TRANSPORTATION SECURITY ADMINISTRATION
OFFICE OF INTELLIGENCE

# (U) Mass Transit
## Threat Assessment
### 2 March 2011

# (U) Executive Summary

## (U) Scope

**(U//FOUO)** This Transportation Security Administration's Office of Intelligence (TSA-OI) annual Mass Transit Threat Assessment provides an overview of possible threats to the U.S. mass transit system, and presents conclusions regarding likely perpetrators, as well as their targets and weapons.

**(U//FOUO)** The U.S. mass transit system incorporates the passenger rail, heavy rail, light rail, and transit bus sectors. Approximately 6,000 mass transit agencies/authorities in the United States transport approximately 14 million people daily.

**(U) Source Summary Statement**

**(U//FOUO)** Much of the information and conclusions presented in this assessment was based on information found in the National Counterterrorism Center's Worldwide Incidents Tracking System (WITS) and the Jane's Terrorism and Insurgency Center Database.[1]

**(U//FOUO)** TSA-OI reviewed mass transit-related incidents that took place between 1 September 2009 and 31 August 2010. Other information found in this assessment was based on intelligence and open source reporting with a cutoff date of 31 August 2010. Analytical confidence levels in the key judgments-mainly based on the strength of the sources used—are "moderate" to "high." No single source dominated or had a particularly catalyzing effect on the analysis.

1   (U) WITS is an unclassified, publicly accessible, Web-based system. Users can browse records and derive statistics for enumerating acts of terrorism around the world. Records are based on published methodology and the statutory definition of terrorism: "premeditated, politically motivated violence perpetrated against non-combatants by subnational groups or clandestine agents." (United States Code 22 USC 2656f(d)(2))

# (U) Executive Summary (cont'd)

## (U) Key Findings

**(U//FOUO) TSA-OI assesses with high confidence that the current threat assessment level to U.S. mass transit systems is "medium".[i]** TSA-OI's assessment of the threat is based on recent disrupted plots in the Homeland, al-Qa'ida's (AQ) stated intent, and worldwide terrorist attacks on mass transit systems. TSA-OI has no current, credible threat information regarding imminent attacks on U.S. mass transit systems.

- **(U//FOUO)** Based on disrupted plots, TSA-OI assesses that AQ and its affiliates have demonstrated a continuing desire, intent, and capability to attack mass transit systems in the Homeland and remain the primary terrorist threat to the U.S. transportation industry.

- **(U//FOUO)** TSA-OI assesses that a terrorist[ii] attack against mass transit systems in the United States will most likely occur in a passenger rail car or station to generate fear and the greatest number of casualties.

- **(U//FOUO)** A review of terrorist attacks on overseas mass transit systems during the reporting period indicates that terrorists will most likely utilize improvised explosive devices (IEDs) or conduct armed assaults in a future terrorist attack against the U.S. mass transit system.

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i    (U//FOUO)  Recently uncovered plot operations against mass transit, specifically the Washington, D.C. Metro subway system, did not change TSA-OI's threat assessment against mass transit because the plot has not been linked to al-Qa'ida or any other extremist group, and was part of a sting operation led by the FBI. TSA-OI uses a three-point scale in which "High Confidence" generally indicates TSA-OI judgments are based on high-quality information and/or the nature of the issue makes it possible to render a solid judgment. "Moderate Confidence" generally means the information is interpreted in various ways, TSA-OI has alternative views, or the information is credible and plausible but not corroborated sufficiently to warrant a higher level of confidence. A "Low Confidence" judgment generally means the information is scant, questionable, or very fragmented and it is difficult to make solid analytical inferences, or TSA-OI has significant concerns or problems with the sources.

ii    (U) For the purpose of this assessment, terrorist is defined as al-Qa'ida, its affiliates, groups motivated by religious extremism, or violent secular or political groups.

