VOLUME FOUR
AVIATION SECURITY

CHAPTER IV: RECOMMENDATIONS

I. Oversight of Aviation Security in Canada

The Commission endorses the Government's decision that responsibility for national civil aviation security should remain with Transport Canada, and makes the following recommendations about oversight of aviation security:

Recommendation 1

1. Canada's regulatory regime must comply with the standards specified in Annex 17 to the *Convention on International Civil Aviation* ("*Chicago Convention*") and should comply with its recommended practices.

   1.1. Annex 17 standards must be considered minimum standards that Canada should not only meet, but exceed. Canada should not permit security deficiencies that would result in it being required to file a difference with the International Civil Aviation Organization (ICAO) with respect to any Annex 17 standard.

   1.2. In addition to embracing Annex 17 at its core, Canada's national regulatory regime must be informed by international best practices and must address Canada's unique threat environment.

   1.3. Transport Canada should exercise robust regulatory oversight over civil aviation stakeholders through regular inspection, testing, auditing and enforcement, carried out by a sufficiently trained, qualified and resourced inspectorate.

Recommendation 2

2. In accordance with Annex 17, Transport Canada should establish and implement a single, written National Civil Aviation Security Program that comprehensively safeguards civil aviation against acts of unlawful interference.

   2.1. The National Civil Aviation Security Program should set out the full slate of legislative instruments, measures, policies, practices and procedures, as well as the roles and responsibilities of Transport Canada, airport operators, air carriers, Fixed Base Operations (FBOs),

the General Aviation (GA) sector, the Canadian Air Transport Security Authority (CATSA), the police of local jurisdiction, airport tenants, caterers and all other entities involved in implementing the Program.

2.2. Transport Canada should require all entities with responsibilities in civil aviation security, as outlined in Recommendation 2.1, to establish and implement written security programs that are applicable to their operations and appropriate to meet the requirements of the National Civil Aviation Security Program. At a minimum, these programs should include measures to prevent unauthorized access, assign security-related duties, respond to threats and breaches of security, and allow for periodic review and updating of the programs.

2.3. Transport Canada should require all civil aviation stakeholder programs to be submitted to it for approval.

Recommendation 3

3. The Commission supports continued coordination between all industry and government entities responsible for civil aviation security through the Advisory Group on Aviation Security (AGAS). AGAS must continue to promote collaboration, shared objectives and shared understanding, and common solutions to aviation security problems.

3.1. Transport Canada should require all airports to establish an airport security committee to help in implementing their respective airport security programs.

3.2. Consideration should be given to the inclusion of the National Security Advisor (NSA) in AGAS discussions and decisions.

Recommendation 4

4. In addition to adhering to Annex 17 standards, a regulatory regime should observe a number of key principles:

a. Ongoing, informed assessment of past, present and future threats to civil aviation, with timely proactive adjustments made to the regime as needed;

b. Adherence to an appropriate national risk management protocol, as described in Recommendation 6;

c. Effective, multi-layered and overlapping security measures, policies, practices and procedures that provide redundancies to address all significant risks;

d.   A flexible, performance-based approach to regulation, in which objectives are set to meet the highest standards, with a more prescriptive approach employed where necessary because of complexities and context;

e.   Robust emergency response planning, with well-defined roles and responsibilities; and

f.   Establishment of a culture of security awareness and constant vigilance.

Recommendation 5

5.   Independent experts should conduct a comprehensive review of aviation security every five years.

II. Risk Management

Recommendation 6

6.   Transport Canada should ensure that acceptable levels of risk control have been achieved in all areas of risk pertinent to civil aviation security in Canada. In doing so, it should adopt a national risk management protocol based on best practices and using a performance standard of continuous improvement, delivering levels of risk in all relevant areas that are as low as reasonably achievable. Where acceptable levels have not been achieved, resources must be allocated on a priority basis to address the risk appropriately.

6.1.   To facilitate clear communication and understanding, Transport Canada should require those responsible for aviation security to follow a common set of risk management protocols consistent with the national protocol. Transport Canada should require all stakeholders to:

a.   Provide a detailed description, in their respective security programs that are submitted to Transport Canada for acceptance or approval, of the risk management protocol employed for their operations;

b.   Systematically employ these risk management protocols in the development and implementation of aviation security measures, policies, practices and procedures for their operations; and

c.   Promote coordinated risk management decision-making by engaging in ongoing dialogue with Transport Canada and other stakeholders through participation in AGAS and its technical

committees, and elsewhere as necessary, to ensure clarity, precision and a shared understanding of terminology and methodologies.

