Air Navigation Amendment Regulations 2000 (No. 1) 2000 No. 96

EXPLANATORY STATEMENT

STATUTORY RULES 2000 No. 96

Issued by the authority of the Minister for Transport and Regional Services

Air Navigation Act 1920

Air Navigation (Checked Baggage) Regulations 2000

Air Navigation Amendment Regulations 2000 (No. 1)

Under subsection 26(1) of the *Air Navigation Act 1920* (the Act), the Governor-General may make regulations for the purposes of the Act. Paragraph 26(2)(a) of the Act provides that, without limiting the generality of subsection (1), the regulations that may be made include regulations for or in relation to "aviation security".

The purpose of the proposed *Air Navigation (Checked Baggage) Regulations 2000* ("the Checked Baggage Regulations") is to introduce a new (anti-sabotage) security measure for Australian international civil aviation. This new measure involves specialised procedures to screen passenger baggage, in order to detect explosive devices hidden in the baggage. These detection procedures will be implemented, by the operator of the passenger terminal building, before the baggage is loaded on board the aircraft.

The purpose of the proposed *Air Navigation Amendment Regulations 2000* is to make a consequential amendment to the *Air Navigation Regulations 1947* arising from the proposed Checked Baggage Regulations.

The Commonwealth Government sets and administers minimum standards for aviation security within Australia. The aim of aviation security is to promote a secure environment for Australian commercial aviation and to safeguard against acts of unlawful interference (such as an act of hijack or an act of sabotage). The application of checked bag screening in Australia will ensure the continued unified operation of global aviation security practices, as a counter to terrorism and other acts of unlawful interference world-wide.

The Checked Baggage Regulations provide that:

* an explosive device is a weapon for the purposes of these regulations;

* a terminal operator must screen and clear all items of checked baggage before they are loaded on board international aircraft and must establish testing procedures for this purpose, subject to any exemption issued by the Secretary under regulation 9;

* it is an offence for a terminal operator to permit an explosive device or uncleared items to be loaded on board aircraft; and

* the Secretary of the Department of Transport and Regional Services may issue directions for the procedures to be followed and may exempt certain items or classes of items from the requirement to be screened and cleared. Certain administrative decisions of the Secretary are subject to review by the Administrative Appeals Tribunal. The Air Navigation Amendment Regulations make a consequential amendment to provide that Regulation 5 of the Air *Navigation Regulations* 1947 does not apply to the process of checked bag screening.

Details of the proposed regulations appear in separate attachments. A Regulation Impact Statement is also attached.

Commencement

The regulations commenced on gazettal.

Attachment 1

Air Navigation (Checked Baggage) Regulations 2000

Regulation 1 - Name of Regulations

Regulation 1 confirms the name of the Regulations.

Regulation 2 - Commencement

The Regulations commence on notification in the Gazette.

Regulation 3 - Interpretation

Several terms (used in the Regulations) are defined in regulation 3.

Act means the Air Navigation Act 1920.

Carry-on luggage means the possessions of passengers or crew that are not items of checked baggage. Rather, passengers or crew carry these items into the passenger cabin of the aircraft with them. These items are available to the passengers during flight. (By way of background, these, items are subject to separate and independent security measures, such as passenger screening.)

Checked baggage means the possessions of passengers or crew that have been checked in with the airline for carriage. These items are subject to checked bag screening.

Checked in means the process of "checking in" an item of checked baggage. This is a twostage process. First, the passenger presents the bag to the airline (or agent) for carriage on board a flight. Second, the airline (or agent) accepts the bag for this purpose.

Exempt item means an item (of checked baggage) that has been exempted, by the Secretary, under regulation 9.

International aircraft means an aircraft, engaged in a passenger air service, to or from (but not within) Australian territory. (Australian territory is defined under the Act.)

Passenger means a person (other than crew) carried (or intended to be carried) on board an aircraft.

Passenger air service means an air service for the transport of people (including the transport of both people and goods) that is available (eg, for the purchase of tickets) to members of the general public.

Regulation 4 - What is a weapon

Regulation 4 provides that for the purposes of the definition of "weapon" in the Act, an explosive device is a weapon.

Regulation 5 - Application

Regulation 5 defines the limits of the application of the Regulations so that the Regulations apply to items of checked baggage that are to be loaded on board an international aircraft and do not apply to items that are, or are to be, taken into a sterile area.

Regulation 6 - Screening and clearance of checked baggage

Subregulation 6(1) requires a terminal operator to screen and clear all items of checked baggage, that are processed through the terminal facility, before those items may be authorised for loading on board international aircraft. The Act defines:

* a *terminal operator* as the person who is responsible for the day-to-day management of a terminal;

* to *screen* as meaning to apply testing procedures in order to detect the presence of weapons; and

* to *clear* as meaning to complete the testing procedures, ie determine that the item is free of weapons or, if any weapons are detected, that they are surrendered.

A maximum penalty of 45 penalty units is imposed if subregulation 6(1) is contravened. Subregulation 6(2) provides that screening must be conducted:

* in accordance with directions of the Secretary made under regulation 8; and

* in accordance with the written testing procedures, developed by the terminal operator, under regulation 7. In the event of any inconsistency between the directions and the procedures, the terminal operator must follow the Secretary's directions.

Subregulation 6(3) provides that checked baggage remains "screened" and "cleared" only for as long as the item is held securely (ie, accessible only to authorised people). Subregulation 6(4) provides that people may be authorised for access to the checked baggage by the relevant airline or under a law of the Commonwealth or a State or Territory.

Regulation 7 - Testing procedures

Subregulation 7(1) provides that terminal operators must establish testing procedures by which the screening of checked bags is to occur. Subregulation 7(2) requires the testing procedures to be in writing and that terminal operators must forward a copy of the procedures to the Secretary. A maximum penalty of 45 penalty units is imposed if either subregulation 7(1) or 7(2) are contravened.

Regulation 8 - Directions

Subregulation 8(1) allows the Secretary to issue directions to be followed for the procedure of checked bag screening. These directions may be issued to terminal operators and/or aircraft operators.

Subregulation 8(2) requires all terminal operators, issued with a direction, to comply with the direction. A maximum penalty of 45 penalty units is imposed if subregulation 8(2) is contravened.

