# Aviation Security: The Role of International Law

Professor Dr. Paul Stephen Dempsey

Copyright © 2015 by Paul Stephen Dempsey.



#### Terrorism

- Terrorism is ideologically, politically or religiously motivated violence directed against civilian targets.
- Terrorism is unconventional psychological warfare designed to instill fear and capitulation.

# THE WORLD NEWS

YOUR NUMBER ONE SOURCE FOR WEADLINES.

# lines 1863

THOUSANDS ARE REPORTED DEAD



# US Loss of Focus



- After 9/11, US President George W. Bush declared a "Global War on Terror."
- But terrorism is not an enemy with which a State can wage war. It is a means to instill fear to achieve a political end.
- The enemy was al Qaeda or radical Islam.
- It is the enemy, not the means, against whom a State should declare war.



# The Vulnerability of Air Transportation

"The nation's vast air, land, and maritime transportation systems are marvels of innovation and productivity, but they are designated to be accessible, and their very function is to concentrate passenger and freight flows in ways that can create many vulnerabilities for terrorists to exploit. . . . "Designed and organized for the efficient, convenient, and expeditious movement of large volumes of people and goods, transportation systems must have a high degree of user access." 🛕

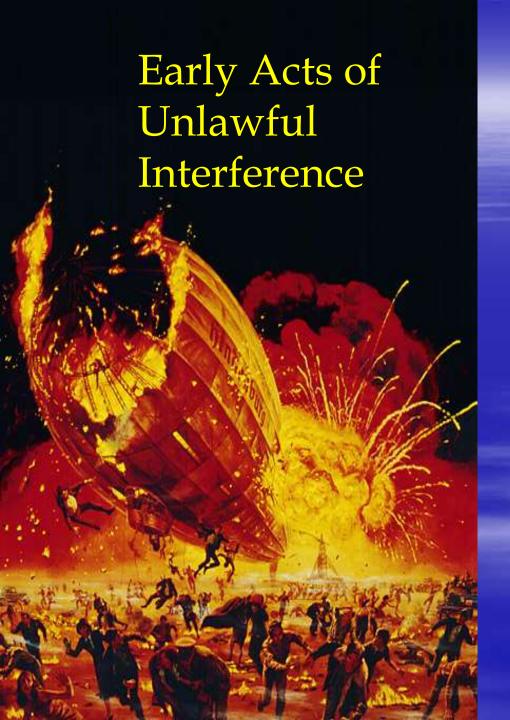


Hijackings account for the largest percentage of all attacks against civil aviation. Other criminal acts include: airport attacks; bombings, attempted bombings; shootings on board civil aviation aircraft; general and charter aviation aircraft incidents;

The primary cause of death and damage is Improvised Explosive Devices [IEDs].

off-airport facility attacks;
 and

shootings at in-flight aircraft.



- •The first recorded hijacking occurred in 1931 when Peruvian revolutionaries commandeered a Ford Tri-motor.
- In 1937, terrorists may have planted a bomb on the Hindenburg Zeppelin, exploding it at Lakehurst, New Jersey.
- •The first hijacking of a commercial aircraft was in 1948, resulting in the crash of a Cathay Pacific aircraft in the ocean near Macao.

#### Hijackings

- During the first dozen years of modern commercial air travel (1948-1960), there were twenty-nine successful hijackings.
- In the following six years (1961-1967), there were a total of sixteen hijackings.
- Then, in 1968 alone, there were thirty successful hijackings of aircraft—seventeen having United States registration.
- The following year, the number of hijackings was more than double the number of the preceding two decades combined.
- After the late 1960s, as the Cuban hijackings decreased in frequency, the total number of aircraft hijackings began to decline.

#### EXAMPLES OF AERIAL TERRORISM

- In 1970, the Palestinian Front for the Liberation of Palestine hijacked TWA 741 from Frankfurt, Swissair 100 from Zurich, and destroyed them at Dawson Field in Jordan; a Pan Am 747 also was destroyed in Cairo; an attempted hijacking of El Al291 from Amsterdam was foiled; BOAC 775 hijacked from Bahrain a few days later;
- In the 1970s, airports in Tel Aviv and Athens were attacked.
- In the 1980s, airports in Rome, Munich and Vienna were attacked.
- The 1985 hijacking of TWA 847 from Athens, and a few days later, the bombing of Air India 182 over the Irish Sea by Sikh separatists, killed all 329 aboard.
- North Korea is widely believed responsible for a 1987 explosion of a Korean Airlines flight 858 over the Andaman Sea near Burma that killed all 115 passengers and crew.
- The 1988 bombing of Pan Am flight 103 over Lockerbie, Scotland, by operatives of the Libyan government, killed all aboard.
- In 2002, missiles were fired at an Israeli charter aircraft over Nigeria.

## Dawson Field, Jordan, 1970







#### Libya



- Musa Kusa, head of Intelligence, and Abdullah Senussi, Muammar Gaddafi's brother in law, are believed to have planned and executed:
- The 1984 bombing of UTA DC-8 at Ndjamena, Chad, injuring 24 people;

US military aircraft destroy Libyan aircraft approaching US aircraft carrier in the Gulf of Sidra;

 The 1986 bombing of the La Belle disco in Berlin, killing 2 US soldiers and 1 woman, injuring 229;

#### In response, the US bombed Tripoli;

- The 1988 bombing of Pan Am 103 over Lockerbie, Scotland, killing 270;
- The 1989 bombing of a UTA DC-10, killing 171; and
- The 2003 attempted assassination of Saudi Prince Abdullah.

#### Al Qaeda and Jihadist Islam

- 1993 World Trade Center bombed;
- 1995 Saudi National Guard complex attacked;
- 1996 Khobar Towers bombed;
- 1998 US Embassies in Kenya and Tanzania bombed;
- 2000 US Cole attacked in Yemen;
- 2001 Richard Reid shoe bombing attempt;
- 2001 –four aircraft hijacked; Pentagon in Washington attacked, and World Trade Center in New York destroyed;
- 2003 Riyadh housing complex attacked;
- 2009 Umar Farouk Abdulmutallab underwear bomber attempt on Northwest 253;
- 2010 NY Times Square bombed;
- 2010 Yemen print cartridge cargo bombs discovered;
- 2002 Ramzi Yousef captured in Pakistan;
   serves a life sentence in a US maximum security prison;
- 2011 Osama bin Laden killed by US Navy Seals in
- Pakistan; Amwar al Awlaki killed in Yemen.