6.2. Each year, the Minister of Transport should certify that the civil aviation security regime in Canada possesses:

a.   A common set of protocols for carrying out risk management, based on current best practices;

b.   A performance standard of continuous improvement, delivering levels of risk in all relevant areas that are as low as reasonably achievable; and

c.   Acceptable levels of risk control in all domains of risk.

6.3. Periodic assessment of Transport Canada's risk management protocol by the Auditor General is encouraged.

Recommendation 7

7.   There should be no significant gaps in civil aviation security. When a significant deficiency is identified, the best interim measures must be implemented to address the risk while more permanent measures, including technological solutions, are developed.

7.1. The civil aviation security regime must be capable of redeploying resources so that all significant threats are adequately addressed and measures do not disproportionately emphasize a particular threat, such as the threat posed by passengers and baggage.

7.2. As soon as improved equipment and measures become available, they should be deployed.

7.3. If, after a systematic risk management process, a decision is made not to implement measures that address a given threat, measures should nonetheless be designed for emergency implementation if the threat subsequently becomes imminent.

7.4. Legislative initiatives to improve civil aviation security should not be subject to unreasonable delay.

Recommendation 8

8.   Transport Canada and others responsible for civil aviation security should foster a culture of security awareness and constant vigilance. As part of this endeavour, a comprehensive public education campaign should be developed to increase awareness of the measures in place for the public's protection and the role the public can play in promoting security.

III. Use of Intelligence

Recommendation 9

9. Transport Canada must provide timely, relevant and actionable intelligence information to civil aviation stakeholders, with the primary recipients being airport operators, air carriers, pilots, CATSA, FBOs and GA facilities.

    9.1. Transport Canada should be guided by the "need to share" principle and should cooperate more closely with key stakeholders to ensure they receive the intelligence information they require.

    9.2. Aviation stakeholders should provide Transport Canada with feedback about the quality and timeliness of intelligence they receive. Where concerns are raised, a collaborative approach to resolving those concerns should be taken.

    9.3. In addition to threats related to airports and air carriers, aviation stakeholders should be kept abreast of changes to the general threat environment. Regular security briefings for all stakeholders, including front-line workers, should occur.

IV. Airport Security

Recommendation 10

10. Non-Passenger Screening (NPS) should be improved at all designated airports in Canada on a priority basis.

    10.1. Full (100 per cent) NPS should be implemented upon entry to restricted areas at all Class 1 and Class 2 airports, with random NPS upon exit at Class 1 airports.

    10.2. NPS upon entry at Class Other and upon exit at Class 2 and Class Other airports should be implemented as necessary, based on risk.

Recommendation 11

11. Perimeter security should be improved at all designated airports on a priority basis.

    11.1. Perimeter security should be enhanced with physical and technological barriers and appropriate monitoring, based on risk.

11.2. Transport Canada should conduct intrusion tests of airport perimeters.

Recommendation 12

12. All vehicles entering airside and restricted areas at Class 1 airports should be subject to a full search, including full NPS of occupants. Vehicles entering Class 2 airports should be searched as necessary, based on risk.

   12.1. Where supply chain security measures have been applied to vehicles, a search may be confined to the areas of the vehicle that have not been secured, and should include full NPS of occupants.

   CATSA's mandate should be expanded on a priority basis to include searching vehicles and screening their occupants. CATSA should be provided with the necessary funding.

Recommendation 13

13. The Restricted Area Identification Card (RAIC) should be implemented at all 89 designated airports on a priority basis, and should be expanded to include perimeter security, including vehicle gates, FBOs and tenant facilities.

   13.1. RAICs, Restricted Area Passes (RAPs) and temporary or visitor passes should be worn and clearly displayed at all times by all individuals who access restricted and airside areas of the airport.

   13.2. All access control devices, including RAICs and RAPs, should be implemented in a manner that prevents "piggybacking," "tailgating" and other means of gaining unauthorized access.