Subregulation 8(3) characterises the types of directions the Secretary may issue. Under paragraph (c), the Secretary may issue any directions that are intended to ensure "best practice" is used for checked bag screening. In addition, two practical examples (of the type of direction) are also outlined:

* under paragraph (a) - the Secretary may issue directions specifying the equipment that must be used for checked bag screening, including the type, operation, maintenance and/or testing of the equipment; and

* under paragraph (b) - the Secretary may issue directions specifying standards that screening officers must satisfy, including standards relating to the characteristics, experience, qualifications and/or training of the screening officers. In addition, the directions may outline arrangements for the testing of screening officers. Under the Act, a screening officer is a person authorised or required to screen (in this case) items of checked baggage (please see section 3).

Subregulation 8(4) requires the Secretary (when making directions) to have regard to the following considerations:

* the kind of checked baggage that will be presented and handled at the terminal facility;

* the category of the airport (Australia's major airports may be allocated security "categories" under the Act);

- * the throughput of passengers handled through the terminal facility;
- * the resources available (at the terminal facility) to conduct checked bag screening;
- * the risk of an explosive device being packed inside checked baggage;
- * the types of explosive device likely to be packed inside checked baggage; and
- * the interests of aviation security generally.

Regulation 9 - Exemptions

Regulation 9 allows the Secretary to exempt items, or classes of items, of checked baggage from the requirement to be screened and cleared under the Regulations. The Secretary's exemptions must be in writing. This ability is outlined under subregulation 9(1).

Subregulation 9(2) confirms that exemptions may be made subject to conditions.

Subregulation 9(2) requires the Secretary (when making exemptions) to have

regard to the following considerations:

- * the category of the airport;
- * the throughput of passengers handled through the terminal facility;
- * the resources available (at the terminal facility) to conduct checked bag screening;
- * the risk of an explosive device being packed inside checked baggage;
- * the types of explosive device likely to be packed inside checked baggage;
- * the destination of the relevant aircraft;
- * whether the checked baggage is interlining from an inbound international service; and
- * the interests of aviation security generally.

Regulation 10 - Requirement to tell intending passengers about screening

Subregulation 10(1) requires terminal operators to provide reasonable notice to intending passengers that their checked baggage may be screened. A maximum penalty of 10 penalty units is imposed if subregulation 10(1) is contravened.

Subregulation 10(2) provides a protection to those terminal operators who are wholly exempted from the requirement to conduct checked bag screening. In the event that all checked baggage at a particular location is exempt, the terminal operator is no longer required to provide notice under subregulation 10(1).

Regulation 11 - Explosive devices not to be loaded on board aircraft

Under regulation 11, a terminal operator is required to ensure that such an explosive device is not loaded on board an international aircraft. For example, the terminal operator must not leave the device unattended or otherwise available for loading. A maximum penalty of 45 penalty units is imposed if regulation 11 is contravened.

Regulation 12 - Opening of checked baggage

Regulation 12 defines additional powers of screening officers when conducting checked bag screening.

In the general case, terminal operators, or screening officers, may only open checked baggage with the consent of the passenger (or other person entitled to possession of the baggage).

Regulation 12 provides an additional power in special circumstances. Terminal operators, or screening officers, may open checked baggage without consent where:

* the operator has made reasonable attempts to find the passenger (or other person entitled to possession of the baggage) - for example, where the passenger is paged over the terminal public address system; and

* the passenger (or other person) is not found.

Regulation 13 - Aircraft operators not to permit uncleared items to be loaded

Regulation 13 outlines the role of the aircraft operator in checked bag screening. In the normal course of events, the aircraft operator accepts checked baggage - from the terminal operator - once the baggage has been appropriately screened and cleared.

Under subregulation 13(1), an aircraft operator must not permit checked baggage to be loaded on board an international aircraft unless the baggage:

* has been handled by a terminal operator and the terminal operator "authorises" the baggage for loading (under regulation 6, a terminal operator must not authorise checked baggage unless the baggage has been screened and cleared);

- * has been screened and cleared by the aircraft operator; or
- * is exempt.

Where checked baggage is screened and cleared by the aircraft operator, and the operator is issued with a direction of the Secretary under regulation 8, the aircraft operator must comply with the direction.

A maximum penalty of 45 penalty units is imposed if subregulation 13(1) is contravened.

Subregulation 13(2) provides that the obligations under subregulation 13(1) do not apply in relation to passengers' "accompanying possessions" (as defined under subsection 20(5) of the Act). Such accompanying possessions are subject to the (separate and independent) security measure - provided under the Act - of passenger screening.

Subregulation 13(3) requires an aircraft operator to ensure that such an explosive device is not loaded on board an international aircraft. A maximum penalty of 45 penalty units is imposed if subregulation 13(3) is contravened.

Regulation 14 - Review of decisions

Regulation 14 allows certain administrative decisions of the Secretary (made under the Regulations) to be reviewed by the Administrative Appeals Tribunal,

- * a decision to issue a direction (on the procedure of checked bag screening) under subregulation 8(1); and
- * a decision to exempt checked baggage under subregulation 9(1).

Attachment 2

Air Navigation Amendment Regulations 2000 (No. 1)

Regulation 1 - Name of Regulations

Regulation 1 confirms the name of the Regulations.

Regulation 2 - Commencement

The Regulations commence on gazettal.

Regulation 3 - Amendment of Air Navigation Regulations 1947

Regulation 3 provides that the principle regulations - the *Air Navigation Regulations* 1947 - are amended as set out in Schedule 1 to the Regulations.

Schedule 1 - Amendment

Schedule 1 makes a consequential amendment in support of a separate set of proposed regulations - the *Air Navigation (Checked Baggage) Regulations* 2000. Item 1 of Schedule 1 amends the terms of regulation 5 of the *Air Navigation Regulations* 1947, so that this definition does not apply to the process of checked bag screening.

Attachment 3

Regulation Impact Statement

Part 1 - Problem identification

The aim of aviation security is to promote a secure environment for Australian civil aviation. In particular, the aim of aviation security is to safeguard. Australia's civil aviation operations against an act of unlawful interference with aviation. The concept of an unlawful interference with aviation comprises major crimes of violence that adversely affect the safety of airline passengers (eg, the hijacking of an aircraft, the intentional destruction of an aircraft in service, etc.).

In summary, aviation security is designed to protect three classes of people. First, passengers should be able to undertake their commercial air travel secure from an act of unlawful interference occurring during their flight.

