



# Homeland Security

January 29, 2007

Mr. Steven Aftergood  
Federation of American Scientists  
1717 K Street N.W., Suite 209  
Washington, D.C. 20036

**Request Number: 07-OIA-0004**

Dear Mr. Aftergood:

This is a final response to your Freedom of Information (FOIA) request dated October 16, 2006 to the Department of Homeland Security (DHS) Privacy Office. You are seeking information pertaining to a copy of the DHS report entitled "Strategic Sector Assessment: U.S. Aviation," 16 June 2006. Your request was subsequently transferred to the Office of Intelligence and Analysis on October 30, 2006.

This office has reviewed and processed the responsive documents. Some DHS information has been withheld in accordance with the Freedom of Information Act, (Title 5, U.S.C.552), (b)(2) which applies to information which pertains solely to the internal rules and practices of the agency. This exemption has two profiles, "High" and "Low." The "High" profile permits withholding of a document which, if released would allow circumvention of an agency rule, policy or statute their impending the agency in the conduct of its mission. The "Low" profile permits withholding if there is no public interest in the document; (b)(5) applies to inter/intra agency memoranda which are deliberative in nature; this exemption is appropriate for internal documents which are part of the decision making process, and contain subjective evaluations, opinions and recommendations. Additional information was withheld in accordance with the FOIA, (Title 5, U.S.C.552), (b)(7)(A) the disclosure of which could reasonably be expected to interfere with the law enforcement proceedings. There were also 2 pages withheld in their entirety in accordance with the Freedom of Information Act, Title 5, U.S. Code 552(b)(2) and (b)(5) exemptions.

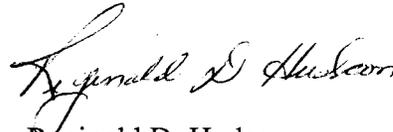
Additionally, please be advised the Office of Intelligence and Analysis conducted a consultation referral with the Federal Bureau of Investigation (FBI) pertaining to information that originated with their agency. The FBI has withheld the referred information pursuant to the Freedom of Information Act of Title 5, USC, Section 552 (b)(2) "High" profile the disclosure of which would allow circumvention of that agency's rule, policy or statute their impending the agency in the conduct of its mission. If you disagree with FBI's determination, you have the right of administrative appeal by writing to: U. S. Department of Justice, Director, Office of Information and Privacy, 1425 New York Avenue, N.W., Suite 11050, Washington, D.C. 20530-0001. Your envelope should be clearly marked "Freedom of Information Act Appeal" and should be submitted within 60 days from the date of this letter.

If you disagree with DHS' decision, you have the right to administrative appeal. Should you wish to do so, you must send your appeal within 60 days of the date of this letter to the: Office of the General Counsel, Department of Homeland Security, Washington, D.C. 20528, following the procedures outlined in Subpart A, Section 5.9, of the DHS Regulations. Your envelope and letter must be clearly marked "Freedom of Information Act Appeal." The implementing Department regulations establish the criteria under which the FOIA is administered. Copies of the FOIA and regulations are available at [www.DHS.gov](http://www.DHS.gov).

Should you need further assistance, please contact me at (202) 282-9889.

Please refer to the request number with any future correspondence with this office.

Sincerely,

A handwritten signature in black ink that reads "Reginald D. Hudson". The signature is written in a cursive style with a large initial 'R'.

Reginald D. Hudson  
FOIA Officer  
Office of Intelligence and Analysis

Attachment(s)



**Homeland Security**

**Homeland Infrastructure Threat & Risk Analysis Center (HITRAC)**

18 May 2006

**Strategic Sector Assessment:**

**(U//FOUO) U.S. Aviation**

(U) Distribution Notice: Requests for further dissemination must be approved by the DHS Office of Intelligence & Analysis (I&A) Production Management Division at

b2 Low [bjq.dhs.gov](mailto:bjq.dhs.gov)

(U//FOUO) The Homeland Infrastructure Threat and Risk Analysis Center (HITRAC) was established in January 2005 to assess risks to domestic critical infrastructure and key resources through enhanced integration of intelligence reporting and analysis with information from the respective infrastructure sectors.

Analysis of suspicious activity reporting is part of HITRAC's mission to provide strategic, national-level analysis of information reported to the Department.

*(U) Attention: Federal Departments and Agencies.*

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## **(U) Scope**

(U) This Strategic Sector Assessment is one in a series of overall assessments of the potential terrorist threats to critical infrastructure/key resources. The series of assessments is intended to provide decision makers broad, analytically-based threat information that they can use to inform investment priorities and program design in conjunction with strategic planning. The series also provides the analytic foundation for incident reports and threat warnings produced by DHS and other federal partners. Federal infrastructure partners and the private sector assisted in the preparation of this report.