#### Unaccompanied checked bags killed:

- 329 Air India 182 (1985)
- 115 Korean Airlines 858 (1987)
- 270 Pan Am 103 (1988)

Under the seat cushion bombs killed:

- 1 Tokyo (1982)
- 40 Madras (1986)
- ⁴ 4 Athens (1986)





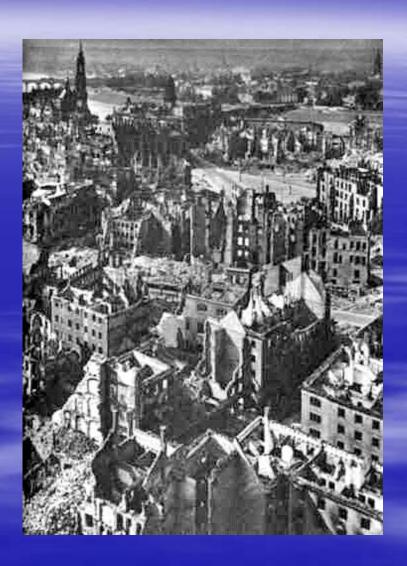
#### **Motives**

- •The earliest incidents usually involved political refugees seeking a safe haven.
- •People rebelling against their political environment hijacked aircraft en route from Cuba to the United States, while others hijacked aircraft from the United States seeking to join relatives or political comrades in Cuba. People in eastern Europe hijacked aircraft to flee the communist regimes.
- •During the early 1970s, a series of hijackings occurred in which the dominant motive was to obtain money by holding passengers hostage for ransom.
- •The hijackings of the late 1970s and the first half of the 1980s were made in an attempt to promote political objectives relating to existing international and territorial conflicts. During these decades, politically motivated hijackings accounted for more than two-thirds of all hijackings worldwide.
- Political frustration and/or religious fanaticism can inspire terrorism.



But, war is the terrorism of the rich .... and terrorism is the war of the poor.





## Carl von Clausewitz

"War is a continuation of politics by other means."



### **Aviation Security Conventions**

- Chicago Convention of 1944 191 States
- Tokyo Convention of 1963 186 States
- The Hague Convention 1970 for the unlawful seizure of aircraft 185 States
- The Montreal Convention 1971 for the suppression of unlawful acts against the safety of aviation – 188 States
- The Montreal Protocol of 1988 for the suppression of acts of violence at airports 173 States
- The MEX Convention of 1991 on the marking of explosives –
   152 States
- Beijing Convention of 2010 on the suppression of unlawful acts relating to international civil aviation – 10 States
- Beijing Protocol to the Hague Convention of 1971 10 States
- Montreal Protocol of 2014 1 State
- As of April 10, 2015

#### OTHER INTERNATIONAL AGREEMENTS

 US-Cuba Memorandum of **Understanding** (1973) The European Convention of 1977 provides that hijacking is not deemed to be a political offense exception that avoids extradition. The Bonn Declaration of 1978. an agreement of G-7 leaders, provides that all flights would be ceased immediately to or from any nation that refused either to return the hijacked aircraft or to

prosecute or extradite a hijacker.



#### The Chicago Convention of 1944



- Article 4 of the Chicago Convention of 1944 prohibits the "use of Civil Aviation for any purpose inconsistent with the aims" of the Convention.
- Among those aims and objectives of the Convention are to "insure the safe and orderly growth of international civil aviation throughout the world" and to "meet the needs of the peoples of the world for safe . . . air transport."
- The preamble to the Convention provides that "the future development of international civil aviation can greatly help to create and preserve friendship and understanding among nations and peoples of the world, yet its abuse can become a threat to general security."



## The Hague Convention of 1970



- Provides that one who, during flight, "unlawfully, by force or threat thereof, or by any other form of intimidation, seizes, or exercises control of, that aircraft, or attempts to perform such act" or is an accomplice of such person, commits an "offense," for which extradition or prosecution and the imposition of "severe penalties" is required.
- Contracting States must render their decision in the same manner as it would in an offense of a serious nature under their domestic law.

#### The Montreal Convention of 1971

The Montreal Convention addresses the issues of damage to air navigation facilities and aircraft sabotage, and extends its scope to certain activities preceding embarkation and departure, and subsequent to landing and disembarkation. It declares the following to be "offense[s]:"

- (a) acts of violence likely to endanger the safety of an aircraft,
- (b) destruction of or serious damage to an aircraft or air navigation facilities, and
- (c) communication of false information that endangers the safety of an aircraft.



#### The Montreal Protocol of 1988



Extended the principal provisions of the Montreal Convention to airports, prohibiting acts of violence at airports and the destruction or damage of airport facilities.



#### New Offenses

The Beijing Diplomatic Conference on Aviation Security held from 30 August to 10 September 2010 produced the Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation and the Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft. Among the additional offenses criminalized were:

- using civil aircraft as a weapon,
- using dangerous materials to attack aircraft or other targets on the ground,
- the unlawful transport of biological, chemical and nuclear weapons and their related material, and
- making a threat against civil aviation.



#### Montreal Protocol of 2014

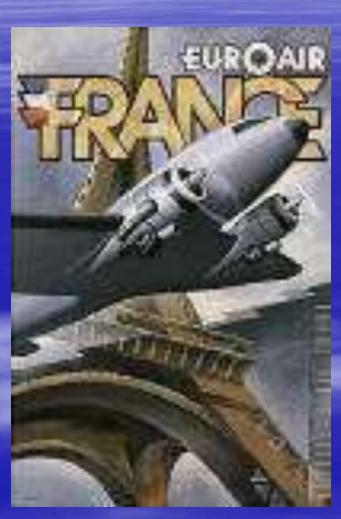
- JURISDICTION: jurisdiction of the State of the aircraft operator as well as of the State of landing is established. Jurisdiction of the State of registry and jurisdiction according to national legislation remain.
- OFFENSES: Two new offenses: physical assault or threat thereof against a crewmember and refusal to follow a lawful safety instruction of the crew.
- IN-FLIGHT SECURITY OFFICERS: The pilot-in-command may ask, but not require, an IFSO to assist in restraining a disruptive passenger. ISFOs may take preventive action against passengers when they reasonably believe that an offence is about to be committed. Deployment of IFSOs is regulated by bilateral agreements between the concerned States.
- The Protocol will enter into force the first day of the second month after the 22nd ratification.

#### **PROHIBITED ACTS**

The four international conventional Air Law instruments collectively prohibit the following:

- offences against penal law;
- performing an act which jeopardizes the safety of the aircraft or of persons or property therein, or good order and discipline on board (Tokyo Art. 1(1));
- unlawfully, by force or threat or intimidation, seizing or controlling an aircraft, or attempting to; or
- being an accomplice of a person who performs or attempts to perform any such act; (Hague Art. 1);
- performing an act of violence against a person on board an aircraft in flight likely to endanger the safety of that aircraft; or
- destroying or damaging an aircraft so as to render it incapable of flight or endangering its safety in flight; or
- placing or causing to be placed a device or substance likely to destroy an aircraft in service, or to cause damage to it which renders it incapable of flight, or is likely to endanger its safety in flight; or
- destroying, damaging or interfering with air navigation in a way likely to endanger the safety of aircraft in flight; or
- communicating knowingly false information endangering the safety of an aircraft in flight;
- attempting to commit the above offences or acting as an accomplice to one who commits or attempts to commit any such offence (Montreal 1971 Art. 1);
- performing an act of violence against a person at an international airport likely to cause serious injury or death; or
- destroying, seriously damaging or disrupting international airport facilities or outof-service aircraft located thereon, if such an act is likely to endanger safety at that airport (Montreal Protocol Art. 2).