# *TSA-OI Mass Transit Modal Threat Assessment*

## *(U) Threat Overview*

**(U//FOUO)** Terrorists view mass transit systems as attractive targets because they carry large numbers of people, are open and easily accessible to the public, are critical to regional transportation systems, and are vital to local economies. IEDs and armed assaults are the usual methods of attack on mass transit targets overseas.

**(U//FOUO)** The disrupted plot against Homeland mass transportation systems by Najibullah Zazi[USPER], as well as calls for attacks against Western mass transportation systems by AQ spokesperson Adam Gadhan[USPER] and al-Qa'ida in the Arabian Peninsula (AQAP), demonstrates the desire of AQ and its affiliates to attack mass transportation systems in the Homeland.[1,2]

**(U//FOUO)** While outside the data collection period used in this assessment, the October 2010 arrest of Farooque Ahmed[USPER] for allegedly plotting to bomb several Metrorail stations in the Washington, D.C., area also shows extremists' intent to target U.S. mass transit systems.[3]

### (U) Perpetrators of Mass Transit Attacks

**(U//FOUO)** According to information found in WITS and Jane's, 197 attacks on mass transit systems—passenger rail and buses—occurred from 1 September 2009 to 31 August 2010. There were a total of 87 attacks on rail targets overseas. These attacks occurred most often in South Asia and Europe/Eurasia. There were a total of 110 attacks on buses, the majority of which occurred in the South Asia and Middle East/Persian Gulf. (See Figure 1)



(U) Totals: Combined Rail and Bus Attacks — Figure 1

110   87

Bus Attacks: 56%
Rail Attacks: 44%

Total = 197 (100%)

(U)

**(U//FOUO)** Terrorist groups aligned or in consultation with AQ have shown intent or demonstrated the capability to attack or engage in planning attacks against U.S. mass transit systems. ***TSA-OI assesses that AQ and its affiliates are the primary threat to mass transit systems in the Homeland.***
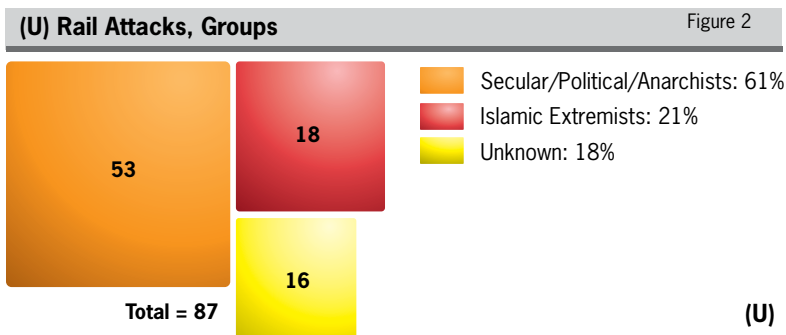
**(U//FOUO)** For both rail and bus attacks, terrorists with secular, political, or anarchistic motives accounted for 47 percent of the 197 attacks on mass transit systems.[4] Violent Islamic extremist groups—usually Sunni extremists—accounted for 20 percent of attacks. Shia and Jewish extremists accounted for 1 percent of all attacks. Perpetrators motivated by unknown causes were responsible for 32 percent of all attacks. (See Figures 2 and 3)

**(U) Rail Attacks, Groups** — Figure 2

| | |
|---|---|
| 53 | 18 |
| | 16 |

Secular/Political/Anarchists: 61%
Islamic Extremists: 21%
Unknown: 18%

**Total = 87** (U)

**(U) Bus Attacks, Groups** — Figure 3

| | |
|---|---|
| 45 | 39 |
| 21 | 2 / 1 |

Unknown: 43%
Secular/Political/Anarchists: 35%
Islamic Extremists (Sunni): 19%
Jewish Extremists: 2%
Islamic Extremists (Shia): 1%

