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Aviation Security: An Annotated Bibliography of Responses to the Gore Commission

John S. Carrico
Michaela M. Schaaf

April 1998

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John S. Carrico is a NASA Nebraska Space Grant Research Fellow at the University of Nebraska at Omaha Aviation Institute. This bibliography was compiled as part of his research scholarship to study airport security. He holds a Bachelor's degree in Aviation Studies and is pursuing a Master of Science degree, Aviation Administration Minor, from the University of Nebraska at Omaha. Mr. Carrico presented his research at the Nebraska Academy of Sciences 1997 Annual Meeting and has published a paper in the Proceedings of the Jerome Lederer Colloquium. He is a member of the 1996-97 Who's Who of American Universities and is a Second Lieutenant in the United States Marine Corps.

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Introduction

This monograph is a companion to UNOA Monograph 96-2, "The Image of Airport Security: An Annotated Bibliography," compiled in June 1996. The White House Commission on Aviation Safety and Security, headed by Vice President Al Gore, was formed as a result of the TWA Flight 800 crash in August 1996. The Commission's final report included 31 recommendations addressed toward aviation security. The recommendations were cause for security issues to be revisited in the media and by the aviation industry. These developments necessitated the need for an updated bibliography to review the resulting literature. Many of the articles were written in response to the recommendations made by the Gore Commission. "Aviation Security: An Annotated Bibliography of Responses to the Gore Commission" is the result of this need.
Aerial Piracy and Aviation Security
Yonah Alexander and Eugene Sochor
Martinus Nijhoff Publishers
1990

Alexander and Sochor compiled articles on different areas of aviation security by various authors. Subjects include aviation laws, regulations, and standards; as well as liability damages resulting from air terrorism. Documents from United States and United Kingdom government officials, as well as other important aviation agencies such as International Security Management Inc., are also included.

Subjects: Aviation Terrorism
Laws and Regulations

Air Piracy, Airport Security, & International Terrorism
Peter St. John
Quorum Books
1991

While this book covers many aspects of aviation terrorism, the main emphasis is on hijackings. The author profiles terrorists and discusses how to deal with countering terrorism in the air. The book also discusses airport security and the international response to terrorism.

Subjects: Airport Security
Terrorists

Global Terrorism: An Overview
General Ahmed Galal Ezeldin, Ph.D.
Office of International Criminal Justice, The University of Illinois at Chicago
Monograph # 10, 1991
The aim of this monograph was to assess the effects of terrorism and recommend how it can best be countered by the international community. It provides definitions of terrorism and identifies different types of terrorism. Different types of weapons used in terrorist attacks, and reasons for using them are included. This author is a leading authority on aviation terrorism.

Subjects: Terrorists

*Combating Air Terrorism*
Rodney Wallis
Brassey’s
1993

This book is devoted primarily to airline and airport security. It discusses the how the international community is dealing with making the skies safer for the traveling public. Recommendations for improving airline and airport security are discussed, as is the future threat of terrorism in aviation.

Subject: Airline Security
Airport Security

*Detection of Explosives for Commercial Aviation Security*
Committee on Commercial Aviation Security
National Academy Press
1993

Key issues for the Federal Aviation Administration from a detection technology standpoint are covered. Issues regarding technology include: 1) What can the different detection methods do in principle?, 2) What can they actually do in practice, and 3) How can the different methods be best employed to counter the terrorist threat? This book discusses the
different protocols for testing and performance and also the development of new technology.

Subjects: New Technology

*Aviation Terrorism*
Jin-Tai Choi
St. Martins Press
1994

This book contains information on the nature and development of aviation terrorism. It provides examples of attacks on both aircraft and airports. Types of security systems used by different countries are discussed. This book cites many events that have occurred in aviation terrorism and the adoption of different types of security plans used in various countries.

Subjects: Security Plans
Security Systems

*Airline Passenger Security Screening*
National Research Council
National Academy Press
1996

This book contains information the Federal Aviation Administration has requested regarding the implementation of new, automated passenger screening methods. The book covers areas dealing with the development of aviation security, as well as passenger screening technologies and operational cost issues. It also covers health effects from different types of technology and also areas such as public acceptance and legal issues.

