of these workload increases, the federal government decided to contribute to the cost of aviation security-related policing, that is, to provide part of the cost of the increased policing services. The *CATSA Act* gives CATSA the responsibility for managing the government's airport policing contributions:

29 The Authority may, with the approval of the Treasury Board, enter into agreements with the operator of any aerodrome designated by regulation for the purposes of contributing to the costs of policing incurred by that operator in carrying out their responsibilities.

CATSA's appropriations include the budget for this program.

The Panel has examined CATSA's role in this program. Transport Canada regulations require the airports to have the policing arrangements, and the airport operators enter into agreements with the police of local jurisdiction to provide the service. CATSA's role is limited to providing funding to the airports to help pay for these services, based on arrangements specified by Transport Canada. Because CATSA has neither a policing nor a regulatory mandate, the Panel considers that there is little CATSA can add to airport policing through funding. Furthermore, since this program is not directly related to screening, CATSA's focus could be diverted from its core mandate. We did hear that this role has contributed to creating good relationships between CATSA and the local police forces. The Panel is convinced that these good relationships can be maintained by working together as integral components of the overall aviation security system.

Since the federal government has imposed the airport policing requirements to meet federal aviation security standards, it should bear responsibility for how these requirements are funded. During our discussions with airports, we heard several comments concerning the insufficiency of the funding, the apparent inconsistency in the funding provided to one airport rather than another, and the lack of transparency of the funding formula. Some larger airports feel that they should receive a larger share of the available funds to offset the extra costs associated with being a higher threat level. Others feel the allocation does not adequately cover all policing activities that respond to aviation security needs at reasonable costs, such as provincially authorized special constables or explosive-sniffing dogs. Still others claimed they were unaware of how the funds were allocated.

In our view, the federal funding for airport policing needs to be rationalized. The allocation of funds to the airports must be based on sound and transparent criteria, which should be established so that they do not deter airports from making cost-effective decisions in carrying out their policing requirements. On the other hand, airports should be free to make decisions to increase the level of service beyond the basic requirements that are funded automatically.

At airports which receive funding, the service is provided by the police force of local jurisdiction (at Vancouver, Edmonton, Halifax and Kelowna, this is the RCMP). The Panel observed a wide variation in how policing services are delivered, partly because several different organizations provide the service. In particular, we noted differences in aspects of

emergency response, including evacuation procedures, and standard protocols for response to PBS and HBS alarms. For example, we heard at one international airport that if the local police are called to respond to a suspect bag at Level 5, the entire terminal building is evacuated, while at other airports different intermediate procedures are in place, including examination of the bag by a sniffer dog, or moving the bag to a compression chamber in an isolated area.

The Panel recognizes that airports present a wide variety of situations in terms of traffic volume, architectural design and levels of risk. We are also aware that airport operators have the responsibility and authority to arrange for policing services according to their specific requirements, as long as they meet the minimum standards of the regulatory framework. While this flexibility to adjust to local conditions is important and should be maintained, we consider that there would be a benefit to having common standards for the delivery of the regulated requirements, particularly for PBS and HBS response.

Recommendation 3.4

- (a) Responsibility for the airport policing contribution program should be transferred to Transport Canada.**
- (b) Transport Canada should review the existing standards for police response to all types of screening points to rationalize the program, and should fund all reasonable costs associated with meeting the new standards.**

3.3 THE RESTRICTED AREA IDENTIFICATION CARD (RAIC)

In November 2002, the Minister assigned the responsibility to CATSA to develop and implement enhancements to the existing Restricted Area Pass (RAP) system, incorporating biometric identifiers by way of a new Restricted Area Identification Card (RAIC) program. The new program is to be implemented at the 29 Class 1 and 2 airports in Canada, and will

eventually allow for validation of a RAIC-holder's identity at any of the participating airports – that is, it will have multi-airport capabilities. RAICs will be issued by individual airport operators, as is now the case for RAPs. As currently planned under the program, they will only be valid and usable once they are activated by CATSA, which will operate a Canada-wide near real-time updated identity verification system that includes confirmation of security clearance from Transport Canada. A card would, conversely, be de-activated if CATSA is notified of a restricted area violation, or security-clearance infraction, again in near-real time, and the card would no longer function.

A valid RAIC can be used by the holder to confirm credentials while entering the restricted area of an airport, by inserting that card into a reader and providing the biometric called for – an iris or fingerprint scan. Individual airport operators may also choose to include an access key on RAICs issued for use at their airport, in which case the RAIC card reader will be linked to an access point that is opened if the holder's identity and permission to enter are confirmed. Such an entry point can be monitored by airport personnel present during service hours, or by automatic double barriers that isolate the RAIC-holder while the confirmation is in progress – sometimes known as “man-trap” doors. In any event, whether access points are supervised by staff, or controlled mechanically, RAIC-holders will also be subject to non-passenger screening by CATSA screening officers. As we recommended in section 3.1.3, in Canada's eight active Class 1 airports, screening should be performed wherever non-passengers enter restricted areas. On the other hand, once the RAIC is fully operational and automatic isolating barriers are in place, non-passenger screening could be discontinued in Class 2 airports. However, CATSA should be prepared to implement NPS on an as-needed basis in Class 2 and Class Other airports, when threat analysis indicates a need.

It is also possible to incorporate access keys to multiple airports on a single RAIC for use, for example, by air crew who must pass through restricted areas of more than one airport to perform their duties. The Panel heard from representatives of air crew about the importance to them of easy, fast and reliable access. We also heard concerns from airport operators about their responsibilities for rigorous access control of restricted areas. We are convinced that the RAIC system, when fully implemented, can provide the necessary confidence and speed to confirm identities across Canada, and could therefore be the basis for an effective pass for access to several or all airports in Canada. The Panel encourages stakeholders to continue working together to implement a multiple

airport access system in conjunction with RAIC. Transport Canada should take the lead to ensure that this happens.

Amendments to the *Canadian Aviation Security Regulations* to govern the implementation and operation of the RAIC system are in the process of consultation, but are not yet finalized. The system is now implemented in some Canadian airports on a trial basis, but uncertainties about start-up and longer-term costs, and about the regulatory framework, have delayed implementation of RAIC in many of the 29 airports.

The Panel considers that when completely implemented, RAIC should become a responsibility of Transport Canada. It will be part of an integrated national system that can confirm identity and security clearance, which is suitable for a multimodal transportation approach. Transport Canada is already responsible for issuing security clearances for people requiring access to restricted areas at airports, and is developing a policy for port workers. Because of the multi-airport aspects of the program, it is most appropriate for a federal agency to activate, track and de-activate cards via the national identification system for individual workers as set out in the regulations (when finalized), and to maintain the system across the country; in our view, this agency should be Transport Canada. We also consider that RAIC should be implemented in all designated airports across Canada, not just the 29 major ones. Holders of RAICs would continue to be subject to random non-passenger screening under CATSA's mandate, with the changes recommended by the Panel.

Recommendation 3.5

- (a) CATSA should complete the installation of the Restricted Area Identification Card system on a priority basis; to facilitate this, Transport Canada must complete the regulatory framework for RAIC as soon as possible.**
- (b) Once CATSA has completed implementation of the Restricted Area Identification Card, the RAIC national identity verification system should be operated and maintained by Transport Canada.**
- (c) The multiple-airport access system should be implemented in conjunction with RAIC as quickly as possible.**
- (d) RAIC should be expanded to all 89 designated airports.**

3.4 ADDITIONAL FUNCTIONS ASSIGNED BY THE MINISTER

The Minister may add other specific functions to CATSA's mandate:

6 (2) The Authority ... is also responsible for air transport security functions that the Minister may assign to it, subject to any terms and conditions that the Minister may establish.

This provision has already been used, as described above, to add responsibilities for non-passenger screening, and for developing and implementing the Restricted Area Identification Card, to CATSA's mandate. Threats to aviation security can evolve suddenly and unexpectedly. The need to screen for particular purposes or to perform additional functions in relation to aviation security may be identified by the Minister to address new policy objectives in response to such threats. It is only prudent that the Minister should have the power to assign CATSA specific new responsibilities. Therefore the *CATSA Act* should retain the option for the Minister of Transport to assign new functions to CATSA, and to specify any associated terms and conditions.

3.5 CRITERIA FOR CATSA'S MANDATE

Another aspect of CATSA's mandate is *how* it must be exercised. According to the *CATSA Act*, CATSA must:

ensure "effective and efficient screening" (6.1);

ensure "consistency in the delivery of screening across Canada and for any other air transport security function" (6.2);

carry out "its responsibilities under this section in the public interest, having due regard to the interest of the travelling public" (6.3); and

perform screening in conformity with security regulations, security measures and orders (2 – "screening").

Other criteria, duties and authorities are further defined for the conduct of these principal mandates. These will be discussed in Chapter 5, on delivery of screening services. Performance management and measurement for all these criteria will also be discussed in Chapter 5.

It is well established that the term *effective* means attaining the given objective(s). For CATSA, achieving security is the primary objective, and the criterion of *effectiveness* should remain in the Act. In the French version of the Act *effective* is specified as *efficace*, which is an appropriate expression.

It is also well established that *efficient* means the relationship of the level of resources applied to activities, outputs and results. It can be expressed in quantitative or qualitative terms, and addresses, for example, value-for-money concerns. The Panel heard many comments about whether both “effectiveness” and “efficiency” are given equal consideration in the context of CATSA’s and Transport Canada’s responsibilities. We note that the use of a single term in French may produce confusion since *efficace* is used to refer to both “effective” and “efficient.” It may also lead to overlooking value-for-money issues. The French version of the Act should therefore be amended to provide a separate term equivalent to “efficient.” The criterion of *efficiency* should remain in the Act, to retain an appropriate focus on achieving value for money in CATSA’s operations.

The Panel also heard varying interpretations of the term consistency in relation to delivery of screening. It could mean the “same,” “uniform,” “constant,” “in compliance with,” “according to rules,” “predictable” or “logical.” Some saw it as applying to customer service, while others limited its reach to security. The Panel considers that the current reading of *consistency* in the *CATSA Act* may be misleading, and open to different and possibly conflicting interpretations. But the purpose of the concept in terms of aviation security is obvious: security should be at the same level across Canada. It need not be performed identically in every location because of differing local conditions and variations in the threat environment. Indeed, if screening were carried out in too uniform a manner at all times, it would be easier for a would-be intruder to find a way to break in. An element of unpredictability must be built into the aviation security system. There is a need for some operational flexibility in order to properly manage both threat assessment and value-for-money decisions. For instance, not all Canadian airports are, or should be, subject to the same specific security procedures at all times. As will be discussed in Chapters 4, on the regulatory framework, and 5, on service delivery, we

found that the regulatory framework sometimes seeks consistency as an objective at the expense of efficiency, especially in small airports.

The Panel considers that “consistency” refers to a general level of security across Canada, which is clear from the overall purpose of the Act. In fact, the French version of the provision uses the term “niveau de contrôle,” or “level of screening” in s. 6(2). There is no need to include the concept of consistency expressly within the *CATSA Act*, and therefore this criterion should be removed.

The *public interest* criterion refers to the concerns of the general population, which may encompass a wide variety of issues: preventing aircraft from falling on cities, killing citizens and destroying buildings and public facilities; securing aircraft that may transport hazardous materials; and supporting the sovereignty of Canada, whose government should not be intimidated by terrorists threatening the lives of its citizens. The criterion of *public interest* should remain in the Act.

The *interest of the travelling public* is primarily to fly safely and feel secure while travelling. It is also to enjoy a reasonably pleasant travel experience that meets expectations, such as departing on time, being treated courteously, not standing in lines for long periods, not losing one’s luggage, etc. This criterion should remain in the Act.

Recommendation 3.6

- (a) The text of the *CATSA Act* should be amended to remove the *consistency* criterion.
- (b) The text of the French version of the *CATSA Act* should be amended to add a separate term equivalent to *efficient* in section 6 (1).

Chapter Four

REGULATORY FRAMEWORK

4.1 REGULATION OF AVIATION SECURITY IN CANADA

The regulatory framework in any given sector normally develops over time; sometimes, in reaction to specific events, a flurry of legislative action occurs. In aviation security such was the case following the tragic events surrounding the 1985 bombing of Air India Flight 182 and the September 11, 2001 attacks on New York and Washington. Today, the set of rules that govern aviation security is very comprehensive but at the same time perhaps overly complex and prescriptive given the government's movement towards regulatory reform and smart regulations. In our view, the prescriptive framework currently established is not the best approach to address current and future threats.

In this chapter, we briefly outline the regulatory framework established for aviation security and then provide recommendations on how it should be framed for the future. We also give advice as to how the regulatory framework can contribute to a better planning regime in relation to anticipating and responding to threats to aviation security.

4.1.1 The *Aeronautics Act*

The *Aeronautics Act* is the principal legislative instrument through which the Government of Canada regulates the aviation industry in Canada. The

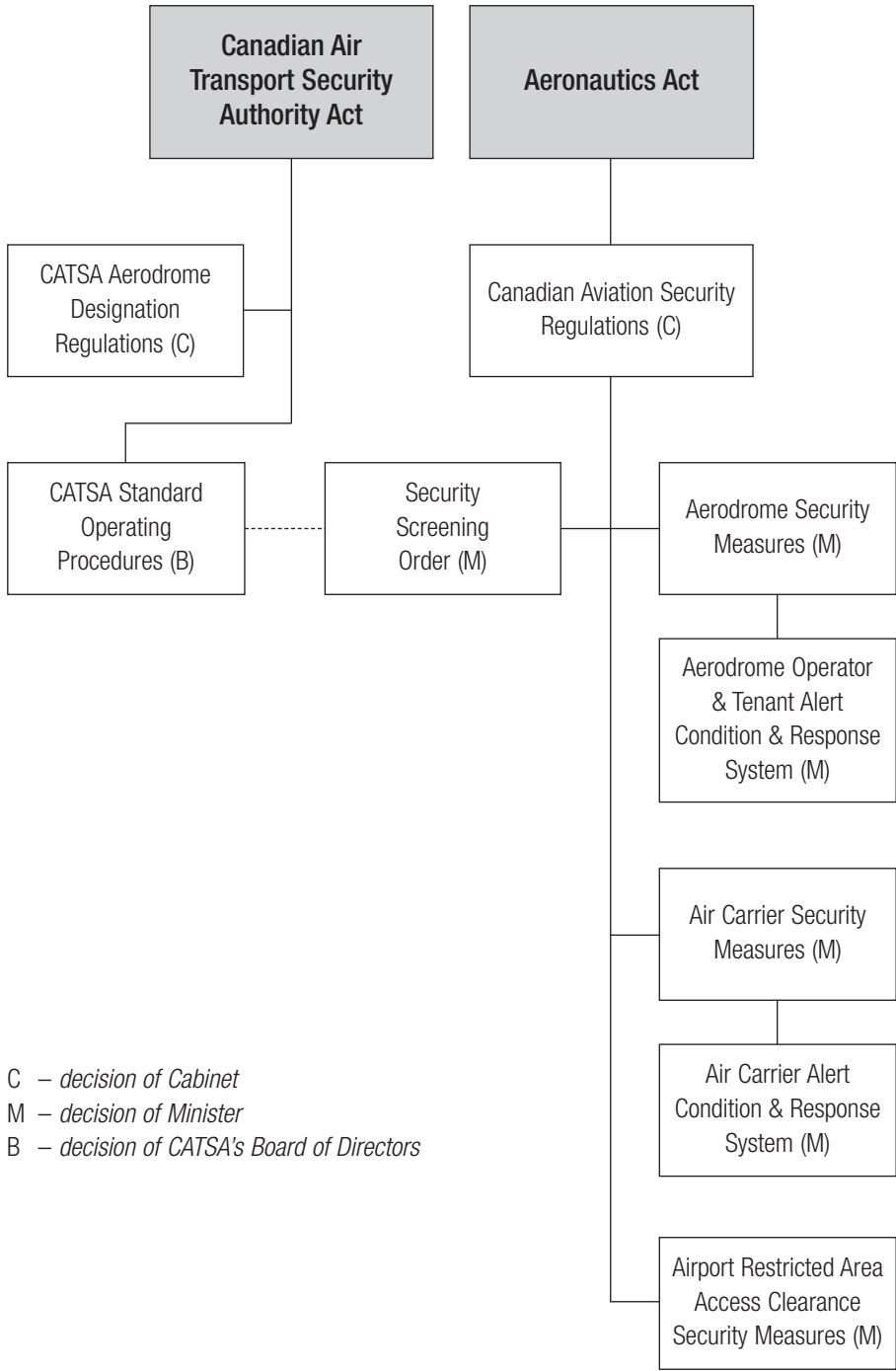
Act, as amended in 2004, establishes the framework under which aviation security regulations, security measures, restricted area access clearance measures, security screening orders, emergency directions and interim orders are developed and adopted. Illustration 4.1 provides a schematic overview of the regulatory framework. Compliance monitoring and enforcement of the rules are the responsibility of Transport Canada and apply equally to CATSA and to airport operators, air carriers, service providers and their workers. Although the structure separates the roles of the regulator from the screening service delivery organization, in reality, the Minister of Transport is ultimately responsible and accountable to Parliament and the people of Canada for both the department and CATSA.

4.1.2 Regulations

The *Aeronautics Act* permits the Governor in Council to pass regulations. Before regulations are passed, Transport Canada must follow a process that includes considering alternative regulatory solutions, a benefit-cost analysis and timely and thorough consultations with interested parties. The *Canadian Aviation Security Regulations* contain requirements of general application to CATSA, aerodrome operators, air carriers, other aircraft operators, passengers and the general public. The *Regulations* do not contain confidential or sensitive information and are thus publicly available.

The *Regulations* deal with the screening of persons, goods, things and vehicles, the escort of persons (e.g. prisoners) on aircraft, restricted areas at airports and the control of access to these areas, response to threats against aircraft or a flight, reporting of security incidents and establishment of aerodrome security committees. An important provision in the regulations allows the Minister of Transport to make further rules prescribing security measures applicable to CATSA, screening officers, aerodrome operators, air carriers and persons who provide services to or carry on a commercial activity for air carriers and airport operators. These rules may be referred to as “measures” or “orders” and essentially provide another more detailed set of rules that each entity must follow.

4.1: Overview of the Regulatory Framework



C – decision of Cabinet
 M – decision of Minister
 B – decision of CATSA's Board of Directors

The security measures and orders are issued by the Minister of Transport and, in urgent situations, by the Deputy Minister of Transport. Due to the sensitive matters they cover, they are not public documents and are distributed on a need-to-know basis to stakeholders responsible for their implementation. Transport Canada routinely conducts prior consultations with those directly affected by these rules, but not with the general public. Current security measures and orders include the *Aerodrome Security Measures*, *Air Carrier Security Measures*, *Airport Restricted Area Access Clearance Security Measures* and the *Security Screening Order*. These instruments constitute the minimum security standards to be implemented by airport operators at airports in Canada, by air carriers with respect to flights from airports in Canada, and in the case of the *Security Screening Order*, by CATSA.

The *Aerodrome Security Measures* impose specific obligations on airport operators and set out detailed security measures with respect to designating, signing and securing restricted areas, establishing and controlling access control points to each restricted area, instituting and maintaining a restricted area pass system and developing, maintaining and exercising airport emergency plans and procedures. Under these measures, the *Aerodrome Operator and Tenant Alert Condition and Response System* sets out further detailed security measures that apply when enhanced threat levels exist.

The *Airport Restricted Area Access Clearance Security Measures* outline the procedures to be followed by airport operators in the issuance and control of Restricted Area Passes (RAPs). A restricted area at an airport is the designated area that only authorized persons are allowed to enter due to the proximity to aircraft and other sensitive operations that occur in the airport terminal and airside. The issuance of a RAP is subject to the person being granted clearance by the Minister of Transport. These *Measures* also give authority to the airport operator to grant temporary access to an airport restricted area under certain conditions of escort or surveillance by a person in possession of a RAP. Within the *Measures*, the Minister of Transport has the authority to exempt members of police forces, CSIS and any other person that the Minister considers does not pose a threat to the security of civil aviation from the requirement to possess a RAP clearance.

For airlines, the *Air Carrier Security Measures* impose security obligations on air carrier operators with respect to their aircraft, passengers and carry-on baggage, checked baggage, air cargo and mail, and catering and commissary provisions. In addition, procedures for the handling of threats to an aircraft or to a flight, aviation security training programs for crew members, and the provision of seats without charge to members of the Canadian Air Carrier Protective Program on an as-requested basis are provided for in the *Measures*. The *Air Carrier Alert Condition and Response System*, flowing from the *Air Carrier Security Measures*, sets out detailed security measures that apply when enhanced threat levels exist.

Most important to CATSA is the *Security Screening Order*, which taken together with the *Canadian Aviation Security Regulations* define CATSA's role regarding:

- The qualifications and deployment of screening officers, including official language requirements;
- The screening of passengers and their carry-on baggage;
- The screening of checked baggage;
- The random screening of non-passengers who enter the restricted area at airports and the things in their possession or control;
- The random screening of persons taking flights destined to the United States;
- Responding to incidents and threats; and,
- Information reporting and record-keeping.

The *Order* specifies at which aerodromes and on which flights screening must be conducted, how screening passengers and non-passengers must be performed, and how staff is to be deployed to screening points. It prescribes what CATSA must screen for, what equipment to use, and the procedures to be employed. In addition, CATSA must ensure that any person passing beyond a screening point into a restricted area is in possession of a boarding pass, ticket or other document such as a valid RAP. The Panel observes that the level of regulation applied to CATSA is very detailed and prescriptive, perhaps more so than other parts of the aviation industry that are largely private sector entities.

4.1.3 Emergency Directions and Interim Orders

For urgent matters, *Emergency Directions* and *Interim Orders* are used to address immediate risks and threats to aviation security. This was the administrative tool, used on August 10, 2006 after discovery of the alleged U.K. plot to use liquid explosives on aircraft, that directed CATSA not to allow liquids beyond the screening area. *Emergency Directions* may be made by the Minister of Transport or by an officer of Transport Canada authorized by the Minister. In practice, they are approved by the Director General of Security and Emergency Preparedness. These directions automatically cease to have force 72 hours after they are made, but can be renewed if necessary.

The *Aeronautics Act* also authorizes the Minister and the Deputy Minister to issue *Interim Orders*. Such orders are used to address significant risks and threats, and give immediate effect to recommendations of persons and organizations, such as the Transportation Safety Board of Canada, that are authorized to investigate aviation accidents and incidents. *Interim Orders* are to be approved by the Governor in Council within 14 days of being made and expire after one year, unless replaced by a regulation.

4.1.4 Exemptions

The *Aeronautics Act* (s. 5.9(2)) allows the Minister of Transport, or an officer of the Department authorized by the Minister, to make exemptions from the application of a regulation, order or security measure. Many exemptions from the regulations, measures and orders have been issued. Of particular interest to this Review are five exemptions to the *Security Screening Order* that direct CATSA to deviate from the regulations and orders. Two allow CATSA to exclude from screening members of the military police and Transport Canada aviation security inspectors who enter the restricted area at non-passenger screening checkpoints. Another exemption removes certain items from the prohibited items list that may now be taken beyond the screening checkpoint: for example, knitting needles and sports racquets.

Two other exemptions have more far-reaching implications for CATSA and Transport Canada. One pertains to pre-board screening and has the effect of compelling CATSA to comply with its own screening procedures, known as its *Standard Operating Procedures* (SOPs). As the screening authority, CATSA produces its SOPs based on Transport Canada's *Security Screening Order*. The SOPs provide precise guidance to screening officers

on how to do their jobs. The exemption pertaining to hold bag screening prescribes the screening equipment systems and processes that CATSA employs to screen checked baggage on flights to the U.S., in lieu of those set out in the *Security Screening Order* and in the absence of new regulations currently being prepared by Transport Canada covering hold bag screening.

These latter two exemptions require CATSA to advise Transport Canada in advance of any changes to its SOPs. CATSA must also demonstrate to Transport Canada, upon request, that the level of security provided through its SOPs meets or exceeds the level of security provided for by the provisions of the *Security Screening Order* from which CATSA is exempted.

We understand that one of the reasons these exemptions were issued by Transport Canada was the time needed to amend the *Security Screening Order*, which would normally include consultations with CATSA and other affected stakeholders, and the time involved in drafting and processing changes to the *Security Screening Order*. We have thus observed that parts of the *Security Screening Order* are considerably out of date. For example, it mandates the use of explosives detection trace (EDT) equipment for pre-board screening at only 58 airports, whereas EDT equipment has been deployed by CATSA at all 89 airports where it has the mandate and obligation to conduct screening.

The cumulative effect of the pre-board screening and hold bag screening exemptions issued by Transport Canada and the deployment by CATSA of EDT at all airports has been to make a significant portion of the *Security Screening Order* inapplicable. The exemptions may also be considered, in some respects, to constitute a “transfer” of some of Transport Canada’s rulemaking functions to CATSA. Such exemptions add to the complexity of the regulatory framework and call into question the philosophy of prescribing detailed rules through the regulatory process when they can be adopted in a more flexible and efficient manner by the operating authority, CATSA. This is especially applicable to this government organization that delivers this important screening program and needs to be responsive and adaptable to changing circumstances in the field of aviation security.