**Total = 110** (U)
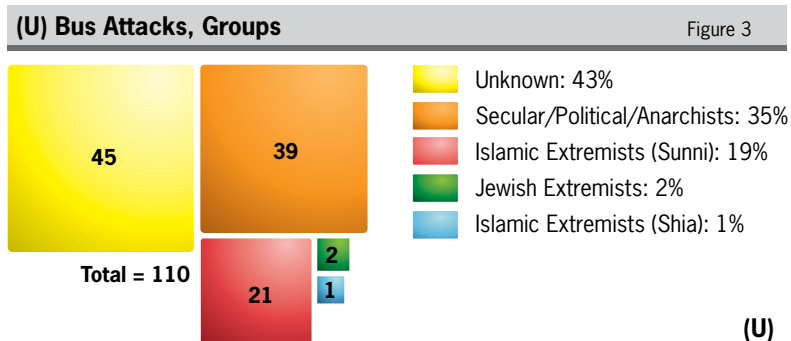
- **(U//FOUO) May 2010:** Faizal Shahzad[USPER] was arrested in connection with a failed attack on Times Square in New York City. Shahzad admitted to law enforcement authorities that had his New York City's Times Square attack been successful, he would have attacked other targets, including mass transit.[5] Shahzad was trained for his attack by Tehrik-e Taliban Pakistan, a group allied with AQ. [6,7]

- **(U//FOUO) March 2010:** In a video entitled "A Call to Arms," AQ spokesperson Adam Gadahn[USPER] emphasized how even unsuccessful attacks on Western mass transportation systems could bring cities to a halt and cost billions in increased security measures.[8]

- **(U//FOUO) February 2010:** Najibullah Zazi, a legal permanent resident of the United States from Afghanistan, admitted to bringing triacetone triperoxide (TATP) explosives to New York City in September 2009, as part of a plan to attack the New York City subway system. Zazi had previously traveled to Afghanistan and Pakistan to join the Taliban and fight against the United States and allied forces, and was recruited there by AQ to return to the United States and conduct a suicide bombing.[9]



(U) Adam Gadahn



(U) Najibullah Zazi

**(U//FOUO)** No U.S. domestic terrorist groups have expressed the intent to carry out an attack on U.S. mass transit systems.
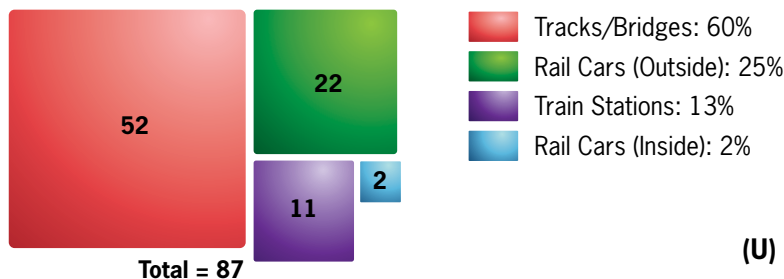
## (U) Targets

**(U//FOUO)** During this reporting period, terrorists conducted attacks on a variety of rail and bus targets overseas, with the majority being against railroad tracks and bridges, and buses targeted from the outside.

Sometimes a single operation included one or more targets (e.g., railcars were blown up inside a railway station or an IED damaged a bus stop and the bus). (See Figures 4 and 5)

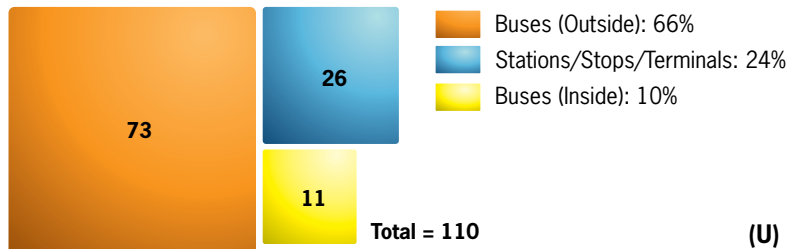- **(U) March 2010:** Suspected members of the Communist Party of India- Maoists (CPI-M) blew up a section of track that caused 10 passenger cars of the high-speed Rajdhani Express in India to derail.[10]