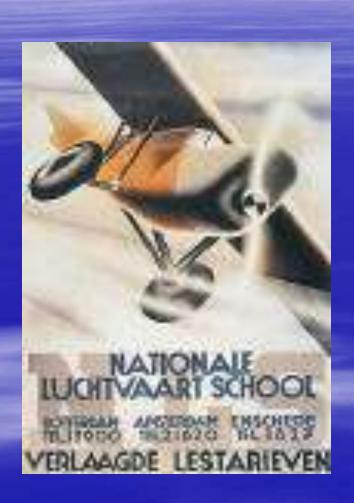
### RIGHTS OF STATES



- The State of Registration may exercise jurisdiction over offenses committed on board an aircraft (Tokyo, Art. 3(1).
- A State that is not the State of Registration may exercise its jurisdiction over an offense committed on board if the offense:

affects its territory,
was committed against its national or
permanent resident,
infringes its security, or
breaches flight or maneuver rules and
regulations there in force. (Tokyo, Art. 4).

If it refuses to accept a disembarked passenger that it not its national or permanent resident, a State may return such passenger to his State of nationality or permanent residence, or the territory in which he began his journey (Tokyo, Art. 14(1)).



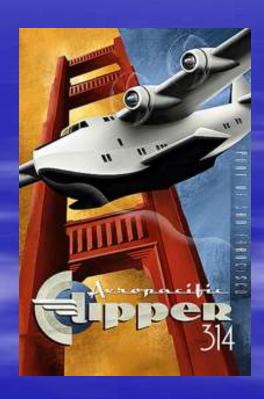
#### Contracting States must:

- restore control of an aircraft unlawfully seized or interfered with to the aircraft commander, or preserve his control thereof (Tokyo, Art. 11(1); Hague Art. 9(1));
- permit the passengers and crew to continue on to their destination as soon as practicable, and return the aircraft and its cargo to those entitled to lawful possession thereof (Tokyo, Art. 11(2), (Hague Art. 9(2)), (Montreal Art. 10(2).
- avoid unnecessary delay of the aircraft, crew or passengers (Tokyo, Art. 17).

States must allow a passenger to disembark if delivered to it by the commander of the aircraft on grounds he has committed, or is about to commit, an offense against penal law, or "may or do jeopardize the safety of the aircraft or of persons or property therein or which jeopardize good order and discipline on board." (Tokyo, Art. 12).

Once it takes delivery, if the State must:

- take him into custody for such time as necessary to launch criminal or extradition proceedings (Tokyo, Art. 13(2));
- allow him to communicate with the State of which he is a national (Tokyo, Art. 13(3));
- immediately make a preliminary enquiry into the facts (Tokyo, Art. 13(4));
- notify the State of registration, the State of which the person is a national, and any other interested State that the person has been taken into custody and the circumstances that warrant his detention, and whether it intends to exercise jurisdiction (Tokyo, Art. 13(5), Montreal 1971 Art. 5(2));and
- accord to a person in its custody treatment no less favorable than that accorded its own nationals (Tokyo, Art. 15(2)).



Contracting States must make the unlawful seizure or attempted seizure of an aircraft punishable by severe penalties (Hague Art. 2). Further, it must make the following offenses punishable by severe penalties (Montreal 1971 Art. 3):

- (a) an act of violence against a person on board an aircraft in flight if that act is likely to endanger the safety of that aircraft; or
- (b) destruction of an aircraft in service or causes damage to such an aircraft which renders it incapable of flight or which is likely to endanger its safety in flight; or
- (c) place or cause to be placed on an aircraft in service, by any means whatsoever, a device or substance which is likely to destroy that aircraft, or to cause damage to it which renders it incapable of flight, or to cause damage to it which is likely to endanger its safety in flight; or
- (d) destruction or damage of air navigation facilities or interferes with their operation, if any such act is likely to endanger the safety of aircraft in flight; or
- (e) communicate information which he knows to be false, thereby endangering the safety of an aircraft in flight. (Montreal 1971 Art. 1).



- If the offense took place aboard its registered aircraft, or in its territory, or aboard an aircraft dry leased to a person who has its principal place of business or its permanent resident within the State, that State must exercise its jurisdiction over the offense of unlawfully seizing an aircraft or any other act of violence against the crew or passengers (Hague Art. 4) (Montreal 1971 Art. 5(1)).
- If the alleged wrongdoer is in its territory, that State may take him into custody for purposes of promptly making an enquiry into the facts to determine whether criminal proceedings or extradition should be instituted (Hague Art. 6), (Montreal Art. 6(1).
- If the alleged wrongdoer is found in the State, it must either extradite him, or submit the case to competent authorities for prosecution in the same manner as any ordinary offense of a serious nature would be handled (Hague Art. 7) (Montreal 1971 Art. 7).
- Other States must assist the prosecuting State in its criminal proceedings (Hague Art. 10(1), Montreal 1971 Art. 11).



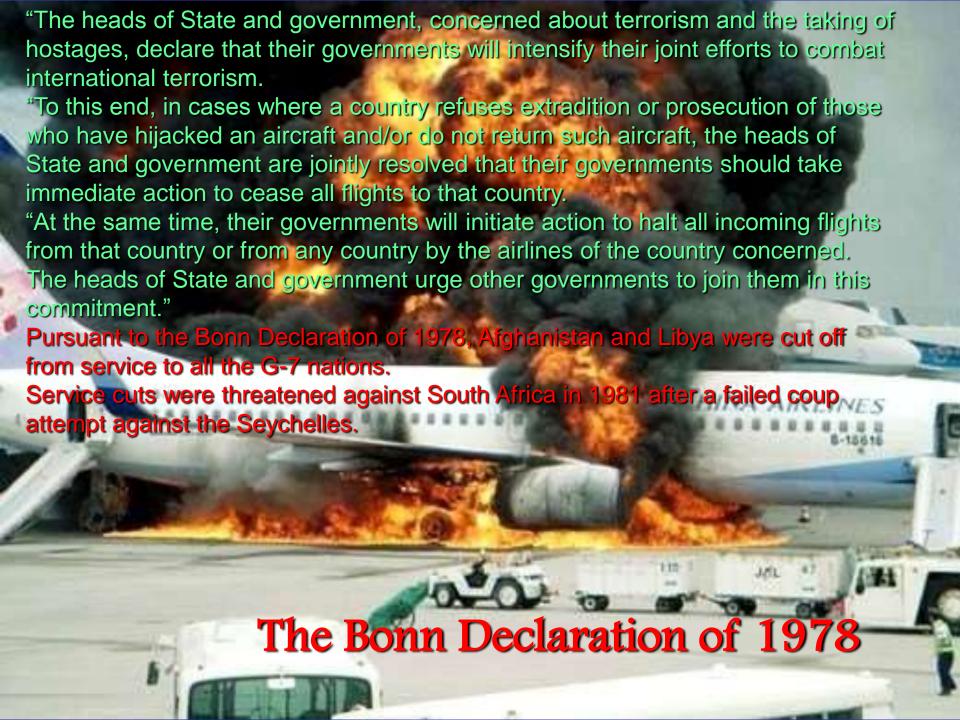
#### Annex 17 to the Chicago Convention (1974)

- Reaffirms many of the requirements of the Tokyo, Hague and Montreal Conventions.
- •Requires that each member State "have as its primary objective the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation."
- •Requires States to establish a national civil aviation security program and to create a governmental institution, dedicated to aviation security, that would develop and implement regulations to safeguard aviation.
- Requires States to develop a security training program, share aviation threat information, and otherwise cooperate with other States on their national security programs.