**(U) Key Findings**

*(U//FOUO) DHS continues to receive information on terrorist threats to the U.S. aviation industry and to the Western aviation industry worldwide;*

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**(U) Infrastructure Overview**

*(U//FOUO) The U.S. aviation industry consists of both aircraft and aviation facilities. There are more than 200,000 aircraft in the United States, of which more than 19,000 are involved in air-carrier and air-taxi activities. In addition, of the 19,815 domestic airports, nearly 600 serve air-carrier operations with aircraft seating more than nine passengers.*

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**(U) Threat Overview**

*(U//FOUO) An independent assault at the Los Angeles International Airport (LAX) in July 2002 that left two dead and four wounded near the El Al ticket counter, remains the sole successful aviation-related terrorist attack within the United States since 11 September 2001.*

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***(U//FOUO) Al-Qa'ida Represents the Greatest Threat to the Aviation Industry***

(U//FOUO) Al-Qa'ida continues to remain the greatest threat to the U.S. aviation industry and the traveling public.

— (U//FOUO) In December 1999, Ahmed Ressam was arrested on his way to attack LAX.



Figure 1: (U) LAX

— (U//FOUO) In December 2001, Richard Reid unsuccessfully attempted to destroy American Airlines Flight 63 with a shoe bomb.<sup>1</sup>

— (U//FOUO) In 2002, a Sudanese man confessed that he had fired a man-portable air defense system (MANPADS) missile at a U.S. Air Force aircraft taking off from a base in Saudi Arabia.<sup>2</sup> It was a military aircraft in what DoD termed a combat zone.

— (U//FOUO) In 2002, al-Qa'ida planned a suicide hijacking to attack the U.S. Bank Tower/Library Tower in Los Angeles.<sup>3</sup>



Figure 2: (U) Library Tower

— (U//FOUO) In May 2003, reports linked al-Qa'ida to a plan to fly an explosives-laden general aviation aircraft into the U.S. Consulate in Karachi, Pakistan.<sup>6,7</sup>



- (U//FOUO) In the summer of 2003, al-Qa'ida planned to use camera flash attachments as stun guns. They also intended to use cameras to disguise bomb components in order to hijack commercial airliners and crash them into targets in Western countries, including along the U.S. East Coast and in Australia, Britain, and Italy.<sup>10, 11</sup>
- (U//FOUO) As of early July 2005, al-Qa'ida reportedly had planned to attack military and civilian airports in Los Angeles and San Diego in September or October of 2005. The possible tactics included the hijacking of an airliner on the way from India to the United States, or a flight from Mexico.<sup>12</sup>

(U//FOUO) These plots and attacks provide insight into al-Qa'ida's tactics, adaptability, ingenuity, and tenacity. Al-Qa'ida has used suicide hijackings, an array of explosive devices, and standoff weapons to attack aviation targets. Al-Qa'ida has adapted to increased aviation security by shifting planned suicide hijackings from domestic carriers to international flights bound for the United States to take advantage of perceived less effective security screening at some foreign airports. The use of improvised explosive devices (IEDs) has evolved from using explosives to attack airports, to integrating an IED within a shoe to bring down an airliner, and to expectations that an IED could be used to gain access to an airliner flight deck. Al-Qa'ida's ingenuity was evident in its attempts to convert items into weapons (camera flash attachments into stun guns) and to design IEDs into apparently non-threatening forms (a shoe and a camera). Finally, nine of the plots took place after September 2001, demonstrating a continued commitment to attack aviation-related targets.

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***(U//FOUO) Table 1: Al-Qa'ida-Affiliated and Other Groups Also Pose a Threat to U.S. Aviation***

<b>Groups</b>	<b># of Attacks on Aviation</b>	<b>Year of Last Attack</b>	<b>Demonstrated Reach for Aviation Attacks</b>
HAMAS	0	N/A	N/A
Revolutionary Armed Forces of Columbia (FARC)	8	2002	Colombia / Peru
Abu Sayyaf Group	1	1994	Philippines
Armed Islamic Group (GIA)	1	1994	Algeria
Moro Islamic Liberation Front (MILF)	3	2003	Philippines
National Liberation Army (Colombia)	5	1999	Colombia
Popular Front for the Liberation of Palestine - General Command (PFLP-GC)	2	1974	Europe / Middle East
Liberation Tigers of Tamil Eelam (LTTE)	3	1995	South Asia
New Peoples Army (NPA)	1	1996	Philippines
Popular Front for the Liberation of Palestine (PFLP)	20	1991	US / Europe / Middle East
Riyadus-Saliheyn Martyrs' Brigade	2	2004	Russia
Shining Path	5	1993	Peru
Communist Party of Nepal (Maoists) (CPN(M))	4	2004	Nepal / India
Taliban	9	2005	Central Asia