- **(U) December 2009:** Suspected members of the Revolutionary Armed Forces of Colombia (FARC) hijacked two buses with 10 passengers in Colombia. The hijackers later released the hostages and set fire to both buses.[11]

- **(U) November 2009:** An IED exploded under a section of railroad track as the Nevsky Express was passing by in Novgorod, Russia. The explosion derailed the train, killed 39 people, and injured 95. Russian authorities blamed militants from the Caucasus region.[12,13]

**(U) Rail Attacks, Locations** — Figure 4



52 | 22 | 11 | 2

- Tracks/Bridges: 60%
- Rail Cars (Outside): 25%
- Train Stations: 13%
- Rail Cars (Inside): 2%

Total = 87 (U)

**(U) Bus Attacks, Locations** — Figure 5



73 | 26 | 11

- Buses (Outside): 66%
- Stations/Stops/Terminals: 24%
- Buses (Inside): 10%

Total = 110 (U)



(U)

**(U) Nevsky Express**

**(U//FOUO)** Terrorists have also mounted significant attacks against subway and passenger rail systems in Western countries, to include Madrid, Spain (2004); London, England (2005); and Moscow, Russia (2010), as well as in Mumbai, India (2006, 2008), the South Asian region's largest sovereign, democratic, republic. There were no terrorist attacks on passenger trains or buses in the United States during this period. ***TSA-OI assesses that a terrorist attack against mass transit systems in the United States will most likely occur in a passenger rail car or station to generate the greatest number of casualties and fear.***
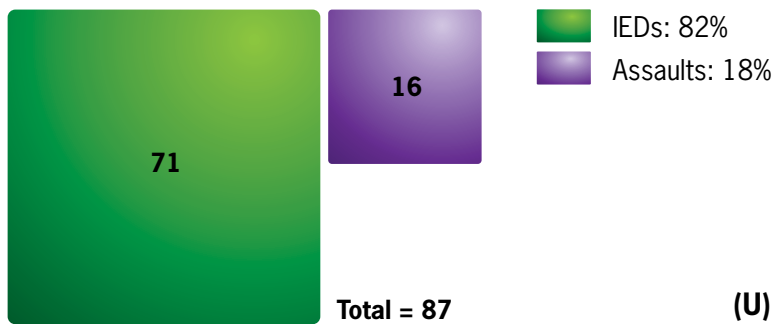
## (U) Tactics and Tradecraft

**(U//FOUO)** IEDs and armed assaults were preferred terrorist tactics in attacks against mass transit trains and buses overseas. Vehicle-borne improvised explosive devices (VBIEDs) were also used in a small number of mass transit attacks. (See figures 6 and 7, next page)

**(U) Improvised Explosive Devices**

**(U//FOUO)** IEDs were favored in the majority of attacks overseas against mass transit. During this reporting period, 87 attacks occurred on rail systems. Seventy-one of the 87 terrorist attacks (82 percent) involved the use of IEDS. ***TSA-OI assesses, based on WITS data, that IEDs would likely play a role in an attack against mass transit systems in the Homeland.***

- **(U) March 2010:** Two female suicide bombers from the Caucasus region of Russia detonated IEDs inside passenger rail cars at two of Moscow's metro stations, killing 40 people and injuring 102. The devices were constructed with 1.5 to 4 kilograms of RDX and metal shrapnel.[14,15]