#### Recent Amendments to Annex 17

- Amendment 10 to Annex 17, adopted less than three months after the events of September 11th, 2001, extends its reach to domestic air transportation. Specifically, the relevant provision provides: "Each Contracting State shall ensure that principles governing measures designed to safeguard against acts of unlawful interference with international civil aviation are applied to domestic operations to the extent practicable."
- Coupled with ICAO's new security audit procedures, states that fail to comply with their international legal obligations in this arena are likely to have industrialized nations prohibit commercial aviation services to or from their territories.



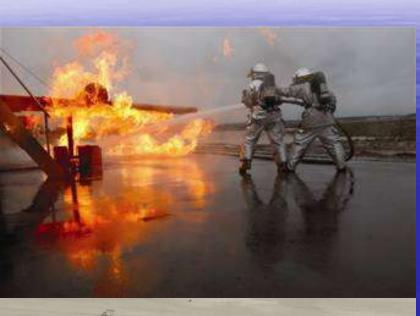


# Article 3 bis (1984)

- After Korean Airlines flight 007 was shot down by Soviet military aircraft over the Soviet Union in 1983, ICAO Council adopted a resolution providing that the use of armed forces against commercial aviation was incompatible with customary international law and the Chicago Convention.
- In 1984 ICAO adopted Article 3 bis, which prohibits the use of weapons against aircraft in flight. It entered into force in 1998.
- As of July 2012, 143 States had ratified Article 3 bis.



# The Montreal Convention of 1991





- In response to Security
  Council Resolution 635,
  ICAO drafted the
  Convention on the Marking
  of Plastic Explosives for
  the Purpose of Detection of
  1991.
- It calls upon member States to take "necessary and effective measures" to prevent the manufacture, and exert control over the possession and movement of, unmarked explosives, as well as destroy existing stockpiles.
- This is not, technically, an aviation convention.





# U.S. Security Audits

- In 1985, Congress required the FAA to assess the security procedures of foreign airports and foreign air carriers that serve the United States.
- It required the FAA to conduct a security audit of foreign airports, and if it found that an airport failed to comply with Annex 17, it notified the appropriate authorities of its decision and recommended steps to achieve compliance.
- If the airport failed to correct the deficiency, the FAA published a notice that the airport has failed its security audit in the *Federal Register*, posted its identity prominently at major U.S. airports, and notified the news media.
- The FAA could also "withhold, revoke, or prescribe conditions on the operating authority" of an airline that flies to that airport, and the President may prohibit an airline from flying to or from said airport from or to a point in the United States.



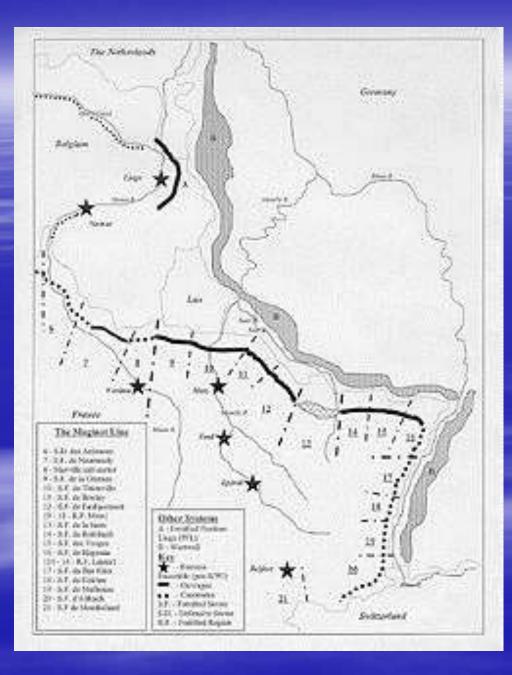
The U.S. announce all service would be suspended between the United States and:

- •Beirut in 1985,
- •Lagos in 1992
- Manila and Bogotá in 1995
- •Athens in 1996
- •and Port-au-Prince in 1998.

The DOT also has denied code-sharing approval to destinations in nations on the Department of State's list of governments that support terrorism.

## THE ICAO SECURITY AUDITS

Following September 11, 2001, the 33rd ICAO General Assembly passed several resolutions strongly condemning the use of aircraft as weapons of mass destruction. One such resolution called upon ICAO to establish a security audit program modeled on USOAP, launched in 1999. As a result, ICAO inaugurated the Universal Security Audit Programme [USAP] to assess state compliance with Annex 17 (security).



- States tend to be reactive rather than proactive.
- They also tend to "fight the last war."









RHONDA THOUGHT THAT THE INCREASED AIRPORT SECURITY CHECK HAD BEEN A BIT MISDIRECTED.

Copyright © 2001 Stefano Barattihttp://www.arscomica.com













9:00	P	On	Time		
6:00	A	On	Time	3	
6:03A		On	Time	3	
6:17A		On	Time	3	
6:17A		On	Time		
6:30	A	On	Time	3	
6:31		♥ Your computer might be at risk ×			
6:35					
		T	ie curi	ent D	epa

- An average of five guns per day was seized in airports across the U.S. in 2013
- At least 70 percent of the seized weapons were loaded
- Nearly half of all the guns confiscated across the country were
   .380 and 9mm pistols
- "If you look at the numbers, none of them are terrorists. They are people who violated TSA rules."
- Civil charges can be filed and the passenger could be fined up to \$11,000
- Most of the weapons confiscated in 2013 had gun permits and were found in the carry-on luggage of passengers
- The TSA states that guns must be declared to the airline on check-in, must be included with checked luggage and cannot be brought into the main cabin.





# 2010 Homeland Security Statistics from Airport Screenings

Terrorist Plots Discovered	0
Transvestites	133
Hernias	1,485
Hemorrhoid Cases	3,172
Enlarged Prostates	8,249
Breast Implants	59,350
Natural Blondes	3

### U.S. Domestic Law

The Antihijacking Act of 1974 implements the Hague Convention of 1970. It imposes penalties for carrying weapons or explosives aboard aircraft and a penalty of twenty years of imprisonment or death if a passenger is killed during a hijacking. It also authorizes the President to suspend the landing rights of any nation that harbors hijackers.