(U//FOUO) **Hizballah:** A Lebanese-based radical Shia group inspired by the Iranian revolution and the teachings of Ayatollah Khomeini, Hizballah has established cells in Africa, Europe, North America, and South America.

(U//FOUO) **Other Threats:** Many other groups with anti-American views (see table 1) have attacked aviation targets in the Middle East and South America.

(U//FOUO) The lone terrorist, acting out of personal outrage and with no support or communication with other terrorists, also poses a serious threat to the U.S. aviation industry. A Muslim radical

carried out the only aviation-related terrorist attack within the United States since 2001—a July 2002 armed attack near the El Al ticket counter at LAX.<sup>23</sup>

#### (U) Historical Background of Improved Security Measures\*

(U//FOUO) The 2001 attacks on the World Trade Center and the Pentagon were of such a magnitude and impact that the number of previous terrorist attacks against the U.S. aviation targets often is overlooked. According to the Terrorism Knowledge Base maintained by the National Memorial Institute for the Prevention of Terrorism, 54 aviation-related terrorist attacks against the Homeland (including Puerto Rico) occurred between 1968 and 1984. Between 1985 and 2001 there were no aviation-related terrorist attacks within the United States, and only one since 2001.

(U//FOUO) The 15-year hiatus in terrorist hijacking incidents was probably due in large part to the introduction of increased security measures. In 1970 following the destruction of two U.S. airliners at the hands of the Popular Front for the Liberation of Palestine, President Nixon announced the comprehensive anti-hijacking program, which included putting "sky marshals" on selected flights. After additional hijackings, the Federal Aviation Administration issued an emergency rule in 1972 requiring U.S. air carriers to inspect all carry-on baggage for weapons or other dangerous objects and search each passenger physically or with a metal detector. Additional security measures were instituted for U.S. airlines operating in Europe and the Middle East. The al-Qa'ida attacks in 2001 highlighted the limitations of these measures.

\* (U) <http://www.tkb.org/AnalyticalTool.jsp>, 12 June 2005 through 29 August 2005, and <http://www.faa.gov/about/media/b-chron.pdf>, 25 October 2005.

#### (U//FOUO) Scenarios of Concern



**(U) Aircraft as Weapons**

(U//FOUO) The aviation industry since 2001 has implemented additional security measures intended to thwart airline hijacking.

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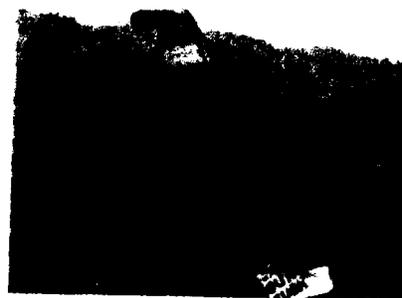
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Figure 3: (U) PSWA Flight 182



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operatives. Greenpeace protestors on two occasions have used powered parachutes to penetrate security measures and over-fly meetings between the U.S. President and European leaders, and to land a protestor on the roof of a nuclear reactor containment building in Switzerland.<sup>25</sup>

**Figure 4: (U) Greenpeace activists disrupting an international meeting**

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(U//FOUO) **Towed Gliders and Hot-Air Balloons:** These are unlikely terrorist choices. While a fiberglass glider may offer a stealth capability, it does not carry fuel, has a small payload, and depends more on weather than does a powered aircraft. In addition, towed gliders are often difficult to pilot and require pilot certification, which could result in law enforcement scrutiny. Similarly, balloons are easily spotted due to their size, low speed, and lack of unmanned precision guidance capability, making them unlikely terrorist attack platforms.

### (U) Aircraft as Targets

(U//FOUO) U.S. aircraft, especially fully fueled and loaded large passenger aircraft, remain inviting targets for terrorists. The destruction of a large passenger airliner would garner terrorists immediate worldwide media attention, provide the desired terrorist symbolism, and deter the flying public at a time when many airlines are financially troubled.