   13.3. All RAICs and RAPs, as well as employee uniforms and any other form of airport identification belonging to former airport employees, should be diligently accounted for, retrieved and/or deactivated. Appropriate penalties should be imposed for failing to return such items.

Recommendation 14

14. For FBOs and GA facilities attached to designated airports, access to the airports' airside and restricted areas should be strictly controlled through RAICs, full NPS and vehicle searches.

Recommendation 15

15. Transport Canada should improve its policies and procedures governing transportation security clearances.

15.1. Transport Canada and the RCMP should increase efforts to share information on individuals applying for a transportation security clearance to work at airports.

15.2. Transport Canada should establish a formal process, including specific criteria, for reviewing applications for security clearances made by individuals with a criminal record.

15.3. Transport Canada should reinstate credit checks as a component of the security clearance process before issuing an RAIC for non-passengers who require access to restricted areas at airports.

15.4. Transport Canada should take steps to reduce the delay in processing applications for transportation security clearances.

Recommendation 16

16. Security measures should be developed and implemented to protect public areas of air terminal buildings at Class 1 airports, based on risk.

Recommendation 17

17. All airports should develop and implement a security awareness and constant vigilance program that includes training for all airport workers employed in air terminal buildings and airside portions of airports.

V. Passenger and Baggage Screening

Recommendation 18

18. Current methods for conducting pre-board screening (PBS) are comprehensive, but improvements are required in their application.

18.1. Although technology has enhanced the ability to effectively conduct PBS, that technology should rarely be relied upon exclusively.

When selecting equipment and procedures for passenger screening, consideration should be given to individual rights, including privacy rights and the rights guaranteed under the *Canadian Charter of Rights and Freedoms*. In particular, any consideration of behavioural analysis techniques as a tool for PBS must include a thorough review. Concerns about the risk of racial, ethnic and religious profiling must be given specific and careful attention. If a decision is made to implement such a program, the following must be addressed: effectiveness of the measure; competencies, training (initial and ongoing) and testing required of those who would conduct the analysis; and oversight requirements.

18.2. Given the importance of the "no search, no fly" rule and the potential impact of security measures on individual rights, Transport Canada and the Office of the Privacy Commissioner of Canada should collaborate to devise tools and criteria to evaluate proposed security measures.

Recommendation 19

19. Although the multi-level system in place for Hold Bag Screening (HBS) is comprehensive, some improvements are required.

19.1. Baggage should never be loaded onto an aircraft without a passenger-baggage reconciliation. Interlined baggage, in particular, must be subjected to comprehensive passenger-baggage reconciliation prior to being loaded.

19.2. Consideration should be given to whether the current administrative monetary penalties for non-compliance with passenger-baggage reconciliation procedures provide sufficient deterrence and reflect the gravity of the potential consequences of non-compliance.

19.3. Although technology has enhanced the ability to effectively screen checked baggage, that technology should rarely be relied upon exclusively.

VI. Use of Technology and Explosives Detection Dogs

Recommendation 20

20. Transport Canada should ensure that all screening technology is reliable and effective. This requires assessment not only during the development and deployment stages, but also continual assessment during conditions of actual use.

20.1. Transport Canada should ensure that screening officers operating equipment are adequately trained and regularly tested to ensure their competence.

20.2. Transport Canada should ensure that screening equipment is properly maintained.

Recommendation 21

21. The use of explosives detection dogs should be evaluated and expanded as appropriate. Consideration should be given to their use in:

a.   PBS and HBS;

b.   Screening of air cargo; and

c.   Perimeter security, including the screening of vehicles.

VII. Screeners

Recommendation 22

22. CATSA should find long-lasting solutions to resolve difficulties in the recruitment of appropriately qualified screening contractors and in the recruitment, retention, training and oversight of competent screening officers to ensure the highest quality of screening.

   22.1. Because of the voluminous material that all screening officers are required to master, consideration should be given to specifying a minimum educational requirement for them in the *Designation Standards for Screening Officers*.

   22.2. Given the importance of their work, screening officers should receive appropriate compensation and employee benefits to reduce difficulties in retaining them.