Second, airline crew members, ground personnel and other industry staff members should be able to conduct their activities secure from the occurrence of an act of unlawful interference.

Third, members of the general public should be secure from the occurrence of acts of unlawful interference (eg, in relation to the destruction of aircraft flying overhead).

In particular, members of the Australian community should be able to place confidence in the security and the reliability of Australian civil aviation. The commercial aviation sector provides a key role in the efficiency and effectiveness of Australian transportation. Overall, transportation represents a pivotal element to Australia's business infrastructure - providing an essential input to many other business sectors. As a result, the security and the reliability of Australian civil aviation is an important element to the continued growth and output of the Australian business community and of the Australian economy in general. For example, many types of goods are transported by air (such as for export) due to the effective, high speed transport product offered by Australia's commercial airliners.

As a result, the aim of aviation security extends beyond merely an enforcement role (ie, of identifying persons who commit acts of unlawful interference with Australian aviation, after the event, and prosecuting them). Rather, the primary purpose is to deter, detect and prevent attempted acts of unlawful interference with aviation before they occur. In effect, the primary purpose is to create an "aviation security net" to protect Australia's civil aviation operations.

Within this framework, the purpose of the proposed regulations is to introduce a new (antisabotage) security measure for Australian *international civil* aviation. This new measure involves specialised procedures to screen passenger baggage, in order to detect explosive devices hidden in the baggage. These detection procedures will be implemented, by the operator of the passenger terminal building, before the baggage is loaded on board the aircraft.

Market failure

In targeting the social goals - of deterring, detecting and preventing acts of aircraft sabotage - regulation is necessary in order to address the potential for market failure within the aviation industry. Three types of market failure are typical to the transportation industry.

Externalities

An externality occurs when a transaction between parties creates benefits (which are not paid for) or imposes costs (which are not compensated) on others not directly involved in the transaction. Security incidents can result in substantial negative externalities or spillover costs. Medical and other costs such as lost productivity that are borne by the community as a whole are likely to greatly exceed those private costs borne by passengers, airlines and insurers directly party to the relevant market transactions.

Also, bystanders who are involuntarily exposed to a hazard (for example when an aircraft crashes in a populated area) are far less tolerant of the risk than customers or employees who are voluntarily involved. Their intolerance may far exceed the monetary compensation that bystanders may be awarded after the event.

Imperfect information

Imperfect information exists because customers (such as passengers) cannot directly observe the efforts made by individual carriers to ensure safe and secure carriage. Individual customers can exercise their tastes for safety only if they can accurately assess the security level offered by a mode and by rival carriers within that mode. By way of background, this problem of imperfect information is more prevalent in passenger rather than freight transportation. The typical passenger consumes rather infrequently and does not have the necessary specialist knowledge. As a result, carriers may provide levels of safety and security lower than anticipated by customers.

Carrier myopia

And finally, carrier myopia represents the situation where carriers are "myopic", because the cost of preventing sabotage occurs in the present, whereas the consequence of sabotage occurs in the future. Carriers that take little effort to prevent acts of sabotage can take advantage of imperfectly informed customers by masquerading as high-security carriers. The incentives to engage in this kind of behaviour are strong because the costs of prevention are borne in the present, whereas the effects of incidents occur at defined points in the future. In the interim the carrier can earn excess profits, which will cease only when the incidents actually occur and its customers shun the carrier.

Two types of carriers are particularly susceptible to such behaviour. The first are new entrants. Due to inexperience, these carriers may take too little prevention in the present and regret it when sabotage and adverse customer reaction occurs in the years ahead. The second candidate for myopia is a more established carrier that decides to cheat. A financially distressed carrier reduced expenditures on security, yet prices are maintained. Or established carriers may cheat simply because they feel that they need a short-term financial boost to improve their stock price or to make them more attractive to a potential purchaser. Market failure caused by myopia is not only theoretically very plausible, but, according to ample empirical evidence, it occurs in all modes of transportation - including aviation. Carriers have strong incentives to engage in myopic behaviour.

Assessment of the risk

Sabotage of a commercial aircraft in flight is a real and continuing threat for civil aviation. Over the years, civil aviation has been the target for the criminal, the refugee seeker, the mentally unstable and the political extremist. Historically, the first act of sabotage was committed against a civil aircraft in July 1949. In the 133 sabotage acts that have subsequently followed worldwide, some 3,500 people have died. Attacks like these have continued to the present day.

The following summary has been extracted from a *U.K.* report - prepared by the London Metropolitan Police - the *Review of Notable International Events and Terrorist Activity During the Year and Significant Incidents Against Civil Aviation Interests* (the "Heathrow report").

Destruction of aircraft (including attempts), 1968-99

(graph omitted - see printed copy)

Sabotage - conducted via the placement of explosives in passenger baggage represents a substantial component of overall incidents. In particular, since 1980 there have been 17 recorded incidents of explosive devices either placed or attempted to be placed on board international, commercial aircraft via passenger checked baggage.

Date Airline Comment

21.4.80	EI Al terrorist (via a dupe*)
6.6.80	Transavia unknown perpetrator
6.8.81	MEA unknown perpetrator
13.10.81	Air Malta terrorist
23.9.83	Gulf Air probable terrorist
23.12.83	Alitalia unknown perpetrator
18.1.84	Air France terrorist
10.3.84	UTA terrorist
9.3.85	Royal Jordanian unknown perpetrator
23.6.85	Air India terrorist
26.9.85	Haiti Air unknown perpetrator
30.10.85	American Airlines unknown perpetrator
27.4.86	EI Al terrorist (via a dupe*)
26.6.86	El Al terrorist (via a dupe*)
21.12.88	Pan Am terrorist
1.9.89	U TA terrorist
23.11.89	Saudia possibly associated with criminal

activity

A **dupe** is a passenger who carries an item for another person in their baggage and where the passenger is unaware that the item contains an explosive.

Most of these attacks have come as a result of terrorist attack. In particular, the nature of the threat from terrorist attacks (world-wide) has undergone an evolutionary shift during the past decade. Commentators have alluded to trends towards mass destruction as an end in itself - as a protest against the West in general and America (including American interests outside the U.S.) in particular.

The U.S. State Department report

One of these global commentators on terrorism is the U.S. State Department. Annual reports on terrorism are prepared by the State Department's Office of the Coordinator for Counter terrorism, to provide the U.S. Congress with an accurate overview on terrorism. The latest report is for 1999.