4.2 CATSA'S STANDARD OPERATING PROCEDURES (SOPs)

To guide screening personnel in the day-to-day performance of their functions, CATSA developed its *Standard Operating Procedures* from Transport Canada's *Security Screening Order*. The SOPs explicitly state that they do not supersede the requirements of the *Aeronautics Act*, the *Canadian Aviation Security Regulations* or the *Security Screening Order*, although they may be superseded by CATSA Screening Operations Bulletins and Transport Canada Security Notices. These Bulletins and Notices are a means of quickly updating and communicating changes in the rules to the front-line staff of both CATSA and Transport Canada. The SOPs are handled by screening personnel in a way that prevents them from being circulated outside of their workplace due to the sensitive nature of their contents.

The SOPs are checked by Transport Canada in advance for compliance with the *Security Screening Order* and are designed to achieve or exceed these regulatory requirements. CATSA uses Screening Operations Bulletins to amend its SOPs, pending the release of a new consolidated version of the SOPs. The Bulletins are also used to provide other relevant information and direction to screening contractors and their screening officers on a regular basis. Each screening officer is required to read the Bulletins and provide signed confirmation that they have done so. This paper process seems out of date, cumbersome, and does not appear to guarantee full understanding of the SOPs on the part of screening officers who may possess varying educational backgrounds and language skills. A complete binder of SOPs and Bulletins in paper form is bulky and therefore difficult to use as a reference tool when immediate answers are required. Refresher courses for screening officers would help ensure that their access to and knowledge of the SOPs and Operations Bulletins remains up to date and complete.

Recommendation 4.1

It is recommended that CATSA develop a more user-friendly format for its *Standard Operating Procedures* and for disseminating and integrating updates to ensure that its front-line screening personnel have ready access to them in order to carry out their responsibilities.

4.3 OVERSIGHT AND ENFORCEMENT

Transport Canada provides rigorous oversight and enforcement of the *Aeronautics Act, Measures and Orders* through a national network of aviation security inspectors. At the largest airports these inspectors are located on site, while the smaller airports are subject to regular visits by inspectors. Inspectors focus not only on CATSA's compliance but also have oversight responsibilities for airport and air carrier security operations.

A phenomenon that was repeatedly brought to our attention was the overlapping oversight brought to bear on screening personnel. Screening officers are employed by a security firm hired under contract to CATSA and are deployed by the service provider to screening points within the airport. At the larger airports, it is not unusual therefore to have managers from the security firm, local CATSA managers and Transport Canada inspectors all monitoring the performance of the screening lines. Add to this mix the interested parties representing the airport and airlines and it is understandable that screening personnel feel pressured from all sides in the performance of their duties. As screening officers can be criticized and even relieved of their duties by various people, it is no wonder that this situation can seriously impact the efficiency of the screening process and result in slow screening lines and longer wait times, as well as anxiety, increased sick leave and turnover of staff.

The Minister of Transport designates persons as screening officers for the purposes of conducting airport screening on the basis of minimum standards set out in the Transport Canada document entitled *Designation Standards for Screening Officers*. CATSA trains the screening officers and ensures that they meet the Standards. Transport Canada inspectors, if they observe poor screening performance by an individual screening officer, have the authority to revoke, suspend or cancel the certificate issued to that officer. This is known as de-designation and this action effectively revokes the employee's authorization to work until reinstatement, which normally requires retraining. This added layer of oversight seems unnecessary, as CATSA is responsible for screening officer training and should have sole responsibility and accountability to sanction screening personnel if circumstances warrant.

Recommendation 4.2

Transport Canada should not retain the power to de-designate screening officers. CATSA should be accountable for screening officer performance including certification and designation.

Another issue where confusion was found to exist involved Transport Canada inspectors and the set of rules they were using to regulate CATSA. In some instances, we were told they inspect according to the *Security Screening Order*, while we also were informed that they inspect against CATSA's SOPs. This leads to disagreements over interpretation and is counter-productive for all involved. For example, interpretation of what "random selection" at screening points means has led to unnecessary disagreement between CATSA and Transport Canada. Confusion such as this can also contribute to the anxiety level that screening officers face in carrying out their duties. There should be absolute clarity and consistency between Transport Canada and its inspectors on the one hand, and CATSA and its screening personnel on the other, as to which set of rules, the SOPs or the *Security Screening Order*, are to be used for monitoring and enforcement purposes, and this should be clearly communicated to all involved. Later in this chapter we discuss the regulatory regime in general and make suggestions that would result in a very different approach to regulation, oversight and enforcement activities.

There are also questions about how Transport Canada as regulator can take effective enforcement action against CATSA, a Crown corporation. Whereas enforcement letters sent to CATSA citing infractions may be a necessary step leading to corrective action, going beyond this and imposing a fine seems impractical. This approach may be appropriate in the private sector but does not appear to be sensible given that the Crown corporation is funded through public funds – a fine paid by CATSA would mean less money available for security operations. We note that the Auditor General of Canada, in her *2005 Annual Report* dealing with National Security in Canada¹, commented on Transport Canada's enforcement posture with respect to CATSA and concluded that the department's enforcement regime does not work well with the Crown corporation and that it should put in place system-wide performance measures in order to specify what it considers to be satisfactory

¹ Auditor General of Canada, Annual Report (April) 2005; National Security in Canada – The 2001 Anti-Terrorism Initiative – Air Transportation Security, Marine Security and Emergency Preparedness.

performance by CATSA. We endorse this view and encourage Transport Canada to institute comprehensive assessment for CATSA, rather than monitoring daily screening activities.

Finally, we looked at the *Aeronautics Act* and the *CATSA Act* to determine whether the terminology used in both is consistent. We observed that the Acts, regulations, measures and orders use slightly different terminology when describing what must be screened. For example, terms such as “property,” “belongings,” “baggage” and “goods” had a number of variations. Two discrepancies were identified between the *Canadian Aviation Security Regulations* (CASRs) and CATSA’s SOPs, related to the definition of weapons, and bomb threats:

- The CASRs adopt the very broad **definition of weapon** set out in the *Criminal Code of Canada*; the same definition is used in the body of CATSA’s SOPs, but the Definitions section of the SOPs uses a different and narrower definition.
- The SOPs do not explicitly require CATSA to advise the aerodrome operator of all **bomb threats** received at the aerodrome, as required by s. 62 of the CASRs. However, this may be implicit in the SOPs, which state that the aerodrome operator coordinates the search and other actions required to determine whether the threat is specific or non-specific.

There is also some question as to the treatment of “vehicles” and where authority lies to screen vehicles and conveyances. We discussed the screening of vehicles entering airport restricted areas in Chapters 2 and 3 of this Report. A review of relevant terminology and its consistent use within the aviation security context needs to be undertaken in order to avoid confusion.

In addition, we noted a few minor discrepancies between the *Security Screening Order* and CATSA’s SOPs, which we have brought to the Minister’s attention for follow-up. We have not included the details in this Report since the *Security Screening Order* is not a public document. Nevertheless, we do not consider these discrepancies to have a significant effect on the security or integrity of the Canadian air transportation system.

Recommendation 4.3

We recommend that to the extent possible, Transport Canada standardize the terminology used in the *Aeronautics Act*, its attendant regulations, measures and orders, and in the *CATSA Act*.

4.4 REGULATORY ISSUES

The regulatory regime applying to CATSA under the *Aeronautics Act*, as described above, is solely focused on security effectiveness and consistency. Under the *CATSA Act*, the Authority is also required to achieve efficiency in carrying out its responsibilities and to do so in the public interest, having due regard to the interests of the travelling public. This involves elements beyond security and brings into the equation questions of cost effectiveness and service levels, elements that the travelling public, aerodrome operators and air carriers also seek as an outcome. On the one hand, CATSA is tightly regulated to deliver a high level of security, and on the other it must do so in a way that facilitates the expeditious movement of passengers, their belongings and baggage, as well as workers through the airport environment. This leads to pressure on CATSA in how it achieves its objectives.

The ability that a Crown corporation would normally have to set its own operational policy is largely usurped by the regulatory framework imposed upon CATSA and does not provide for the managerial discretion and creativity necessary to achieve its other objectives in a balanced way. These issues must be reconciled so that both Transport Canada and CATSA are working towards the same objectives at all levels in both organizations. The Panel notes that Transport Canada, as a department, has broader policy objectives than safety and security. Its mission statement also takes into account a transportation system that is efficient, affordable, integrated and environmentally friendly. This broader mandate needs to be reflected in the regulatory framework and especially within its security enforcement regime.

4.4.1 Results-based regulation

The regulatory framework applying to CATSA, including the *Aeronautics Act*, regulations, measures and orders, appears to the Panel to be overly detailed and prescriptive: it spells out in the most minute fashion specifically what has to be done, and by whom, in a certain set of circumstances, as well as the manner in which to do it. In large part, Transport Canada moved from a planning and performance-based regulatory framework to more prescriptive regulations following the Air India Flight 182 bombing in 1985. In reaction to this event, new detailed regulations were adopted for such procedures as reconciliation of baggage. This regulatory approach was reinforced in the immediate aftermath of September 11, 2001, when authorities further tightened the rules as a means to prevent future attacks.

The *Security Screening Order* is very detailed and directs CATSA to follow very specific procedures, specifying the number of staff required and equipment to be employed in performing security screening services. This approach leaves little room for CATSA to make operational decisions, deploy resources efficiently or develop innovative means to achieve its objectives. At times, customer service and cost effectiveness suffer from the organization's lack of flexibility to deviate from the prescriptiveness of the regulations and security orders. Many of the provisions in the *Security Screening Order* are more procedural than regulatory, thus leaving little discretion for CATSA management. For example, the imposed requirements that screening officers be continuously busy, be rotated from the X-ray machine every 15 minutes, and that there be at least three screening officers per line in every location regardless of traffic, should be questions that CATSA management can address through risk analysis and effective management practices. This can lead to better use of resources. We observed that the organization has matured to the extent that it now possesses the experience and knowledge that would enable it to make such operational decisions and be held accountable for them.

A regulatory framework that is too prescriptive can create other problems. For example, having standardized and mandatory security procedures can easily become predictable and therefore be less effective since the system could be circumvented by someone who observes it for a long-enough period. This rigidity may provide, in certain circumstances, a reduced level of security by not allowing new equipment and methods to be adopted quickly. In other circumstances, it may be more costly and less efficient to operate according to a fixed recipe when flexibility is required. For

example, we were advised that at some small airports, the number of screening personnel outnumbered all other airport employees combined. Ultimately, regulations that are too prescriptive can prevent the operating authority from making adjustments, which through experience can result in a better outcome for all involved.

The regulatory process is, by nature, both complex and cumbersome in responding to changing circumstances and needs, which arise from time to time in the dynamic aviation security environment. We believe that CATSA should have the managerial discretion and be held accountable for operational decisions, provided that security remains the main focus. Transport Canada should therefore develop an approach to regulation and compliance monitoring of CATSA that is more in line with a performance-based, results-oriented system. At the same time, other aviation industry partners in security may also benefit from a similar approach.

4.4.2 Towards a results-based regulatory framework

Prescriptive regulation may come in the form of ‘command and control’ regulations, design standards, specifications or, more generically, means-based standards. They specify in detail what must be done by the regulated entity to achieve compliance. They leave little or no room for discretion in their application and implementation. A federal department regulating another arm of the government in this manner is quite unusual. On the other hand, performance-based or results-based regulations set out objectives and leave it to the regulated entity to determine the best means of achieving them.

We recognize that the prescriptive regulatory framework was initiated following the terrible tragedy of Air India Flight 182 in 1985, and in response to the Seaborn Report² recommendations. However, we note that during the period, there was no formal national aviation security program in Canada, and that screening was the responsibility of the airlines, which were more focused on customer service aspects during these early days of deregulation. Within this environment, a prescriptive regulatory framework was developed to respond to immediate needs.

² *Report on Security Arrangements Affecting Airports and Airlines in Canada*, Interdepartmental Committee on Security and Intelligence, Privy Council Office, October 1985.

Regulation, ranging from prescriptive to results-based, has to be seen as a continuum rather than a dichotomy. The Panel has come to the conclusion that the current regime imposed on CATSA tips too far towards the prescriptive end of the continuum. In the case of aviation security, the weight should be readjusted in favour of a results-based approach. CATSA, as a Crown corporation, has matured and gained enough experience since its creation to become accountable for delivering results and should no longer be subject to the level of detailed rules imposed upon it through prescriptive regulations. Similarly, the private sector could benefit from a performance-based approach to regulation, something the government has recognized through its commitment towards regulatory reform. In the case of CATSA, which has in place its *Standard Operating Procedures*, we feel that Transport Canada can immediately suspend the application of its *Security Screening Order*. We believe that Transport Canada should examine the aviation security regulatory framework through a performance lens and adopt a performance-based approach so that airlines, airports and especially CATSA are able to deliver against a more results-oriented regulatory regime.

Recommendation 4.4

It is recommended that, as a high priority, Transport Canada develop a more results-based regulatory framework for aviation security.

One such methodology that can be used as a model is referred to as the Security Management Systems (SeMS) approach. The SeMS is a management approach to human and organizational risk management that is applied throughout an entire organization, including the non-regulated aspects. To be effective, SeMS must become an element of corporate management that sets out the organization's security policies and its intent to embrace security as an integral part of its overall business. Thus, security becomes a culture that percolates throughout the entire organization rather than simply being an obligation. There are various basic elements associated with SeMS, including adopting a policy statement and assigning accountabilities, establishing a security management plan, implementing a training program, tracking quality assurance and oversight, as well as developing an emergency response plan.

A partnership approach between the regulator and the operator is one of the key elements of implementing SeMS. Implementation also implies regulating at the system level where the end result is more important than detailed, day-to-day compliance. A safety management system approach has been successfully applied to safety programs in the air and other modes of transportation and is considered transferable to transportation security. On the safety side, expected results include a reduced accident rate through more proactive management of risk, reduced industry costs and more efficient use of government resources – elements that would also benefit CATSA, industry and Transport Canada on the security side.

Generally speaking, a SeMS approach may include at minimum the following elements:

- a security policy on which the system is based and documentation containing all processes and responsibilities;
- an analytical process for setting goals for the improvement of security and for measuring the attainment of those goals;
- a process for identifying security risks and evaluating and managing the associated responses;
- a process for ensuring that personnel are trained and continuously competent and informed to perform their duties;
- a process for the internal reporting and analysis of threats, incidents and breaches and for taking corrective actions to prevent any similar incident reoccurring; and
- a process for conducting internal reviews and external audits of the security management system.

Results-based regulations, supported by SeMS, can be “loosely” or “tightly” specified. For example, for industry, a somewhat tighter approach may be appropriate in part because of its profit motive and tendency toward containing costs. For a governmental agency such as CATSA, whose whole purpose is security, a looser approach should apply. For example, Transport Canada could simply specify that the screening equipment used by CATSA must be capable of detecting explosive substances instead of specifying details related to the kinds of explosive substances, their mass, volume or concentration. Results-based regulations may reflect the ultimate objective sought and/or intermediate objectives leading to the ultimate objective. For example, Transport Canada would establish basic elements while CATSA would have full responsibility for

operational policy, including operational design, screening officer and service provider qualifications, equipment decisions and management of the list of prohibited items.

The results-based approach presents advantages for the regulated entity, permitting it to achieve compliance in the most efficient and cost-effective way. This approach also enables innovation and the adoption of a culture of continuous improvement, identified as a characteristic of a “high reliability organization.”³ A disadvantage is that it is not always easy to determine how to meet the performance requirement. Also, the regulated entity may have to initially invest added time and resources to implement and verify for its own purposes that it is in compliance with the performance requirements.

From the regulator’s point of view, results-based requirements are simpler and less detailed to prepare in the first instance, reduce the need for issuing regulatory exemptions and reduce the time and effort needed for producing regulatory amendments. This would mean that Transport Canada resources could be redeployed to pressing priority projects, such as developing a regime for air cargo security. Among the disadvantages, compliance monitoring is more complex than with the prescriptive approach and requires a culture shift by inspectors to an audit approach to compliance monitoring as envisaged by SeMS. Developing this new audit-type approach to monitoring and enforcement should allow for more efficient use of inspectors. Finally, it may be more difficult for the regulator to demonstrate that it is meeting its international or bilateral obligations; however, it should be noted that SeMS is not unfamiliar to international bodies such as ICAO and many of its member states and is actively being discussed in these venues.

It would seem that some progress towards less prescriptive aviation security regulations is being made. Current drafts of the regulatory measures envisaged for hold baggage screening, developed jointly by Transport Canada and CATSA, have been described to the Panel as being a step in the right direction since they are more performance-oriented. The Panel notes that the current Advisory Group on Aviation Security (AGAS) plays an important consultative role at the national level by bringing together government and aviation industry participants to exchange views

³ Benoit, Liane; “World Class Model or Potemkin Village? A Study of Performance Measurement in Canadian Air Transport Security; Paper submitted to the Canadian Air Transport Security Authority Review Advisory Panel (June, 2006).

on issues of mutual concern and that the Group should be used as a conduit to speedy action.

Along with this results-focused approach, Transport Canada should more fully reflect risk assessment in its screening regulations. Currently, small airports with little traffic, and demonstrably lower risk, are subject to the same high level of security screening requirements as Class 1 airports. This inflexibility can be costly for CATSA and small airports, especially when a full roster of screening personnel is required for small passenger loads and few flights per day. If, based on risk assessment, it is determined that security could be maintained in a more flexible manner, this should be a goal of CATSA's operational policy. For example, more stringent requirements at Class 1 airports could be warranted, while permitting alternative cost-effective solutions for small airports. The Panel notes that this has been the case for airport security in areas other than screening. For example, requirements for perimeter fencing and surveillance differ between classes of airports.

Transport Canada established the criteria for designation of airports where screening is performed by CATSA. Actual designation is achieved when, upon recommendation by the Minister of Transport, the Governor in Council, pursuant to section 34(a) of the *CATSA Act*, passes the *CATSA Aerodrome Designation Regulations* listing the airports. The current list of 89 designated airports covers approximately 99 per cent of total passenger traffic in Canada. Captured under this designation are the large Class 1 airports that handle thousands of passengers a day, as well as the smallest airports that may have just a few dozen passengers a day. Allowing CATSA to have greater flexibility on how it provides screening at some of the smaller airports could reduce costs and enable the Authority to redeploy resources to higher-volume airports and thus improve service for the travelling public without any reduction in security. We understand that Transport Canada is reviewing the designation of airports and the Panel supports this effort. The results of the review, together with operational flexibility for CATSA, could mean removing some of the 89 airports from the designated list or rationalizing, through risk analysis, the screening requirements for each airport. CATSA should also be encouraged to design, test and implement more cost-effective operational policies offering screening solutions in smaller airports, such as fewer screening officers per line. This type of risk analysis will ensure that Canadians receive the greatest benefit from limited aviation security resources.

Adopting a more results- and performance-based approach to regulations will also be consistent with federal government policy, as contained in the 1999 Government of Canada *Regulatory Policy* and the new *Government Directive on Regulating*, which are key elements of the Government's Smart Regulation initiative. We understand that Transport Canada is moving in this direction, but perhaps not fast enough and not far enough in the aviation security sector. The *Aeronautics Act* was amended in 2004 to provide new regulatory authority in respect of SeMS. The regulatory framework for aviation security should move more quickly towards a results-based approach as a general rule and employ prescriptive regulations only by exception. This would mean that operators and entities such as CATSA would dedicate themselves to deliver results rather than devote themselves to measurement against a checklist of specified activities and procedures. Establishing a results-based framework begins with strategic plans and programs.

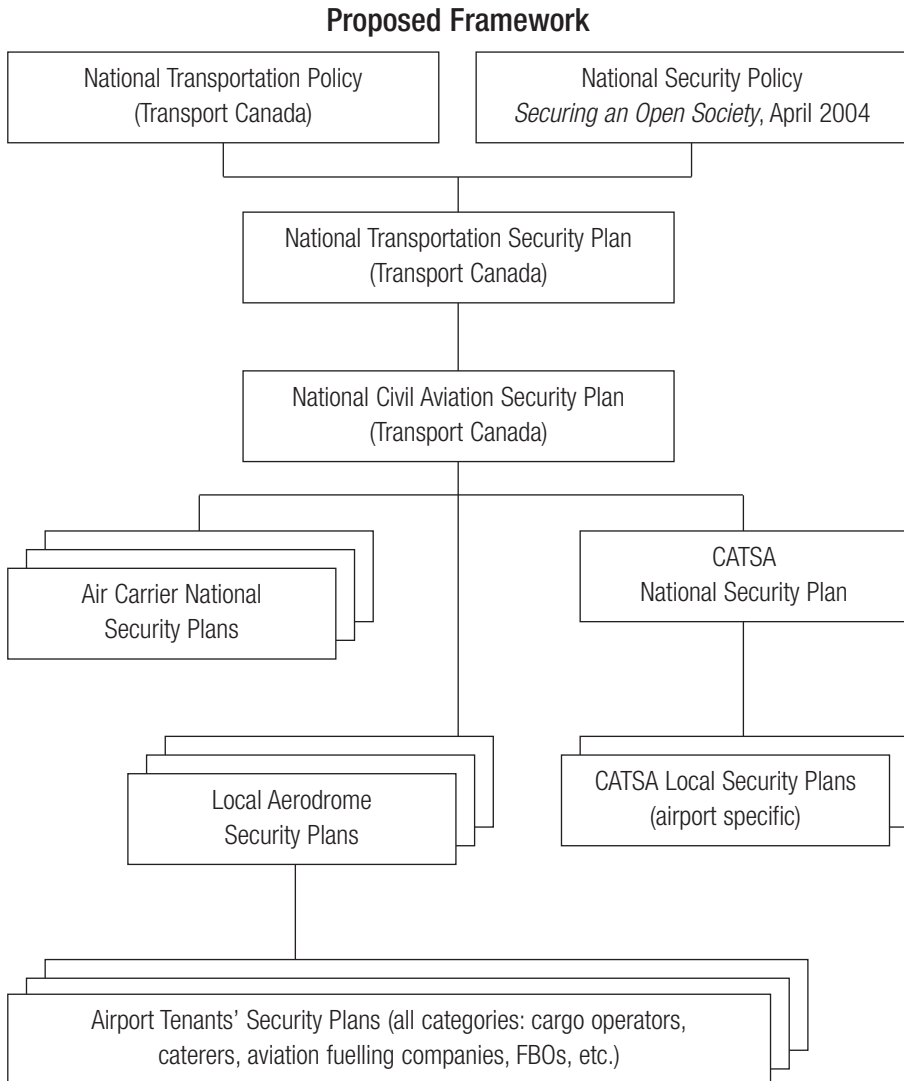
4.4.3 Towards a security planning system

The underlying foundation of a results-based regulatory framework is an integrated set of plans covering the national, local and sectoral operators in the aviation industry. Annex 17 of ICAO⁴ requires each member state to establish and implement a written civil aviation security program. It also provides that member states shall require each airport to establish, implement and maintain a written airport security program that meets the requirements of the national program. Canada has taken the position that it complies with ICAO requirements through its body of legislation, regulations and security orders that offer the equivalent of a national civil aviation security program. Still, it does not currently have a specific national program. While Canada complies with the spirit of Annex 17, we are convinced that a formal planning system, beginning with Transport Canada, would greatly benefit the aviation security sector. At present, Transport Canada does not require airport operators, CATSA, air carriers and other airport stakeholders and tenants to develop and maintain security plans. We note that the United Kingdom requires all key aviation players (airports, airlines, cargo shippers and caterers) to produce comprehensive and effective security plans that are in compliance with a national plan. This security planning system approach should be incorporated into the Canadian context, particularly as Transport Canada moves towards a more results-based regulatory regime.

⁴ For an extended discussion of Annex 17, see Chapter 2.

As a starting point, a National Civil Aviation Security Plan (NCASP) produced by Transport Canada would outline the national policy, strategy and objectives to be met through a series of integrated industry plans. As depicted in illustration 4.2, the NCASP would be established taking into account and conforming to Transport Canada’s National Transportation Policy, National Transportation Security Plan and the Government of Canada’s National Security Plan.

4.2: Canada’s Civil Aviation Security Program



Within this structure, each airport, major air carrier and CATSA would be required to produce a security plan that is in line with the NCASP. Airports, air carriers and CATSA, as a first step, would undertake a security and risk assessment in order to produce their plan. For consistency purposes, Transport Canada should establish the basic elements for conducting assessments and developing plans and also approve the plans, as well as monitor and enforce compliance. Multi-year plans could be approved and adjusted as needed. This would be similar to the planning system that was implemented after September 2001 for marine facilities under the *Marine Transportation Security Act* and the *Marine Transportation Security Regulations*.

Security and risk assessments would include such things as the identification of important assets and infrastructure and possible threats to them, plus the likelihood of an occurrence. The plan would also address weaknesses in infrastructure, policies and procedures, as well as possible counter-measures and changes needed to reduce vulnerability. The security plan, based on the assessment, at minimum, would cover elements designed to prevent unauthorized access of persons and things into the facility, assignment of duties and responsibilities related to security, procedures for responding to threats or breaches of security, and procedures for periodically reviewing and updating the plan. Assessments and plans for smaller airports would naturally be less complicated and onerous than for large airports but no less important in maintaining a security posture.