(U//FOUO) **Onboard Attack:** In their 2004 study of terrorist threats against LAX, the Rand Corporation<sup>USPER</sup> determined that plots involving the detonation of an IED aboard a commercial airliner had the greatest potential for loss of life.<sup>31</sup> In spite of security improvements, a number of potential scenarios exist for getting a bomb aboard a passenger airliner. A disassembled bomb could be smuggled onboard in smaller, innocent-looking or easily concealed components. For example, IED components could be smuggled aboard as typical carry-on items, such as shampoo or medicine bottles and electronic devices, and later assembled in an aircraft lavatory. A bomb also could be smuggled aboard in checked baggage, cargo, or supplies. A trusted airline, airport, or aircraft maintenance employee could place the IED onboard, either in the United States or overseas. If properly placed, such a device would not have to be large or devastatingly powerful; terrorists used less than a pound of plastic explosives to destroy Pan American Airlines Flight 103 over Lockerbie, Scotland, in December 1988.<sup>32</sup>



Figure 5: (U) Wreckage of Pan Am Flight 103

(U//FOUO) Hijacking an aircraft in order to take hostages is another possibility; however, carrying out such a hijacking would likely be difficult. The terrorists would have to overcome the same security measures facing a group of suicide hijackers. In addition, they would have to be able to control the passengers and convince the flight crew to follow their demands.

(U//FOUO) **Standoff Attack:** In spite of the United States' international effort to reduce and control their availability, MANPADS remain a serious potential threat to the U.S. aviation industry. While older missiles may be unreliable and newer, more-capable missiles may be hard to obtain and difficult to operate, these systems have the potential to inflict a high death toll with minimal risk to the operator.

(U//FOUO) Al-Qa'ida has used MANPADS-type weapons on at least two occasions overseas and in both cases, the operatives fired their missiles without being detected or apprehended. There is no reason to assume al-Qa'ida would not use them in the United States if the operatives



Federal law enforcement officers have arrested individuals attempting to obtain these systems. In each case, however, the weapons did not physically exist or never came to the United States.

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**(U) Aviation Facilities and Systems as Targets**

**(U//FOUO) Airport Terminals:**

Since 2001, enhanced security procedures and passenger and luggage screening have slowed the movement of passengers within terminals at peak periods,



Figure 6: (U) Air Traffic Control Radar

**(U) Reporting Notice:**

(U) DHS encourages recipients of this document to report information concerning suspicious or criminal activity to the local FBI Joint Terrorism Task Force (JTTF) and the Homeland Security Operations Center (HSOC). The FBI regional phone numbers can be found online at <http://www.fbi.gov/contact/fo/fo.htm>, and the HSOC can be reached by telephone at \_\_\_\_\_ or by email at \_\_\_\_\_@dhs.gov. For information affecting the private sector and critical infrastructure, contact the National Infrastructure Coordinating Center (NICC), a sub-element of the HSOC. The NICC can be reached by telephone at \_\_\_\_\_ or by email at \_\_\_\_\_@dhs.gov. Each report submitted should include the date, time, location, type of activity, number of people and type of equipment used for the activity, the name of the submitting company or organization, when this information is available, and a designated point of contact.

(U) For comments or questions related to the content or dissemination of this document, please contact the DHS/I&A Production Management staff at \_\_\_\_\_@hq.dhs.gov.