- **(U) November 2009:** Unknown assailants in Atlantida, Honduras, detonated an IED in a bus, injuring one passenger and damaging the bus. Authorities responding to the incident disrupted a second IED found on the bus.[16]
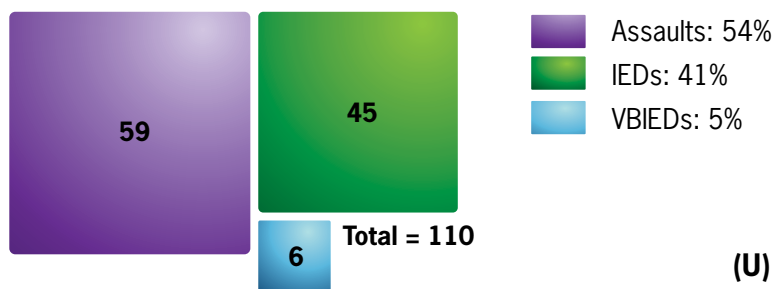
**(U) Vehicle-Borne Improvised Explosive Devices**

**(U//FOUO)** VBIEDs have been primarily employed against buses. A VBIED attack is defined as an attack involving a vehicle serving as the delivery means for explosives with an initiating device. A VBIED can also be used by a suicide bomber (SVBIED) employing a command switch to initiate the explosion.

**(U) Rail Attacks, Tactics**   Figure 6

71

16

IEDs: 82%
Assaults: 18%

**Total = 87**   **(U)**

**(U) Bus Attacks, Tactics**   Figure 7

59

45

6

Assaults: 54%
IEDs: 41%
VBIEDs: 5%

**Total = 110**   **(U)**

- **(U) March 2010:** An unknown perpetrator on a motorcycle carried out an SVBIED attack against a bus in Haifa, Israel, killing 1 person and injuring 12.[17]

- **(U) February 2010:** An SVBIED detonated next to a bus in Karachi, Pakistan, killing 13 people and injuring 60.[18,19]

- **(U) October 2009:** An SVBIED detonated next to two buses in Peshawar, Pakistan, killing 54 people and injuring 166.[20,21]



**(U) Aftermath of SVBIED explosion**

**(U//FOUO)** Multiple IEDs or VBIEDs were used in 16 of all attacks (8 percent) that occurred during the sampled time frame. Attacks that utilize multiple IEDs or VBIEDs—or both— are usually intended to kill passengers fleeing the initial attack and/or emergency response officials.

- **(U) May 2010:** Authorities in Gaya, India, safely defused two IEDs planted on railway tracks by members of CPI-M members. The IEDs each contained over 5 kilograms of explosives.[22]

- **(U) February 2010:** Assailants detonated a VBIED targeting a bus carrying Shia Muslims in Pakistan. Two hours later, assailants detonated a second VBIED targeting a hospital emergency area that was treating the victims of the first attack, killing 33 and injuring 167. Authorities safely defused a third IED that was planted inside a computer monitor in the hospital emergency room.[23]

**(U) Assaults**

**(U//FOUO) Assaults were terrorists' preferred method of attack against buses during the reporting period.** Assaults accounted for 59 of the 110 attacks against buses, and 16 of the 87 attacks against rail. Assaults are defined as attacks, usually short duration or direct action operations, that include tactics

such as hostage taking, kidnapping, assassination, arson, hijacking, or sabotage. These attacks are usually perpetrated by one person or small teams seeking to damage, destroy, deny service, seize or inflict casualties.

- **(U) May 2010:** CPI-M terrorists removed the metal bar—commonly referred to as a fish plate—that joins rails together, from a track in India. This caused a passenger train to derail and collide with an oncoming freight train in West Bengal, killing 148 people and injuring 150.[24]

- **(U) February 2010:** Extremists launched several grenades at a railway station in Russia. The attack damaged the building, but resulted in no injuries.[25,26]

- **(U) November 2009:** FARC insurgents stopped a bus at a road block in Narino, Colombia. The insurgents fired on the bus and set it ablaze, killing 6 people and wounding 13.[27,28]

(U)

**(U) Fish plate**

## (U) Cyber Attacks

**(U//FOUO)** There were no cyber terrorist attacks against the U.S. mass transit sector during the period covered by this assessment. There is no evidence that terrorists pose a cyber threat to mass transit systems.