CATSA, in addition to its National Plan, would produce site-specific security plans for all airports at which it operates and these would tie into the airport's security plan. Major airport tenants (i.e. air cargo, caterers, fixed base operators, etc.) would also be required to produce site-specific security plans that would be an integral piece of each airport security plan. Ideally, the airport, CATSA, and air carrier security plans would contribute to the fulfilment of the NCASP by clearly defining the responsibilities and authorities of each organization.

Plans should be developed on the basis of national policies and risk assessment according to existing risk analysis methodologies, where Risk (R) is a function of the likelihood and feasibility of the Threat (T), plus the Vulnerability (V) of and the Impact (I) on the target. For example, airport plans would require the sharing of intelligence and hence the Airport Security Committee referenced in Chapter 2 of this Report would be tasked to produce a Multi-Agency Threat and Risk

Assessment (MATRA) in support of the plan. All plans should be regularly reviewed and updated to ensure they reflect current risk and assessment realities.

Security planning would not mean the abolition of regulation; rather, it would mean regulation directed towards results. Plans would need to include a description of how the entity would meet the regulated objectives. Periodic auditing of operations against the plans and the modifications to them would be performed by Transport Canada inspectors. If necessary, the department could issue letters of notification of non-compliance and if compliance is not achieved, take other measures. For example, ultimately the department could reserve the right to remove a specific authority and exercise it itself, or confer it upon another entity, and it could reserve the right to withdraw an operating certificate if non-compliance persists.

In terms of available action the Minister may take against CATSA as a Crown corporation, he could draw upon a range of available measures should the Authority exhibit problematic or chronic failures. Progressive measures include sending a letter to the Chair of the Board, installing someone within CATSA to oversee and report back to the Minister, working with the Prime Minister's Office to replace the Board, or installing a caretaker Chair until a replacement is found. If CATSA were a departmental entity, the normal accountability accord established between the Minister and the corporation head would be the yardstick by which performance is judged.

Hence, the new regulatory framework would lead to a new relationship between Transport Canada and CATSA. CATSA would become responsible and accountable for:

- Developing national and local security plans for Transport Canada approval, in compliance with the National Civil Aviation Security Plan;
- Adopting a Security Management Systems (SeMS) approach;
- Operational policy and procedures for carrying out all assigned screening mandates (including pre-board, non-passenger and hold bag screening) through their *Standard Operating Procedures* in compliance with the CATSA National Security Plan;
- Defining the equipment, processes and resources needed for screening operations, deploying these resources appropriately and achieving results for Canadians;

- Managing their operations and delivering a security service within budget and attuned to government priorities in the areas of security policy and customer service;
- Contributing to information exchanges and security committee meetings with others in the aviation community; and
- Managing their financial and administrative affairs as well as communications with the public.

Transport Canada, being freed from the requirement to make detailed rules and enforce them, would be able to focus on:

- National transportation security policy and programs;
- Providing strategic direction to the entire aviation security community;
- Establishing a National Civil Aviation Security Plan and assisting CATSA and industry in developing an integrated planning framework;
- Ensuring that all players are aligned in their efforts;
- Undertaking priority projects such as developing an air cargo regime, security of general aviation and perimeter security;
- Periodic audit-style monitoring and system-wide analysis; and
- Taking enforcement action when necessary.

Private sector operators (airports, air carriers, shippers, etc.) would also be responsible for developing security plans for Transport Canada approval based on the National Civil Aviation Security Plan and implementing them in compliance with all regulations and measures. They would need to embrace a SeMS approach throughout their organizations and would contribute to information exchanges and participate on security committee meetings with others in the aviation community.

Recommendation 4.5

It is recommended that, in line with ICAO Annex 17, Transport Canada develop a National Civil Aviation Security Program and require CATSA, as well as airport operators, major tenants and air carriers, to develop security plans for their areas of responsibility, consistent with the National Program. Transport Canada should approve the plans and audit the organizations on a periodic basis for compliance with their plans.

Recommendation 4.6

In line with the results-based regulatory regime, it is recommended that CATSA assume full responsibility (and accountability) for operational policy, including operational design and screening solutions, qualifications of screening officers and service providers, equipment decisions and management of the list of prohibited items.

DELIVERY OF SCREENING SERVICES

CATSA delivers passenger screening services in 89 designated airports across the country, covering about 99 per cent of all passenger traffic in Canada. The 89 airports are listed in Appendix D. Nine of these designated airports are classified as Class 1 airports (one of which, Montreal-Mirabel, is inactive for passenger travel), 20 as Class 2 and 60 as Class Other airports. In Chapter 3, we outlined the procedures for pre-board, hold bag and non-passenger screening. All three types of screening are performed according to specific requirements, some aspects of which vary depending on the category of airport.

Pre-board screening may vary somewhat from one location to another, due to variations in the equipment used and the airport layout. In some smaller airports, screening of hold baggage is performed in full view of the passengers, whereas in larger airports, this function takes place behind closed doors in the baggage handling area. Nevertheless, passenger and hold bag screening are designed to achieve the same level of security in all 89 locations. CATSA also performs random screening of non-passengers in the Class 1 and Class 2 airports.

Together with its service providers and screening officers across Canada, CATSA's achievement in putting these screening operations in place in the first four years of its existence is truly commendable. Now CATSA begins an era in which it must refine its practices.

In this chapter, we will examine *how* CATSA's screening services are provided. CATSA must select a suitable model or models for employing screening officers and develop a performance strategy to manage service delivery and ensure rigorous, visible accountability for that service. Finally, there are several human resources management issues to be addressed.

5.1 SERVICE DELIVERY MODEL

The *CATSA Act* provides that CATSA may deliver its front-line screening services in any of three ways: directly, using CATSA employees; through independent contractors engaged by CATSA; or through the operators of airports, who themselves may use their own employees or contracted service providers, if this option is selected.¹ Since the *CATSA Act* came into being, service providers under contract to CATSA have performed all screening services.² Each of these service delivery options has certain advantages and disadvantages.

Service delivery contractors: CATSA has over 20 contracts with some 12 different organizations to provide screening services at the 89 designated airports across Canada. The use of contractors appears to provide screening services at a reasonable cost compared to the alternative of a government workforce employed directly by CATSA. However, because CATSA is not the direct employer of the screening officers, its oversight and supervision of those officers is indirect, and must be carried out by enforcing compliance with its *Standard Operating Procedures* (SOPs) and with the terms of the service provider contracts.

The contractors all organize and carry out screening according to CATSA's SOPs, and they are bound by the terms of the contract they have in place with CATSA. We have nonetheless observed some significant differences among providers: some have a larger pool of workers available; some may give more generous benefits and more consideration to seniority; some offer more training for screening officers beyond what is given by CATSA, as well as more training for and support for Point Leaders. They do not all maintain the same performance and discipline information on employees,

¹ *CATSA Act*, ss. 6, 7.

² With the exception of the City of Lloydminster, Alberta, which provides screening at its own small regional airport.

and have different disciplinary and retraining procedures. They also differ in how they recognize and reward employee performance.

We are aware that there have been changes (sometimes several) in the contractors providing services at some of Canada's largest airports, and there may be some consolidation under way in the industry. The Panel considers it essential for CATSA to design its Requests for Proposal (RFPs) and contract provisions carefully, and to monitor delivery of the services offered under contracts effectively and rigorously according to CATSA's SOPs when service-providers are used, ensuring that any lessons learned are built into subsequent RFPs. This underscores CATSA's accountability for the management of its contracts.

It has been suggested that using relatively lower-paid contract employees may have two disadvantages: first, they may feel low job satisfaction and loyalty, and they may not therefore share CATSA's mission and values, so turnover may be higher than optimal. Second, there could be potential for screening officers to be compromised by financial pressures. The Panel notes that while rates of pay have risen significantly since CATSA was established, there are regions where comparable jobs pay much more. The Panel also heard that in some locations, screening officers hold second, or even third, jobs.

A high rate of turnover of screening officers gives rise to significant costs to replace them – to recruit and obtain security clearances; to provide uniforms; to train, certify and arrange for designation; and to integrate new staff into the workplace. The Panel learned that the annual turnover among the contracted staff currently averages 12.2 per cent across the eight active Class 1 airports in Canada, though it varies widely across Canada according to competing local employment opportunities. Turnover of screening personnel in the United States declined dramatically when they became federal employees of the Transportation Security Administration. It averaged 126 per cent a year in 1998-99 at the 19 largest U.S. airports³; we learned from TSA officials that it is now about 20 per cent annually. We were advised by TSA that employment as a screening officer within TSA is seen as an entry to the U.S. federal civil service, and this may be a contributing factor to the higher rate of turnover in the U.S.A. than in Canada. CATSA is a separate employer and does not

³ United States General Accounting Office, *Aviation Security: Slow Progress in Addressing Long-Standing Screener Performance Problems*, Statement of Gerald L. Dillingham, March 16, 2000, and *Aviation Security: Terrorist Acts Illustrate Severe Weaknesses in Aviation Security*, Statement of Gerald L. Dillingham, September 20, 2001.

provide access to other public-service jobs. Opportunities for screening personnel in Canada may be greater with a service provider organization than with CATSA, depending on its relative size, whether it has other local, regional or national locations and whether it has diversified lines of business that allow screening officers to plan a long-term career path. Regardless of the employer, the nature of screening, which is described as repetitive, often monotonous, stressful work requiring constant vigilance, is a significant contributing factor to turnover.

Airport Operators: Using its own employees or contractors, an airport may be well-placed to provide screening services in the context of its own customer service approaches. This could result in more seamless integration of screening within the wider airport operations. There may also be some scope for cross-utilization between screening personnel and airport staff performing other airport security tasks, and hence greater job variety. However, cross-utilization may be limited due to requirements for all types of staff during peak hours. Using an airport operator as a CATSA service provider would yield the same general advantages outlined above, and risk the same disadvantages. It would also introduce one more player into the service delivery process, but this might be justified by better relations between CATSA and the airport operator concerning shared objectives. On the other hand, procedures for administering contracts could complicate relations between CATSA and the management at that airport. Airports may also feel pressure for their own business reasons to focus more on efficient throughput, at the expense of effective security.

The Canadian Airports Council (CAC), in a survey of its member airports, confirmed the views the Panel heard from several airports: that they should have the option of being considered to carry out front-line screening services (PBS, HBS and NPS) as part of their wider security responsibilities. We are aware that, to date, CATSA's RFPs have excluded airport operators from bidding on screening contracts. The Panel notes that CATSA's RFPs have generally sought a contractor who would provide screening services at several airports in a region. Airport authorities are prevented under the *CATSA Act* from offering screening services at competing airports,⁴ and this restriction appears appropriate. Nevertheless, CATSA may want to encourage as open a market as possible, and therefore should consider the option of allowing airport operators to compete for screening contracts at their own airports. Like

⁴ *CATSA Act*, s. 7. (1).

any other service provider, an airport provider would have to meet CATSA's national service and performance standards, and be subject to its oversight and training program.

Delivery of front-line operations by CATSA employees: The key advantage of screening officers being CATSA employees would be that CATSA would have more direct oversight and therefore consistency in delivering front-line screening operations. Increased cost would be the main drawback – labour costs could be in the order of 40 per cent higher, or more than \$2 per passenger screened. As CATSA employees, many screening officers would likely have much better employee benefits, and career progression opportunities within CATSA. Turnover may decrease further if employee satisfaction improves. As noted above, this also depends from region to region on competing job opportunities. The U.S. example cited earlier of screening officers using TSA employment as an entry to government as a whole is less relevant in Canada, as CATSA would continue to be a separate employer. CATSA would nonetheless face the human resources management rigidities of a larger public employer, for example in dealing with poor performance and reallocating resources. It would lose the operational flexibility inherent in a contracting-out approach.

On balance, the current arrangement seems to be working quite well – it is achieving CATSA's objectives at a reasonable cost. However, the other options allow for CATSA to respond to changing requirements that may develop in the future. Where feasible, airport operators should be eligible to bid on screening contracts for their own airports. We conclude, therefore, that all three options for CATSA to deliver screening services should remain in the Act.

Recommendation 5.1

- (a) All three options for CATSA to deliver screening services should remain in the *CATSA Act*.**
- (b) Airport operators should be eligible to bid on a screening contract for their own airport.**

5.2 PERFORMANCE MANAGEMENT

An organization's performance is the level to which it meets expectations over some period of time. So we must consider what CATSA's expectations or objectives should be, how it measures them, what results are achieved, and how results are reported.

The *CATSA Act* specifies five broad criteria for CATSA's delivery of screening services: efficiency, effectiveness, consistency, public interest and the interest of the travelling public. Further criteria and duties provided in the Act must also be addressed by CATSA in carrying out its core responsibilities. These include developing standards for qualifications, training and performance of screening contractors and screening officers – standards that are as stringent as or more stringent than those established in the aviation security regulations made under the *Aeronautics Act*.⁵ CATSA is also given the mandate for certifying service providers and screening officers who have met these standards, and for enforcing the standards through amending, suspending or cancelling such certification if the circumstances warrant.⁶

Treasury Board has defined a performance measurement strategy as a system that “generates evidence-based information/data that answers the following questions: are we achieving the outcomes expected for the targeted beneficiaries within the time set and at a reasonable cost?”⁷ It can be subdivided into several different categories to fully address the whole range of activities that contribute to meeting overall expectations and objectives. CATSA must set measurable targets and develop indicators; these must be communicated within the organization and to partners; results must be monitored and reported, and timely corrective action taken.

For a public organization like CATSA, establishing performance standards means publicly committing to measures of effectiveness, efficiency and service to users, and auditing and reporting against these standards. The standards should make it clear what is considered *acceptable* performance,

⁵ *CATSA Act*, s. 8. (1).

⁶ *CATSA Act*, s. 8. (2), (3).

⁷ Quoted in Liane Benoit, *World-Class Model or Potemkin Village? A Study of Performance Measurement in Canadian Air Transport Security*, research prepared for the CATSA Act Review Panel, June 2006, page 14.

so that CATSA can show over time how it is succeeding (and where it must address weaknesses), and not simply report on activities.

5.2.1 Performance indicators

The five criteria specified for CATSA's delivery of screening services – effectiveness, efficiency, consistency, public interest and the interest of the travelling public – must form the core of CATSA's performance management framework. Public interest is a general criterion that is difficult to assess within a managerial approach. In Chapter 3, we recommended that the criterion of “consistency” be dropped from the *CATSA Act* because it is implicit in the concept of security “effectiveness” and the overall purpose of the Act. Assessment of CATSA's performance should therefore focus on the criteria of effectiveness, efficiency and the interest of the travelling public.

Security effectiveness: Measurable indicators of effectiveness are difficult to devise: should they be based on the number of aviation security-related incidents over time, or on the number of threat items seized? Like crime statistics, such measures depend on many other factors and it is difficult to determine whether more or fewer incidents measure an organization's failure or success.

A study on performance measurement⁸ undertaken for the Panel by Liane Benoit concluded that effectiveness for security organizations, such as CATSA, for which the consequences of failure are extremely high, is reflected in the characteristics of what are known as “high reliability organizations.” In general, such organizations must exhibit “adequate financial and human resources and a strong, shared sense of mission ... that includes a collective commitment to highly reliable operations in terms of both safety and production.”⁹ Seven essential elements are identified for the achievement of this level of effectiveness:

1. extraordinary levels of technical competence;
2. sustained high technical performance;
3. regular and continuous training;
4. structural redundancy;

⁸ Benoit, op. cit.

⁹ Frederickson and LaPort, cited in Benoit, page 7.

5. flexible decision-making processes involving operating teams;
6. collegial, decentralized authority patterns in the face of high-tempo operational demands; and
7. processes that reward error discovery, reporting and a continual search for system improvement.¹⁰

In our view, these are the security effectiveness characteristics to which CATSA should aspire, and it should establish performance indicators accordingly.

Indicators of efficiency: Efficiency of CATSA's screening operations is very important to aviation partners and to the travelling public. CATSA's current efficiency commitment is to ensure that a passenger waits no longer than eight minutes for pre-board screening, at least 90 per cent of the time. This is a relevant measure for travellers, but is an average over a period of time. It does not reflect the longer wait times inherent in peak-period travel.

Stakeholders, particularly the Canadian Airports Council and air carriers, expressed dissatisfaction with CATSA's performance measurement and reporting standards for throughput. They criticized the methodology used and CATSA's failure to invite airports and airline participation in the process. They called for CATSA to clearly articulate national throughput performance standards against which CATSA's performance can be assessed. CATSA is now publishing national throughput performance statistics,¹¹ with summaries of average and peak waiting times, which is an important step in this direction.

The Panel agrees that a peak throughput commitment is a good idea. However, we note that airports affect throughput with design and space allocated for screening and waiting areas, and therefore suggest that CATSA's published standards should reflect this.

Interests of the travelling public: CATSA must develop reliable indicators for customer service as well. The Panel received comments and submissions from a number of organizations concerning the need for improved customer service skills, and greater sensitivity among screening officers for the needs of travellers with disabilities. Although the CATSA training program includes customer service training and a component on

¹⁰ Ibid.

¹¹ *Queuing Time and Throughput, Winter 2006, April 2006, CATSA website.*

serving disabled persons, service providers acknowledged that more extensive training in both areas would be beneficial.

The Panel suggests that CATSA engage with interest groups, including representatives of disabled travellers, to help establish appropriate indicators for customer service.

5.2.2 Factors affecting performance

A wide variety of factors may affect the performance of CATSA and its service providers in their security screening role. Some are within CATSA's control, some are not. The significant factors include whether organizational goals are mutually consistent, the nature of regulatory control, the screening officers, staffing flexibility and equipment, and input and infrastructure constraints. We recommended in Chapter 4 that CATSA should have the responsibility for operational policies so it can adjust and adapt to changing circumstances. This will give CATSA greater control over – and accountability for – meeting specified performance objectives. In this section, we will discuss elements that affect performance, and which CATSA should take into consideration when designing indicators.

General goals are reflected in overall priorities, and operational procedures and objectives should flow from those goals. In CATSA's case, the goals are clear: effectiveness – that is, assuring air transportation security – is most important. But efficiency is also required, which means, among other things, providing customer service at a reasonable cost. In some circumstances, these two sets of statutory goals may seem to contradict one another. CATSA must find a balance between the criteria of security effectiveness and efficiency, and develop performance measures in consultation with Transport Canada, airport operators and air carriers, so that all parties are aware of the balance and how CATSA's performance will be monitored and measured.

The prescribed procedures for screening (regulations, orders, SOPs) affect the other performance factors as well, such as the design and layout of screening lines, staff certification and use of technology and procedures. Enforcement also affects performance: the Panel observed on several occasions that throughput declines significantly when Transport Canada inspectors are present and screening officers are anxious not to make mistakes. CATSA in turn must ensure that its service providers and their screening employees comply with the *Standard Operating Procedures*.

Input constraints include peaks in passenger traffic at a given airport that result from concentration of flights, as well as the reliability of air carriers' schedules, which together determine maximum staffing required at pre-board and hold bag screening. The type (business, leisure or charter) and destination of passengers affects the number of carry-on items and bulkiness of their outer clothing. Air carrier check-in processes can affect whether passengers arrive in good time at pre-board screening. The number of carry-on items permitted by air carriers and their maximum size also affect PBS operations. Air carrier scheduling, particularly in spacing flight departures, can assist with the efficiency and effectiveness of security services, though the Panel recognizes that flights are often bunched together to accommodate travellers' plans at their destinations, and to allow for reasonable transfer to connecting flights.

Airport design can affect the flow of passengers, how easy it is for passengers to move rapidly from one screening point to another, and whether alternative layouts can be tried out. CATSA's accomplishments in deploying equipment for pre-board and hold bag screening since it came into existence in 2002 have been achieved within architectural limitations. Security equipment has been squeezed into existing terminal building facilities and, for in-line hold bag screening, into baggage-handling systems that were not designed for it. As a result, the efficiency of a large number of these security systems is less than optimal. The Panel observed airports where inadequate space for pre-board screening lines renders these lines less than optimally efficient, and others where absence of back-up equipment or redundancy sometimes causes major delays.

Effectiveness and efficiency of performance is affected by the ergonomic design of the screening lines, such as the height and placement of tables, the space between screening lines and whether floor coverings and furnishing reduce standing fatigue. The design of the entry and exit areas is particularly important. An official of the U.S. Transportation Security Administration advised that having good practices for "divesture" (placement of outer clothes, electronics and pocket items for screening separately), and using secondary search screeners beyond the main processing line, can increase throughput by 25 per cent. Preparation of persons being screened (providing information so they are prepared as they approach the screening point) and arrangements for them to pick up their belongings and leave the screening area, are key to optimal flow through the lines. The screening point configurations – layout of queuing areas, arrangement of tables and bins for divesture, space available for

secondary searches, and the pick-up area for divested items – vary from airport to airport. The Panel observed that layouts and practices that work well at one airport are not necessarily adopted at other airports.

Vancouver International Airport is one good example of cooperation between the airport authority and CATSA in the design of the pre-board screening space. As a result, the number of passengers processed per hour by CATSA screening officers at this airport is significantly higher than the national average. We urge other airport authorities to look at the Vancouver example as a best practice.

CATSA's performance standards, including peak-hour throughput standards for pre-board and hold bag screening, should reflect the impact of design and ergonomic constraints. CATSA must work with airport operators and other partners to establish space allocation standards for pre-board screening lines and a throughput standard for an optimum configuration.

Budgetary constraints also play a major role for government organizations like CATSA, since budgets allocated within an annual appropriation model cannot easily be adjusted to changes in passenger volumes; this rigidity makes it difficult to allocate the proper resources to meet traffic demands.

The availability, capabilities and reliability of technology are also important factors in performance. Some equipment offers faster throughput with greater automatic screening capability, while other processes rely on manual actions like physical searches or scanning with a hand-held detector. The selection of equipment and associated technology, its reliability (and whether back-up redundancy is available for contingencies), and capacities (both in terms of the size of items handled and throughput per minute or other time period) are factors affecting performance. The Panel encourages CATSA to continuously monitor the human/machine system performance and adjust, as necessary, the processes to ensure maximum effectiveness.

Operating highly automated equipment presents both challenges and opportunities for performance. This type of work can be much more monotonous for screening officers than manual searches, but such equipment can also build in features that stimulate alertness and help identify threat objects. Challenges can be addressed in part through defining competencies and aptitudes needed for particular roles; careful selection of candidates; training to develop and enhance competencies;

and through retention of experienced screening personnel. Tools such as in-line virtual test objects and stand-alone interactive self-learning stations are good examples of technology that can improve screening officers' effectiveness, and we were told that the screening staff welcome them.

Excellent performance depends on implementation of an operational plan, including human resources management, supported by rigorous oversight. At most Class 2 and all Class Other airports, there is now no on-site CATSA oversight; the Panel observed that the screening personnel in most locations would benefit from more direct interaction with CATSA managers.

The Panel has serious concerns about the role of Point Leaders, who have a crucial role at screening points. A Point Leader is a screening officer who has achieved a higher level of certification through success in extra CATSA training and, in some cases, seniority and who monitors the work of screening officers and operations at a screening point. The Panel was told that some Point Leaders receive little training in leadership; some are mainly concerned with staffing the screening points and monitoring break times, and some have been subjected to intimidation when they took disciplinary action against fellow members of a union. We are very concerned that there may be great variability in the activities of Point Leaders, coupled with insufficient oversight by CATSA managers, as noted above. The Panel notes that CATSA is actively considering options to improve operational supervision currently provided by the contractor's Service Delivery Managers and the Point Leaders. There should be a close look at the Point Leader function at screening points, including their role, responsibility, recruitment, status and training. Point Leaders should be selected on merit, and must be more effective in supervising the operational activities of screening workforce.

CATSA's own *Standard Operating Procedures* affect performance and service standards, satisfaction of stakeholders and staffing resource decisions. The SOPs must be adequate in scope, but not excessively voluminous. New procedures should be considered that can improve performance. We are aware that a Registered Traveller Program with specialized screening points could speed up screening of low-risk travellers, but consider that the best gains would be made by investing in improvements that would benefit the processing of all passengers. The Panel recognizes that if time spent waiting and being screened, even at

peak times, is reliable and reasonably short, there will be fewer delays, and fewer demands for separate high-speed treatment.

Finally, contract constraints affect performance through the number of screening officers available at a given time, how flexible their shifts and schedules are, and the quality of management provided by the contractor. The present constraints on CATSA's budget planning and spending were cited as reducing funds available for overtime and additional staffing to meet unexpected traffic demands, particularly towards the end of a fiscal year.

Recommendation 5.2

- (a) CATSA should develop measurable performance standards, including peak-hour throughput and wait-time standards for each airport that reflect, among other factors, the pre-board screening configuration at the various screening points.**
- (b) CATSA should establish space allocation standards for pre-board screening lines and a throughput standard for an optimum configuration.**
- (c) CATSA should develop workplace design standards to optimize screening effectiveness and employee working conditions and ensure best practices are shared with all airports.**

5.2.3 Achieving high performance

As we have discussed above, there are many factors that affect how CATSA can achieve both effectiveness and efficiency in the interests of the travelling public. Many of these factors are beyond the control of CATSA alone. Achieving performance targets for security screening services requires the commitment and cooperation of the service provider, their screening employees, CATSA, air carriers, the airport operator and Transport Canada.