The Air Transportation Security Act of 1974 authorized the screening of passengers and baggage for weapons.

The Aircraft Sabotage Act of 1984 implements the Montreal Convention of 1971. It imposes penalties of up to \$100,000 or twenty years of imprisonment, or both, for hijacking, damaging, destroying, or disabling an aircraft or air navigation facility.

The International Security and Development Act of 1985 authorizes expenditures for enhancing security at foreign airports.

The Foreign Airport Security Act of 1985 requires the Secretary of the U.S. Department of Transportation (DOT) to assess security at foreign airports and to notify the public or suspend service if a foreign airport fails to correct a security breach. It also requires foreign airlines serving the United States to adopt and implement security procedures prescribed by the U.S. government.

# U.S. Domestic Law

- The Aviation Security Improvement Act of 1990 mandates background checks for airline and airport employees, and imposes additional training, educational, and employment standards upon them. It also requires deployment of bomb-detection technology for baggage.
- The Federal Aviation Administration Reauthorization Act of 1996 requires passenger profiling, explosive detection technology, procedures for passenger/bag matching, and certification for screening companies.
- The Omnibus Consolidated Appropriations Act of 1997 authorizes the purchase of advanced screening equipment for baggage.
- The Aviation Security Improvement Act of 2000 requires fingerprinting and background checks of airport and airline security personnel at Category X airports.
- The Aviation and Transportation Security Act of 2001 federalizes the airport screening function, establishing the new Transportation Security Administration (TSA) under the DOT to regulate security in all modes of transportation. It also enhances baggage screening procedures and imposes more stringent personnel qualifications on security employees.
- The Homeland Security Act of 2002 consolidates twenty-two agencies, including the TSA, into a new cabinet-level Department of Homeland Security. The agency is given jurisdiction, inter alia, over transportation security, customs, immigration, and agricultural inspections.

- On September 11, 2001, four aircraft were hijacked. Two were flown into the World Trade Center, one was flown into the Pentagon, and one crashed in Pennsylvania.
- More than 3,000 people were killed.
- This event launches America's "War on Terrorism."





# Suicide Hijacking: It was not the first time.



- In 1974, Samuel Byck attempted to hijack a plane at Baltimore/Washington International Airport and fly it into the White House, in an attempt to assassinate President Nixon.
- In 1994, four terrorists hijacked an Air France aircraft at Algiers in an apparent attempt to fly it into the Eifel Tower or explode it over Paris.

# The Pre-9/11 Security Environment

- Security personnel were "generally very poorly trained, woefully underpaid, generally unmotivated, poorly supervised, inadequately resources . . . [under] inadequate procedures and processes, and no standardization of the equipment to be used, and inadequately managed – both by the airlines responsible for the screening and the FAA responsible for the regulatory oversight of the U.S. aviation security system."
- Training consisted of only eight hours of classroom, and four hours of on-the-job instruction.
- Turnover rates for security employees at some airports exceeded 400% annually.
- Billie Vincent, Bombers Hijackers Body Scanners and Jihadists (2012).

## ATTACK ON THE U.S.

#### HOW THE MORNING UNFOLDED













#### American Airlines

FLIGHT 11 Boeing 767 92 passengers

#### BOSTON 🛁

Departs 8:00a.m. Boston International

#### WORLD TRADE CENTER

Impact 8:45 a.m.

NORTH TOWER
 Collapses 10:28 a.m.

#### United Airlines

FLIGHT 175 Boeing 767 65 passengers

#### BOSTON -

Departs 8:15a.m. Boston International

#### WORLD TRADE CENTER

Impact 9:03 a.m.

SOUTH TOWER
 Collapses 10:05 a.m.

#### American Airlines

FLIGHT 77 Boeing 757 64 passengers

#### WASHINGTON >

Departs 8:21a.m. Dulles Airport

#### PENTAGON, Washington

Impact 9:45 a.m. East Wall

#### United Airlines

FLIGHT 93 Boeing 757 45 passengers

#### NEWARK >

Departs 8:43a.m. Newark New Jersey

#### Pennyslvania

Aircraft is crashed southeast of Pittsburgh at 10:10 a.m.

#### American Airlines 77

- Scheduled flight: Dulles International Airport to Los Angeles International Airport, departed at 8:10 a.m.
- Crash: West side of Pentagon, 9:40 a.m.
- Those on board: 64 people, including four flight attendants, two pilots

# O 160 PENNSYLVANIA Pittsburgh OHIO Dulles W. VIRGINIA VIRGINIA TENN. NORTH CAROLINA Dashed line represents flight path when transponder was turned off.

#### **American Airlines 11**

- Scheduled flight: Boston Logan International Airport to Los Angeles International Airport, departed at 7:59 a.m.
- Crash: World Trade Center North at 8:45 a.m.
- Those on board: 92 people, including nine flight attendants, two pilots



#### **United Airlines 175**

- Scheduled flight: Boston Logan International Airport to Los Angeles International Airport, departed at 7:58 a.m.
- Crash: World Trade Center South at 9:05 a.m.
- Those on board: 65 people, including seven flight attendants, two pilots