   22.3. Because of the challenges associated with their duties, particularly repetitive, stressful and monotonous work that only rarely results in finding prohibited items, CATSA should make ongoing efforts to instill greater sense of mission and morale among screening officers:

   a.   Consideration should be given to creating an employment structure that provides opportunities for advancement; and

   b.   Consideration should be given to holding regular briefings for screening officers, particularly at Class 1 airports, to provide relevant intelligence updates, as well as information relating to prohibited items, methods of concealment and information contained in recent Transport Canada bulletins.

   22.4. Screening officer duties should focus solely on preventing unlawful interference with civil aviation. Screening officers should not be mandated to search for contraband or other items that may interest law enforcement, but that are not relevant to CATSA's mandate.

22.5. Given the changing nature of threats to aviation, training of screening officers should be continuous. Training should include instruction in practical skills and in the detection of improvised explosive devices (IEDs).

22.6. Training of screening officers should be designed to foster a general culture of security awareness and constant vigilance.

22.7. CATSA should continue to use training and motivational tools such as X-ray Tutor (XRT) and the Threat Image Projection System (TIPS).

22.8. Where screening officer deficiencies are identified, immediate steps, primarily additional training, should be taken to ensure competence.

22.9. Transport Canada should define clear and consistent system-wide performance standards for CATSA, in addition to the failure rate for infiltration tests, against which compliance and effectiveness can be assessed. Performance measures should define whether CATSA's performance is satisfactory or unsatisfactory:

a. This should include agreement between Transport Canada and CATSA regarding the threshold for failure of infiltration tests and the specific elements that constitute failure; and

b. CATSA's response to failed infiltration tests should emphasize re-training, and should include documentation of corrective action taken and timely written responses to Transport Canada enforcement letters and related enquiries.

22.10. Whenever the Auditor General of Canada deems it necessary, the Auditor General should review the changes implemented by CATSA to address problems with recruitment, retention, training, testing and oversight of screening officers.

VIII. Air Cargo and Other Non-Passenger Items

Recommendation 23

23. A comprehensive system for screening air cargo (including mail) for transport on passenger and all-cargo aircraft should be implemented as an urgent priority. Canada's system of Known Shippers should be discontinued as soon as possible, and a system of Regulated Agents put in its place in accordance with international best practices. In designing and implementing the system, the Government should exceed the minimum requirements of Annex 17 of the *Chicago Convention*, with the aim of achieving the highest possible standards of air cargo security.

23.1. The Commission supports Transport Canada's proposed Air Cargo Security (ACS) Initiative and recommends its implementation on a priority basis.

23.2. Under the new regime, all air cargo to be loaded onto passenger aircraft should be screened to a level comparable to that currently provided for hold baggage.

23.3. All air cargo to be loaded onto all-cargo aircraft should be screened to a level deemed appropriate, on the basis of risk. When air cargo is transferred from all-cargo to passenger aircraft, additional screening should be conducted commensurate with screening requirements that normally apply to air cargo carried on passenger aircraft.

23.4. Screening for air cargo should take into account the risk posed by new, emerging or otherwise unaddressed threats as they arise.

23.5. The evaluation of technologies to screen consolidated or bulk cargo should be accelerated.

23.6. A centralized screening service for all air cargo requiring screening at the airport should be considered for all Class 1 airports.

23.7. CATSA, with its screening mandate, expertise, equipment and dedicated personnel, is the appropriate authority to conduct air cargo screening services at the airport and may have a role to play in the oversight and inspection of screening by Regulated Agents. CATSA's mandate should be expanded by legislation to include the screening of air cargo.

23.8. Care must be taken to provide adequate training for all air cargo screeners. This should include rigorous testing for required competencies. The development and implementation of computer software training and screening aids should be accelerated.

23.9. Transport Canada should employ a sufficient number of security inspectors trained and qualified for inspecting, testing, auditing and enforcing the new air cargo security regime.

23.10. Funding for the ACS Initiative must ensure that it remains sustainable and can respond to emerging or otherwise unaddressed threats.

23.11. Annual progress reports on enhancements in air cargo security should be provided to Parliament by the Minister of Transport for each of the five years following release of the Commission's report.

Recommendation 24

24. The new security regime for air cargo must be governed by legislation, not by non-binding Memoranda of Understanding. The security regime should reflect international best practices.