In its 1999 report, the State Department documents and describes a shift - from wellorganised local groups supported by state sponsors - to more far-flung and loosely structured webs of terror with private sponsorship in criminal enterprises, such as blackmail and trafficking in drugs, guns and even human beings. And importantly, the State Department reports a shift in the terrorism "centre of gravity" from the Middle East to South Asia.

For example, the State Department reports that Islamist extremists from around the world continued to use Afghanistan as a training ground and base of operations for their worldwide terrorist activities in 1999. The Taliban, which controlled most Afghan territory, permitted the operation of training and indoctrination facilities for non-Afghans and provided logistic support to members of various terrorist organisations, including those in Chechnya, Lebanon, Kosovo and Kashmir. The most well-known terrorist hosted in Afghanistan is Usama Bin Ladin - indicted in November 1998 for the bombings of two U.S. Embassies in East Africa.

The State Department reports that security problems also persisted in India. Kashmiri militant groups continued to attack government, military, and civilian targets in India-held Kashmir via ongoing insurgencies. Also during 1999, Pakistan supported Afghanistan's Taliban and permitted many known terrorists to reside and operate in its territory. Kashmiri extremist groups in Pakistan raised funds and recruited new cadre.

In Sri Lanka, the Tamil separatist group maintained a high level of violence in 1999, conducting numerous attacks on government, police, civilian, and military targets.

Several separatist groups also engaged in violent acts in the Philippines, after breaking off peace talks in June 1999. While these groups only threatened to attack U.S. forces, other targets were also affected in numerous incidents. Islamist extremists also remained active in the southern Philippines, engaging in sporadic clashes with Philippine Armed Forces and conducting low-level attacks and abductions against civilian targets.

And finally, the State Department reported on the separatist violence that also flared in parts of Indonesia - for example in Aceh, Sumatra, where the Free Aceh Movement and its sympathisers clashed with Indonesian security forces throughout the year. While the separatists primarily attacked Indonesian targets, other interests suffered collateral damage.

A recent sabotage plot

The overall sabotage threat to aviation can also be illustrated in the January 1995 (unsuccessful) plot led by terrorist Rarrizi Ahmed Yousef. Had the plot been successful, up to 12 international aircraft in the East Asian region would almost certainly have been destroyed and thousands of passengers killed. The plot was uncovered from the investigation following the February 1993 attack on the New York World Trade Center.

After planning the bombing of the Center (and other acts of terrorism in the U.S.) with other Islamic radicals, Yousef returned to Pakistan on the evening of February 26, 1993, the same day that the WTC bombing took place. Yousef then travelled to the Philippines in early 1994 and by August of the same year had conceived a plan to bomb as many as 12 airliners flying in East Asia. Yousef and co-conspirators tested the type of explosive devices to be used in the aircraft bombings and demonstrated the group's ability to assemble such a device in a public place, in the December 1994 bombing of a Manila theatre. Later the same month, the capability to smuggle an explosive device past airport security and detonate it aboard an aircraft also was successfully tested when a bomb was placed by Yousef aboard the first leg of Philippine Airlines

flight 424 from Manila to Tokyo. The device detonated during the second leg of the flight, after Yousef had deplaned at an intermediate stop in the Philippine city of Cebu.

The plot was discovered in January 1995. Subsequent investigations revealed the plan, in which five terrorists were to have placed explosive devices aboard United, Northwest, and Delta airline flights. In each case, a similar technique was to be used. A terrorist would fly the first leg of a flight out of a city in East Asia, planting the device aboard the aircraft and then deplane at an intermediate stop. The explosive device would then destroy the aircraft as it continued on a subsequent leg of the flight.

Yousef and the co-conspirators were arrested and convicted. Yousef was sentenced to life imprisonment for his role in the Manila plot. Yousef was also convicted and sentenced to 240 years for the World Trade Center bombing.

Assessment of the risk - summary

In summary, it is acknowledged that the threat of sabotage (in particular, from checked baggage) is second to the primary aviation security threat of hijack. Nevertheless, sabotage continues to be a constant threat (taking into account year-by-year fluctuations). Civil aviation interests continue to remain at risk from the activities of various individuals and/or groups.

Magnitude of consequences

One method of specifying the problem, and of summarising the above points, is to outline the consequence of no government intervention in deterring, detecting and preventing acts of sabotage (conducted via passenger baggage).

The direct costs of a single, typical act of sabotage (with minimal third party damage) is estimated at \$150m. These costs are borne by those directly affected (such as passengers, crew and the airline).

In addition, the loss of Australia's status as a secure provider of aviation would impose a significant cost on the Australian community generally. The cancellation or diversion of passenger air travel would result in costs of hundreds of millions of dollars a year. For example, this level of cost would result if inbound international tourism contracted only marginally, such as only one or two percentage points. Similarly, cancellation or diversion of air freight would result in further costs of a similar magnitude. For example, this level of cost would result if Australian air freight exports (once again) contracted only marginally, such as only one or two percentage points.

The detection capability

Importantly, over recent years, researchers and manufacturers have achieved the means (suitable for commercial application) of detecting the relatively small amounts of explosives necessary to disable a commercial aircraft in flight.

Different types of specialised equipment have been devised and are currently available, including:

* equipment to scan the content of bags and to detect the physical composition of the various types of explosive material (if any) present ("advanced technology" equipment); and

* equipment to detect minuscule residual trace elements of explosives on the exterior of checked baggage ("trace detection" equipment).

No other (commercially suitable) detection capability exists. For example, the option of hand searching of checked baggage (by individual screeners) would not be viable in Australia due to the extreme cost of the measure and the substantial disruption the measure would cause to normal airport activities.

Part 2 - Objectives

The proposed regulations on checked bag screening implement a Government decision, in mid 1998, to require the implementation of a checked bag screening capability at Australia's major international airports for outbound international aircraft . In particular, the Government decided that - with the increased deployment of checked bag screening equipment overseas, Australia cannot afford to be identified as a potential easy target to those who wish to target civil aviation through sabotage. In particular, checked bag screening is proposed:

to augment the operations of existing Australian security measures for passenger baggage. For example, the pre-existing security measure of "bag match" ensures that passengers and their baggage are carried on board the same aircraft. This provides a direct measure against perpetrators selecting a particular flight for sabotage (by way of booking travel on the flight; placing an explosive device in their **own baggage;** and checking-in the bag) but then declining to travel on board the flight in order to avoid being destroyed themselves.