The air carriers and the airport operators are essential partners with CATSA in the design and delivery of security screening services. The location of screening points, the layout and space provided for the screening lines, as well as information and signage, all influence screening

performance. At airports where this partnership works well, the benefits are evident. The Panel encourages CATSA and air carriers to develop protocols for ensuring that travellers arrive early enough and proceed promptly to pre-board screening, in order to reduce cases in which checked-in passengers must be escorted to the front of queuing lines so they will not miss their flights.

Transport Canada's role is pivotal in assuring effective delivery of security services and is monitored and enforced by security inspections. Screening officers may feel anxious when inspectors are present, which can reduce throughput significantly. The Panel urges CATSA and Transport Canada to develop a more collegial and collaborative work environment for the screening staff.

The Panel notes that CATSA has implemented bonus systems for its service providers and for its own regional managers, and we support this initiative. However, bonus systems can have unintended consequences. If a performance bonus depends on reducing errors over time, a contractor or CATSA regional manager may have less incentive to report breaches, errors and incidents, or to assign responsibility for an error. This may bias both performance reporting and any follow-up learning from mistakes and, more seriously, could weaken security.

Reliable and measurable performance standards, consistent with its statutory mandate, are essential for CATSA to be able to work with its various partners. Such standards represent CATSA's commitment to deliver results, to demonstrate value for money and to reassure travellers. CATSA must also communicate these elements clearly to its partners.

5.2.4 Performance reporting

CATSA has recently adopted the Balanced Scorecard¹² as a framework management system, with performance measurement being one of the outputs. CATSA advises that it employs a customized version of the Balanced Scorecard methodology, which is a system of linked objectives, measures, targets and initiatives that collectively describe the strategy of CATSA and how the strategy can be achieved. At present, the Balanced

¹² Developed by Dr. Robert Kaplan and David Norton; see Paul Averson, "What is the Balanced Scorecard?", Balanced Scorecard Institute, 1998, Washington, D.C. page 1; *The Balanced Scorecard*, Robert S. Kaplan, David P. Norton (Harvard Business School Press), 1996.

Scorecard system has been implemented at the senior management level and CATSA has plans to gradually introduce the system at other levels.

“CATSA’s Balanced Scorecard is supported by a comprehensive computer-based information system, Business Intelligence (BI) that records, analyzes and disseminates data on a real-time basis. It provides the national office with information from each screening checkpoint on a daily basis through reports filed with the newly established Security Communications Centre (SCC).”

“The Scorecard structures strategic management goals and the activities that support them in a continuous ‘double loop’ fed by performance indicators, metrics and targets, all geared towards ‘continuous improvement.’ While originally designed as a management tool for industry, the model has recently been adapted and implemented in some public sector organizations, impelled in part by the current trend in central agencies towards the adoption of more business-like approaches to public administration and a renewed emphasis on ‘value for money’ in publicly funded operations.”¹³

CATSA has devoted considerable effort to performance measurement, but has yet to settle on consistent performance objectives, measurement and reporting. The reporting appears blurred with “a hundred different indicators and measures divided between various performance profiles and programs that have been established to measure and assess how CATSA is performing.”¹⁴ The performance priorities¹⁵ and targets¹⁴ changed over time so it was difficult, on a comparative yearly basis, to accurately measure achievements.

Benoit’s research raises questions about the significance of the measures (objects seized are of varying degrees of risk); the difficulty of establishing targets; and the systemic bias where performance indicators attached to bonus systems may tend to reduce the number of reported incidents and breaches.¹⁶ She comments that the performance data were linked mainly to activities, rather than results.

¹³ Benoit, *op. cit.*, pages 12-13.

¹⁴ *Ibid.*, page 15.

¹⁵ *Ibid.*, pages 25-26.

¹⁶ *Ibid.*, pages 20-27.

CATSA has nonetheless made progress in developing performance measurement reporting and in establishing more robust performance criteria and indicators comparable to internationally accepted norms... “and CATSA might be turning the corner in terms of the establishment of more robust performance criteria and indicators.”¹⁷ Recent quarterly reports¹⁸ show improvement in some areas, but still contain many elements that can be characterized as activity reports.

5.3 HUMAN RESOURCES ISSUES

The quality of personnel in an organization is a major performance factor. CATSA’s means to address this is through provisions of its contracts with service providers, and its training and certification procedures – as long as suitable performance standards have been established. Screening officers should have appropriate competencies, including language proficiency. They may be required to perform several different functions and be certified to move from one position to another and their level of training, absenteeism, alertness and motivation are key. A recent study concluded that while the performance of airport security is a function of their underlying institutional configuration, ... three key factors are good predictors of screening performance: turnover, pay and training among screening officers.¹⁹ This analysis indicates that

(T)he causal links between these variables and screening performance are straightforward. Without receiving proper training, screeners hardly know what to look for... A similar causal logic applies to low pay. It is one of the well-proven findings in labour economics that ‘you get what you pay for’. Low pay only discourages highly skilled workers from applying. It also reduces the employee’s incentive to perform well and increases the incentive to engage in moral hazard since similar or even better employment can be easily found

¹⁷ Ibid., page 25.

¹⁸ *Quarterly Performance Report – 2005-2006/Q4*. CATSA website.

¹⁹ Jens Hainmüller and Jan Martin Lemnitzer, ‘Why do Europeans Fly Safer? The politics of airport security in Europe and the U.S.’, *Terrorism and Political Violence*, v. 15, No. 4 (Winter 2001) 4-5.

²⁰ Ibid.

elsewhere... The causal mechanism underlying the correlation between turnover and screening performance is as follows: As with most tasks, the performance of screening increases with experience... With a rapidly fluctuating workforce nothing like an 'organizational memory' can be developed that would enable managers to constantly update and review procedures in a process of trial and error.²⁰

One of CATSA's first initiatives was to negotiate increases in hourly pay of about 50 per cent. In most areas of the country, at \$15 per hour, the average wage is considered generally competitive in 2006. As a result, the screening staff turnover at the Class 1 airports during the past year averaged a respectable 12.2 per cent.

As we discussed earlier in this chapter, turnover is an important issue since training new staff takes time and consumes scarce resources (about \$4,000 per trainee, plus many other direct costs such as uniforms) before they become fully effective. Attention by management to human resources may reduce turnover, for example by recognizing performance, installing continuous learning on site, and offering better benefits with seniority.

Repetitive, stressful work requiring constant vigilance requires highly motivated, highly trained, committed individuals with a strong sense of mission. Douglas H. Harris, a specialist in ergonomics, emphasizes the link between aptitude and achievement, arguing that a critical factor for successful performance is a match between the aptitudes of the job incumbent and the skill requirements of the job. Harris states that

This matching is a function of the procedures employed for selecting and assigning personnel to jobs. Other important factors are opportunities to develop job-related knowledge and skills; measurement, feedback and recognition of job performance... and opportunities for career growth and achievement.²¹

The Panel notes that CATSA has succeeded in improving the status of the contracted screening workforce with increases in pay, introduction of standard uniforms, improved training and uniform standard operational procedures. The service providers were also satisfied that CATSA is improving provisions of contracts.

²⁰ Ibid.

²¹ Douglas H. Harris, "How to Really Improve Airport Security", *Ergonomics in Design*, vol. 10(1) Winter 2002, page 17.

Several key human resources issues were brought to our attention in the course of our consultations.

5.3.1 Pay and recruitment

While pay levels have generally improved, the Panel notes that higher pay might be required to attract sufficient numbers of applicants with the highest aptitude for threat detection. In Alberta, there are still great disparities in hourly pay between screening officers and other workers in comparable jobs; recruitment is a major challenge there, and turnover is higher than in other parts of Canada.

The Panel was told that many screening officers hold second jobs – particularly at the larger airports, where almost 50 per cent of the screening workforce has second (or even third) jobs. In locations where the cost of living is high, or for screening officers with significant family responsibilities, income from screening may be insufficient, and many screening officers take on additional full- or part-time jobs. Such jobs are often at the same airport – for example, at a retail outlet or on an air carrier check-in desk. This situation can make it difficult to administer work shifts for screening officers, and may reduce alertness of screening officers working 16 hours in a row, perhaps for several days. Other employees work many hours of overtime at the screening points, partly to meet peak requirements when there are staff shortages. Indeed, we understand that screening officers are sometimes offered incentives to cover peak requirements by working overtime. Excessive hours of work, whether through overtime or extra jobs, can lead to fatigue.

We suggest that CATSA undertake a study to determine the extent to which screening officers are working overtime and at extra jobs, the effect on service delivery of their working long hours, and what remedies might be indicated.

5.3.2 Orientation and training

There is no doubt that training has improved considerably since CATSA became responsible for security screening services, and all stakeholders acknowledged this. CATSA has expanded the training curriculum to focus on security technology and people skills, and has recently moved to an in-house training service.

More on-going and refresher training is needed, especially related to new techniques and detection of improvised explosive devices, even for fully certified staff. CATSA conducts simulated infiltration tests for training purposes. The Panel strongly supports such performance measurement and feedback as a necessary element of training and quality assurance. The Panel also encourages use of in-line and stand-alone technologies, such as TIPS and XRT, to provide practice, rate performance and give direct feedback to screening employees. We suggest that results from any on-line performance training or measurement should not be used for punitive actions, such as fines, penalties, reprimands or decertification. We heard that such tools for continuous learning feedback are well accepted by screening employees, but that budget limitations have prevented installation widely enough to be worthwhile for all employees.

Comments from stakeholders at airports concerning customer service skills were mixed. Many reported courteous and friendly service, while others indicated problems with the attitude of some screening personnel and a need for more courteous service.

The Panel was told that there may also be a need for CATSA and, in turn, its screening contractors, to have more operational flexibility, so that screening officers with specific competencies can be located to best advantage, with appropriate rotation to maintain alertness. For example, screening officers with good interpersonal skills should be placed more frequently in positions which have the greatest public contact. Conversely, those with the best aptitude for detecting threat items in X-rays could specialize in this function.

As we noted in Chapter 4, all screening officers are expected to understand and master CATSA SOPs and Bulletins amounting to several hundreds of pages. They are required to engage in continuous review of these documents during downtime and before the shift begins. CATSA should develop and deliver refresher courses to screening officers on its *Standard Operating Procedures* to ensure they maintain an up-to-date understanding of their complete content. Both new and experienced screening personnel would benefit from continuous training in new screening techniques, including recognizing newly identified threats and prohibited items.

²² Transportation Security Authority, June 2006.

The Panel was impressed by the approach of the Performance Accountability and Standards System (PASS) Human Capital Program implemented by the U.S. Transportation Security Administration.²² It shows a genuine commitment to better integrate standards for performance with training for competency using the standards as benchmarks, and supervising and measuring performance (with quarterly feedback). This is over and above continuous online training, with hundreds of tests being performed on a daily basis in each screening position with computerized devices and people trying to infiltrate.²³

Recommendation 5.3

We recommend that CATSA provide refresher courses to screening officers on new screening techniques, and on changes to the CATSA *Standard Operating Procedures*, to ensure that screening officers maintain an up-to-date knowledge of their complete content.

5.3.3 Oversight and supervision

Many stakeholders observed that screening officers are monitored by too many people pursuing sometimes-conflicting goals: their employer (the contractor service provider); CATSA's local managers; the airport management; air carriers; and Transport Canada inspectors.

Security tasks must be performed with the highest degree of integrity, which can be very costly. Employees must be highly reliable, with good attendance at work and in good health, competent and well-performing, and must be willing to comply with orders and respect discipline.

When a CATSA service provider for a given airport changes, the employees change employers. Because their certification is CATSA's responsibility, this information must be kept active. The Panel considers that CATSA should require in the terms of its contracts that service providers obtain consent for transfer of relevant employment information. CATSA must ensure that its own rules, and those of its contractors, protect employees' personal information effectively, and are complied with rigorously.

²³ One element of the TSA program authorizes recruits to act as testing officers, which is not possible in Canada, accordingly reducing the capacity for testing.

The Panel noted that at some airports, the screening staff works in teams – that is, the same group of five screening officers work together whenever they are on duty. We do not know whether this practice is frequent or systematic. The problem is that with this level of predictability, the potential of a group being compromised rises. Although the risk is unknown, it is a concern, and there should be standard procedures requiring random mixing of all screening staff.

As we noted earlier, at most Class 2 and all Class Other airports, there is at this time no on-site CATSA oversight, and the Panel was told that screening officers would benefit from more direct interaction with CATSA managers. Even at Class 1 airports, the Panel is concerned that oversight by CATSA management may be insufficient, because there are few on-site personnel. The problem for CATSA is to supervise screening delivery effectively through contractor service providers, who are the direct employers of screening officers. CATSA should be accountable for screening officer performance, including certification and designation actions. Visits by CATSA managers should be planned to give them maximum opportunity to observe screening operations and to meet with individual screening officers. When it is impractical to have a CATSA manager at less-busy Class Other airports, CATSA could consider delegating the contract management responsibility for security screening services to the airport manager, after he or she has been suitably trained by CATSA.

Recommendation 5.4

CATSA should consider options to improve supervision at all 89 airports. CATSA should deploy more management personnel in the field in order to provide closer supervision of security screening services.

5.3.4 Labour relations

Screening officers and Point Leaders who work for service providers under contract to CATSA are generally represented by a union, and their terms of employment are covered by collective agreements. Three unions represent most of the screening personnel across the country.

The unions representing security screening officers asked that the RFP for all CATSA contract renewals contain a commitment for the new

contractor to recognize the seniority, pay, annual leave, sick leave, pensions and other benefits the screening personnel enjoyed with their previous employer. Such provisions may help address attrition at the time of a change in contract and reduce overall turnover. We understand that CATSA already follows this procedure. CATSA should continue to provide through its RFP that such benefits for screening officers are maintained when a new contractor becomes their employer.

Unions and CATSA both expressed concern about the uncertainty of third-party liability insurance coverage for screening personnel – for example, in the event that a screening officer is involved in an incident in which damages are claimed, or is called to testify in relation to such a claim. Some contractors have an insurance policy for their employees, while others do not. It should be a standard contractual practice for CATSA to require all its providers to cover their screening officers with personal liability insurance. The liability insurance available to CATSA should ensure that CATSA contractors and their employees have adequate coverage.

Several airport operators presented the argument that screening is an essential service and therefore screening employees should not have a right to strike. The Panel notes that the *CATSA Act* contains a provision²⁴ that has the effect of declaring screening services at an airport to be an essential service (consistent with related provisions in the *Canada Labour Code*)²⁵ and we suggest that this be retained. The provision does not remove the right to strike, and does not specify what staffing levels should be maintained to assure service. The parties affected would have to negotiate how to continue essential services in the event of a dispute.

5.3.5 Dispute resolution

In our consultation process, the Panel heard from several unions and other stakeholders that formal appeal mechanisms are needed, particularly in situations in which a worker employed at an airport is unable to work because his or her Restricted Area Pass has been suspended. We looked into the mechanisms for dispute resolution and appeals which are currently available, and offer the following comments.

²⁴ *CATSA Act*, s. 27.

²⁵ *Canada Labour Code*, s. 87.4.

All airport workers, including CATSA screening officers, require a Transportation Security Clearance (TSC) issued by Transport Canada. Transport Canada has a TSC Review Panel, which addresses missing or incomplete information. The applicant may provide new information, or seek further review of the TSC Review Panel's recommendation. Appeals are possible to the Federal Court of Canada, in case of errors of law, or to the Security Intelligence Review Committee if the TSC is refused or cancelled based on information collected from CSIS.

All airport workers, including CATSA screening officers, also require a Restricted Area Pass (RAP) provided by the aerodrome operator (airport authority), when the TSC is approved. The airport operator has the power to refuse to issue a RAP, or to temporarily suspend or cancel it. The Panel was told that RAPs are sometimes revoked for apparently minor reasons, and there is frustration that airport workers may have no recourse for appeals. Any review process for actions by an airport operator would be conducted by the airport operator itself, through a mechanism it chooses.²⁶ We understand that representatives of airport operators have developed guidelines on sanctions and appeals for RAPs. These have been shared with other stakeholders, and we commend this initiative. The Panel urges all airport operators to implement a review mechanism, in consultation with interested parties. Transport Canada inspectors may also take actions against improper use of a RAP, including issuing fines or suspensions, as part of their enforcement of the regulatory framework under the *Aeronautics Act*. Review of Transport Canada's actions goes to the Transportation Appeals Tribunal of Canada (TATC), and appeals may be heard by a TATC Appeal Panel.

Because the two related documents – the TSC and RAP – are required by all airport workers, clear, timely dispute resolution mechanisms and good communications about how they function will benefit all workers. The Panel learned that screening officers have particular concerns, because regulations under the *Aeronautics Act* require that they may not start their training for certification nor work in a restricted area until their TSC and RAP have been issued. This may take many weeks, during which time they may work only as greeters outside the restricted area. Other airport workers – even those with direct access to aircraft – may be permitted

²⁶ Some airport authorities have established a recourse process with several steps – an initial review of decision by the manager of security, a possible appeal to the next level of senior management and, if required, to an internal appeals tribunal.

to start work with a temporary pass, under escort, before their TSC has been confirmed.

Screening officers also require certification from CATSA, with separate endorsements for each of five functions, on the basis of their competency following training.²⁷ CATSA is responsible for training, endorsement and certification, and requires a 12-month waiting period following two successive failures to re-qualify. CATSA provides an informal resolution process for disputes about certification. The process is conducted either by an adjudicator who is a CATSA employee with specific qualifications, including relevant and extensive knowledge or, for more serious cases, a CATSA Regional Manager or a three-member panel. Issues related to the certification process may be referred to other tribunals depending on the grounds – for example, to the Canadian Human Rights Commission or the Federal Court.

The last item a newly certified screening officer requires before he or she can start work is designation as a screening officer by the Minister of Transport, upon notification from CATSA that the worker has demonstrated the necessary competencies. Designation is a formal aviation document, so review for suspension, cancellation or refusal to renew by Transport Canada is through the TATC.²⁸ Appeals may be heard by a TATC Appeal Panel.

Once an employee has started to work, periodic performance appraisals may be conducted by the contracted service provider, not CATSA. Disputes or disagreements are processed according to rules for grievances in the relevant collective agreement. The Federal Court may hear cases where due process is not followed.

The Restricted Area Identification Card (RAIC) is being piloted at several airports, as further described in Chapter 3. It is under consultation as we are preparing this report, and draft amendments to the *Canadian Aviation Security Regulations* and Measures are in preparation. At present, procedures for review, dispute resolution and appeal have not been

²⁷ “Currently, certification is valid for two years; however, under [CATSA’s] revised program, screening officers will be re-certified annually,” *CATSA’s Story: Submission to the Advisory Panel on the CATSA Act Review*, Backgrounder, “CATSA Training Program: Preparing our Screening Officers to Do the Job Right” (May 2006), page 10. Note that a screening officer may continue to work at PBS functions if certification for either of the advanced X-ray detection systems is revoked.

²⁸ *Aeronautics Act*, s. 6.71, 6.9, 7, 7.1, 7.1, 7.7, 8.3.

developed. The relationship between a RAP and a RAIC, and the respective responsibilities of Transport Canada and airport operators, must also be clarified.

The Panel concludes that screening officers providing CATSA services (as well as other airport workers) must have transparent and timely recourse and appeal mechanisms for all situations when actions are taken that affect whether or how they may work. We suggest that a dispute resolution and appeal mechanism should be implemented for the Restricted Area Identification Card system.

5.4 MANAGEMENT OF INCIDENTS

The Panel received many comments about confusion ensuing when a security breach related to screening occurs and part or all of the air terminal must be evacuated. When this happens, we consider it essential that clear and frequent communications with the public are maintained. It is of the greatest importance, both for the security of travellers and airport workers and for the effectiveness of the operation, that the public knows in proper time how to react, what to do and which organization is in control of the situation.

In one incident at a Class 1 airport, a screening officer identified an image of a prohibited item on the pre-board screening X-ray monitor, and referred it for physical examination by another officer. However, the traveller associated with it had left the screening point with the item and could not be found. After discussion among the airport operator, Transport Canada and CATSA, the sterile area, where departing passengers who had already been cleared through screening were waiting, was evacuated, and all were re-screened. Many flights were delayed and some passengers missed connections. Passengers complained that little practical information was provided. The suspect item was a kitchen knife that proved to be inoffensive, but once the emergency was declared, none of the participants could exercise any discretion.

The Panel became aware that there may be lack of clarity at some airports about who is in charge during certain security emergency procedures, and how responsibilities flow from the airport's emergency plans and procedures. Although the airport emergency plans and procedures define

the actions to be taken in any given situation, in practice there may sometimes be a reluctance to take charge. Security breaches at airports can cause considerable operational disruptions and performance problems. The time taken to investigate an incident and determine the action required delays aircraft departures and causes inconvenience for the travelling public. These are significant performance problems. From observations and reports received by the Panel, it seems that many security incidents involving CATSA screening result from passengers prematurely taking carry-on items identified for further scrutiny and leaving the PBS area without being identified. Because Transport Canada's regulatory requirements are currently so prescriptive, particularly in relation to prohibited items entering the restricted area, screening officers and their supervisors may feel they have very little discretion over what action to take. This may be a contributing factor to some of the indecision that arises and the flexibility, or lack of it, in some circumstances.

Although these responsibilities are to some extent described in airport Emergency Plans and Procedures, they are not always clear to all users of the aviation system. The *Aeronautics Act* imposes various requirements on CATSA, on airport operators and on air carriers, for responding to threats to airports and airport facilities and for incident reporting.

Furthermore, the regulatory framework under the *Aeronautics Act* puts obligations on operators of the eight active Class 1 airports to make specific provision for portable explosives detection trace equipment, and to maintain or make arrangements with the local police for explosives detection dogs and their handlers to investigate threats at the airport. The Panel has observed a wide diversity of understandings between local police forces and airports. The Panel is not convinced that all airports have attained optimal solutions in this regard, and encourages airport operators and police to work closely to develop better arrangements.

The Panel learned that CATSA and associations representing the airport operators (the Canadian Airports Council), and air carriers (the Air Transportation Association of Canada), have together with Transport Canada established a working group to develop guidelines to coordinate their actions during a possible security breach. We commend this initiative, but we are concerned that the issue may not yet be fully resolved.

Recommendation 5.5

As a high priority, Transport Canada, CATSA, airport operators, air carriers and police services must develop unambiguous guidelines on the handling of security breach incidents at all screening points. The guidelines should include clear and timely communications to the public.

5.5 SECURITY CLEARANCES

One of the most common concerns expressed to the Panel related to the excessive time it takes for new employees to receive a Transportation Security Clearance,²⁹ required to obtain an airport Restricted Area Pass. Many examples were cited of workers waiting several months for the clearance to be received. This significantly affects CATSA's operations, as well as those of all other employers at an airport.

We understand that the process begins with the applicant filling out a form with personal history information. This is vetted by the employer's security office. It is then presented to the airport security office; the airport security office checks the form and takes biometric information, then forwards the application and biometric data to Transport Canada, which sends it to the RCMP for a criminal record check and to CSIS for a security assessment. With that information, Transport Canada makes the decision as to whether a Transportation Security Clearance should be issued, and informs the airport operator accordingly. If the TSC is confirmed, the airport makes its own decision as to the areas of the airport to which the employee will have access, and issues the RAP.

In discussions with CSIS, we were advised that although approximately 15 per cent of all requests for an assessment may be turned around in 24 hours, the median time for CSIS processing was 33 working days in 2005–06. It is not known what the processing time is within the RCMP, Transport Canada, or the individual airport security offices. At every stage in the application process, delays may occur. We were told by all

²⁹ This is a suitability/background check, and if issued does not entitle the holder to receive sensitive information.

participants in the process that improper completion of the pass applications – with either inadequate information or errors – causes delays in processing. This appears to be a systemic problem that has persisted for many years. The Panel encourages individual applicants, their employers and the airport operators to be more vigilant in checking and verifying the information they provide on the application forms.

The time lag in obtaining TSCs correspondingly delays approval of RAPs, and this creates significant operational problems for CATSA and its screening providers. Prospective screening employees cannot receive training until the RAP is received; in many cases the prospective employee will not wait, and pursues another employment opportunity, especially in hot job markets such as Alberta. CATSA has given temporary relief to allow new staff to be hired in a temporary Level O position, and to begin work as a greeter at the start of a screening line. Although the greeter position may be non-sensitive from a security perspective, it is an important position from a customer service point of view, demanding good customer service skills. The Panel suggests that new screening recruits awaiting security clearance be given customer service training prior to starting in this role.

The delay in reviewing security clearances appears to arise from the volume of applications and lack of resources to deal with this volume. We are aware that this has been an issue for some time, and that demand for security clearances continues to increase. Nevertheless, given the significant impact of the delays in approving new employee security clearances, it is important that the government of Canada find a solution to this persistent problem.

Recommendation 5.6

We recommend that Transport Canada undertake a detailed audit of the security clearance process to determine the causes of delay, and take remedial action to correct these deficiencies, in order to speed up the process of issuing Transportation Security Clearances for persons requiring airport Restricted Area Passes.