Subjects: Airport Security
Costs
New Technology
Security Systems

Delays for Travelers and Higher Costs for Airlines
John H. Cushman, Jr.
The New York Times
July 26, 1996

Passengers flying between U.S. cities will be subjected to the same kinds of scrutiny, long lines, and detailed searches that international flyers are used to encountering. Delays might add 15 to 30 minutes to normal schedules. As a result there will be added labor costs and loss of income which will be passed to the customer through higher ticket prices. A report by departed Inspector General of the Transportation Department cites that airports and airlines charged with maintaining security are not doing a sufficient job. The report states that undercover agents were able to breach security in 40 percent of their attempts.

Subjects: Airport Design
          Airport Security
          Costs
          Inspector General Report
          White House Commission on Aviation Safety and Security

Clinton Heightens Aviation Security
Paul Mann and Carole A. Shifrin
Aviation Week and Space Technology
July 29, 1996, p. 29

President Clinton is calling for heightened security in the nation's airports following the downing of TWA Flight 800. Clinton wants security for, "... every plane, every cabin, every time." Transportation Secretary Federico Pena states hotels will no longer be allowed to transfer luggage. This article also contains information on how airline officials are responding to both the President and the institution of the new measures.
Potential of Explosives Focioses Renewed Attention on Security
Carole A. Shifrin
*Aviation Week & Space Technology*
August 5, 1996, p.33

Government and aviation officials warn that a risk free system does not exist. Industry experts agree stating that "there are ways of getting around any so called 'fool-proof system'." Investment in new technology is needed, however Congress will not require the deployment unless equipment is tested and conducted under protocols developed by outside experts. Implementation of new security equipment could result in major reconstruction of facilities at most airports. There is need to look for better and less expensive technology than what appears to be available today.

Subjects: Airport Design
          Airport Security
          New Technology

Senate to Weigh Terrorism Bill
Paul Mann
*Aviation Week & Space Technology*
August 12, 1996, pp. 34-35

The U.S. Senate looks at a September House-passed bill containing measures on aviation security and the nation’s counter-terrorism programs. The White House and Congress have sought speedy adoption of antiterrorism bills in the wake of TWA Flight 800. Critics of the bill state that it fails to mandate wiretapping and chemical markers. The National Rifle Association also criticizes the bill claiming that microscopic chemical markers could constitute a safety hazard threatening sportsmen.
Subjects: Airport Security
Legislation

House Panel Focuses on Counter-Terrorism Methods
Edward H. Phillips
*Aviation Week & Space Technology*
September 16, 1996, p. 38

Security systems must be cost effective while minimizing delays. The Aviation Security and Anti-Terrorism Act of 1996 is discussed. James C. DeLong discusses security personnel being a weak link in aviation security. There is a need for expansion of airports by a factor of four as a result of passenger delays due to security screening.

Subjects: Aviation Security and Anti-Terrorism Act of 1996
Airport Security
Personnel
White House Commission on Aviation Safety and Security

Federal Support Bolsters Next-Generation Technologies
Michael A. Dornheim
*Aviation Week & Space Technology*
October 7, 1996, pp. 44-46

FAA and other federal agencies are funding research of new technologies in airline security. Advanced nuclear and x-ray technologies, and radar and chemical sniffers are being researched.

Subject: New Technology

Surveillance Critical to Antiterrorist Thrust
Joseph C. Anselmo
*Aviation Week & Space Technology*
October 7, 1996, p. 63
The paramount weapon against terrorism is human spies. There has been a boost in resources devoted to the use of human intelligence. Using satellites and aircraft is not enough it takes human spies to uncover terrorist's plans. The intelligence community has had notable success, however some questions regarding procedures have arisen. Recruiting informants is difficult and agents must seek approval from highest level.

Subjects: Human Spies
Terrorist Infiltration

A Broader Plan, Not a 'Silver Bullet'
James Ott
Aviation Week & Space Technology
October 7, 1996, pp. 32-34

Security at U.S. airports is beginning to mirror that of European airports. There is no 'silver bullet' to solve the problem of terrorism. A list of criminal acts against world civil aviation, as well as a table containing the security costs at 84 airports is provided. The White House Commission on Aviation Safety and Security, and some of their recommendations are discussed in this article.

Subjects: History
White House Commission on Aviation Safety and Security

Sober View Takes Over: What Can Be Done?
James Ott
Aviation Week & Space Technology
October 7, 1996, pp. 34-35

The author identifies a good start in the renewed battle against air terrorism. Twenty recommendations were provided by the Gore Commission totaling $429.4 million. Some experts predict both the cost and delays will cripple the air transport system. There is general
agreement between government and general aviation on thwarting terrorism while not interfering with commerce.