In augmenting "bag match", checked bag screening will counter the possibility of a perpetrator who is either a suicide or a "dupe". By way of background, a dupe is a passenger who carries an item for another person in their baggage and where the passenger is unaware that the item contains an explosive. As noted above, a number of attacks in the past against commercial aircraft have been conducted via the use of dupes. For example, these security measures will counter the ability for terrorists - who travel only on the first leg of a flight - to set an explosive device to destroy the aircraft during the second leg of the flight; and

* thereby, to ensure that Australia's security arrangements harmonise with internationallyaccepted aviation security standards and practices.

For example, an important objective is to avoid the situation of Australia's civil aviation industry being excluded from operations globally - due to inconsistencies or deviations between Australian and overseas arrangements.

International harmonisation

Australia is not alone in proposing a regulatory framework for aviation security. The aviation industry is one which operates globally. Most, if not all, countries with scheduled international air services regulate the field. In particular, the "starting point" or "base-line" for aviation security currently exists in the international arena, in the form of a preeminent and widely-accepted international treaty. This treaty is the *Convention on International Civil Aviation* (the "Chicago convention") - the world's pivotal civil aviation treaty. Australia is a founding member of the Chicago convention, signing the convention on 7 December 1944.

One of the chief roles of the Chicago convention is standardisation, through the establishment of international standards and recommended practices (SARPS). The SARPS are published in Annexes to the convention. SARPS currently cover a range of "operational inputs" to the provision of air services, including: rules of the air; aeronautical charts; units of measurement; airworthiness;

communications; and the safe transport of dangerous goods. One of these "operational inputs" is aviation security. Aviation security SARPS are outlined under Annex 17 to the convention.

In particular, checked bag screening is the subject of an Annex 17 recommended practice:

4.3.3 Recommendation. - Each Contracting state should establish measures to ensure that checked baggage is subjected to screening before being placed on board aircraft.

Currently, some 185 countries - including all of the world's major aviation nations - have signed the Chicago convention and have thus become "contracting states" and have agreed to the principles *of* international aviation security standards. As a signatory to the convention, Australia has the objective *of* implementing all Annex 17 standards and recommended practices on aviation security and of harmonising its security arrangements with these globally-accepted aviation security standards and practices.

In summary, a unified, global block has developed in order to pursue standardised worldwide aviation security practices. This global block includes all countries with which Australia has international commercial air services.

Due to the recent availability of (commercially acceptable) advanced technology and trace detection equipment, countries within this global block are now implementing checked bag screening procedures for their international air services. For example, checked bag screening is being currently introduced in: the U.K., the U.S., Canada, France, Switzerland, the Netherlands, Belgium, Norway, Singapore, Korea, Taiwan, Japan, China (including Hong Kong), Malaysia, the Philippines, India and Thailand.

In the U.S., the Federal Aviation Administration (FAA) issued a Notice of Proposed Rulemaking on the security (including screening) of checked baggage in April 1999. A comment period was provided for the period to August 1999. Simultaneously, the FAA has been acquiring (on behalf of industry) advanced technology and trace systems for deployment in U.S. airports. Using an industry-funded trust account, as at July 1999 the FAA had purchased some 110 advanced technology systems and some 600 trace units. These had been installed in 80 major U.S. airports. In November 1999, the FAA announced the purchase of a further 60 advanced technology systems. The FAA expects to continue the deployment to more than 400 airports throughout the U.S.

Action is also being taken by European countries, via the *European Civil Aviation Conference* (ECAC). (ECAC is an inter-govern mental organisation, with 38 European member states(1), whose aim is to promote the continued development of a safe, efficient and sustainable European air transport system.) ECAC currently lists checked bag screening as its "main security issue". In particular, ECAC recently decided that checked bag screening is to be implemented in all member states by 31 December 2002, setting down a program involving regular ECAC review of developments "to ensure that momentum towards this important objective is maintained".

(1) ECAC'S members comprise: Albania, Armenia, Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Monaco, the Netherlands, Norway, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey, Ukraine and the U.K.

In summary, aviation security regulators around the globe promote the application of universal aviation security measures. For example, all countries currently implement systems for the screening *of* passengers. Checked bag screening has also now become one of these global aviation security measures. On the other hand, under the framework of the Chicago convention, while the measures are universal, the procedures used to implement these measures within contracting states may be adapted to suit the circumstances of the individual countries.

In the event that Australia failed to implement similar checked bag screening arrangements:

* Australia would become "out of step" with international aviation security standards. Australia's security arrangements would no longer harmonise with internationallyaccepted security practices and would no longer be part of the global system of aviation security measures;

* with the risk that the international operations of Australian airlines may be impeded or limited overseas, due to Australia's lowered operational standards; and

* as a result, Australia would also become an exposed target for terrorism, given that the protection afforded to Australian civil air services would be substantially and recognisably lower than surrounding nations. In short, the risk for an act of sabotage (against a commercial flight, such as by terrorism) in Australia would be significantly enhanced.

These checked bag screening arrangements are proposed with a view to providing both a deterrent and a detection capability at major airports. A particular emphasis will be to implement new arrangements to screen baggage for international flights that are placed under a higher, or an enhanced, threat to aviation security. These arrangements will also include both an overt and a covert screening presence. In practice, the practical arrangements (such as the selection and number of items of screening equipment to be used) will vary from terminal to terminal, in order to reflect the varying circumstances (such as passenger throughput) at individual airports.

As a result, under the terms of the proposed regulations, the Department of Transport and Regional Services is to issue directions to ensure "best practice" is used for checked bag screening (please see regulation 8). For example, "best practice" includes minimum standards on screening equipment (including the type, operation, maintenance and/or testing of the equipment) and qualifications and training of screening personnel. The Department, when making directions, must have regard to the following considerations:

* the kind of checked baggage that will be presented and handled at the terminal facility;

* the category of the airport (by way of background, Australia's major airports may be allocated security "categories" under the Act);

- * the throughput of passengers handled through the terminal facility;
- * the resources available (at the terminal facility) to conduct checked bag screening;
- * the risk of an explosive device being packed inside checked baggage;
- * the types of explosive device likely to be packed inside checked baggage; and
- * the interests of aviation security generally.