**(U//FOUO)** Hackers motivated by nationalism but unassociated with any terrorist group have demonstrated an interest in attacking mass transit websites overseas. In August 2010, unknown perpetrators hacked the Indian Railway Catering & Tourism Corporation Ltd. (IRCTC) website, a company which handles railway reservations, causing a disruption in service.[29] In May 2009, a group of Moroccan hackers defaced the Israeli Dan Bus company website by inserting anti-Israeli slogans throughout the site.[30] Similar instances of defaced rail systems websites have also taken place in India.[31] Although common, the tactic of defacing a website poses little threat to the operations of mass transit systems.

## (U) Chemical Attacks

**(U//FOUO)** Terrorist organizations and violent extremists have used or considered the use of chemicals to attack mass transit systems. The Japanese cult, Aum Shinrikyo, in 1995 conducted attacks on the Tokyo, Japan, subway system with the nerve agent sarin. The attack killed 12 people and injured 3,800, hospitalizing 1,000 of them.[32]

**(U//FOUO)** There has never been a chemical attack in the United States, and there is no evidence that terrorists have ongoing plots to attack mass transit systems using chemical weapons. Operators of U.S. mass transit systems

**(U//FOUO) Note:** Within TSA, intelligence plays a major role in developing countermeasures to secure the mass transit sector. TSA-OI works closely with TSA's Transportation Sector Network Management (TSNM) division, security partners, and modal stakeholders to develop and implement effective security countermeasures. TSA-OI provides intelligence information in the form of briefings, written products, and teleconferences, allowing security partners to make informed and timely decisions to mitigate threats to mass transit stakeholders. TSNM also uses the intelligence provided by TSA-OI to identify technologies and procedures, and develop vulnerability assessments of each mass transit system that will enhance security in the mass transit environment.

are aware of the vulnerability for such an attack and are developing risk mitigation and countermeasure procedures to protect their systems.

## (U) Suspicious Incidents

**(U//FOUO)** Suspicious activities, including vandalism and sabotage of rail equipment and infrastructure, are a continuing concern for the rail industry. Reporting such incidents may help law enforcement and homeland security officials identify unusual behavior, trends, patterns, and possible criminal acts that may reveal potential terrorist interest or intent.

- **(U//FOUO) October 2010:** A Long Island Railroad train in New York struck a five-gallon container that had been placed on the track approximately 1,500 feet west of the Mastic-Shirley Station in Shirley, New York. Local police conducted a sweep of the area, with negative results, and a subsequent investigation determined the container was an empty gas can that was likely placed on the tracks by neighborhood children.[33]

- **(U//FOUO) May 2010:** A light rail train traveling south bound ran into a concrete vehicle stop that had been placed across the tracks near Baltimore, Maryland. A concrete stop had also been placed across the north-bound tracks in the same vicinity. There was a 30-minute interruption to light rail service in order to allow officials to remove the concrete obstacles from the tracks.[34]

## (U) Outlook

**(U//FOUO)** TSA-OI currently has no credible intelligence suggesting that transnational or domestic extremists are actively plotting an attack against the mass transit system in the Homeland. AQ and its affiliates remain the primary threat to U.S. mass transit systems, and remain intent on planning attacks against transportation systems inside the Homeland. TSA-OI assesses that IEDs and assaults will be the most likely tactics and that a passenger rail car or station will be the most likely targets for any future terrorist attack against the U.S. mass transit system. TSA-OI assesses with high confidence that the terrorism threat to U.S. mass transit system is medium.