Subjects:  
Cost  
White House Commission on Aviation Safety and Security

Nuclear Detection of Explosives Still Shows Promise  
Michael A. Dornheim  
*Aviation Week & Space Technology*  
October 7, 1996, pp. 46-47, 49

Nuclear testing is federally sponsored due to its excellent discrimination in detecting explosives from other substances. Thermal neutron analysis is undergoing further development and can be used for both checked baggage and carry-on baggage. Pulsed fast neutron analysis is also being developed for use in drug detection.

Subject: New Technology

Europe Makes Steady Progress On Airport Baggage Screening  
John D. Morrocco  
*Aviation Week & Space Technology*  
October 7, 1996, pp. 40-41

European nations are deploying baggage screening systems in hopes to reach a 100% compliance by the year 2000. The European Civil Aviation Conference set the European-wide policy for 100% baggage screening in 1993. Some European nations may not have the capability required to improve security, even though most are willing. The CTX 5000 screening system, developed by the U.S. company InVision Technologies, will be deployed to most of these airports.

Subjects: Airport Security  
New Technology
Airlines Test New Scrutiny of Baggage
Matthew L. Wald
*The New York Times*
October 20, 1996, p.27

Several smaller airlines have initiated baggage match with passengers. Senior Clinton officials have vowed to press on with tighter security despite the indications of TWA Flight 800 not being a terrorist attack. Government officials will not say where the bag-match systems are in place, stating that terrorists will take different routes if they know.

Subjects: Airline Security
         Airport Security
         Baggage Match

Panel Recommends Costly Program to Improve Airport Security
Matthew L. Wald
*The New York Times*
December 13, 1996, p.A20

The Aviation Security Advisory Committee, established by the Federal Aviation Administration, recommended a $1 billion per year program of improvements in aviation security. The advisory committee said the money should come from tax dollars since attacks on planes were directed against the United States. Several of the Gore Commission recommendations are included in the article.

Subjects: Aviation Security Advisory Committee
          Costs
          White House Commission on Aviation Safety and Security

Sky Marshals Reduce Hijacking Threat
Hijacking, considered the violent act of choice among publicity seeking terrorists, is rare in the United States. The FAA's placement of air marshals has been given credit for this reduction. Officials believe new technology and trained security can virtually eliminate hijacking. Marshals have not encountered a hijacking at any time since their first deployment in 1962.

Subjects: Hijacking
U.S. Federal Air Marshals

In the last year federal authorities have increased their scrutiny of airlines. Inspector General of Transportation, Mary Schiavo, criticizes security at airports. She also provides recommendations for security at airports. According to government officials, airlines are expected to pay for the cost of security. The Federal Aviation Administration's standards for the hiring, training and performance of security personnel set five years ago is provided.

Subjects: Airport Security
Costs
Inspector General Report
Personnel

Despite Warnings, Most Air Cargo Is Unscreened
Pam Belluck and John Sullivan
The vast majority of air cargo is not x-rayed or hand searched. President Clinton said that air security will be tightened. X-ray equipment can not effectively detect explosives in many of the large crates and boxes shipped on passenger planes. There are many opportunities to put explosives on planes and bypass security.

Subjects: Airport Security
Civil Rights
Security Systems

Slowness in Listing Passengers Deepens Air Security Doubts
Barry Meier and Pam Belluck
The New York Times

Failure to release names in a quicker fashion after the TWA Flight 800 crash raised questions about airport security. Law enforcement officials say they have suspicions about the airline's procedures for handling checked baggage. The system of matching baggage to passengers is vulnerable to deception and inaccuracy. Experts say luggage procedures in U.S. air travel could be tighter.

Subjects: Airport Security
Baggage Match

Viewpoint
Robert W. Hahn
Aviation Week & Space Technology
February 3, 1997, p.74

This editorial disputes the recommendations made by the White House Commission on Aviation Safety and Security. The author states some of the recommendations, such as full passenger bag match, could be
counterproductive and increase passenger delays to an unacceptable level. The author also suggests that terrorist-free air travel is not a realistic option because the cost is simply too high.

Subjects: Airport Security
White House Commission on Aviation Safety and Security

Thinking Like a Terrorist- A Field Trip to a U.S. Airport
The AirSafe Journal, Issue 3
February 1997

This article discusses what it was like for a graduate student and his class to assume the identities of a terrorist group at a local airport. While doing this, the students looked for possible terrorist targets. The author talks about the group findings at a local airport. This is an informative article which shows the reader the possible threats of terrorism at airports.