Part 3 - Options

Four options are essentially available to implement checked bag screening in Australia.

Option 1 - self-regulation

On the "plus" side for self-regulation, the major participants of Australia's aviation industry currently comprise a cohesive group committed to achieve the goal of a secure aviation network. In addition, the industry has viable associations and peak bodies. For example, the industry consultative group maintained by the Department of Transport and Regional Services - provides a regular forum for all major industry participants.

On the other hand, aviation security is an area of strong public interest concern, based upon the subject of public safety. The problem arises from a real and continuing risk, and has the potential for extreme impact on the Australian community. And finally, the potential areas of transportation market failure are unable to be resolved via selfregulation. These areas of market failure include: imperfect information; carrier myopia; and externalities.

A continuing potential problem is also ensuring compliance and coverage from all industry participants (including new entrants and minor industry participants). For example, new entrant (foreign international) airlines could decide to handle their checked baggage outside of an established terminal (and without checked bag screening). It would be difficult for self-regulation to produce nation-wide, enforceable sanctions. In these circumstances, "free-riders" could benefit from the existence of industry arrangements (eg, by acting myopically) without themselves complying. As a result, the option of self-regulation is not recommended.

Option 2 - guasi-regulation or co-regulation

The sole use of quasi-regulation or co-regulation could, once again, result in some "fringe" firms (ie, firms not included in peak bodies or industry groupings) not complying with minimum standards. As a result, the scheme would fail to provide universal sanctions for non-compliance. In contrast, for an area of strong public interest concern (based upon the subject of public safety) such as aviation security, the intervention of government necessarily creates a public (and consumer) expectation of full compliance by all members of industry. In particular, the regulatory tools of quasiregulation or co-regulation - alone - are not suited to schemes of general or industrywide application. In contrast, to be effective, any aviation security regulatory framework needs to apply to the whole of Australia's civil aviation industry.

In summary, as with the option of self-regulation, industry "free-riders" could benefit from the existence of industry arrangements (eg, by acting myopically) without themselves complying. As a result, the option of quasi-regulation or co-regulation is not recommended.

Option 3 - an information -campaign

An information campaign would not achieve the objectives of checked bag screening -whether by way of the dissemination of security inputs or security outputs:

* the dissemination of information on security outputs (ie, sabotage incidents involving injuries or fatalities) involves a small, and exclusively backward-looking, statistical sample from which to draw conclusions about future industry performance. By definition, the future conduct of myopic carriers will deviate from past practices; and

* the dissemination of information on security inputs requires a great deal of expertise on the part of the information recipients. Passengers, and members of the general public, must predict the probability of future incidents based on industry practices on such matters as the standard of screening equipment, screener training qualifications and screener staffing resources. And finally, the dissemination of information on security inputs has a further counterproductive element - of exposing the "insiders' view" (eg, for the benefit of terrorists or other potential perpetrators) on how to avoid or by-pass the various security measures and of consequently heightening the potential risk to the public.

Similarly, a system of "security ratings" for industry members would not ensure adherence to minimum security standards. In measures such as checked bag screening, industry members (such as terminal operators and airlines) either meet the minimum standards or they do not. In the event that a myopic firm was not willing to comply with the "common security language" of Australia's civil aviation industry, such a rating system would not provide a compliance capability.

As a result, the option of an information or education campaign is not recommended. On the other hand, the Department of Transport and Regional Services does propose the introduction of a full and frank information handling system between government and industry.

Option 4 - explicit government regulation

Government has been involved in the direct regulation of safety and security for some years. The primary thrust of such regulation is directed at the problem of providing a compliance capability against myopic members of industry. Regulations act to inform new carriers of appropriate minimum security standards. Industry members must demonstrate that they meet these security requirements before they can begin operations, Inspectors then serve as a deterrent to prevent established carriers from acting myopically and to detect and punish those carriers who cheat.

This option is therefore recommended for the implementation of checked bag screening in Australia.

Under this option, in the first instance terminal operators will be able to develop their own proposed screening procedures, and submit these procedures to the Department of Transport and Regional Services. In particular, it is anticipated that the procedures will vary substantially from terminal to terminal, in order to reflect local operating conditions and needs (such as the size and daily distribution of passenger throughput, the numbers of international carriers and the types of existing baggage handling systems). The procedures will cover such aspects as:

- * the type and number of explosive detection devices to be used at the terminal;
- * the balance between overt and covert screening;

* how these devices are to be incorporated into the airport's existing baggage handling systems;

* supporting arrangements, such as equipment maintenance and testing procedures;

* arrangements to handle the different types of bags (especially non-standard bags, such as transfer, over-size or crew bags);

- * arrangements to address heightened threat situations;
- * staffing levels and training standards;
- * meeting the needs of passengers (eg, privacy and consent issues); and

* contingency plans (such as alternative arrangements during short-term unavailability of equipment). This also covers arrangements on handling a confirmed explosive device.

The procedures will be assessed by the Department to verify that they will result in an effective detection capability. As a result, certain practical limitations will apply. For example, terminals may only use equipment that has been certified as effective in the detection of explosives - for example, certified by international bodies such as the U.S. FAA and or the U.K. Department of the Environment, Transport and the Regions (DETR). Terminals should also have regard to manufacturers' recommended maintenance and training programs. Aside from these practical considerations, however, terminals have a discretion to develop overall programs that suit the individual circumstances of their locations. Once the Department has verified that the screening procedures will be effective at a particular terminal, the Department will ratify and endorse the procedures under the terms of the proposed regulations.

Part 4 - Impact Analysis

Only a small class of persons will be directly affected by the regulatory proposal. Specifically, the regulatory proposal only impacts upon those members of Australia's civil aviation industry who implement security measures. The primary obligation - to conduct checked bag screening - will be placed upon the operator of the relevant passenger terminal building. In practice, this comprises the operators of Australia's major airports (eg, Sydney Airport, Melbourne Airport, etc.). Indirectly, Australia's major airlines and foreign airlines serving Australia will also be affected - via the introduction of revised arrangements for the handling and processing of checked baggage at these locations.

From the point of view of the travelling passenger, there will be no significant change to current passenger facilitation or travel arrangements. For example, a significant change to international air fares is not anticipated as a result of the introduction of checked bag screening in Australia.