Chapter Six

GOVERNANCE AND ACCOUNTABILITY

Governance is the capacity of an organization to make decisions to achieve its objectives. CATSA, like any organization, needs the proper capacity to take the strategic, tactical and operational decisions necessary to fulfill its mandate. Preparation for decisions requires adequate stakeholder consultation, information systems, analysis and integration. An organization's capacity to make sound decisions is a function of its financial and human resources, its decision-making authority, its relationships with key partners and its adaptive capacity.

In this chapter we look at CATSA's current organization and its formal structure as a Crown corporation; other possible organizational models; relationships with key partners; and the operational, financial and administrative arrangements applying to it. In the course of our research, interviews, submissions and hearings, significant governance issues were raised. These include: the appropriateness of CATSA's status as a Crown corporation; clarity and consensus on CATSA's mandate; and the scope of CATSA's management authority and accountability. Each of these issues is addressed in this chapter.

6.1 CATSA AS A CROWN CORPORATION

The *Budget Act 2002* created CATSA as a Crown corporation by listing it under *Schedule III* of the *Financial Administration Act* (FAA).¹ Within the Canadian government, there is no legal definition of a Crown corporation, except for the purpose of the *Financial Administration Act*, section 2: “Crown corporation” has the meaning assigned by subsection 83(1), which reads: “agent corporation” means a Crown corporation that is expressly declared by or pursuant to any other Act of Parliament to be an agent of the Crown. A Crown corporation is wholly owned by the Crown (FAA, s. 83(1)), but unlike a government department, it is a legal person separate from the Minister (FAA, s. 98).

A Crown corporation is directed by a Board of Directors, which has the ultimate decision-making power within the organization (FAA, s. 109). It is accountable to Parliament through the Minister (FAA, s. 88), which means that the Minister does not enter into the decisions made by the Board, although the Minister may issue directives to the Board (FAA, s. 89(1)). A list of the 34 Crown corporations, including CATSA, is provided in Schedule III to the *Financial Administration Act*.

A review conducted by the Treasury Board Secretariat commented on the role of Crown corporations, and we note that CATSA seems a typical example of this genre:

Crown corporations operate in a complex environment – one in which they often need to deal with a mix of commercial and public policy objectives.”²

6.1.1 CATSA's Board of Directors

CATSA's Board of Directors is composed of 11 members, including the Chairperson, who are appointed by the Governor in Council (*CATSA Act*, s. 10 (1)). The Board includes nominees from the air carriers and the airport authorities (s. 10(2)). This is an important feature and it has “had

¹ *Budget Act 2002, Part 1, #3.*

² Treasury Board Secretariat, *Review of the Governance Framework for Canada's Crown Corporations – Meeting the Expectations of Canadians*, February 17, 2005, page 14.

an excellent effect on relations with these two communities.”³ Airports and air carriers submit names to fill two Board positions each. These submissions come from the two principal industry associations: the Canadian Airports Council (CAC) and the Air Transport Association of Canada (ATAC).⁴ When satisfied with the names submitted, the Minister recommends appointments to the Governor in Council. Although these stakeholder groups participate in the appointment process, Board members nevertheless must serve the Board as the government’s fiduciaries and bear responsibility for decisions taken. Although the Governor in Council may appoint a trade union representative as a Board member in one of the remaining positions, the Panel thinks that trade unions should have a designated member on the Board.

Directors hold office during pleasure⁵ for a term of not more than five years and their mandate is renewable only once for five years (s. 13). Only permanent residents or Canadian citizens are eligible to serve on the Board. No full-time public servants, members of the federal or provincial parliaments, or mayors or municipal councillors, may serve on the Board (s. 12). The CATSA Board has a Corporate Governance and Nominations Committee that conducted a recruitment process for the new Chair and recent vacancies, and worked with an executive search firm to attract, interview and select appropriate candidates to recommend to the Board and subsequently to the Minister of Transport.⁶

The Board is responsible for the management of the activities and affairs of the Authority (s. 23). It may make by-laws respecting the management and conduct of the activities and affairs of the Authority and the carrying out of the duties and functions of the Board, including its code of ethics, committees and contracting policies (s. 24).

CATSA’s Board has created several committees, including an Audit Committee, a Human Resources Committee, a Corporate Governance and Nomination Committee and a Strategy Committee. The **Audit Committee** ensures that appropriate ethical practices and financial controls are in place. This includes oversight of corporate records, systems, and

³ Sussex Circle, *The Organizational Status of the Canadian Air Transport Security Authority (CATSA)*, July 27, 2006, page 7.

⁴ We heard representations that small airports were not sufficiently represented through this process.

⁵ The appointing authority can terminate the appointment without giving a reason.

⁶ *CATSA’s Story: Submission to the Advisory Panel on the CATSA Act Review*, Backgrounder C-II, “Relevant and Effective: The CATSA Board of Directors” (May 2006), page 8.

management practices. The **Human Resources Committee** reviews CATSA's human resources policies, including its compensation and benefits plans, and performance and evaluation programs. The **Corporate Governance and Nomination Committee** was created in April 2004 to implement systems ensuring good Board performance, such as: establishing, maintaining and evaluating the processes and practices for performance management of the President and CEO; ensuring proper administration and compliance of the Code of Conduct for Board members; making recommendations to the Board on roles of the Board and management, reviewing policies and procedures of the Authority with respect to ethics and values; and ensuring compliance with government policy on Board nominations and appointments. The **Strategy Committee** was established in December 2005 to oversee CATSA's participation in the five-year review, to provide advice to the Board on CATSA's future directions, and to keep abreast of new and emerging threats, trends, technologies and techniques within aviation security that might have an impact on the Authority's operations.

A few seats have remained unfilled for some time, and this could affect the Board's effectiveness. Service on CATSA's Board can be quite demanding: we were told they had 54 meetings over the last 18 months. Our examination led us to conclude that Board members take their role very seriously – most of them attend all the Board and committee meetings – and that the Board is exercising appropriate and effective oversight of this Crown corporation.

6.1.2 Remuneration for members of the Board

Members of the Board serve on a part-time basis (s. 14(1)), and are paid by the Authority according to remuneration fixed by the Governor in Council for each day that they attend meetings of the Board or any of its committees or perform other duties (s. 14(2)). They are reimbursed for reasonable travel and living expenses incurred in the course of performing their duties (s. 15).

The government's Remuneration Guidelines for part-time appointees in Crown corporations were updated most recently in October 2000⁷, and CATSA's Chair and Directors are compensated according to this scheme⁸.

⁷ Privy Council Office, *Remuneration Guidelines for Part-time Governor in Council Appointees in Crown Corporations*, October 1, 2000.

⁸ Order-in-Council PC2002-870, of May 23, 2002 for the Chair; and 2002-871 for directors.

The Guidelines set out ranges of per-diem rates and annual retainers. There are higher ranges for Board Chairs, and for Vice-Chairs (CATSA does not currently have a Vice-Chair). CATSA is considered a “Group 6” Crown corporation, in the same category as the Canada Deposit Insurance Corporation, the Cape Breton Development Corporation, the Farm Credit Corporation and the International Development Research Centre. It is in a higher category than the pilotage authorities, Marine Atlantic Inc. and the National Capital Commission, but at a lower level than VIA Rail, the CBC and Canada Post. The rates for members of the CATSA Board are as follows:

Per Diem	Annual Retainer	
Directors & Chairs	Directors	Chair
\$420	\$5,400	\$10,800

It appeared to the Panel that the level of remuneration provided to members of CATSA’s Board of Directors is too low, given the members’ qualifications, their fiduciary role in this particular industry and their liability. The government’s Advisory Committee on Senior Level Retention and Compensation (which has private- and public-sector members) provides advice and recommendations to Treasury Board about compensation for executives, deputy ministers, chief executive officers of Crown corporations and Governor in Council appointees (but not routinely for Directors and Chairs of Crown corporations). The Committee periodically reviews executive compensation to support the Government’s efforts to attract and retain qualified senior executives. In its *Review of the Governance Framework for Canada’s Crown Corporations*, the previous government announced 31 measures intended to improve accountability and transparency. The *Review* noted: “The increased involvement of boards in the provision of strategic guidance to Crown corporations, and the recognition of their responsibility for the performance and activities of their organizations, raises the question as to whether the compensation currently paid to directors should be reviewed.”⁹ Measure #30 called for the Advisory Committee to do so.

⁹ Treasury Board Secretariat (February 2005), *op. cit.*, page 41.

6.1.3 The Chief Executive Officer

The Chief Executive Officer (CEO) of CATSA is appointed by the Board for a term of not more than five years. The appointment of the chief executive officer is renewable for one or more subsequent terms of not more than five years (s. 17). The CEO is responsible for the day-to-day management of the Authority (s. 18), and cannot be a member of the Board (s. 20).

The *CATSA Act* provides for its CEO to be appointed by the Board, rather than by the Governor in Council.

This innovation (something that was seen in 2002 as both forward-looking and responsive to the Auditor General’s recommendations re: best practices in corporate governance) has the effect of making the *management* of the corporation more distant from the government than is typical in a Crown, even though the corporation itself is more constrained by government control. It also means that the Board is expected to play a larger role than normal as the representative of the shareholder (i.e., the government) in overseeing and setting the direction for the business of the corporation.¹⁰

The Panel is satisfied with this process and notes that the Board is providing appropriate oversight through its Governance committee.

6.1.4 Relations with the Minister and accountability

Like other Crown corporations, CATSA reports to Parliament through a Minister (the Minister of Transport) for the conduct of its affairs. The issue of “reporting through” or “reporting to” is not trivial: in *reporting to*, there is an immediate authority that can make decisions about the mandate’s execution, change decisions and impose modes of execution that the responsible officials must follow; in *reporting through*, the Minister is answerable for the organization rather than accountable; he is a conduit, a means for reporting to Parliament, with limited formal authority to influence the corporation’s actions.

Nevertheless, in practice, the government has several effective levers for influencing or directing the behaviour of the Crown corporation. The annual process of the Corporate Plan and Budgets, which must first be signed by the Minister before it is submitted for Treasury Board

¹⁰ Sussex Circle, op. cit., page 7.

consideration, is a powerful vehicle of effective control. After approval, the corporation prepares a summary of the Plan and Budgets, which must also be approved by the Minister before it is tabled in Parliament and referred to the appropriate Standing Committee.¹¹

In addition, on the Minister's recommendation, the Governor in Council may issue a directive to the Board, which must be tabled in Parliament within 15 sitting days. However, this power is rarely exercised and has not been used by the Minister of Transport to provide direction to CATSA.¹²

Finally, the Minister can influence the priorities of a Crown corporation by providing guidance to it in the form of a ministerial letter of expectations. The Treasury Board Secretariat report of its *Review of the Governance Framework for Canada's Crown Corporations* recommended that:

To improve the communication of policy objectives and priorities from the government to Crown corporations, the responsible Minister will issue a statement of priorities and accountabilities to Crown corporations within his or her portfolio. The statement will be discussed beforehand with corporate management and the Board, but ultimately it will reflect the government's policy expectations for the corporation. The statement will be subject to an annual review and help form the basis for a periodic review of the corporation's performance.

This form of direction is meant to confirm mandates and business lines, to inform the corporation of the government's priorities; to achieve consistency between government and corporation "regarding the government's priorities, policy objectives and performance expectations for a fixed period; and serve as a key driver in the development of the Crown corporation's corporate and/or strategic plans, annual reports and financial forecasts."¹³

The Panel learned that the Minister of Transport issued a letter to the Chair of CATSA's Board of Directors in August 2006. This letter set some expectations about priorities and offered general directions on which to focus. We understand that this was the first such letter issued by the Minister of Transport to a Crown corporation within his portfolio and we support this practice. To further strengthen the practice, we encourage

¹¹ *Ibid.*, page 30.

¹² *Ibid.*, page 29.

¹³ Treasury Board Secretariat (February 2005), *op. cit.*, page 18–19.

Transport Canada to consult with the management or Board of the Crown corporation in advance, as recommended by the Treasury Board Secretariat *Review*.

6.1.5 Corporate planning

The Corporate Plan approval process is intended to be the key opportunity for the Minister to give policy guidance to CATSA. The corporate plan

is the centrepiece of the accountability regime adopted by Parliament for Crown corporations. This regime allows Crown corporations greater managerial autonomy than departments in order that they may pursue both commercial and public policy objectives efficiently and effectively with a minimum of government intervention.¹⁴

Drafts of CATSA's Corporate Plan and Budgets are reviewed by Transport Canada officials, in order to prepare recommendations to the Minister for the Treasury Board. The process for CATSA has typically been very drawn out, and as a result, the Treasury Board has often approved CATSA's budget many months after the start of the fiscal year for which it is intended. This in turn causes CATSA to re-profile or lapse funding that cannot be spent in the remaining months of the fiscal year.

The corporate planning process has been the source of considerable friction between CATSA and Transport Canada. In previous years, CATSA has sought to use the corporate planning process to seek new authorities, such as authority for cost recovery, or approval of pilot projects, such as the use of canine units for explosives detection. These requests were generally included without sufficient prior consultation with the department; they greatly slowed the process of review and approval, and were ultimately turned down. As a result, CATSA continues to function without the financial flexibilities granted to most other Crown corporations, departments and agencies.

CATSA does not appear to have succeeded in establishing a working relationship with the Treasury Board Secretariat that would enable the organization to function in an optimal way, and we urge CATSA to attend to this relationship. We were advised that there has been little continuity of TBS reviewers; CATSA has worked with six different TBS analysts in its

¹⁴ Treasury Board Secretariat, *Guidelines for the Preparation of Corporate Plans*, (June 1994), page 1.

first four years of operation. CATSA comments that the TBS reviews have often been “micro-detail oriented.” This appears to be very frustrating for CATSA (and Transport Canada).

There are also questions concerning which unit in Transport Canada is best positioned to perform this examination. Three different areas of Transport Canada have held this responsibility; in spring 2006, it was assigned to the Security and Emergency Preparedness Directorate (SEP), which has regulatory responsibility for CATSA. If CATSA remains a Crown corporation, it may be preferable to move responsibility for the review of the annual corporate plans to a unit with a wider policy perspective, such as Transport Canada’s Secretariat for Crown corporations or Transport Canada’s Policy Group.

There is a pressing need for CATSA and Transport Canada to develop a better working relationship around the development of CATSA’s annual Corporate Plan. We urge Transport Canada to assist CATSA in making its case to the Treasury Board for appropriate financial authorities, such as cost recovery for non-core services. We support CATSA’s initiative in proposing to test new screening approaches in pilot projects; CATSA should have the authority to proceed with these, within budget, and should be accountable for the results.

6.1.6 Relationships

To achieve its objectives, CATSA must maintain good working relationships with a wide range of partners. At the local airport level, key relationships include those with the airport management; with the air carriers; with the local police (who respond to incidents at the screening points); with its service provider, screening employees and their union; and with the Transport Canada inspectors.

Due to peak hour pressures, constraints imposed by the physical layout of the airport and the regulatory requirements, tensions are sometimes quite high among CATSA, Transport Canada and the industry. We have observed frustration on all sides. CATSA feels it is being impeded in its work. Transport Canada’s inspectors feel there is insufficient attention paid to security. Industry stakeholders feel there is a lack of understanding of their business constraints.

On the one hand, it is clear that CATSA operations affect airport revenues, since otherwise profitable space must be provided free of charge and retail outlets may lose business if passengers spend long periods in line-ups. When delays occur, this can also create costs for air carriers. On the other hand, the presence of security measures, such as passenger screening, is essential to the continuing health and development of the commercial aviation sector in the current threat environment. These measures appear to be with us to stay, and it is very much in the interest of the industry to facilitate CATSA's operations so that any negative impacts on passengers' travelling experience are minimized. For example, we observed that the space provided for pre-board screening in an airport and configuration of this space, as well as other support provided by the airport such as placement of greeters at the front of the screening line to direct passengers, can significantly affect throughput of passengers at the screening line.

Despite these constraints and pressures, we observed that, on the whole, CATSA regional managers have developed sound working relationships with most of their partners at the airport level. However, in our visits to airports across the country, we noted some friction between CATSA and its screening providers, on the one hand, and the Transport Canada inspectors, on the other. We observed, on both sides, that people were highly committed to their mission and conscientiously carrying it out.

The inspectors expressed frustration with the current situation in which they issue letters of contravention to CATSA for infractions of the detailed rules, but may not receive a timely reply. They may see little evidence of change, and sometimes disagreements arise over how the rules should be interpreted and applied. Occasionally, they have found that they were not backed up by headquarters. Some inspectors expressed concerns about how CATSA undertakes training and certification, concluding that, following a negative inspection report, screening officers may be recertified without proper retraining and testing. On the other hand, airport and airline stakeholders, as well as CATSA managers, expressed concerns about the inflexible and overly prescriptive nature of the rules enforced by the inspectors and, occasionally, the vigour with which they are applied. It appeared to us that some of Transport Canada's inspectors (as well as some headquarters personnel) felt that their role had been diminished by the creation of CATSA and they appeared not to have fully accepted the role assumed by this new organization.

In our view, the singular focus of the regulatory enforcement regime on security objectives, when CATSA is required by its Act to also provide efficient and customer-oriented service, is one source of the friction that we observed. The detailed nature of Transport Canada's oversight of the screening operations multiplies the occasions for disagreement between the inspectors and CATSA operational units. Transport Canada is in a position to alleviate these day-to-day tensions at the operational level by introducing a less prescriptive regulatory framework focused on strategic objectives, and by giving CATSA responsibility for operational policy, as proposed in Chapter 4. However, the boundary between strategic and operational policy is inevitably somewhat fluid and will require the two organizations to collaborate in a constructive way on an ongoing basis. As will be discussed later in this chapter, it is crucial that Transport Canada and CATSA clearly delineate their respective roles and ensure that employees at all levels in both organizations fully understand and observe this division of responsibility.

Currently, a small number of CATSA managers are spread rather thinly across the country. There are too few to provide effective oversight of the screening operations and to iron out all of the operational issues that can arise in all 89 airports. In fact, there are significantly more Transport Canada inspectors in the field than CATSA managers (although we recognize that they are also responsible for inspection of airlines and airports). Panel members observed at one screening point, via closed-circuit television, that the screening employees appeared to become much more diligent when a Transport Canada inspector arrived on the scene. We understand that CATSA is taking action to strengthen its regional management capacity and we support this initiative. In order to assume the operational responsibilities and accountabilities outlined later in this chapter, CATSA will have to significantly strengthen its quality assurance regime, so that compliance with its *Standard Operating Procedures* can be assured on the front lines.

At the national level, CATSA works closely with Transport Canada, the Canadian Airports Council, the Air Transport Association of Canada, the RCMP and the Canadian Airport Police Commanders Association. CATSA appears to have effective working relationships with the two main industry associations – CAC and ATAC – and very good relationships with the RCMP and Airport Police Commanders.

On the other hand, there appears to be a high level of frustration and mistrust between Transport Canada and CATSA at the national level.

There seem to be two possible explanations for the tensions between CATSA and Transport Canada. Some see an inherent tension between CATSA's status as a (nominally) arm's length Crown corporation and its role as the provider of aviation screening and related services for the Government of Canada. This view implies that there is a real question as to whether continuance of the present organizational model is in the longer-term interest of the Government and the public. The second view is that while there is indeed a tension, it stems more from the unwillingness of Transport Canada to allow the full benefits of the current model to be realized. In this view, it is the *constraints* imposed on the Crown corporation model – rather than the model itself – that create the key issues to be addressed.¹⁵ We will return to these issues later in this chapter.

6.1.7 Consultation

CATSA's communications and consultation processes were identified to the Panel as an area requiring further improvement by a number of stakeholders. We were advised that, on most issues, CATSA will consult on an *ad hoc* basis with some stakeholders. As CATSA assumes responsibility for operational policy and procedures, it will be important to have formal consultative mechanisms in place with key stakeholders to obtain their input on issues of national concern, including the development of performance indicators.

Input from the travelling public is equally important. Organizations representing disabled Canadians expressed concerns that their needs were not well understood or accommodated by front-line screening personnel. These groups recommended that CATSA draw on the expertise available on providing services to disabled persons in the design of its training programs. More generally, there is a need for CATSA to have regular input from the travelling public. An advisory group should be convened at least once a year to provide advice on customer service issues (including performance indicators), customer complaints and communications strategies.

¹⁵ Sussex Circle, *op.cit.*, page 7.

Recommendation 6.1

We recommend that CATSA establish a national-level advisory committee, reporting to the Board of Directors, to represent the interests of the travelling public, including travellers with disabilities.

6.1.8 Financial and Administrative Arrangements

It appears that the financial controls applying to CATSA are, to say the least, unusual for a Crown corporation. The situation was summarized in a study by Sussex Circle:¹⁶

[T]he government has retained the ability to effectively control most if not all aspects of [a] Crown corporation, through its control of voted appropriations and the corporate plan approval process. These are “back door” controls, however, and exist in case of need. Not unlike the general power of government direction to a Crown corporation, many of these control levers are intended for exceptional use.

In the present case, however, these control levers have been applied to CATSA with considerable vigour and appear to signal strongly opposing views of where decisions should be taken concerning CATSA’s operational direction.

It is no overstatement to note that CATSA is not functioning now with the full range of authorities that would be normal for a Crown corporation, or any other federal agency.

The Panel notes that, as a Crown corporation, CATSA enjoys some administrative flexibility, including the authority to design its organizational structure, to classify its positions, to operate as a separate employer and to establish its human resources policies. As a Crown corporation, CATSA also has considerable flexibility in its contracting activities: the authority to design requests for proposals and to award contracts. This is important for an organization that delivers its core programs via service contracts, acquires and maintains hundreds of millions of dollars worth of high-technology screening equipment, and must have the contractual flexibility to act expeditiously when required.

¹⁶ Ibid., pages 9-10.

In summary, CATSA is a Crown corporation with little independence from central agencies and Transport Canada, having less financial and operational authority than most other Crown corporations, agencies and departments. This is a Crown corporation structure for a very constrained organization, yet one that has to deal with highly sensitive mandates and has to demonstrate a high degree of responsiveness.

6.2 OTHER ORGANIZATIONAL MODELS

As a Crown corporation, CATSA has achieved considerable success in very difficult times in the past four years: hundreds of millions of dollars of high-technology explosives detection equipment was purchased and installed in the 89 designated airports; 4,000 screening officers were trained and deployed; standard operating procedures were developed; and strengthened procedures were put in place. Most industry stakeholders, as well as CATSA itself, wish to continue the present structure, albeit with increased financial and operational flexibility. It is seen as effective and responsive to the industry's concerns.

The Panel considered several organizational options for CATSA, including: folding CATSA into Transport Canada as a Directorate or a Special Operating Agency; creating a not-for-profit corporation, based on the NAVCAN model; or establishing CATSA as a departmental corporation.

CATSA's mandate requires it to protect the public interest and to achieve a given security level (effectiveness) while achieving efficiency (which is: security-value-for-money decisions, proper operation for the industry and appropriate procedures for the travelling public). Functioning as it does within the security domain also requires a high level of collaboration and coordination with other security partners. CATSA's governance structure should provide the means to achieve all of these goals.

Folding CATSA into Transport Canada may improve relations with the department and may increase its focus on security, but this may occur at the expense of efficiency and customer service. This option would also serve to situate CATSA's employees within the Public Service, with associated additional costs and bureaucratic rigidity. Industry stakeholders

expressed significant concerns to the Panel about queues, waiting times, unnecessary procedures, too-costly operations and insufficient attention to customer service. If CATSA were merged with Transport Canada, this “would almost certainly signal to the public, to international partners and to the aviation industry that the government had lost confidence in CATSA and the current screening regime,”¹⁷ which would be inappropriate, in our view. The Panel concludes that CATSA, as a Crown corporation, has done a credible job in its first four years of existence, and should be recognized for this.

Some industry stakeholders advocated the option of a not-for-profit organization, like NAVCAN, as the model most likely to be sensitive to their needs. On the other hand, such a model is likely to be less responsive to evolving security concerns of the government, which we consider essential to the Authority’s mandate. Organizations operating in the security field need to be aware of and responsive to a rapidly evolving security environment and need to work closely with other government departments and agencies. For this reason, CATSA needs to be closer to the government than a not-for-profit corporation structure would provide. We note also that CATSA, unlike NAVCAN, is not a revenue-generating organization, but is dependent on appropriations, and is likely to remain so for its core operations.

Our analysis leads us to the conclusion that there are only two viable organizational options for CATSA: to remain a Crown corporation, or to be transformed into a departmental corporation.

As discussed above, as a Crown corporation, CATSA enjoys more administrative flexibility in its human resources and contracting practices than do government departments and agencies, and normally would have considerable financial and operational flexibility as well. The CEO of CATSA reports to its Board of Directors, and the Board reports to Parliament through the Minister of Transport. With four industry representatives and one union member on the Board, close ties are maintained with these partners. The Board of Directors provides expert oversight to CATSA’s operations, and a high degree of credibility in relations with Transport Canada, the Minister and Parliament. CATSA operates in a multi-party system (with airports, airlines, government, law

¹⁷ *Ibid.*, pages 14-15.

enforcement) so industry or former industry representation on its Board is an asset.¹⁸

If CATSA were transformed into a departmental corporation, it would become a portfolio agency reporting to the Minister of Transport,¹⁹ while maintaining a distinct identity from the department. This would bring the Authority closer to the Government of Canada and to Transport Canada. As a departmental corporation, it would be led by a deputy head, and this would offer important advantages in maintaining relationships with central agencies and other federal departments. However, the full benefits would be realized only if CATSA's deputy head were recognized as a full deputy, with a direct relationship to the Minister and central agencies and the ability to attend meetings of the deputy minister community.