   24.1. Legislative provisions should include, but not be limited to, the following:

   a.   Mandatory security programs for all Regulated Agents, with formal approval from Transport Canada;

   b.   Clear definitions for terminology, including the terms "screen," "inspect" and "search";

   c.   Measures and technologies for screening air cargo;

   d.   Screening requirements for all Regulated Agents, whether shippers, freight forwarders or air carriers;

   e.   Appropriate training requirements for all Regulated Agents, their employees and sub-contractors;

   f.   Requirements to maintain the security of off-airport premises to a specified level wherever cargo is handled, stored and potentially accessed;

   g.   Requirements to maintain the security of off-airport vehicles to a specified level for the transport of air cargo to its final point of transfer;

   h.   Requirements for ensuring appropriate access and security controls for air cargo while on airport premises, during transfer to the aircraft and on loading onto the aircraft;

   i.   Mandatory security clearances, including a credit check, for all workers who have access or potential access to air cargo from the point of receipt to the point of transfer, including sub-contractors engaged to handle cargo on behalf of a Regulated Agent;

   j.   A system of inspection, testing, auditing and enforcement by Transport Canada or its designated agent; and

   k.   Methods of enforcement, including administrative monetary penalties and other penalties that reflect the potential gravity of the consequences of non-compliance.

24.2. Regulated Agent security programs should describe all measures, practices, policies and procedures applicable to air cargo security that have been, or will be, implemented by the Regulated Agent, including security awareness programs and risk management protocols.

Recommendation 25

25. A supply chain security regime should be established for other non-passenger items (such as stores and catering) that are prepared at off-airport premises before being delivered to an aircraft.

IX. Fixed Base Operations and General Aviation

Recommendation 26

26. As an urgent priority, all passengers and carry-on and checked baggage boarding flights at FBOs and GA facilities that feed into designated airports or are attached to designated airports should be screened to a level comparable to passenger and baggage screening for scheduled commercial flights.

26.1. As an equally urgent priority, all non-passengers entering such FBO and GA facilities should be screened to an acceptable level, based on appropriate risk management protocols;

26.2. All non-passenger items (including air cargo) to be placed on flights departing from such FBO and GA facilities should be screened to an acceptable level, based on appropriate risk management protocols.

26.3. On a priority basis, all FBO and GA facilities should develop and implement a security awareness and constant vigilance program that supports a "neighbourhood watch" approach to security. An accompanying training program should be developed and implemented for all personnel to foster a culture of security awareness and constant vigilance.

26.4. CATSA should oversee security screening services at FBOs and GA facilities. If CATSA's resources are engaged, additional government funding should be provided.

26.5. The aviation security requirements for FBOs and GA facilities should be governed by legislation.

XI. Duty to Warn and Transparency

Recommendation 27

27. The development of a public warning system for threats against airlines should receive further study. Issues include:

     a.   international experience with such systems;

     b.   the circumstances under which public warnings of threats have occurred in Canada;

     c.   the proper balance between security and industry interests;

     d.   the proper balance between the need for secrecy and the need to instill public confidence;

     e.   the appropriate threshold at which a public warning should be issued; and

     f.   the policy and legal implications, including possible liability to air carriers whose operations could be compromised by a public warning.

Recommendation 28

28. In general, greater transparency in aviation security is required to inspire confidence in the system, to provide assurance that resources are effectively allocated and to ensure that government and industry stakeholders remain accountable for managing this mandate.

     28.1. The Commission does not recommend publishing intrusion test results. If a decision is nonetheless made to publish them, publication should only occur after enough time has passed to enable vulnerabilities identified by the tests to be addressed.

XII. Funding

Recommendation 29

29. As a core mandate directly related to national security, civil aviation security should receive sustained funding, regardless of prevailing economic circumstances, to maintain an acceptable level of security.

29.1. Funding for civil aviation security should be derived primarily from government.

29.2. Funding priorities should be directed to areas of risk that have not achieved an acceptable level of risk control, such as air cargo and control of access to airside and restricted areas of airports.

29.3. If additional funds are required for initiatives related to passenger and baggage security, the Commission supports the continuance of an Air Travellers Security Charge (ATSC). However:

a. The collection, retention and disbursement of the ATSC should be subjected to comprehensive and transparent accounting. All revenue from the ATSC should be traceable and should be used solely for civil aviation security;

b. An annual report of ATSC revenues as well as expenditures by program or department is recommended; and

c. CATSA should be the main beneficiary of funds from the ATSC.