Cost of checked bag screening

However, there will be an additional cost impact upon industry. The Department of Transport and Regional Services has estimated the cost of introducing checked bag screening via two independent methods. The first method attributes per-unit costs of comparable bag screening processes (in those overseas countries where checked bag screening has already commenced). That is, it applies an indicative cost of screening per bag to Australian international departure levels (plus a continued passenger growth rate). Discounting this "cost stream" at a rate of 7 per cent gives a present dollar value cost for the industry of some \$55.6m.

The second method involved the Department estimating the number and type of screening machines needed (to be installed by industry) to undertake the task.

These estimates come to the following cost values:

cost of "advanced technology" equipment 42.0m (including installation costs) cost of "trace detection" equipment 0.6m staffing cost 22.1m (over 5 years, discounted at 7%) TOTAL \$64.7m

In summary, the Department of Transport and Regional Services estimates the cost of implementing checked bag screening in the order of \$60m.

It is anticipated that terminal operators (ie, the airport operators) will pass these costs -in a nondiscriminatory manner - onto those international airlines serving the airport. For example, under the Commonwealth's prices oversight arrangements implemented for the privatisation of Australia's (former) Federal airports, airport operators are able to pass the costs associated with Government-mandated aviation security requirements onto users (such as airlines) on a "costonly" basis.

And finally, a further cost (of a different character to the above industry operating cost) is the potential for inconvenience, embarrassment and intrusion into the privacy of passengers. This covers the potential situation of the screening equipment indicating the presence of an explosive

device, in the passenger's bag, throughout the (escalating) stages of screening. A final procedure - in order to clear the bag for carriage - will be for screening personnel to conduct a physical inspection of the bag with the consent of the passenger.

On the other hand, screening practice will incorporate two factors designed to mitigate this cost. First, screening practice will be evaluated during operation to keep the false alarm rate to an absolute minimum. In particular, the operating characteristics of the screening equipment will be assessed and amended where appropriate. Second, screening procedures will be developed in order to handle passenger privacy issues in a sensitive manner. In particular, these issues will be addressed within the training course for screening personnel.

Benefit of checked bag screening

On the other hand, it is expected that the overall benefits of the regulatory proposal will be significant and widespread. The positive effects of a secure aviation infrastructure for Australia benefit a wide range of persons - namely, the whole of the Australian community. However, these benefits are more difficult to accurately quantify in dollar terms. This *RIS* addresses both the direct and the indirect beneficiaries.

By way of background, any cost-benefit analysis for aviation security is atypical (compared to the vast majority of other transport analyses). For one thing, the primary benefit is the avoidance of further costs. Without the protection of aviation security, these further costs - based on a certain probability - will be incurred at some point in the future. Second, indirect benefits (ie, the avoidance of indirect costs) play a substantial - if not a dominant - role. And third, these costs - if not avoided - can potentially become so large as to cancel out the overall product revenues.

The direct benefit

A security breach, resulting in an unlawful interference (eg, the destruction of an aircraft and its passengers by terrorists) occurring within Australia would impose a substantial cost on all parties directly affected (the passengers and their families, as well as the airline concerned). These are the direct costs to be avoided - and hence the direct aviation security benefit. As a result, the direct beneficiaries of an aviation security measure include passengers of international, commercial air services - via improvements in the deterrence, detection and prevention of acts of sabotage with Australian civil aviation.

The Department of Transport and Regional Services estimates (very conservatively) the direct cost of a single, typical sabotage of a commercial aircraft (with minimal third party property damage) at \$150m.

However, the absence of aviation security standards - and a consequent loss of confidence in the security of Australian civil aviation - would not simply result in a single incident. Rather, once it becomes known that Australia is no longer a secure provider of aviation infrastructure, it is likely that Australian aviation would be targeted for additional acts of unlawful interference. A case in point is the February 2000 hijack in Afghanistan (involving an Afghan Ariana airliner on a domestic service, which eventually flew to Stansted airport in the U.K.), following "closely on the heels" after the December 1999 Indian Airlines hijack from the same region.

Further costs can also be anticipated to closely follow the first act of sabotage. If even one such act were successful, it is highly likely that the travelling public would demand immediate enhanced security measures. Airlines would react by introducing measures in relation to their own activities. However, in the absence of credible, secure and industrywide infrastructure, such a company-specific security response may be more costly overall due to the effects of duplication and lack of harmonisation.

Plus, even if immediate regulatory standards were introduced industry-wide, via government regulation, providing immediate protection on an ad hoc emergency basis would nevertheless result in major inconveniences, costs, and delays to air travellers that may substantially exceed those imposed by the planned and measured steps contained in this regulatory proposal. That is, without the advantage of a nationally-consistent, industrywide and transparent "regulatory feedback loop", the immediate introduction of minimum security standards will necessarily be improvised and involve trial-and-error to determine appropriate standards. The feedback loop underpinning this regulatory proposal includes the steps of: standard-setting; performance targeting; systems testing; performance measurement; and risk analysis and evaluation - finally feeding back into the standardsetting.

The indirect benefit

More generally, however, the loss of Australia's status as a secure provider of aviation transport infrastructure would impose a significant cost upon Australian industry as a whole. As transportation is a service provider, a substantial part of this cost would be transmitted throughout the Australian economy. A loss of confidence in the security of Australian civil aviation would tend to negatively affect patronage and would either reduce demand for Australian transport (of both people and goods) altogether or it would divert transportation traffic onto other modes of travel that are less economically suited to the task. Air transportation is ordinarily selected due to its ability to rapidly and reliably transport large volumes of people and goods. These are the indirect aviation security costs to be avoided - and hence the indirect aviation security benefit.

In the event of a loss of confidence in the security of Australia's aviation infrastructure, the Department of Transport and Regional Services estimates these indirect costs (to be borne by the Australian community) in the order of many hundreds of millions of dollars per year, due to:

* the cancellation or diversion of passenger air travel. For example, due to the cancellation of inbound international tourism. International inbound visitor expenditure is currently \$13.8b annually. If a proportion of intending or prospective international travellers choose destinations alternative to Australia (eg, to other regions, such as Europe or America) or substitute their travel plans for some other product completely - even a small proportion, such one or two percentage points - such an outcome would cost the Australian community hundreds of millions of dollars a year.