Departmental corporations are, like CATSA, operational organizations (examples include the Canada Revenue Agency, Parks Canada, the Canadian Food Inspection Agency and the Canada Border Services Agency) and can be granted considerable financial and administrative flexibility to manage their affairs. Like Crown corporations, departmental corporations have a different legal personality from that of the Minister. On a day-to-day basis, it is operational focus more than organizational design that differentiates departmental corporations from government departments; they are intended to be less at arm's length from government than Crown corporations, but subject to fewer Treasury Board controls, when possible. Some are separate employers: they have their own employee classification systems and terms and conditions of employment. They have their own rules for general administrative policy, organization of the Agency, real property and human resources management. "The Treasury Board must approve the Agency's annual corporate plan and may direct that changes be made to it, which must be followed. In addition, the Treasury Board approves the Agency's annual spending plans and exercises the considerable influence over the Agency that this implies... Apart from the four agencies mentioned above, departmental corporations are treated exactly as departments in the *Financial Administration Act*. Their interaction with the Privy Council Office is comparatively rare, because of their infrequent involvement in matters of policy. In any case, departmental corporations would normally coordinate their influence

¹⁸ See CATSA Position Paper, *CATSA's Governance: The Choice of An Organizational Model* (May 2006), page 6.

¹⁹ One departmental corporation – the Canada Revenue Agency – reports to Parliament through the Minister, but this is a unique case.

on policy matters through the portfolio department.”²⁰ Such a departmental corporation could succeed CATSA as a separate employer for CATSA’s employees. As a departmental corporation, CATSA may be more easily integrated within the government’s security community.

On the other hand, there is no guarantee that financial and administrative flexibilities would be forthcoming. A departmental corporation would no longer benefit from the oversight provided by an expert Board of Directors, unless a Management Board is established, as in the case of the Canada Revenue Agency. An industry advisory committee could be established, but its recommendations would not carry the same weight as a Board of Directors with fiduciary responsibility for the organization. Members of a consultative committee are also more likely to serve the interests that they represent, rather than the broader interests of the organization, as fiduciary members are required to do. Finally, this change could be perceived as weakening CATSA in relation to Transport Canada.

The Panel concludes that there are important advantages as well as disadvantages to the Crown corporation model, and that the same can be said for a departmental corporation. To achieve its security mandate, CATSA needs to be close to government, so that it is in the security and intelligence loop and reflecting the priorities of the day. To achieve efficiency and serve the travelling public, CATSA must be responsive to industry concerns as well as those of passengers. As a departmental corporation, CATSA would be closer to government, but farther from its industry partners. As a Crown corporation, it is closer to industry and somewhat farther from the control of the government. Either way, something would be lost and something gained.

Recommendation 6.2

- (a) It is recommended that the Canadian Air Transport Security Authority either remain a Crown corporation or be transformed into a departmental corporation.**
- (b) If CATSA remains a Crown corporation, there should be an increase in the level of compensation provided to Board members.**
- (c) If CATSA becomes a departmental corporation, an advisory board representing the various stakeholders should be established. The Minister should appoint its members.**

²⁰ Sussex Circle, *op.cit.*, Annex Two, pages 27.

More important than its organizational structure, however, is CATSA's need to have a more normal array of management authorities – and with them, true accountability – for its mandates.

6.3 MANAGEMENT AUTHORITY AND ACCOUNTABILITY

Normally, a Crown corporation has a significant degree of management control over its operations. CATSA, as we have seen in previous chapters, is strictly constrained by regulation and screening orders in carrying out its operations, including acquisition of equipment, qualification and deployment of personnel, and operational procedures. It has also been subject to rather strict financial controls. It has no capacity to set fees or to re-spend revenues and is more constrained in resource allocation in general than other Crowns. As noted by Sussex Circle:

The key considerations related to effectiveness are whether CATSA has the authority to:

- determine its own operational policies within a strategic policy framework set by Transport Canada;
- raise revenues through fees to cover its operating costs (including costs associated with increasing passenger volumes);
- monitor and evaluate the effectiveness of its own screening programs, according to standards set by Transport Canada and subject to periodic audit by the department; and
- deal with international partners on matters within its service mandate.

None of these matters is a function of Crown corporation status or not. Indeed, ... Crown corporation status ought, in principle, to be conducive to the fulfillment of these sorts of responsibilities, though under the present arrangement, it is not.²¹

²¹ *Ibid.*, pages 7-8.

We agree with this analysis. In the Panel's view, it is clear that CATSA suffers from too little financial, administrative and operational flexibility. As Sussex Circle concluded: "As we see it, the operating constraints currently imposed on CATSA are not paralleled in any comparable department/agency relationship in the Government of Canada."²²

Recommendation 6.3

Whichever organizational model is adopted for CATSA, the organization needs to be provided with increased flexibility in the areas of operations, finance and administration.

6.3.1 Operational authority and accountability: Who should do what?

Operational authority could be described as the capacity for an organization to make decisions in the operational domain that allows it to protect its interests and attain its objectives. For CATSA, these are primarily decisions concerning the operation of the screening function. CATSA, as well as the industry stakeholders, have asked for more operational flexibility:

- to operate within the basis of a Security Management Systems (SeMS)-based approach;
- to operate within a regime of less prescriptive PBS regulations;
- to operate within a more risk-based regulatory framework;
- to conduct its own infiltration tests with all needed material;
- to be able to conduct trials and manage the lifecycle of new equipment and screening techniques; and
- to benefit from less prescriptive *Measures* concerning screening officer rotation and resources at screening lines.

CATSA is accountable to Parliament through the Minister of Transport for effectiveness and efficiency in performing screening functions. Currently, there are few initiatives CATSA can take in this regard, since it must adhere to the *Security Screening Order* (SSO) approved by Minister of Transport on the advice of Transport Canada. There is some disconnect

²² Ibid., page 8.

between responsibility and empowerment, due to a lack of operational flexibility: in effect, CATSA could be held responsible for decisions taken by Transport Canada. In short, while according to the Act, CATSA should be accountable for performing screening effectively and efficiently, it is now accountable only in respect to the regulations and orders, even if they are less than effective or efficient.

It was apparent to the Panel and to many stakeholders that clarification is needed concerning the operational mandates of CATSA and Transport Canada. While it is clear that the Department must retain the responsibility to establish national air transport security policy and to regulate accordingly, and for CATSA to execute the screening functions, clarity is needed on who should decide the operational policies and procedures needed to perform the roles assigned to CATSA as the operating authority. CATSA thinks it should determine the ‘hows,’ while Transport Canada insists they are to be determined within the SSO. As a research report prepared Sussex Circle puts it:²³

Rather, the roots of these sorts of problems lie in differing views of the respective places of Transport Canada and CATSA on the aviation security policy continuum. Or to put it in simpler terms, Transport Canada and CATSA need first to agree on who should be doing what... Where these boundaries (policy as set in the strategic context at the departmental level and the operational policy established in an operating agency) are not clear or are not mutually accepted, the results are typically miscommunication, poor cooperation and all the inefficiencies and frustrations that result from that. This is what we have observed between CATSA and Transport Canada.

This issue calls for action at two levels: firstly, mutual acceptance of the mandate needs to be confirmed and practical cooperative mechanisms installed; secondly, the Act needs to be clearer about the respective weight to be placed on effectiveness and efficiency, and this needs to be addressed within a more results-based regulatory framework. There is also a need to rationalize and reconcile the Corporate Planning and Budget exercise, as well as development of the Minister’s Letter of Expectations.

²³ *Ibid.*, pages 9-10.

Recommendation 6.4

- (a) In order to carry out its mandate effectively, CATSA should be responsible and accountable for operational policy and decisions (including deployment of human resources and the lifecycle management of its assets), while Transport Canada would retain responsibility for overall aviation security policy, strategy and legislation.**
- (b) These responsibilities and accountabilities should be clearly communicated at all levels of both organizations, and their acceptance needs to be carefully monitored.**

An important area of operational responsibility relates to decisions about capital equipment. CATSA employs more than \$500 million worth of high-technology equipment in its screening operations across the country. Some of this equipment was inherited in 2002; most has been purchased since then, applying technical standards set by Transport Canada. It was important for Transport Canada to provide this technical expertise in CATSA's early days. Now, however, the Crown corporation is in a position to assume responsibility for its capital program.

New technology options are rapidly becoming available and CATSA, as the operating agency, needs to be able to assess these options against the lifecycle costs and staffing implications of current equipment and approaches. To achieve optimal value-for-money decisions, we recommend that the operating agency – CATSA – be given responsibility for managing the full lifecycle of its capital equipment. This means that CATSA needs the capacity and authority to carry out research and development to assess the available options, to establish performance standards, to acquire and deploy new equipment, to maintain it and to plan for its replacement. Transport Canada should provide input via its review of CATSA's Security Plan and Corporate Plan and Budget. CATSA would be accountable for achieving value for money in and for the security effectiveness of its decisions on capital equipment, as in all other areas of its operations.

Recommendation 6.5

CATSA should have full responsibility for the lifecycle management of its capital equipment, including research and development, procurement, maintenance and replacement.

6.3.2 Financial authority and accountability

An organization has financial flexibility when it commands sufficient funds, controls their allocation and the time period in which funds are expended, and determines how they will be used. CATSA and almost all the stakeholders have asked for an expansion of CATSA's financial authorities. CATSA has requested non-lapsing funds through carry-forward and cost recovery, creating a contingency fund through a revolving fund or a net-voting authority, and an expedited budget mechanism to respond quickly to incidents. These requests are justified by the flexibility needed to finance operations and to adapt to specific and evolving threats. The Panel agrees that it is an unfortunate practice when CATSA must reduce staff on the pre-board screening lines or limit overtime in the last months of the fiscal year in order to balance its budget. Nor does the Panel accept that limitations on overtime staffing, solely for budgetary reasons, are reasonable in times of a specific threat to air security. The Panel also thinks that CATSA should have the authority to deploy resources according to the requirements of its mandate. Sussex Circle observed that

It is not uncommon for departments and agencies to have the ability to reallocate resources, to have a determining voice in the acquisition of capital equipment (within limits), and certainly to manage the deployment and location of human resources. It is increasingly common for departments and agencies to have net-voting authority.²⁴

The Panel is of the view that, whether CATSA is a Crown corporation or becomes a departmental corporation, it is important that certain financial authorities be provided, so that:

- CATSA's appropriations recognize the impact of changes in traffic volume on its costs incurred;

²⁴ *Ibid.*, page 10.

- CATSA may conduct cost recovery and revenue generation activities, under certain conditions;
- CATSA may carry forward unused capital and operating funds, preferably as non-lapsing appropriations;
- CATSA may move funds from one budget item to another; and
- CATSA may make urgent budgetary decisions when needed, under the proper controls.

Recommendation 6.6

We recommend that CATSA's budget reflect passenger volumes as well as productivity gains realized from enhanced technologies and procedures. CATSA should also be provided with the capacity to generate revenues, to recover costs in line with federal government policies, to carry forward operating funds, to re-profile capital and to transfer operating funds between budget items. These flexibilities should be awarded once CATSA has demonstrated it has the appropriate procedures and systems in place.

6.3.3 Administrative authority and accountability

Administrative flexibility may be described as an organization's capacity to make decisions in the administrative domain that allow it to protect its interests and attain its objectives. These may include spending plans outlined in the annual corporate plan, such as pilot projects; spending decisions, such as purchase of equipment; and human resources management.

As mentioned above, as a Crown corporation, CATSA has greater administrative flexibility than a government department or agency. It is, by definition, a separate employer with its own organizational structure, rates of pay and relations with employees. It also has considerable latitude in its approach to contracting, provided it demonstrates probity and achieves value for money. This is particularly important to an organization that purchases and maintains expensive capital equipment and that delivers its core programs through service contracts. As an organization of government with significant contracting responsibilities, CATSA should aim to become a leader in contract management.

If CATSA becomes a departmental corporation, it could lose these administrative flexibilities, unless they are expressly granted by the Treasury Board.

Recommendation 6.7

We recommend that, if CATSA becomes a departmental corporation, it remain a separate employer, be granted the same contracting authorities that it has as a Crown corporation and the maximum administrative flexibilities allowed for under the *Financial Administration Act*.

Transport Canada's oversight of CATSA's corporate planning process has created administrative limitations, in that CATSA has been discouraged from, or indeed prevented from, pursuing innovative ideas for the delivery of its programs. One example is its proposal to test the feasibility of using canine units to supplement the detection capability of its existing equipment. Without commenting on the merits of this particular proposal, we observe that CATSA needs to have the operational and administrative room to explore and test alternative methods in order for innovation to take place. This means that it should be encouraged to undertake appropriate pilot projects, in consultation with its partners, and assume full accountability for the results achieved.

FUTURE AVIATION SECURITY IMPLICATIONS

7.1 LOOKING AHEAD

There is a natural tendency for security measures to focus on past events and thus to be reactive rather than proactive. After the Air India Flight 182 tragedy, Canada pushed forward with such security measures as passenger-baggage reconciliation, to prevent bags being placed on aircraft without the owners accompanying them. After the September 11 attacks, attention was re-focussed on preventing dangerous objects from reaching the aircraft cabin. The recent alleged terrorist plot in London resulted in an immediate ban on liquids and gels in carry-on luggage. Although these are appropriate responses to specific threats, we must expect that terrorists will be looking for new methods of attack calculated to evade existing security measures. This puts pressure on the system to be able to predict the nature of future attacks, assess the risks, devise solutions and set priorities for future enhancements to Canada's aviation security system. Because resources are not unlimited, and some of the potential solutions are very costly, decisions must be made on a sound risk assessment basis.

We wish to underline the importance of instilling a culture of not only learning from past events (including mistakes), but also of looking ahead to identify the next possible threat to Canada's aviation security system. Most important, continuous and concerted efforts need to be made at the national level within and among government organizations, such as Transport Canada and CATSA. While both organizations clearly do some

forward-looking analysis, we did not find evidence of a systematic approach to anticipating possible future acts of aviation terrorism.

In this era of rapidly changing technology and terrorist tactics, relevant intelligence and prevention information needs to be shared and analyzed on an ongoing basis. As discussed, the Security Management System approach expects all employees, whether they have expertise in operations or high-level threat analysis, to become partners in an overall security culture that encourages them to be proactive, creative and involved in identifying threats and finding solutions to them. For example, brainstorming sessions and other such exercises should be standard in each organization so that the issue of predicting, anticipating and dealing with threats is always fresh in the minds of employees.

Transport Canada, with its responsibility for overall aviation security policy, should take the lead to instil a forward-looking culture throughout the aviation security system. Within the Department, one approach would be to adopt a rigorous and systematic practice of anticipating future threats and build a requirement into its security planning system so that all security partners do the same.

Recommendation 7.1

We recommend that Transport Canada and CATSA take steps to instil a culture of continuous learning from past events and forward-looking threat assessment throughout their organizations, and in collaboration with other security partners.

7.2 AVIATION TRENDS

Projecting future trends is always uncertain, especially when a multiplicity of variables must be taken into consideration. However, there is consensus among experts that the volume of commercial air traffic is likely to continue increasing, perhaps substantially, over the next decade. There is strong evidence of rising demand for both passenger and cargo transport, as the rebound from the September 2001 depression of the aviation sector continues. Expanding markets and liberalized trade are positive factors.

The growth of Asian prosperity will ensure growing trade and travel between Canada and the emerging Asian economic giants. Airline alliances, such as the Star Alliance, have developed to coordinate flights, obtain feeder traffic and increase efficiency in operations. Ongoing air treaty negotiations, such as those between the United States and the European Union, could further stimulate demand for air travel. In North America, the desire to travel by aging baby boomers during their leisure years may also boost the demand for air travel.

As depicted in table 7.1, Transport Canada forecasts that annual growth rates in air passenger traffic will average 5.3 per cent in the short term (2003-2008), 4.3 per cent from 2003 to 2013, and 3.8 per cent over the longer term (2003-2018).

7.1 Forecast growth in air passenger traffic

Forecast growth in air passenger traffic¹ – all reporting airports				
Major, regional/local and charter carriers				
Average annual growth rates (per cent)				
Year	Domestic	Transborder	International	Total
1993-2003	2.5	2.2	4.3	2.7
2003-2008	4.4	6.3	7.4	5.3
2003-2013	3.5	5.3	6.0	4.3
2003-2018	3.1	4.7	5.3	3.8

Source: Transport Canada, Economic Analysis Directorate, *Transport Canada Aviation Forecasts 2004-2018* (September 2005)

Similar growth is expected in other countries. The International Air Transport Association (IATA), an industry association representing the world's leading passenger and cargo airlines, predicts an annual average growth rate of 5.6 per cent between 2005 and 2009 based on the airlines' own projections.²

¹ Enplaned and deplaned revenue passengers.

² IATA, *Passenger and Freight Forecast 2005-2009* (October 2005).

In the freight sector, Transport Canada predicts an annual growth rate of 5.7 per cent from 2003-2013 and IATA forecasts 6.3 per cent for the period 2005-2009.³

Projections like these are dependent upon the reliability of information taking into account a variety of factors, and are tied to forecasts of future economic growth and social trends. There are potential shocks to the system that are difficult to factor in, such as the effects on air travel of another pandemic, a sharp rise in oil prices or another deadly air terrorist incident. Even the threat of a terrorist attack, such as the uncovering of the alleged plot to bomb trans-Atlantic aircraft in the U.K., can dampen the desire to fly. Despite these factors, the confidence with which projections of future growth is presented rests on some solid factors.

Meanwhile, the aviation industry is undergoing significant changes in the way business is conducted, in large part due to technological developments. New wide-body aircraft that can seat up to 800 passengers on a single flight are coming on stream. Airlines are replacing fleets with more fuel-efficient equipment and investing in automated and off-site check-in processes and reservation systems designed to improve efficiency and passenger service. Developments such as these will add capacity and efficiency into the system, putting additional pressure on airport passenger processing, including passenger, baggage and cargo screening.

At the same time, air taxis and microjets, which take advantage of smaller, less expensive jet engines, computerized cockpits and composite materials, and can carry small numbers of passengers (typically four to six), could become attractive alternatives to regular commercial air travel. Smaller satellite airports could be used to accommodate this traffic and the growing passenger and cargo demand, especially to alleviate pressure on the large hub airports.

Airports are among the most advanced sectors of the economy, with major building programs at many of the major international airports adding new terminals and runways, and investment in maintenance and rehabilitation of existing infrastructure. In Canada, between 1992 and 2003, airports invested or committed over \$8 billion to improve facilities.⁴ International

³ Transport Canada, Economic Analysis Directorate, Transport Canada Aviation Forecasts 2004-2018 (September 2005); and IATA, *Passenger and Freight Forecast 2005-2009* (October 2005).

⁴ Canadian Airports Council, *A Competitive Flight Plan for Canada's Air Infrastructure – A Policy Paper for the Government of Canada* (June 2006).

airports in Toronto and Vancouver are currently rebuilding and adding new multi-million dollar terminals. Airports in Ottawa, Calgary, Edmonton, Montreal, Victoria and Regina, as well as others across the country, have recently expended substantial sums on airport improvement projects. Winnipeg and Halifax airports have also announced building programs that will soon begin.

Thus, capacity in the system is expected to be available to handle projected demand. Anticipated technological advances in navigation and air traffic control systems also promise increased system capacity. These growth projections have significant implications for security.

7.3 TECHNOLOGY TRENDS

Increased passenger and flight volumes, in themselves, pose significant challenges for security. Very large aircraft, and the fast turn-around times needed to make them economical to purchase and maintain, will result in large numbers of passengers attempting to pass through the airport at the same time. This can be expected to create further pressure throughout the airport, including at the security screening points during peak travel times, normally early morning and late afternoon.

When the impact of new technologies is factored in, the challenges may be both alleviated and made more complex:

- As Unmanned Air Vehicles (UAVs) move from the military to the civil aviation sector, robotic navigational technologies become more pervasive.
- FANS (Future Air Navigation Systems), developed by NASA, permit on-board satellite-assisted navigation that renders ground control unnecessary.

New technologies also present opportunities for new forms of security:

- Lighter-than-air vehicles (also known as airships) may be deployed in the stratosphere as telecommunication 'stratellites' that could also be used for security surveillance.
- Management of transportation services is changing dramatically as a result of the information technology revolution and market

deregulation. Supply chains can be re-engineered to produce inventory visibility in real time. Passengers will be processed online from home to destination.

While these technologies offer enhanced capacity for tracking, monitoring and security control, they also offer opportunity for hostile cyber attacks potentially capable of incapacitating the system or creating air disasters. Contemporary crimes such as identity theft raise issues of concern to aviation security, since terrorists could manipulate identification to breach security controls. This challenge in turn encourages the introduction of greater use of technological solutions, such as biometrics, as a verifiable security check on identity.

Existing screening equipment currently deployed at Canadian airports is designed to detect dangerous or potentially dangerous concealed items on passengers and in carry-on and hold baggage. This represents a considerable investment. CATSA has deployed over 6,000 pieces of equipment utilizing X-ray, Computed Tomography (CT-X), and explosive trace detection technologies to support its screening operations in checking both carry-on and hold baggage.⁵ However sophisticated, and however effective at detecting what it was designed to detect, this equipment is nonetheless challenged by the ingenuity of those who potentially have access to new and difficult-to-detect substances and methods. For instance, component parts for an improvised explosive device could be assembled and deployed during flight. New and ingenious methods of concealing weapons or explosive devices within apparently innocuous objects such as liquids or gels also pose a threat. Certain kinds of dangerous chemicals, as well as biological and radiological agents that are difficult to detect, also present a challenge for authorities.

There is a wide range of options currently available or in development that promise to deliver better detection of dangerous materials and methods. These include trace explosive detection portals, backscatter X-ray and millimetre wave imaging machines, and projected techniques using nuclear technologies and fluorescent polymers.⁶ The trace explosive detection portal, also referred to as a “puffer,” is designed to screen passengers carrying explosives. It is a walk-through portal that passes air gently over the person from head to toe causing the release of any particles

⁵ CATSA 2006 Annual Report: Measuring for Results.

⁶ Information from CATSA, U.S. Transportation Security Administration (TSA); U.S. TSA Press Release, “Reagan National Airport and Washington Dulles International Airport Unveil Explosives Detection Trace Portal Machines,” January 9, 2006.

that are naturally absorbed by or clinging to a person's clothing or body. These particles or vapour are drawn into the machine for analysis and can instantaneously indicate whether that person is carrying an explosive device or has come into contact with explosive substances. Such machines have already been deployed in other countries, including at passenger screening points in some U.S. airports by the Transportation Security Administration. However, it has been found that an airport environment is different from a laboratory. Problems of reliability have been encountered, including an unacceptably high number of false readings due in part to environmental factors such as dust, dirt and fuel fumes that are typically found in airport terminal buildings.

The detection of liquid explosives is another area where technology manufacturers are developing equipment that is more affordable, fast, reliable and easy to use. While systems already exist, some have limitations and may not fit all the needs for aviation security. For instance, one device, using a laser beam, can analyze the contents of a clear bottle but is unable to see through opaque containers.

There are a number of caveats that must be applied to the promise of these technologies. Firstly, they are still very expensive, even though prices are coming down. Advanced CT-X machines currently employed in hold baggage screening, for example, cost more than \$2 million per unit.⁷ The more complex the equipment, the longer the downtimes caused by mechanical failures, the more that must be spent on maintaining trained service people with rapid response capability, and the more that must be invested in system redundancy to avoid passenger backups.

Since its inception, CATSA has invested over \$500 million in capital equipment. Much of the equipment is technologically advanced, but also requires periodic updating. For depreciation purposes, all capital equipment used by CATSA, such as the X-ray and explosive detection machines, is considered to have a useful life of seven years. We heard from some European airports that the EU would like screening equipment to be updated after only three or four years to take advantage of new technology. If equipment is continually replaced prior to being fully depreciated, then this is an added cost burden. Adopting the latest technology and maintaining the highest degree of security in a cost-effective manner has serious public policy implications.

⁷ The cost of a CT-X 2500 model is \$1.1 million; a CT-X 9000 costs \$2.2 million.

Some of the technologies give rise to privacy and human rights concerns (for instance, sophisticated techniques like backscatter X-ray machines that produce near ‘nude’ images). Others have concerns about the potentially harmful health effects such as the radiation used in scanning people. The backscatter X-ray portal is similar to trace explosive detection portals in that a person is scanned by a single low-dose X-ray beam moving rapidly over their form in the machine. This technology produces a highly realistic image on a computer screen. The image enables the operator to detect both concealed weapons and substances on the person being screened. Suppliers of such technology realize that privacy issues are very much a concern and have been improving the system’s masking techniques to hide body parts the image produces. A solution that we encountered in the U.K. is to give passengers requiring a search the option to select between a hand search and a backscatter X-ray where images are viewed by screening officers of the same sex.