Subjects: Airport Security
Terrorists

Airport Insecurity: This Isn’t a Bomb, It’s the Bill of Rights
Barba Ehrenreich
Time Magazine
March 3, 1997, p. 86

Aviation security does little to thwart terrorists, however it does function to degrade and control passengers. The measures seem to draw the attention away from airline executives and the Federal Aviation Administration, the ones responsible for airline safety and security.

Subjects: Airline Security
Civil Rights
Hot Air: The Skies Stay Unfriendly
*The New Republic*
March 10, 1997, pp.14-15

The White House Commission on Aviation Safety and Security and the Federal Aviation Administration have convened in the wake of TWA Flight 800 to make recommendations which are unlikely to deter terrorism. New expensive technologies will only cause delays that will result in crippling the airline industry.

Subjects: White House Commission on Aviation Safety and Security
Terrorism Prevention

What's Ahead at Airports
John F. Infanger
*Airport Business*
April 17, 1997, p. 13

Airport specialists can provide insight in today’s hot issues. These specialists, called consultants, say nearly 90% of all U.S. airports will be obsolete in the near future. More room will be needed to accommodate security measures required to ensure safe baggage. This will result in passengers needing to arrive at the airport earlier and stay longer.

Subjects: Airport Design

Sizing up the Threat
Eric A. Laing II
*Airport Business*
April 1997, pp. 16-17-18

Airport officials, security experts, scientists, and engineers from around the world met to discuss what needs to be done concerning airport and airline security. This article contains information on developments in
airport security and new technology being used in the prevention of terrorism. It deals with information from matching passengers to baggage, to the prevention of bombs being placed outside of airports.

Subjects:  
Airport Security  
New Technology

White House Commission on Aviation Safety and Security Home Page

This home page is the best source for a complete list of the recommendations given by the White House Commission on Aviation Safety and Security. This site information on airport security and new technology. There are also links to other aviation security web sites.

Subjects:  
White House Commission on Aviation Safety and Security

Report Details Security Issues at Twin Cities Airport
Associated Press

This report cites security gaps that have left Northwest Airlines jets vulnerable to sabotage. The article was taken from the Star Tribune and states security problems have been spotted on three occasions over the past nine months, despite the heightened state of alert ordered at airports last fall by the Federal Aviation Administration.

Subjects:  
Airline Security  
Airport Security

Airport, Aircraft, and Airline Security, Second Edition
Kenneth C. Moore
This is a study of every aspect of modern aviation security. This edition contains information from the earliest to the most current methods used in combating aviation terrorism. The section on airline security gives air carriers and those interested in airline security a better understanding of the inner workings of the airline industry.

Subjects: Airline Security
Aviation Security

William J. Hughes Technical Center Aviation Security Laboratory

This web page has information concerning the Federal Aviation Administration and its role in aviation security. This site discusses, in great detail, how the William J. Hughes Technical Center, one of the FAA’s security laboratories, works. This web site also discusses the relationship between the FAA and the aviation community.

Subjects: Federal Aviation Administration
New Technology

Aviation Security: Immediate Action Needed to Improve Security
August 1, 1996

This article discusses threats to aviation and ways to increase aviation security. It is the testimony given by Keith O. Fultz, the Assistant Comptroller General, Resources, Community, and Economic Development Division. It was given before the Committee on Commerce, Science, and Transportation. It addresses issues concerning aviation security and discusses steps Congress, the FAA, and the aviation community should take to meet the threat of terrorism.

Subjects: Aviation Security
Government

Statement of David Z. Palvin

*Airportnet*


This web site contains testimony given by David Plavin, President Airports Council International, to the Senate Commerce, Science and Transportation Committee. This testimony gives useful insight into issues concerning aviation security. Plavin talks about domestic terrorism and ways to identify and respond to it.

Subject:  Aviation Security  
Terrorism

Computer Security in Aviation: Vulnerabilities, Threats, and Risks

Peter G. Nuemann


This article addresses the vulnerabilities and risks in aviation. The site examines security needed in the global system of computers and networks used in aviation. Also considered are what crises are possible and what should be done to prevent these types of disasters.

Subject:  Computer Security

Security at Domestic Aviation Facilities

Charles G. Slepian


This article gives a detailed background on aviation terrorism. It also discusses terrorism at several airport facilities and how these airports were not built with security as a consideration. This article also lists recommendations in improving security at airports. It also suggests who
should be responsible for supervision and control of employees and vendors at local airports.

Subjects: Airport Security
          Terrorism
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