#### SOURCES: Flight Explorer, staff reports

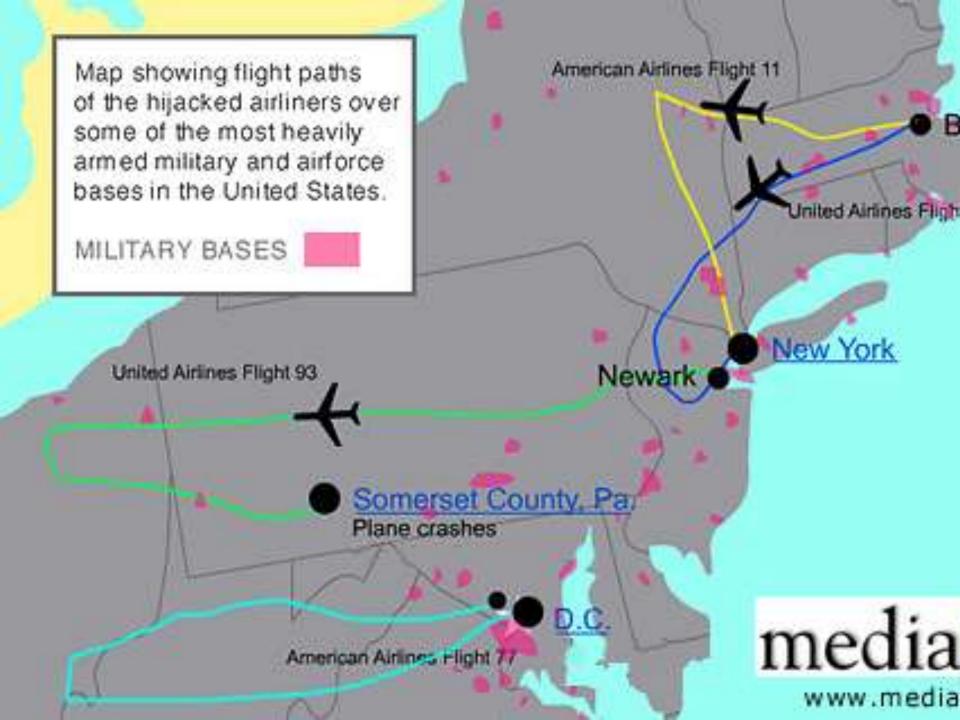
#### **United Airlines 93**

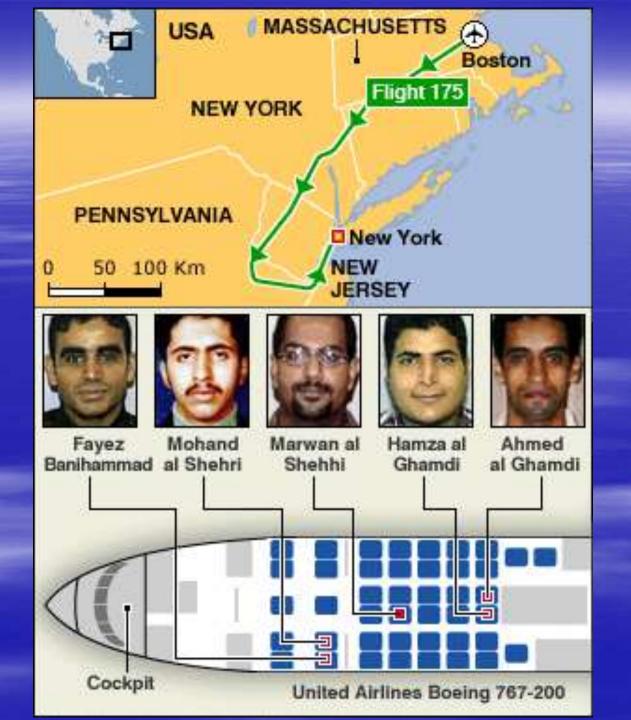
- Scheduled flight: Newark International Airport to San Francisco International Airport, departed 8:01 a.m.
- Crash: Stony Creek Twp., Pa., which is 80 miles southeast of Pittsburgh, at 10:10 a.m.
- Those on board: 45 people, including five flight attendants, two pilots