*(U//FOUO) Prepared by the TSA-Office of Intelligence, Transportation Analysis Branch. For dissemination questions, contact TSA-OI_Production@tsa.dhs.gov.*

**Tracked by:** HSEC-02-03003-ST-2009, HSEC-02-03004-ST-2009, and HSEC-03-00000-ST-2009

*TSA-OI Mass Transit Modal Threat Assessment*

# (U) Endnotes

1    (U) Site Intelligence Group; 29 Oct 2009; "(U) Articles from Wuhayshi-Echo of Epics;" Eleventh Issue; (U)

2    (U) OSC, 07 March 2010; GMP20100307101001; "(U//FOUO) Al-Sahab Releases Adam Gadahn Video 'A Call to Arms';" (U)

3    (U) Joint Intelligence Bulletin; 28 Oct 2010; "(U//FOUO) Homegrown Violent Extremist Arrested for Plotting Attack on Northern Virginia Metrorail Stations" (U//FOUO)

4    (U) For this report; TSA-OI defines actors according to NCTC's categorization of perpetrators/types.

5    (U) NY Daily News; 19 May 2010; "(U) Faisal Shahzad Mug Shot Revealed; Times Square Bomber Also Eyed Grand Central, Financial District;" (U)

6    (U) Fox News Sunday; 10 May 2010; "(U) Transcript: John Brennan on 'FNS';" (U)

7    (U) www.state.gov; "(U) Designations of Tehrik-e Taliban Pakistan and Two Senior Leaders," 1 September, 2010;" (U)

8    (U) Site Intelligence Group; 7 March 2010; "(U) Al-Qaeda's American Spokesman Praises Fort Hood Shooter;" (U)

9    (U) DOJ Press Release; 22 Feb 10; "(U) Najibullah Zazi Pleads Guilty to Conspiracy to Use Explosives Against Persons or Property in the U.S., Conspiracy to Murder Abroad and Providing Material Support to Al-Qaeda;" (U)

10   (U) Jane's Terrorism and Insurgency Center; http://jtic.janes.com; 16 April 2010; (U)

11   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 200911374; (U)

12   (U) www.bbc.com; "(U) Bomb Caused Russian Train to Crash;" 28 November 2009; (U)

13   (U) www.bbc.com; "(U) Rail Crash Revives Russian Fears;" 28 November 2009; (U)

14   (U) OSC; CEP20100329964286; 29 March 2010; "(U) Metro Bombing Death Toll 37; Two female suicide bombers Suspected of Detonating Nail Bombs (Part 2); (U)

15   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 201007160; (U)

16   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 200910487; (U)

17   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 201006419; (U)

18   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 201005671; (U)

19   (U) www.pakitribune.com; "(U) Twin Blasts Rock Katachi. 26 Die, Over 80 Injured;" 5 February 2010; (U)

20   (U) OSC, SAP2091011950068; 10 October 2009; "(U) Most of Those Killed in Peshawar Suicide Attack Said to Be Afghans;" (U)

21   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 200909490; (U)

22   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov, ICN: 201009095; (U)

23   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov, ICN: 201005671; (U)

24   (U) Jane's Terrorism and Insurgency Center; http://jtic.janes.com; 28 May 2010; (U)

25   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 201005886; (U)

26   (U) www.news.az; "(U) Railway Station in South Russia Comes Under Fire;" 3 February 2010; (U)

27   (U) Worldwide Incidents Tracking System; http://wits.nctc.gov; ICN: 200910405; (U)

28   (U) OSC, LAP20091123003001, 23 November 2009; "(U) Highlights: Colombia Military/Guerilla/Paramilitary Activities 23 Nov 09;" (U)

29   (U) www.deccanchronicle.com; "(U) Hacked! 'Safe' railway website;" 30 August 2010; (U)

30   (U) www.allvoices.com; "(U) Moroccan Hackers Hit Dan Bus Site;" 7 May 2009 (U)

31   (U) www.expressindia.com; "(U) Hackers Deface Eastern Rail Website;" 25 December 2008; (U)

32   (U) Research Planning, Inc.; "(U) Aum Shinrikyo: Once and Future Threat?;" Emerging Infectios Diseases, Vol.5, No.4, July-August 1999; (U)

33   (U) TSIR-82931-2010-10-21 (U//FOUO/LES)

34   (U) TSIR-82341-2010-05-27 (U//FOUO)