A warning might also be in order concerning the purchase of new screening technologies: there is a growing private sector security industry engaged in research and development of screening technologies. While this is the source of innovation and for that reason should be encouraged, some of the equipment being developed is of dubious capability. This places an additional burden on government to maintain its own informed technical capacity to objectively assess the claims of industry on behalf of products, many of which will find their most important market in the public sector. We are satisfied that Transport Canada and CATSA have this capacity to test and assess new technologies and we note how important it is that this capacity be maintained within government in support of objective and appropriate procurement decisions. We recommend that this capacity should most appropriately be lodged within CATSA, as the agency that deploys and operates screening equipment in compliance with expectations set by Transport Canada. In this role, CATSA should take into account human resources considerations, such as the competencies required of screening personnel and their managers, before the acquisition and implementation of new technologies and screening processes.

Recommendation 7.2

It is recommended that CATSA have responsibility for the assessment (including pilot projects) of emerging technologies and techniques in the detection of potential threats, as part of its lifecycle management of its capital program.

A promising aspect of screening is the reconceptualization of what it means to screen 'persons' and 'things.' Future technologies may permit people to be screened without divesting their carry-on baggage, emptying pockets or removing shoes. Integrated scanning units are being developed that perform multiple functions (detect explosives in shoes, metal objects and explosives hidden on the passenger); no removal of coats or contents of pockets is required. Manufacturers claim a throughput of 240 passengers per hour, with consequent reductions in staffing requirements. The Kelowna and Vancouver airports have expressed interest in participating in a pilot project to test this type of equipment. In five to 10 years, screening technologies are expected to be available that could be imbedded in the walls of a hallway. These would be invisible to passengers and much less invasive than the current approaches.

Behavioural analysis is another innovation that could be used to identify higher-risk passengers for more thorough searches. Screening techniques such as this involve a mix of technology and human judgment. Technologies under development claim to be able to detect malicious intent in individuals and include voice analysis (measuring stress levels) and physiological response (polygraph-like tests). For example, the Suspect Detection System (SDS) consists of a booth in which a three-minute polygraph is administered through voice recording to discern whether a person may have criminal intent, based on the principle that fear will be reflected in measurable psycho-physiological parameters. If specific parameters are triggered, a further face-to-face examination is conducted. The U.S. Transportation Security Administration has begun testing of Israeli-designed SDS technology at one American airport.

There are also claims made on behalf of remote sensing technologies, like electromagnetic neurological imaging, which at present sound more like science fiction than realizable technology. There seems little likelihood that all of these speculative projects will be coming to fruition in the near future. In any event, were they to prove practicable, they would raise serious privacy issues and concerns about the objective value of the

indicators they claim to detect. For instance, the identification of stress in an individual might have a number of innocent explanations, and might even be linked to the relatively high stress experience of air travel – or of being tested for stress indicators under such conditions. We were not sufficiently persuaded by the available evidence concerning technologies that claim to measure an individual's intent to conclude that they should be developed for use at Canadian airports within the coming years.

The exercise of human judgment in screening for behaviour of passengers can be taken more seriously. Some countries, notably Israel, employ trained frontline personnel who make initial judgments regarding risk levels of passengers based on behavioural observation. This triage of passengers into high-, medium- and low-risk streams results in more focus being placed on the individuals displaying higher risk. Elements of this approach are being adopted at some European airports. In the United States, Boston Logan Airport has pioneered a program that similarly streams passengers according to estimated risk, and the Transportation Security Administration is piloting a program called SPOT (Screening of Passengers by Observation Techniques) that may be applied at a wider range of U.S. airports. These programs rely upon observation of atypical behaviour patterns to identify suspicious persons who are flagged for closer attention. It is important to note that these programs do not attempt to extrapolate presumed intentions, but merely observe anomalous external behaviour.

We have some concerns about the application of this approach in Canada. However interpreted, it implies a degree of discretion assigned to frontline personnel to make judgments about passengers – judgments that might have serious impact on individuals. We note that the threat environment in some other countries greatly exceeds anything experienced in Canada; consequently there is widespread acceptance in Israel, for example, of security measures that might not be as acceptable to Canadians. We would note as well the danger of such a system of passenger analysis being misunderstood as 'profiling,' which in its ethnic, religious and racial forms is generally seen as inappropriate, if not illegitimate, in Canada. In fact, these implications are neither necessary nor inevitable if such an approach is planned and implemented properly. However, there would certainly be public perception and civil liberties issues that must be taken seriously.

Widespread adoption of the behavioural approach may require redesign of existing airports. This type of risk triage is intended to facilitate throughput of low- and medium-risk passengers, while screening

resources concentrate on the high-risk stream. For this to be effective, the airport must be designed so as to accommodate the process efficiently. We note in this regard that Ben Gurion International Airport in Israel was designed with multiple layers of security in mind. However, the airport also has a relatively low volume of passenger traffic – about 30 per cent of the total volume of passenger traffic at Pearson International in Toronto.⁸

Despite our reservations about the introduction of the behavioural analysis method as an additional type of screening tool, the Panel recognizes that its application is being both tested and adopted in a few other countries. Before the adoption of such a technique is considered for Canada, it would be necessary to review international experiences with this method and to carry out carefully planned and controlled pilot projects in Canada in order to assess such things as the accuracy of the behavioural analysis process, the competencies and training required, and the impact on the overall efficiency and effectiveness of screening.

7.4 IMPACT ON CATSA

It is clear that in the future, screening for things – up to this point CATSA's staple activity – will become more automated and less labour-intensive. As new, more sophisticated technologies and techniques become a feature of aviation security, more specialized and highly trained personnel will be required to operate and interpret the outputs of the equipment and assess for behavioural screening. Future requirements could also involve new responsibilities for CATSA, such as inspection and verification of identity against travel documents, including boarding passes.

The precise forms that future screening will take remain unclear at present, as considerable uncertainty is attached to the viability and acceptability of emerging technologies and techniques. The general direction is, however, clear: as technological solutions advance, greater emphasis will shift toward development of the human skills needed to

⁸ Ben Gurion Airport processed 9 million passengers in 2005 (Israel Airports Authority website: www.iaa.gov.il); Toronto International Airport had 29.9 million total passengers in 2005 (Greater Toronto Airports Authority website: www.gtaa.com).

make the risk assessment decisions that are at the heart of this process. This further highlights the importance of making timely intelligence information available to the frontline screening staff who will need to have the background and capacity to understand the information and apply it in on-the-spot decision-making. Any such transition remains some way down the road, but we are satisfied that this will be the general direction over the next decade. If so, there are a number of important implications for CATSA as an organization.

As new forms of weapons and explosives and new techniques for concealing and deploying them are developed, CATSA will have to develop new and better means to detect them. As the requirements for screening shift in response to new technologies and new threats, as well as higher volumes and more diversified traffic, CATSA requires the flexibility to adjust its methods and operations to meet the new challenges. Collecting information and sharing best practices on screening techniques and technology with the international community will help the organization stay abreast of developments and make it more difficult for terrorists to defeat the systems put into practice.

Our vision for CATSA would see it becoming Canada's expert organization for delivering aviation security screening by being fully responsible and accountable for the practices, procedures and operations necessary to protect the travelling public. With management authority and accountability for all aspects of its operations, as recommended in this Report, CATSA will be well-placed to efficiently deliver the level of screening effectiveness and customer service that Canadians expect, and that industry requires to remain competitive. Transport Canada will remain the lead government organization for aviation security and will be responsible for providing strategic direction and establishing a results-based regulatory framework as the roadmap. Freed of operational details, Transport Canada will be able to focus on quickly closing known gaps and developing proactive strategies for the aviation security sector as a whole. Together, the two organizations, and their partners in aviation security, should be better able to prepare and respond to the challenges of today and those in the future.

Chapter 8

OTHER OBSERVATIONS

The Panel's Terms of Reference invited us to draw to the Minister's attention any important issue that we encountered during the course of our work:

Other issues: The Panel may inform the Minister of other important issues that come to its attention through its research, analysis or consultations.

At the same time, the Terms of Reference specifically excluded from our mandate the making of recommendations concerning the Air Travellers Security Charge (ATSC):

In its December 2001 Budget, the Government introduced the Air Travellers Security Charge (ATSC) to fund aviation security initiatives. Amounts raised by the ATSC are attributed to the Consolidated Revenue Fund and not directly to CATSA or any other government entity with security responsibilities. The work of the Panel will *not* extend to the current ATSC structure, level or impact on the aviation industry. Advice is not being sought from the Panel with respect to funding sources, mechanisms and levels applicable to CATSA.

However, throughout our consultation process, many stakeholders made reference to the ATSC in their submissions and presentations and were very preoccupied with it. We therefore provide some observations on the ATSC, without making specific recommendations.

The Panel also heard from several airports that the requirement to provide facilities free of charge to an increasing number of federal departments and agencies has put undue financial burden on them. This chapter also includes some comments on this issue.

8.1 THE AIR TRAVELLERS SECURITY CHARGE

Budget 2001 provided \$2.2 billion to enhance aviation security over a five-year period ending in 2006-07. To fund this increased level of aviation security, the government introduced the ATSC, to be paid by air travellers effective April 1, 2002. The *Air Travellers Security Charge Act* was passed to create the ATSC¹.

Enhanced aviation security initiatives that would be funded by the ATSC included:

- an enhanced regulatory regime;
- additional Transport Canada security inspectors;
- the installation of reinforced cockpit doors on passenger aircraft;
- increased policing presence at airports;
- the establishment of the RCMP's Canadian Air Carrier Protective Program (CACPP); and
- the creation of CATSA to be responsible for the screening of passengers and their luggage.

Some \$1.942 billion, or approximately 88 per cent of the \$2.2 billion, was earmarked for CATSA's budget to cover the last three initiatives.

The ATSC is managed by the Department of Finance. There is no direct mechanism that links the ATSC to the security expenditures. ATSC revenues flow directly to the Consolidated Revenue Fund. Air security expenditures, including CATSA's appropriations, are determined by

¹ Air Travellers Security Charge Act, 2002, c. 9, s. 5.

parliamentary appropriations. The intention, however, is that revenues from the charge would be equivalent to the level of required expenditure for the enhanced security initiatives over a five-year period. There have been periodic adjustments in the level of the charge since its inception as the financial requirements have changed.

In Budget 2003, following a review that involved consultations with stakeholders, reports by independent consultants² and a significant upward revision of Transport Canada's forecast of air passenger traffic, the ATSC was reduced. In Budget 2004, the ATSC was reduced a second time, based on "updated revenue and expenditure projections," a revised forecast by TC of growth in air passenger traffic and CATSA's 2003 *Annual Report* that revealed 2002-03 operating funds were not all spent. Again in Budget 2005, after a third review of the charge, the ATSC was reduced again, based on "updated information for revenue and costs;" the Auditor General's first *Report on the ATSC*; and CATSA's 2004 *Annual Report* that showed some 2003-04 operating funds would be unspent. Finally, in Budget 2006, ATSC was recalculated to reflect a one-percentage-point reduction in the GST. The ATSC reductions are represented in table 8.1.

During our consultations, stakeholder representatives – the Canadian Airports Council (CAC), the Air Transport Association of Canada (ATAC), airport authorities and the air carriers in particular – strongly expressed their opposition to and concerns with the ATSC. They argued that in principle, all costs associated with the protection of national security should be borne by the federal government and not by the civil aviation industry – and ultimately by the air passengers. The industry also expressed the view that the ATSC is not transparent, not properly accounted for, and not appropriately invested in the air transportation industry.

² Independent Review of the Finance Canada Revenue Model for the Air Travellers Security Charge, Geoffrey D. Gosling, Ph.D. (March 2003).

Air Travel Demand Elasticities: Concepts, Issues and Measurement, David W. Gillen, William G. Morrison, and Christopher Stewart MBA, Wilfrid Laurier University (January 2003).

Air Travellers Security Charge (ATSC) and Low Cost and Regional Air Carriers, Sypher: Mueller International Inc. (January 2003).

8.1: ATSC rates³

ATSC rates (\$ per enplaned passenger)					
Effective date	April 1 2002*	March 1 2003*	April 1 2004*	March 1 2005*	July 1 2006* ⁴
Domestic (One-way)	\$12.00	\$7.00	\$6.00	\$5.00	\$4.95
Domestic (round-trip)	\$24.00	\$14.00	\$12.00	\$10.00	\$9.90
Transborder	\$12.00	\$12.00	\$10.00	\$8.50	\$8.42
Other international	\$24.00	\$24.00	\$20.00	\$17.00	\$17.00

(*amounts include the GST or the federal portion of the HST where applicable)

8.1.1 Federal funding or separate security charge

Some of the more compelling arguments presented by the industry stakeholders for having aviation security funded by the federal government include the following:

- The State is the real target of the security threat and acts of terrorism are not committed against the aviation sector, per se. Accordingly, the State has an obligation to protect its sovereignty, its assets and its citizens.
- The ATSC unfairly discriminates between modes of transportation. This discrimination provides a competitive advantage to other modes of transportation, such as marine and rail (where, it is claimed, security costs are borne by the general taxpayer) at the expense of the air transportation industry.

³ Budget documents, Finance Canada.

⁴ ATSC rates are structured to include, where applicable, the Goods and Services Tax or the federal portion of the Harmonized Sales Tax (GST/HST). As a result of the GST/HST rate reduction, certain technical adjustments to ATSC rates are required in order to ensure that consumers receive the full benefit of the rate reduction. The ATSC rate for other international air travel is not subject to the GST/HST and remains unchanged.

- There are many fees and charges already directly or indirectly paid by the traveller that should cover the cost of aviation security. Airport Authority costs, such as rent and taxes paid to the government, are passed on to the air carriers and subsequently to the air traveller. The airport charges air carriers landing fees, terminal use fees and local airport security fees that are also passed on to the passenger through the price of a ticket. In addition, the air fares are subject to GST, provincial taxes, fuel taxes and airport improvement fees.

The Panel notes that there are good arguments as to why the cost of aviation security should be borne by the air transportation industry:

- The air transport industry requires specific security measures.
- The enhanced security measures are an integral component of the safe and secure transfer of passengers from one point to another. Therefore, the air travellers are the primary beneficiaries.
- If the federal government assumed the cost, it would be borne by the general taxpayer and those who do not fly would be subsidizing those who do.
- The enhanced security measures provide a significant economic benefit to the aviation industry. Without security, customers would fly less and the industry would suffer from these customer choices. It could be argued that without a reasonable level of security, the added liability cost could put some air carriers out of business.
- This ATSC represents very little by comparison to the other indirect costs that the air traveller pays: for illustrative purposes, a \$415 return ticket between Ottawa and Toronto would cost the passenger an extra \$70 in fees and charges, including the ATSC. Out of the total price of \$485, the \$9.90 represents approximately two per cent of the cost and has a marginal impact on the customer's purchase decision.

Should aviation security initiatives be funded by the federal government or through the ATSC? There are strong arguments in favour of either case. However, the imposition of a separate charge to fund security initiatives is in line with international practice⁵ and the Panel does not find the imposition of an ATSC unreasonable.

8.1.2 Transparency in accounting for and use of the ATSC

Industry stakeholders made the case that if there must be an ATSC, it needs to be transparent, properly accounted for and appropriately invested in the air transportation industry.

How the federal government intended to spend the ATSC revenue seems to be a source of misunderstanding. As was previously noted, funding was to be provided for incremental security-related costs incurred after 9/11 and the ATSC was to cover these costs over a five-year period. CATSA's five-year budget was to cover approximately 88 per cent of the total amount, with the remainder to be allocated to Transport Canada for additional transportation security inspectors and to the air carriers to help fund the reinforcement of the cockpit doors on passenger aircraft.

Stakeholders claimed that there is currently no transparency or comprehensive accounting for how the ATSC is spent. As a result, the industry has no confidence that the revenues from the charge are entirely invested in transportation security. The Department of Finance is responsible for managing the ATSC and regularly monitors the revenues and expenses, adjusts the rates to ensure revenues match expenses over a five-year period and publishes the results of its reviews. The results of the latest review released in August 2006 are provided in table 8.2.

⁵ The U.S. imposes a passenger security fee of \$2.50 U.S. per enplanement with a \$5 U.S. maximum per one-way trip. They also impose a security infrastructure fee on the carriers. Collectively, these fees recovered approximately 43 per cent of TSA's security expenses in 2005. In Europe, security activities are paid for by a combination of stakeholders, including airports, air carriers, passengers and the States themselves.

8.2: ATSC revenues and expenses⁶

ATSC revenues and expenses (\$ million)							
Year	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	Total
	(Audited)			(Forecast)			
ATSC Revenue	0	445	420	390	350	365	1,970
Expenses ⁷	40	210	260	310	410	415	1,645
(Deficit)/ Surplus	(40)	235	160	80	(60)	(50)	325
Cumulative (Deficit)/ Surplus	(40)	195	355	435	375	325	325

As indicated in table 8.2, the Department of Finance forecast a cumulative surplus of \$325 million by the end of 2006-2007. However, Budget 2006 provided new funding of \$133 million over two years for CATSA to manage increased operating expenses associated with passenger screening and to deploy new equipment for several airport expansion projects. These additional expenditures will reduce the projected surplus to \$275 million by the end of 2006-07. As a result of this increase in expenditures and in order to provide some latitude to address cost pressures in the future, the Department of Finance decided not to further reduce the ATSC.

The report from the Department of Finance combines all the aviation security expenses and does not break them out by initiative or by department or agency. The Panel tried to assess CATSA's appropriations against the ATSC expenses to the end of 2006-07 to determine how they measured against their Budget 2001 target of 88 per cent of the total amount (\$1.942B of \$2.2B). However, the Department of Finance reports capital expenditures on a depreciation basis and CATSA receives its appropriations on a cash basis, making this comparison impossible to do from publicly available documents.

⁶ Department of Finance *Updated Financial Information on Air Transportation Security*, August 25, 2006.

⁷ Expenses reflect accrual accounting basis and include operating and depreciation expenses.

The Panel supports annual public reporting of the ATSC. Transparency could be improved by showing expenditures by program or by department and agency. It would also be useful if the report would also report capital expenditures as they are appropriated rather than on a depreciation basis. This would be consistent with how the \$2.2 billion aviation security budget is allocated and with how CATSA reports capital expenditures.

Stakeholders made the case that if the ATSC continues to be levied, it should be invested only in air transportation security. It was suggested that all or part of the ATSC should be credited directly to CATSA's appropriations. CATSA's funding would then be linked directly to passenger growth and related workload increases. It was also argued that the surplus should be used to fund additional screeners and improved equipment and to compensate airports for lost commercial opportunities deriving from the large amount of space required for the PBS screening points.

The Panel notes that security costs are an important issue for airports. The larger airports already pay substantial rent to the government and some are experiencing significant new infrastructure costs to meet traffic demands, whereas the smaller airports lack an adequate revenue base to recoup the additional costs imposed by post 9/11 security requirements.

On the other hand, the Panel observed that CATSA invested millions of dollars to install their HBS equipment within existing airport baggage handling systems. In some cases CATSA funded airport modifications, including the replacement of baggage handling systems and expansions to baggage halls. In order to have sufficient space for expanded PBS screening points, CATSA invested in architectural modifications and/or reallocation of terminal space. CATSA and the Canadian government incurred these expenses to offset some of the burden necessitated by the aggressive schedule for the installation of 100 per cent HBS to meet Canada's international obligations.

In conclusion, the Panel notes that the government has decided to retain the ATSC to fund aviation security initiatives, is committed to periodically review and report on the ATSC and will use the surplus to fund increased operating costs and some future capital expansions.

8.2 PROVISION OF SPACE AT AIRPORTS

The requirement for airport authorities to provide free space to federal government departments and agencies is a federal government policy that has been in place since the airports became local authorities in the mid-1990s. This policy is reflected in Section 30 of the *CATSA Act*:

“Every operator of an aerodrome designated by the regulations must provide to the Authority, and maintain free of charge, such space at the aerodrome with services reasonably required by the Authority as the Authority and the operator agree on or, in the absence of agreement, such space at the aerodrome with services reasonably required by the Authority as the Minister determines to be necessary to enable the Authority to carry out its mandate.”

CATSA is the most recent federal organization to require free space at airports. There are several other departmental programs (Canadian Border Services, Immigration, Health, Agriculture, the RCMP, etc.) that require an airport presence and for which the airport authorities must provide the space and absorb the related costs for utilities and maintenance.

Airport terminal buildings are designed to provide space to meet operational requirements and provide amenities, including retail facilities, that will meet customer service and financial expectations. Airports generally generate revenues from commercial space and from fees charged to the air carriers. There is continuous pressure on airports to increase commercial revenues and reduce revenues generated from airline fees. Providing free space for federal government operations reduces commercial opportunities.

As the most recent federal organization to put such pressures on the airport financial structure, CATSA has been a target for complaints in regard to this federal government policy. In addition to having to provide free space, the increase in security requirements, and in particular the addition of HBS, has added a significant financial burden to the airport. While CATSA buys and maintains the HBS screening equipment and has paid for the integration of it into the baggage handling systems, the hold baggage system has increased airports costs for utilities and maintenance of the new more complex systems, and for additional personnel to clear

baggage jams and handle misdirected baggage. For example, the Panel heard from representatives of Edmonton International Airport who indicated that they have incurred incremental costs in the order of \$1.5 million (excluding added utility costs) for a more complicated baggage handling system and Moncton airport authorities advised that their utility costs have increased by \$50,000 per year. The Class 2 and Class Other airports are particularly affected by these additional costs, as they have the least ability to generate revenues to offset the added costs.

In our consultations across the country, airports argued for some reimbursement of the costs incurred to provide space free of charge to CATSA and the numerous other federal departments and agencies that require physical facilities at airports. On the other hand, the government agencies provide a service that is an integral component of passenger facilitation and therefore it is in the airport's best interests to have them on site. Nevertheless, there is clearly a limit to the costs that airports can reasonably be expected to absorb. The Panel has not assessed whether this limit has been reached. We understand that the federal government has previously examined this issue and the implications extend beyond Transport Canada. Nevertheless, we think it important to bring to the Minister's attention that the airports appear to be increasingly frustrated by the increase in cost pressures.

Appendix A

LIST OF RECOMMENDATIONS

Chapter One: REVIEWING CANADIAN AVIATION SECURITY

No recommendations.

Chapter Two: PROTECTING CANADIAN AIR TRAVELLERS

Recommendation 2.1

We recommend that responsibility for aviation security remain with the Minister of Transport.

Recommendation 2.2

Transport Canada should ensure that CATSA continues to receive all the information and intelligence it requires at the national and local levels to perform its functions, including timely access to the best intelligence and actionable information from all sources on explosives, weapons and concealment techniques.

Recommendation 2.3

Airports of all sizes should implement rigorous security awareness programs (a type of airport security watch program) for all personnel working at the airport.

Recommendation 2.4

We recommend that each designated airport establish an Airport Security Advisory Group, to coordinate and consult on the development and implementation of the airport's security plan, to resolve general security

issues, to promote security awareness, and to encourage a collaborative approach to security issues.

Recommendation 2.5

We recommend that an Airport Security Committee be created at each Class 1 airport to facilitate the sharing of intelligence information and to coordinate the development of airport-specific threat and risk assessments.

Recommendation 2.6

We recommend that Transport Canada accelerate its work to develop a program for the security screening of aviation cargo.

Recommendation 2.7

We recommend that screening of passengers be extended to Fixed Base Operations where the size of the operation warrants.

Chapter Three: CATSA'S MANDATE

Recommendation 3.1

CATSA should retain its current screening mandates in the broadest sense of screening, that is, screening of people and things, and CATSA should be considered as the first option for all future aviation screening functions.

Recommendation 3.2

- (a) In Class 1 airports, CATSA should be continuously present at all entry points to the restricted areas of the airport to perform non-passenger screening, on a random basis.
- (b) Non-passenger screening should be extended to include searches of vehicles entering restricted areas in Class 1 airports, and should be performed by CATSA, or under CATSA's oversight using CATSA's standards and procedures.
- (c) Non-passenger screening should be discontinued in Class 2 airports once the Restricted Area Identification Card, with biometric identifiers, is in place; CATSA should be prepared to implement NPS on an as-needed basis in Class 2 and Class Other airports, when threat analysis indicates a need.

Recommendation 3.3

- (a) CATSA's mandate should be amended to remove responsibility for managing funding for the Canadian Air Carrier Protective Program. In the future, funding for the CACPP should be provided via appropriations directly to the RCMP or through Transport Canada.
- (b) An independent external audit of the CACPP should be conducted regularly by the Auditor General of Canada or an independent auditor, on a confidential basis.

Recommendation 3.4

- (a) Responsibility for the airport policing contribution program should be transferred to Transport Canada.
- (b) Transport Canada should review the existing standards for police response to all types of screening points to rationalize the airport policing program, and should fund all reasonable costs associated with meeting the new standards.

Recommendation 3.5

- (a) CATSA should complete the installation of the Restricted Area Identification Card system on a priority basis; to facilitate this, Transport Canada must complete the regulatory framework for RAIC as soon as possible.
- (b) Once CATSA has completed implementation of the Restricted Area Identification Card, the RAIC national identity verification system should be operated and maintained by Transport Canada.
- (c) The multiple-airport access system should be implemented in conjunction with RAIC as quickly as possible.
- (d) RAIC should be expanded to all 89 designated airports.