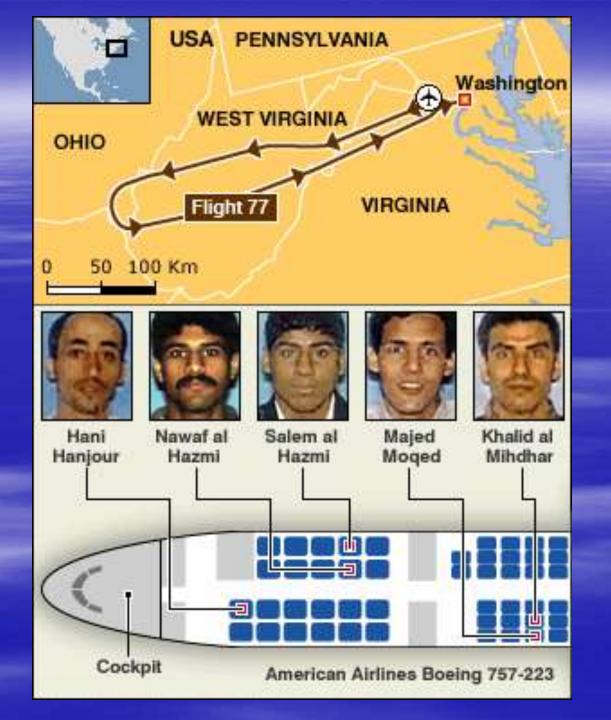


THE WASHINGTON POS

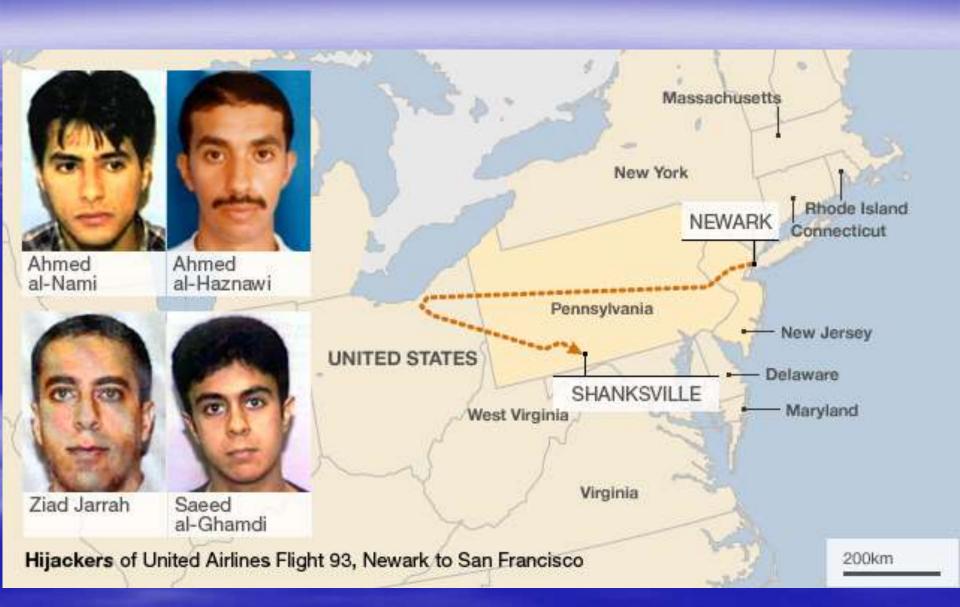


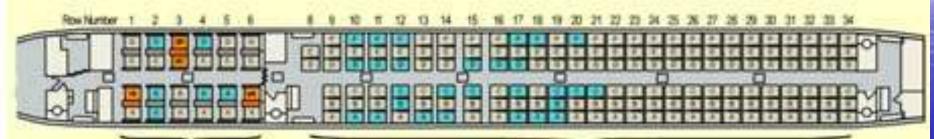












ZONEA-FIRST 24 SEATS ZONE B - ECONOMY 158 SEATS

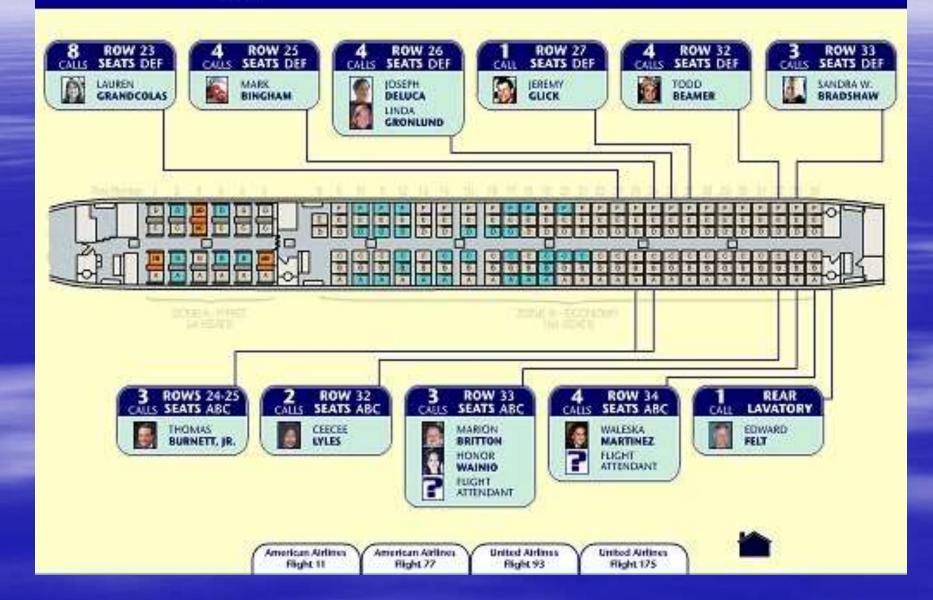
SEAT	PASSENGER	SEAT	PASSENGER	SEAT	MISSENGER	SEAT	PASSENGER
170	Adams, Christian		Bradshaw, Sandra W.	20C	Garcia, Andrew	17C	Marcin, Hildagard
30	Alghamdi, Saeed	48	Burnett, Jr., Thomas	11A	Glick, Jeremy	10F	Martinez, Waleska
68	Albaznawi, Ahmed	150	Cashman, William	HD	Grandcolas, Lauren	10A	Miller, Nicole
30	Alnami, Ahmed	120	Corrigan, Georgine	100000	Green, Wanda	12F	Nacke, Jr., Louis
	Bay, Lorraine	19C	Cushing, Patricia	160	Greene, Dorald	14A	Peterson, Donald
100	Bearner, Tockl	201721	Dahl, Jason	2A	Gronlund, Linda	14C	Peterson, Jean
17F	Beaven, Alan	28	DeLuca, Joseph	19A	Guadagno, Richard	58	Rothenberg, Mark
40	Bingham, Mark	15C	Driscoll, Patrick	15/8/31	Homer, Jr., LeRoy W.	17A	Snyder, Christine
20F	Bodley, Deora	20	Felt, Edward	18	Jarrah, Ziad	18F	Talignani, John
12B	Britton, Marion	198	Folger, Jane	18A	Kuge, Toshiya	11F	Wainio, Honor
12C	Britton, (extra)	13A	Fraser, Colleen	100.00	Lyles, CeeCee	277	Welsh, Deborah
15550			Crew Pass	enger	Hijacker	21C	



**BOEING 757** 

### United Airlines Flight #93





# THE WALL STREET JOURNAL.

© 2001 Dow Jones & Company, Inc. All Rights Reserved.

DOWJONES

VOL. CCXXXVIII NO. 51 EE/PR \*\*\*\*

WEDNESDAY, SEPTEMBER 12, 2001

WSJ.com

\$1,00

#### TERRORISTS DESTROY WORLD TRADE CENTER, HIT PENTAGON IN RAID WITH HIJACKED JETS

#### Nation Stands In Disbelief And Horror

#### Streets of Manhattan Resemble War Zone Amid Clouds of Ash

A WALL STREET JOSENAL News Roundap They were like scenes from a catastrophe movie. Or a Tom Clancy novel. Or a

CNN broadcast from a distant foreign nation.

But they were real yesterday. And they were very much in the U.S.

James Cutter, a 31-year-old insurance broker, was in the Akbar restaurant on the ground floor of the World Trade Center when he heard "boom, boom, boom," he recalls. In seconds, the kitchen doors blew open, smoke and ash poured into the restaurant and the ceiling collapsed. Mr. Cutler didn't know what had happened yet, but he found himself standing among bodles strewn across the floor. "It was mayhem," he says.

Around the same time, Nestor Zwyhun, the 3b-year-old chief technology officer of Tradecard, an international trading firm, had just stepped off the New Jersey com-

#### What's News—

Business and Finance

A LL MAJOR U.S. FINANCIAL markeets closed yesterday and remain
closed today in the wake of the terrorist
attack on the World Trade Center. The
near-panic reaction in the global markets that remained open suggested that
substantial damage was done to the
psyche of a world financial system already on edge from prospects of an international recession. In Tokyo, the Nikei stock index fell below 10000 early
Wednesday for the first time since 1984.

(Article on Page 81)

The World Trade Center housed many Wall Street and banking firms, law offices, technology companies, trading firms and other businesses. Many escaped before the destruction of the buildings yesterday, but the toll of dead and injured is unclear.

(Article on Page 81)

The attacks threaten to push a fragile global economy into widespread recession, smashing consumer confidence and disrupting basic commercial functions such as air travel.

(Article on Page A1)

parent on rolls o

World-Wide

BUSH PROMISED action against terrorist attacks in the Eastern U.S.

The death toll from the hijacked-jet attacks that destroyed the World Trade Center's towers in New York and damaged the Pentagon outside Washington was impossible to gauge immediately. But the president said "thousands of lives were suddenly ended." A fourth hijacked plane crashed near Pittsburgh. Another commercial jet went down in western Pennsylvania. It wasn't immediately clear who was responsible for the attacks, but the president told the nation the U.S. "would make no distinction" between terrorists and "those who harbored them." He virtually promised armed response earlier yesterday, "Make no mistake: The United States will bunt down and punish those responsible for these cowardly acts," he said. (Articles on pages A1 and A15)

Sen. McCain, a Victuan War veteran, expressed the incidents' gravity: "These were not just crimes against the United States, they are acts of war."

#### HEALTH TEAMS launched efforts to treat thousands of injured victims.

Health workers mobilized a nationwide effort to treat the thousands of injured taken to hospitals, identify the dead and supply tens of thousands of units of blood in the wake of the terrorist attacks. More than Death Toll, Source of Devastating Attacks Remain Unclear; U.S. Vows Retaliation as Attention Focuses on bin Laden

By DAVID S. CLOUD And NEIL KING

Staff Reporters of Two WALL STREAM DURANT By successfully attacking the most prominent symbols of American power—Wall Street and the Pentagon—terrorists have wiped out any remaining illusions that America is safe from mass organized violence.

That realization alone will alter the way the U.S. approaches its role in the world, as well as the way Americans travel and do business at home and abroad.

The death toll from the hijacked jets' attacks that destroyed the World Trade Center in lower Manhetan, and damaged the Pentagon, was impossible to guage immediately. But it could eclipse the loss of life the country suffered in the Japanese attack on Pearl Harbor, when more than 2,300 perished.