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- (U) INFR-030000-01-05



- <sup>1</sup> (U) <http://archives.cnn.com/2001/US/12/28/inv.reid>, 6 September 2005.
- <sup>2</sup> (U) <http://www.cbsnews.com/stories/2002/06/19/terror/main512709.shtml>, 20 October 2005.
- <sup>3</sup> (U) [http://www.washingtonpost.com/wp-dyn/content/article/2006/02/09/AR2006020900301\\_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2006/02/09/AR2006020900301_pf.html), 9 February 2006.
- <sup>4</sup> (U) <http://archives.cnn.com/2002/WORLD/africa/11/28/kenya.israel>, 14 October 2005.
- <sup>5</sup> (U) <http://groups.yahoo.com/group/RMSMC/message/2220>.
- <sup>6</sup> (U) Ibid.
- <sup>7</sup> (U) <http://www.cbsnews.com/stories/2003/05/02/attack/printable552161.shtml>, 10 October 2005.
- <sup>8</sup> (U) <http://www.timesonline.co.uk/printFriendly/O,1-4646-1372801-4646.00.html>.
- <sup>9</sup> (U) <http://newsmine.org/archive/war-on-terror/alqaeda/british-thwart-hijackin-terror-attacks.txt>, 10 October 2005.
- <sup>10</sup> (U) <http://www.cnn.com/2003/US/07/29/airline.warning>.
- <sup>11</sup> (U) [http://wnd.com/news/printer-friendly.asp?ARTICLE\\_ID=34245](http://wnd.com/news/printer-friendly.asp?ARTICLE_ID=34245), 1 September 2005.
- <sup>12</sup> (U) TD-314/43833-05.
- <sup>13</sup> (U) <http://www.smh.com.au/articles/2002/10/13/1034222674616.html>, 25 October 2005.
- <sup>14</sup> (U) <http://www.time.com/time/asia/magazine/printout/0,13675,501021209-395419,00.html>, 10 October 1005.
- <sup>15</sup> (U) [http://www.washingtonpost.com/wp-dyn/content/article/2006/02/09/AR2006020900301\\_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2006/02/09/AR2006020900301_pf.html), 9 February 2006.
- <sup>16</sup> (U) <http://www.tkb.org/AnalyticalTool.jsp>, June 12, 2005 through 25 October 2005.
- <sup>17</sup> (U) U.S. Department of State, Patterns of Global Terrorism-2003, 29 April 2004.
- <sup>18</sup> (U) <http://www.tkb.org/AnalyticalTool.jsp>, 12 June 2005 through 25 October 2005.
- <sup>19</sup> (U) U.S. Department of State, Patterns of Global Terrorism-2003, 29 April 2004.
- <sup>20</sup> (U) <http://www.tkb.org/Group.jsp?groupID=3561>, October 18, 2005.
- <sup>21</sup> (U) U.S. Department of State, Patterns of Global Terrorism-2003, 29 April 2004.
- <sup>22</sup> (U) <http://www.tkb.org/AnalyticalTool.jsp>, 12 June 2005 through 25 October 2005.
- <sup>23</sup> (U) <http://www.tkb.org/AnalyticalTool.jsp.incID=13888>.
- <sup>24</sup> (U) [http://www.super70s.com/Super70s/Tech/Aviation/Disasters/78-09-25\(PSA\).asp](http://www.super70s.com/Super70s/Tech/Aviation/Disasters/78-09-25(PSA).asp), 25 May 2005.
- <sup>25</sup> (U) <http://archive.greenpeace.org/climate/climatecountdown/photo5.htm>, 6 June 2005;  
[http://www.stopstarwars.org/html/press/01\\_06\\_13.html](http://www.stopstarwars.org/html/press/01_06_13.html), 20 June 2005;  
<http://www.greenpeace.ch/gallery/seiten/bildarchive/atom/atomkraftwerk/atomkraftwerkaktion/aktatomkraft11.html>, 14 October 2005.
- <sup>26</sup> (U) SAP20031120000007 and <http://msnbc.msn.com/id/7477528/print/1/displaymode/1098/>, 26 January 2006.
- <sup>27</sup> (U//FOUO) DHS, Remotely Piloted Vehicle Threat, 7 June 2004.
- <sup>28</sup> (U) <http://www.armscontrol.ru/UAV/clips.htm>, 11 August 2005.
- <sup>29</sup> (U) Jack F. Williams, Terrorism and Threat in the Chemical Sector Briefing, 22 August 2005, slide 18.
- <sup>30</sup> (U//FOUO) DHS, Remotely Piloted Vehicle Threat, 7 June 2004.
- <sup>31</sup> (U) Rand Corporation, Near-Term Options for Improving Security at Los Angeles International Airport, 2004, p.21.
- <sup>32</sup> (U) The New York Times, Tracking the Weapons: Huge Cache of Explosives Vanished From Site in Iraq, 25 October 2004; [http://www.usatoday.com/news/nation/2004-09-28-cover-explosives\\_x.htm](http://www.usatoday.com/news/nation/2004-09-28-cover-explosives_x.htm), 31 October 2005.
- <sup>33</sup> <http://freepublic.com/focus/f-news/1559994/posts>
- <sup>34</sup> (U) Federal Aviation Administration, Laser Report, 3 January 2006.
- <sup>35</sup> (U) Joint DHS, FBI Information Bulletin, Potential Laser Threat, 22 November 2004.
- <sup>36</sup> (U) Rand Corporation, Near-Term Options for Improving Security at Los Angeles International Airport, 2004, p.21.
- <sup>37</sup> (U) [http://www.theregister.co.uk/2004/10/15/air\\_traffic\\_security/print.html](http://www.theregister.co.uk/2004/10/15/air_traffic_security/print.html), 22 June 2005.
- <sup>38</sup> (U) <http://seclists.org/lists/isn/2000/Dec/0112.html>, 22 June 2005.

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