Recommendation 3.6

- (a) The text of the *CATSA Act* should be amended to remove the *consistency* criterion.
- (b) The text of the French version of the *CATSA Act* should be amended to add a separate term equivalent to *efficient* in section 6 (1).

Chapter Four: REGULATORY FRAMEWORK

Recommendation 4.1

It is recommended that CATSA develop a more user-friendly format for its *Standard Operating Procedures* and for disseminating and integrating updates to ensure that its front-line screening personnel have ready access to them in order to carry out their responsibilities.

Recommendation 4.2

Transport Canada should not retain the power to de-designate screening officers. CATSA should be accountable for screening officer performance, including certification and designation.

Recommendation 4.3

We recommend that to the extent possible, Transport Canada standardize the terminology used in the *Aeronautics Act*, its attendant regulations, measures and orders, and in the *CATSA Act*.

Recommendation 4.4

It is recommended that, as a high priority, Transport Canada develop a more results-based regulatory framework for aviation security.

Recommendation 4.5

It is recommended that, in line with ICAO Annex 17, Transport Canada develop a National Civil Aviation Security Program and require CATSA, as well as airport operators, major tenants and air carriers, to develop security plans for their areas of responsibility, consistent with the National Program. Transport Canada should approve the plans and audit the organizations on a periodic basis for compliance with their plans.

Recommendation 4.6

In line with the results-based regulatory regime, it is recommended that CATSA assume full responsibility (and accountability) for operational policy, including operational design and screening solutions, qualifications of screening officers and service providers, equipment decisions and management of the list of prohibited items.

Chapter Five: DELIVERY OF SCREENING SERVICES

Recommendation 5.1

- (a) All three options for CATSA to deliver screening services should remain in the *CATSA Act*.
- (b) Airport operators should be eligible to bid on a screening contract for their own airport.

Recommendation 5.2

- (a) CATSA should develop measurable performance standards, including peak hour throughput and wait-time standards for each airport that reflect, among other factors, the pre-board screening configuration at the various screening points.
- (b) CATSA should establish space allocation standards for pre-board screening lines and a throughput standard for an optimum configuration.
- (c) CATSA should develop workplace design standards to optimize screening effectiveness and employee working conditions and ensure best practices are shared with all airports.

Recommendation 5.3

We recommend that CATSA provide refresher courses to screening officers on new screening techniques, and changes to the *CATSA Standard Operating Procedures*, to ensure that screening officers maintain an up-to-date knowledge of their complete content.

Recommendation 5.4

CATSA should consider options to improve supervision at all 89 airports. CATSA should deploy more management personnel in the field in order to provide closer supervision of security screening services.

Recommendation 5.5

As a high priority, Transport Canada, CATSA, airport operators, air carriers and police services must develop unambiguous guidelines on the handling of security breach incidents at all screening points. These guidelines should include clear and timely communications to the public.

Recommendation 5.6

We recommend that Transport Canada undertake a detailed audit of the security clearance process to determine the causes of delay, and take remedial action to correct these deficiencies, in order to speed up the

process of issuing Transportation Security Clearances for persons requiring airport Restricted Area Passes.

Chapter Six: GOVERNANCE AND ACCOUNTABILITY

Recommendation 6.1

We recommend that CATSA establish a national-level advisory committee, reporting to the Board of Directors, to represent the interests of the travelling public, including travellers with disabilities.

Recommendation 6.2

- (a) It is recommended that the Canadian Air Transport Security Authority either remain a Crown corporation or be transformed into a departmental corporation.
- (b) If CATSA remains a Crown corporation, there should be an increase in the level of compensation provided to Board members.
- (c) If CATSA becomes a departmental corporation, an advisory board representing the various stakeholders should be established. The Minister should appoint its members.

Recommendation 6.3

Whichever organizational model is adopted for CATSA, the organization needs to be provided with increased flexibility in the areas of operations, finance and administration.

Recommendation 6.4

- (a) In order to carry out its mandate effectively, CATSA should be responsible and accountable for operational policy and decisions (including deployment of human resources and the lifecycle management of its assets), while Transport Canada would retain responsibility for overall aviation security policy, strategy and legislation.
- (b) These responsibilities and accountabilities should be clearly communicated at all levels of both organizations, and their acceptance needs to be carefully monitored.

Recommendation 6.5

CATSA should have full responsibility for the lifecycle management of its capital equipment, including research and development, procurement, maintenance and replacement.

Recommendation 6.6

We recommend that CATSA's budget reflect passenger volumes as well as productivity gains realized from enhanced technologies and procedures. CATSA should also be provided with the capacity to generate revenues, to recover costs in line with federal government policies, to carry forward operating funds, to re-profile capital and to transfer operating funds between budget items. These flexibilities should be awarded once CATSA has demonstrated it has the appropriate procedures and systems in place.

Recommendation 6.7

We recommend that, if CATSA becomes a departmental corporation, it remain a separate employer, be granted the same contracting authorities that it has as a Crown corporation and the maximum administrative flexibilities allowed for under the *Financial Administration Act*.

Chapter Seven: FUTURE AVIATION SECURITY IMPLICATIONS

Recommendation 7.1

We recommend that Transport Canada and CATSA take steps to instil a culture of continuous learning from past events and forward-looking threat assessment throughout their organizations, and in collaboration with other security partners.

Recommendation 7.2

It is recommended that CATSA have responsibility for the assessment (including pilot projects) of emerging technologies and techniques in the detection of potential threats, as part of its lifecycle management of its capital program.

Chapter Eight: OTHER OBSERVATIONS

No recommendations.

TERMS OF REFERENCE

ADVISORY PANEL ON THE *CATSA ACT* REVIEW

BACKGROUND

Aviation security has been an issue of importance for Canada. Significant improvements were made to Canada's aviation security regime as a result of the terrorist bombing of Air India in 1985. Following the September 11, 2001 terrorist attacks on the United States, the Government enhanced Canada's counter-terrorism authorities, capabilities and preparedness. One of the most significant early announcements was the creation of a new Crown corporation – the Canadian Air Transport Security Authority or CATSA – to be responsible for several core aviation security functions, including those associated with the screening of passengers and their on-board and checked baggage. Air carriers had been performing these screening functions, using private sector contractors.

The Government announced the creation of CATSA in the December 2001 Budget, as part of a \$2.2 billion package of new funding for civil aviation security enhancements. Shortly thereafter, on March 27, 2002, the *Canadian Air Transport Authority Act* received Royal Assent. This new legislation assigned CATSA authority for:

- The effective and efficient screening of persons who access aircraft or restricted areas through screening points, the property in their possession or control, and the belongings or baggage that they give to the air carrier for transport,

- The management of funding agreements with the Royal Canadian Mounted Police for the Canadian Air Carrier Protective Program and with airport authorities for enhanced airport policing, and
- Other air transport security functions provided for in the *CATSA Act* or assigned to CATSA by the Minister. Assigned tasks currently include random screening of non-passengers accessing restricted areas at airports and managing the Restricted Area Identification Card (RAIC) program.

The *Act* requires CATSA to ensure consistency across Canada in the delivery of security screening and all other functions within its mandate.

The *CATSA Act* came into force on April 1, 2002 by Order in Council. CATSA's governance structure includes an 11-member Board of Directors, including a Chairperson, all appointed by the Governor-in-Council. The Board appoints a Chief Executive Officer to be responsible for day-to-day management of CATSA and who is not a member of the Board. The Minister of Transport recommends appointments to the Board of Directors, may issue binding directives to CATSA, and may assign other air transportation security functions to CATSA.

Currently, CATSA staff number approximately 200, mainly at the Ottawa headquarters. CATSA delivers its screening responsibilities through contractors who hire approximately 4,000 screening officers who process more than 37 million passengers and workers and intercept more than 700,000 prohibited items annually at 89 airports.

LEGISLATIVE REVIEW REQUIREMENT

According to section 33 of the *CATSA Act*:

- (1) A review of the provisions and the operation of this Act must be completed by the Minister during the fifth year after this section comes into force.
- (2) The Minister must cause a report of the results of the review to be laid before each House of Parliament on any of the first fifteen days on which that House is sitting after the report has been completed.

PROCESS

The Minister of Transport has appointed an Advisory Panel of three part-time members to conduct independent study and analysis, to undertake consultations, and to prepare a report with recommendations and observations.

The Panel will consult CATSA and Transport Canada, as well as stakeholders, including air carriers, airport operators, air travellers and other federal government departments and agencies. The Panel will hold meetings across Canada where individuals and groups can present their views. To assist those who wish to make submissions, the Panel will prepare a Guidance Document setting out key issues of interest to the Panel.

A full-time Secretariat established within Transport Canada will support the Panel.

SCOPE OF THE PANEL'S WORK

The Panel will be the Minister's principal source of independent advice on the five-year review of the provisions and operation of the *CATSA Act*. The Minister is also seeking the Panel's advice on future aviation security requirements and other developments that may impact on CATSA's future operations. The Minister has assigned the Panel tasks flowing from the independent review of the 1985 crash of Air India Flight 182, and acknowledges that the Panel may wish to make observations on other important matters that come to its attention during the course of its work.

1. Review of Provisions and Operation of the Legislation

The primary aim of this five-year review of the *CATSA Act* is to ensure that the legislation provides a sound and adequate statutory basis for CATSA's air transport security mandate. The Panel will review all the provisions of the *CATSA Act* and identify those provisions that the Panel considers require amendment, clarification, replacement, or deletion. The

Panel will also identify the need for new provisions required to carry out CATSA's air transport security mandate.

The Minister has asked the Panel to accord special attention to issues arising from the provisions of the legislation dealing with:

- Governance and accountability, including the choice of the Crown corporation model, and the responsibilities of the Minister, the Board of Directors, the Chairperson, and the Chief Executive Officer;
- The delivery of core screening functions (direct, through screening contractors, or through authority to airport operators);
- CATSA's role in the funding of the RCMP's Air Carrier Protection Program and with airport authorities for enhanced airport security;
- The requirement for CATSA to conform with the *CATSA Act* provisions to deliver its screening functions effectively and efficiently and to deliver all its functions in a consistent manner across Canada;
- The qualifications, training and performance of screening contractors and screening officers, and
- The protection of information relating to air transport security or public security.

The mandate of CATSA remains consistent with the Government's national security policy objectives, and therefore the Minister is not seeking the Panel's advice on the expansion of CATSA's mandate beyond air transport security functions. The structure, organization and functions of government entities are the Prime Minister's prerogative. The Panel will provide recommendations and observations on the appropriateness and effectiveness of the existing model in delivering CATSA's air security mandate.

2. Review of Future Aviation Security Requirements and Other Developments

Based on the Panel's review of the provisions and operation of the *CATSA Act*, including matters with respect to mandate, governance, accountability and service delivery, the Minister is seeking independent advice from the

Panel on a number of issues relating to CATSA's future operations and requirements, including:

- The impact of projected air transport passenger traffic volumes and patterns at Canadian airports with CATSA services;
- Projected security requirements at Canadian airports with CATSA services;
- New technology and screening/processing practices and their impact on equipment acquisition and maintenance requirements.

In its December 2001 Budget, the Government introduced the Air Travellers Security Charge (ATSC) to fund aviation security initiatives. Amounts raised by the ATSC are attributed to the Consolidated Revenue Fund and not directly to CATSA or any other government entity with security responsibilities. The work of the Panel will not extend to the current ATSC structure, level or impact on the aviation industry. Advice is not being sought from the Panel with respect to funding sources, mechanisms and levels applicable to CATSA.

3. Issues Arising from the Independent Review of the Air India Flight 182 Tragedy

On November 23, 2005, the Honourable Bob Rae provided the government his report on outstanding questions with respect to the bombing of Air India Flight 182. Mr. Rae recommended the following question for further study:

“There were grievous breaches of aviation security in the Air India bombing. Has Canada learned enough from the Air India bombing in terms of its public policy in this area, and what further changes in legislation, regulation, and practice are required?”

As part of the Government's response to Mr. Rae's report, the Minister of Transport is directing the Advisory Panel:

- to review the actions taken since 1985 to address the specific aviation security breaches associated with the Air India flight 182 bombing, particularly those relating to the screening of passengers and their baggage, and
- to advise the Minister on whether further changes are required in legislation, regulations or practice to specifically address these breaches.

In the course of conducting this work, the Panel will meet with the families of the victims of the Air India bombing to discuss the aviation security lapses in 1985.

4. Other Issues

The Panel may inform the Minister of other important issues that come to its attention through its research, analysis or consultations.

REPORTING AND TIMING

The Panel will prepare a report for the Minister of Transport that includes observations and recommendations on the provisions and operation of the *CATSA Act* and on the other issues falling within the scope of these Terms of Reference.

The Panel will submit its report by July 1, 2006, in order that the Minister may complete the legislative review by March 31, 2007, five years after the *CATSA Act* came into force.

Appendix C

SUBMISSIONS AND CONSULTATIONS

The following authorities, agencies, organizations and individuals submitted written briefs to the Panel and/or participated in the Panel's consultative meetings.

ACE Aviation Holdings Inc.	Airports Council International – North America
Aeroguard Group	Alberta Infrastructure and Transportation
Aéroports de Montréal	Alkan Air
Air Canada	Alliance for Equality of Blind Canadians
Air Canada Cargo	Alta Flights (Charters) Inc.
Air Canada Jazz	America West Airlines
Air Canada Pilots Association	American Airlines
Air France	American Association of Airport Executives
Air Line Pilots Association, International	ATCO Frontec
Air North	Australia, Department of Transport and Regional Services
Air Transat	BAA Gatwick
Air Transport Association of Canada	BAA Heathrow
Air Transport Association (United States)	Ben Gurion International Airport
Airline Services International	Braden-Burry Expediting (BBE)
Airports Council International – Europe	

British Columbia Aviation Council	City of Yellowknife
British Columbia Institute of Technology, Aerospace Technology	Collenette, the Honourable David M., P.C. , former Minister of Transport
British Columbia Ministry of Transportation	Comox Valley Airport Commission
Buffalo Airways	Conseil des aéroports du Québec
Calgary Airport Authority	Continental Airlines
Calgary Chamber of Commerce	Corporation aéroport – Bagotville Saguenay
Cameron, Professor Gavin, University of Calgary	Dryden Air
Campbell River Airport – City of Campbell River	Dueck Aviation
Canada Border Services Agency	Edmonton Airports
Canadian Air Transport Security Authority (CATSA)	Enbridge Inc.
Canadian Airports Council	European Commission, Directorate-General for Energy and Transport
Canadian Association of Independent Living Centres	Executive Flight Centre, Edmonton
Canadian Corps of Commissionaires, Quebec Division	First Air
Canadian Hard of Hearing Association	Flemming, Mr. Brian, C.M., Q.C., DCL, former Chairman, CATSA Board of Directors
Canadian North	Foreign Affairs and International Trade Canada
Canadian Security Intelligence Service	Garda of Canada
CanJet Airlines	Germany, Federal Ministry of Transport, Building and Urban Affairs
Cargojet	Glanford Aviation Services Ltd.
Cathay Pacific Airways Ltd.	Greater Moncton International Airport
Central Mountain Air	Greater Toronto Airports Authority
CFB Bagotville	Guillaume, Mr. Jim
Chambre de commerce du Montréal métropolitain	Halifax Chamber of Commerce
Charlottetown Airport Authority	

Halifax International
 Airport Authority
 Hamilton International Airport
 Harmony Airways
 Harmony Solutions
 Horizon Air
 International Air Transport
 Association
 International Association of
 Machinists and Aerospace Workers
 International Civil
 Aviation Organization
 International Consultants on
 Targeted Security – Europe
 Holdings BV
 Iqaluit International Airport
 Israel Airports Authority
 State of Israel,
 Israeli Security Agency
 State of Israel,
 Ministry of Transport
 Japan, Ministry of Transport
 Kamloops Airport
 Kelowna International Airport
 Kenn Borek Air
 Kenny, Senator Colin, Chair, Senate
 Committee on National Security
 and Defence
 Kuujjuaq Airport
 Lapierre, the Honourable Jean-C.,
 P.C., M.P., former Minister of
 Transport
 Letourneau, Me. Mario
 Los Angeles World Airports
 Manitoba Transportation
 McGill University, Institute
 of Air and Space Law
 McNeal & Associates
 Consultants Ltd.
 New Brunswick Transportation
 Northern Air Transport Association
 Northwest Airlines, Inc.
 Northwest Territories
 Transportation
 Northwestern Air Lease Ltd.
 Nova Scotia Transportation
 and Public Works
 Nunavut, Department of Economic
 Development and Transportation
 Office of the Auditor
 General of Canada
 Ottawa Macdonald-Cartier
 International Airport Authority
 Penauille Servisair
 Prince Edward Air
 Privy Council Office
 Provincial Airlines
 Purolator Courier Ltd.
 Quebec, Ministère des Transports
 Regina Airport Authority
 Regional Community Airports
 Coalition of Canada
 Richmond Committee on Disability
 Ronald Reagan Washington
 National Airport
 Royal Canadian Mounted Police

Salter, Professor Mark,
 University of Ottawa
 Saskatchewan Highways
 and Transportation
 Sécurité Kolossal Inc.
 Servisair/ Globe Ground
 Shannahan's Investigation
 and Security Ltd.
 Shell Aerocentre, Edmonton
 Skyservice Airlines
 South Africa – Ministry
 of Transport
 St. John's International
 Airport Authority
 Sunwing Airlines
 Teamsters Canada
 Trans North Helicopters
 Transport Canada
 Transwest Air
 Twilite Security
 United Kingdom, Department
 for Transport
 United States Department of
 Homeland Security
 United States Government
 Accountability Office
 United States House of
 Representatives, Committee
 on Homeland Security
 United States Senate, Committee
 on Commerce, Science and
 Transportation
 United States Transportation
 Security Administration
 United Steelworkers of America
 UPS Canada
 US Airways
 Vancouver International
 Airport Authority
 Victoria Airport Authority
 Ville de Rouyn-Noranda –
 Service de l'aéroport régional
 WESTAC – Western Transportation
 Advisory Council
 WestJet
 Whitehorse International Airport
 Winnipeg Airports Authority
 World Wide Flight
 Yellowknife Airport
 Yukon Highways and Public Works

Public Consultation Meetings:

Calgary, Alberta	April 6, 2006
Montreal, Quebec	April 20, 2006
Halifax, Nova Scotia	May 3, 2006
Toronto, Ontario	May 17, 2006
Vancouver, British Columbia	June 1, 2006

Appendix D

AIRPORTS DESIGNATED UNDER THE *CATSA ACT*

CLASS 1 AIRPORTS:

Vancouver International,
British Columbia

Calgary International, Alberta

Edmonton International, Alberta

Winnipeg International, Manitoba

Ottawa, Ontario (Macdonald-
Cartier International)

Toronto, Ontario (Lester B. Pearson
International)

Montréal, Quebec (Pierre Elliott
Trudeau International)

Montréal International
(Mirabel, Quebec)

Halifax International, Nova Scotia

CLASS 2 AIRPORTS:

Kelowna, British Columbia

Prince George, British Columbia

Victoria International,
British Columbia

Regina, Saskatchewan

Saskatoon, Saskatchewan (John G.
Diefenbaker International)

London, Ontario

Sudbury, Ontario

Thunder Bay, Ontario

Toronto, Ontario (City Centre)

Windsor, Ontario

Quebec, Quebec
(Jean Lesage International)

Fredericton, New Brunswick

Greater Moncton International
Airport, New Brunswick

Saint John, New Brunswick

Charlottetown,
Prince Edward Island

Gander International,
Newfoundland and Labrador

St. John's International,
Newfoundland and Labrador

Iqaluit, Nunavut

Yellowknife, Northwest Territories

Whitehorse International, Yukon

CLASS OTHER AIRPORTS:

British Columbia

Abbotsford

Campbell River

Castlegar

Comox

Cranbrook

Dawson Creek

Fort St. John

Kamloops

Nanaimo

Penticton

Prince Rupert

Quesnel

Sandspit

Smithers

Terrace

Williams Lake

Alberta

Fort McMurray

Grande Prairie

Lethbridge

Lloydminster

Medicine Hat

Red Deer Regional

Saskatchewan

Prince Albert

Manitoba

Brandon

Thompson

Ontario

Hamilton

Kingston

Kitchener/Waterloo Regional

North Bay (Jack Garland)
Sarnia (Chris Hadfield)
Sault Ste. Marie
Timmins
Toronto/Buttonville Municipal

Quebec

Alma
Bagotville
Baie-Comeau
Chibougamau/Chapais
Gaspé
Îles-de-la-Madeleine
Kuujjuaq
Kuujjuarapik
La Grande Rivière
Lourdes-de-Blanc-Sablon
Mont Joli
Rivière-Rouge
(Mont-Tremblant International)
Roberval
Rouyn-Noranda
Sept-Îles
Val d'Or

New Brunswick

Bathurst Regional
Charlo
St. Leonard

Nova Scotia

Sydney
Yarmouth

Newfoundland and Labrador

Churchill Falls
Deer Lake
Goose Bay
St. Anthony
Stephenville
Wabush

Appendix E

GLOSSARY OF TERMS

AGAS	Advisory Group on Aviation Security, established by Transport Canada in 2005 – national level consultative group that exchanges views on issues related to aviation security policy, strategy, regulatory and program priorities
APO	Aircraft Protective Officer under the Canadian Air Carrier Protective Program (CACPP) – a specially-trained police officer who is present on selected Canadian commercial flights
ATSC	Air Travellers Security Charge
CACPP	Canadian Air Carrier Protective Program
CATSA	Canadian Air Transport Security Authority
CBSA	Canada Border Services Agency
classes of airports	
<i>Class 1</i>	Canada's nine major airports (one, Montreal-Mirabel, is currently inactive for passenger travel)
<i>Class 2</i>	Canada's 20 intermediate airports
<i>Class Other</i>	Canada's smaller airports, 60 of which are designated under the <i>CATSA Act</i> for aviation screening services
CSIS	Canadian Security Intelligence Service
divesture	Placement of outer clothes, electronics and pocket items for screening separately (into bins or onto roller-paths)

DSSO	Designation Standards for Screening Officers
EDS	Explosives Detection Systems – manual or automated systems used primarily to check for explosives in carry-on baggage and checked baggage
EDT	Explosives-Detecting Trace systems – manually operated equipment used to detect minute traces of explosive residue on the outside of carry-on baggage and checked baggage
FAA	<i>Financial Administration Act</i>
FBO	Fixed Base Operation – operates charters, corporate flights and other aviation services at airports
GA	General Aviation – includes all aviation other than scheduled airline flights and military aviation
HBS	Hold Bag Screening
HHMD	Hand-held metal detector (wand-type)
IATA	International Air Transport Association – an industry association representing major passenger and cargo airlines that are active internationally
ICAO	International Civil Aviation Organization – intergovernmental organization with 189 contracting states (at the time of writing); it is a specialized agency of the United Nations
ITAC	Integrated Threat Assessment Centre – partnership of several federal government agencies that provides security threat assessments, especially regarding terrorism
MANPAD	Man-Portable Air Defence system – shoulder-fired missiles that could be used against aircraft
MATRA	Multi-Agency Threat and Risk Assessment – sets out a process to ensure identification of the full range and magnitude of security risks at an airport, and the roles and responsibilities the different agencies have addressing them; it covers what controls are currently in place and what further action is required

NPS	Non-Passenger Screening – non-passengers include all airport workers accessing restricted areas of airports, such as flight crews, refuellers, caterers, aircraft groomers, maintenance personnel, airport baggage handlers, concession staff, etc.
PBS	Pre-Board Screening
Point Leader	Screening officer who monitors the work of screening officers and operations at a screening point
PSEPC	Public Safety and Emergency Preparedness Canada
RAIC	Restricted Area Identification Card
RAP	Restricted Area Pass
RCMP	Royal Canadian Mounted Police
RFP	Request for Proposal
restricted area	the designated area of an aerodrome that only authorized persons are allowed to enter, because of proximity to aircraft and other sensitive operations that occur both inside the airport terminal and airside
SeMS	a documented process for setting annual security targets, clarifying security roles and responsibilities in an organization, assessing and managing risks, developing contingency plans, conducting audits, and measuring and evaluating performance on an ongoing basis
Screening Officer	An employee of a screening provider carrying out screening services
SOPs	CATSA's <i>Standard Operating Procedures</i>
SSO	<i>Security Screening Order</i> , under the <i>Aeronautics Act</i> and <i>Canadian Aviation Security Regulations</i>
SPP	<i>Security and Prosperity Partnership of North America</i> , between Canada, the United States and Mexico – includes a Security Agenda
TBS	Treasury Board of Canada Secretariat

TC-SEP	Security and Emergency Preparedness Directorate, Transport Canada
TIPS	Threat Image Projection System – software training program for screening officers that operates on in-line X-ray equipment (it projects fictional images of threat objects within the X-ray image of a real bag to improve ability to detect these threat images)
TSC	Transportation Security Clearance, issued by Transport Canada
U.S. pre-clearance	area set aside in some Class 1 airports for pre-board screening and processing by U.S. Customs and Border Protection of passengers destined for the United States (on transborder flights)
TSA	United States Transportation Security Administration (part of the Department of Homeland Security) – responsible for aviation security screening
WTMD	walk-through metal detector archway
XRT	X-ray tutor – interactive computer-based training tool for screening officers (used in a non-operational or classroom setting)