It wasn't immediately clear who was responsible for the attack, though official attention focused on Middle East servorist Osama bin Laden and his organization. One U.S. official said intelligence agencies already bad gathered 'strong information' 'Emizing Mr. bin Laden to the attacks. If the bin Laden organization isn't directly responsible, U.S. officials suspect, it could have sprung from a network of Islamic terror groups he supports and fi-

The gravity of the challenge to the country was summarized by Sen. John McCain, a Vietnam War veterun, who said: "These were not just crimes against the United States, they are acts of war."

Vot a ucar against formerism is unlike a cor

Boston: American Artines
Fight 11, a Boeing 767, leaves
Boston at 7:59 a.m. EDT for Los
Angeles. This flight, with 92
people aboard, including 11
crew, becomes the first plane to
let the World Trade Center,
NEW YORK: At about 8:50 a.m., Fight 11 from
Boston hits the North Tower of the World Trade
City

NEW YORK: Livided Fight 93, a Boeing 7:57 arcraft, leaves Newask at

seven crew. This flight crisines at about 10 a.m., southeast of Pittaburgh.

WASHINGTON: American Flight 77, a Boeing 757, departs Dulles Amport at 8.10 a.m., bound for Los Angeles with 64 people abourd, including six crew. This plane crashes into the Pentagon in Arlington, Va., just south of Washington, D.C.

8:01 a.m., headed for San Francisco with 45 people, including

President Bush nearly promised armed response in his response to the tragedy. "America has stood down enemies before, and we will do so this time," he said in nationally televised address from the Oval Office, in a pointed warning to terrevists as well as to nations such as Afghanistas, which hosts Mr. bin Luden, the president declared: "We will make no distinction between the terrorists who committed these acts and those who har-

Washington

Leaders of the House of Representatives and the Senate shuttered vectoriay and the

#### Hour of Horror Forever Alters American Lives

Attacks Will Force People
To Make Adjustments

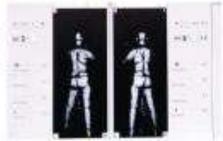


perimeter access. All U.S. airports were required to be equipped with explosive detection system (EDS) to scan all bags by the end of 2002. EDT machines are produced by only two certified manufacturers— InVision Technologies and L3 Communications.

#### Millimeter-wave Imaging

The Transpartation Security Administration is Sealing a system of SSA in help stelect program and aughorises. The equipment scame a passenger's settle body and assets a three-dimensional image;

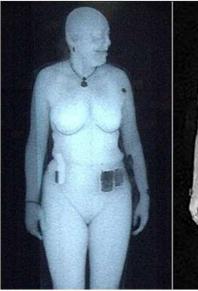
- How it works: 2. The passenger steps tridle the scenner and stands with location arms relead. 2. then anterman quickly volute around the passenger while projecting become of radio-frequency emerge. **NOCKHINI** Supral 19 00000000 WORKS Emission ryange
- 3. Cherty proposed for the pyetien is one. rentholandin that of a velop over 4. hearm polistrate clarifor and jeffers off the NAME OF STREET property (figure)
- 5. De major, estitical haven ported, per versed by security personal in a winote location. The mages are defected after venues and Arrest of South
- The parallegal state the parcets sole



- TECHNOLOGY IS IMPORTANT.

BUT EVEN THE BEST **TECHNOLOGY CAN** NOT DO IT ALL.







#### PROCEDURES.

Airport security personnel screen 1.3 billion bags in the United States annually. Within sixty days, airports had to screen luggage by either: (1) bomb detection machines; (2) manual searches; (3) dog sniffing; or (4) matching bags with passengers. As soon as practicable, all personnel, goods, property, and vehicles that enter the secured area of an airport must be screened or inspected. TSA also must develop procedures for screening and inspecting all individuals, goods, vehicles, and other equipment before they are allowed to enter the secured area of an airport. All U.S. and foreign airlines bringing passengers to the United States from abroad must make their passenger manifests (with passport and visa numbers) available to Customs prior to arrival.



# PERSONNEL



National guardsmen were quickly added to airports after September 11th. Criminal background checks were required to be imposed on 750,000 airport employees and the nation's 28,000 screeners became federal employees. However, 25% of then-existing screeners were not U.S. citizens and had to be dismissed. Screeners must be U.S. citizens, pass a criminal background check, be tested for drugs, be proficient in the English language, and be adequately trained. Armed air marshals were added to domestic flights.

Individuals seeking to enter flight school must undergo a forty-five-day pre-clearance procedure conducted by the Department of Justice. Airline flight crews underwent training on how to deal with a terrorist incident aboard the aircraft; a certified Federal Flight Deck Officer [FFDO] may carry weapons pursuant to the Arming Pilots Against Terrorism Act of 2002.

Individuals authorized to enter restricted areas must be vetted with criminal and employment history checks.
Behavior Detection Officers observe suspicious conduct, and passenger

profiling identifies suspicious passengers.

## The Need for Layered Security Systems

Transportation security can best be achieved through coherent security systems that are well integrated with transportation operations and are deliberately designed to deter terrorists even as they selectively guard against and prepare for terrorist attacks. In particular, layered security systems, characterized by an interleaved and concentric set of security features, have the greatest potential to deter and protect. Layered systems cannot be breached by the defeat of a single security feature—such as a gate or guard—as each layer provides backup for the others, so that the impermeability of individual layers is not required. Moreover, the interleaved layers can confound the would-be terrorist. Calculating the odds of breaching a multi-tiered system of defense is far more difficult than calculating the odds of defeating a single, perimeter protection.

# Airport Sterile Area

- The area between the security screening area to the aircraft.
- It is an area where no article on the TSA/ICAO prohibited list is allowed, unless carried by a law enforcement officer.

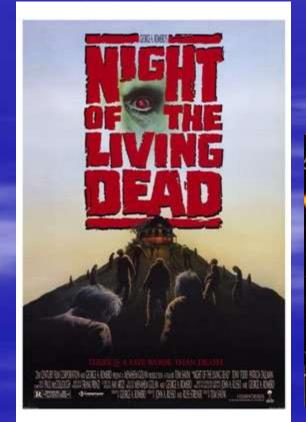


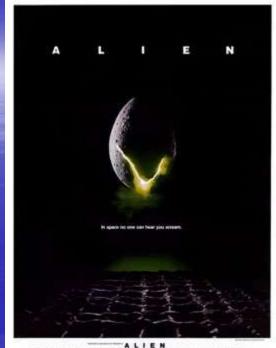
Law is only one mechanism to achieve safe and secure skies.





# WHAT ARE WE UP AGAINST?





TOU DESCRIPT GOODENEY WEARH INFORMACIONETH ANNOY DEAN STANDON
ONNERST MANICOLANDARY FOR THE TOUR COMMISSION OF THE











# Aviation Security: The Role of International Law

Professor Dr. Paul Stephen Dempsey Director, Institute of Air & Space Law McGill University Paul.dempsey@mcgill.ca

# welcome to the institute of AIR & SPACE Postgraduate Law Degrees and Certificate

**Programs** 

www.mcgill.ca/iasl