These principles would also apply to Australian air travel generally. The loss of reliability of the Australian air travel industry would impose similar costs on the economy overall. First, a loss would be associated with passengers opting not to fly due to the increased security risk - the value of the flight to the passenger (consumer surplus). Second, a loss would be associated with the reduced revenues and profitability of airlines and the industry generally (producer surplus). While these potential effects are difficult to quantify, it is anticipated that these effects would also be substantial; and

* the cancellation or diversion of air freight. For example, the disruption to Australian air freight exports. The Australian air freight export sector is currently valued at \$21.5b annually. In the event of a loss of confidence of the security of Australian civil aviation, increased costs to the sector would divert carriage of goods onto modes less economically suited to the task. In the case of many specialised industries (with high value, low weight and perishable items), export demand itself could be adversely affected. Such a downturn - of even a small proportion, such one or two percentage points - would (once again) cost the Australian community hundreds of millions of dollars a year.

These principles would also apply to Australian air freight generally. That is, in the event of an average drop in the reliability of air services, "flow on" costs - such as higher inventory costs -

will be transmitted to freight consignors. Once again, while these potential effects are difficult to quantify, it is anticipated that these effects would also be substantial.

Summary - impact of introducing checked bag screening

The introduction of checked bag screening will impact upon the following classes of people:

1. impact on members of the Australian community

The application of checked bag screening in Australia will ensure the continued unified application of global aviation security practices. Also, in relation to the risk of sabotage via checked baggage, application of the measure will ensure that the threat (of an aviation security incident) is reduced. The threat of a catastrophic and costly event occurring within Australian aviation will be minimised and confidence in the security of Australian civil aviation will be strengthened.

2. impact on business

Non-aviation business will be able to place strengthened confidence in the security of Australian civil aviation. On the other hand, the introduction of checked bag screening will place an additional cost on Australia's aviation industry of approximately \$60m.

3. impact on government

Government expenditure will not be affected.

Part 6 - Consultation

By way of background, the Department of Transport and Regional Services consults widely with Australia's aviation industry on security regulatory issues generally - via consultative meetings with industry representatives. These consultative discussions are usually held within a longstanding joint industry-Department forum, the Aviation Security Industry Consultative Group. The group is comprised of the major Australian airlines; the major Australian airport operators and peak industry bodies. The group meets approximately once every three months.

In relation to the regulatory proposal, the Department has maintained two inter-linking industry consultative processes. The Department has consulted in writing with members of Australia's aviation industry, on the terms of the proposed regulatory initiative. In addition, the Department has discussed the regulatory proposal generally with industry during the regular meetings of the Aviation Security Industry Consultative Group.

Consultative statement

Some members of industry have not fully supported this measure.

First, some members of industry have strongly argued that this measure should be Government funded. In contrast, the regulatory proposal adopts an approach of not specifying mandatory funding arrangements. Rather, those members of industry incurring the cost of checked bag screening (ie, the airport operators) will be free to pass on these costs to the relevant airport users (ie, the Australian and foreign international airlines serving the airports) in a non-discriminatory manner.

For example, even in the U.S. case (where the FAA is acquiring equipment on behalf of industry), this acquisition project is not government funded. Rather, the FAA is financing this project via an industry-funded federal trust account.

Second, some members of industry have argued that the current explosive detection technology has not developed sufficiently to be effective with a high enough degree of reliability. It is acknowledged that both the advanced technology equipment and the trace detection equipment will present some operational aspects, such as a relatively minor false alarm rate. These types of aspects are also present in other security measures, such as passenger screening. However, the equipment is now becoming recognised by the world's leading aviation security regulators as effective, commercially suitable and ready for use. For example, the equipment is becoming certified by bodies such as the U.S. FAA and the U.K. DETR.

And third, some members of industry have noted the secondary nature of the threat to be countered by checked bag screening - and, in particular, the low threat situation in Australia. It is acknowledged that the current Australian sabotage threat is (quantitatively) lower compared to the primary threat of hijack via a weapon brought on board an aircraft through the passenger stream. Nevertheless, the effects of any sabotage incident would be substantial. That is, the adoption of checked bag screening still represents the potential to avoid additional cost to the Australian community of up to many hundreds of millions of dollars a year. In addition, the further benefit of checked bag screening is to counter the risk of:

* the Australian threat level becoming significantly enhanced, as a result of the recognisably lower standard of protection afforded to Australian civil air services compared to surrounding nations; and

* the international operations of Australian airlines becoming impeded or limited overseas, due to Australia's lowered operational standards.

Part 6 - Conclusion

Currently, there is no specific requirement for checked bag screening in Australia. It is recommended that the Government continue its objective of complying with all internationally accepted-security standards and recommended practices - and thereby harmonising with global aviation arrangements. Many overseas countries (including the world's leading aviation countries) are currently implementing checked bag screening. The application of checked bag screening in Australia will ensure the continued unified application of international aviation security practices, as a counter to terrorism and other acts of unlawful interference world-wide.

Checked bag screening is one of the global recommended practices (as outlined under Annex 17 to the Chicago convention) for aviation security. The option of introducing checked bag screening within Australia is therefore recommended.

Part 7 - Implementation

Checked bag screening will be implemented under a new set of regulations made under the Air *Navigation Act 1920.* The new regulations will be administered by the Department of Transport and Regional Services. In particular, the Department will continue its current security oversight and compliance role for Australia's aviation industry.

The future effect and operation of Australia's aviation security regulatory framework overall will be reviewed in partnership with industry. In particular, the Department proposes the use of a "policy feedback loop". This approach will enable government and industry to collate an accurate, up-to-date view as to Australia's "aviation security health" - and to consider future amendments to the regulatory framework as appropriate.

The operation of checked bag screening at airports will be evaluated in detail as part of this overall policy feedback loop. Aspects that have already been highlighted by industry - such as the potential for a false alarm rate when operating advanced technology screening equipment - will be assessed in particular, as well as the overall effectiveness of the equipment to detect

explosive material. The Department will engage in continuing consultations with industry focussing on checked bag screening - in which any operational issues (such as changes to passenger facilitation arrangements at airports) can be raised with the Department. In addition, checked bag screening regulatory issues will continue to be raised (for discussion between industry and the Department) during the regular and ongoing meetings of the Aviation Security Industry Consultative Group. For example, the ongoing ability for the Department's directions to incorporate new technology and techniques will be under review as these developments occur.