



(U)

MASS TRANSIT & PASSENGER BUS ATTACKS (REISSUE)

TACTICS, TECHNIQUES AND PROCEDURES

10 NOVEMBER 2011

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(U) Scope

(U//FOUO) The Transportation Security Administration Office of Intelligence (TSA-OI) is reissuing this product, originally released on 7 April 2011, in advance of the upcoming holiday season to remind stakeholders of tactics, techniques and procedures (TTPs) used worldwide to attack mass transit and passenger bus systems.

(U//FOUO) This TSA-OI assessment is intended to provide a review of the terrorist TTPs used to conduct attacks against mass transit bus systems from 2004 to 2010. For the purpose of this assessment, mass transit bus systems include buses, stations, and bus stops.¹ This is one in a series of products released since 2010 focusing on the TTPs used to attack mass transit systems. This assessment was produced to help security managers and stakeholders evaluate the effectiveness of and vulnerabilities in mass transit bus security programs, plans, and activities.

(U) Source Summary Statement

(U//FOUO) Much of the information and conclusions presented in this assessment have been derived from information found in the National Counterterrorism Center's (NCTC) Worldwide Incidents Tracking System (WITS) and the Jane's Terrorism and Insurgency Center Database. TSA-OI reviewed passenger bus-related information from 1 January 2004 to 31 December 2010. NCTC launched the WITS database tracking system in 2004. Other information found in this assessment is derived from intelligence and open source reporting with a cutoff date of 31 December 2010. Analytical confidence levels in the key judgments—mainly based on the strength of the sources used—are in the “high” and “moderate” range.

(U) Key Findings

(U//FOUO) TSA's Office of Intelligence (TSA-OI) assesses that although counterterrorism pressure has weakened al-Qa'ida (AQ) and al Qa'ida in the Arabian Peninsula (AQAP), both organizations represent an enduring and evolving threat and remain committed to attacking the Homeland, including the transportation sector. Both organizations have targeted commercial aviation and AQ has repeatedly plotted to attack mass transit. We also remain concerned about the threat posed by homegrown violent extremists (HVE) or lone offenders inspired by AQ's violent extremist ideology to launch attacks against less secure targets, such as mass transit and passenger bus systems.^{2,3}

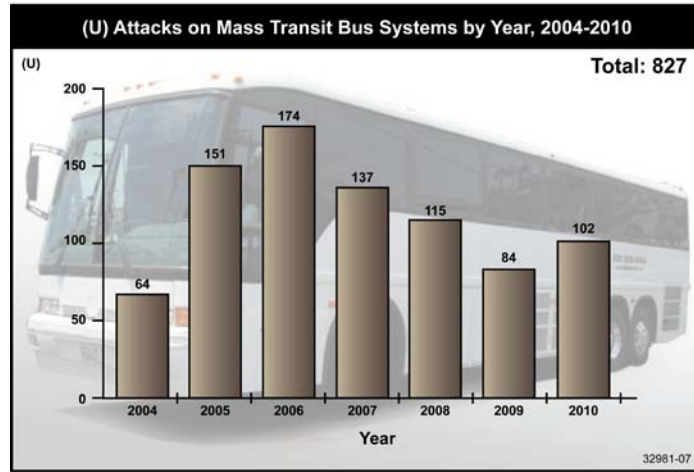
(U//FOUO) Tactics, techniques, and procedures used by terrorist groups worldwide could serve as a model for an attack in the Homeland. The current threat level for the mass transit sector remains at medium.

- (U//FOUO) Terrorist groups have used a wide variety of weapons and tactics in attacks on mass transit bus systems; improvised explosive devices (IEDs) have been the most common weapon used.
- (U//FOUO) Most IED attacks against mass transit bus systems occurred inside the bus and not on the bus routes or at bus stations.
- (U//FOUO) Terrorists appeared to use multiple IEDs in attacks to increase the number of casualties or target first responders.
- (U//FOUO) The number of terrorist attacks on mass transit bus systems remained consistent throughout the year, without any major increases in any particular month.
- (U//FOUO) TSA-OI's data review showed that most attacks occurred during the morning rush hour from 7 a.m. to 10 a.m., with the least amount of attacks occurring from 1 a.m. to 5 a.m.
- (U//FOUO) Secular, political, and anarchists groups conducted the most lethal attacks against mass transit bus systems. TSA-OI assesses that an attack against a mass transit bus system in the Homeland would most likely be carried out by individuals affiliated with a violent religious extremist group.

(U) TSA-OI Assessment: Mass Transit Bus TTPs

(U) Overview

(U//FOUO) According to the National Counterterrorism Terrorism Center’s (NCTC’s) Worldwide Incident Tracking System (WITS) and open source data, terrorists conducted at least 827 attacks on mass transit bus systems from 2004 through 2010. These attacks killed approximately 1,867, and injured 5,704. *None of these attacks occurred in the United States.*



(U//FOUO) During this time period, 48 percent of these attacks involved the use of improvised explosive devices (IEDs).⁴

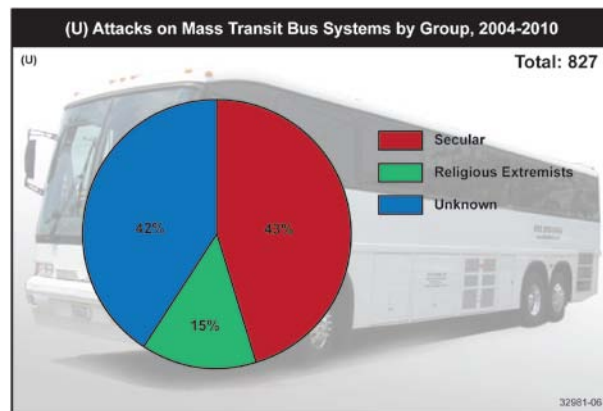
(U) Motives

(U//FOUO) TSA-OI analyzed terrorist groups most actively involved in attacks on mass transit bus systems to determine their motivation for these attacks. The most common group motivations included:

- (U//FOUO) **Secular, Political, and Anarchist groups**⁵: Attack mass transit bus systems overseas to support their separatist, insurgent, or political struggle.⁶
- (U//FOUO) **Violent Religious Extremist Groups**⁷: Attack mass transit bus systems overseas to generate fear, garner media attention, or create a negative economic impact on the host government.

(U) Actors

(U//FOUO) Of the known actors, secular, political, and anarchists groups conducted the highest number of *claimed* attacks against mass transit bus systems during 2004-2010. They were responsible for 43 percent of all attacks but 32 percent of all casualties. According to the reviewed data, the Revolutionary Armed Forces of Colombia (FARC) were the most active



group. Attacks by the FARC are isolated to the South American region,⁸ and the group does not pose a threat to the United States.

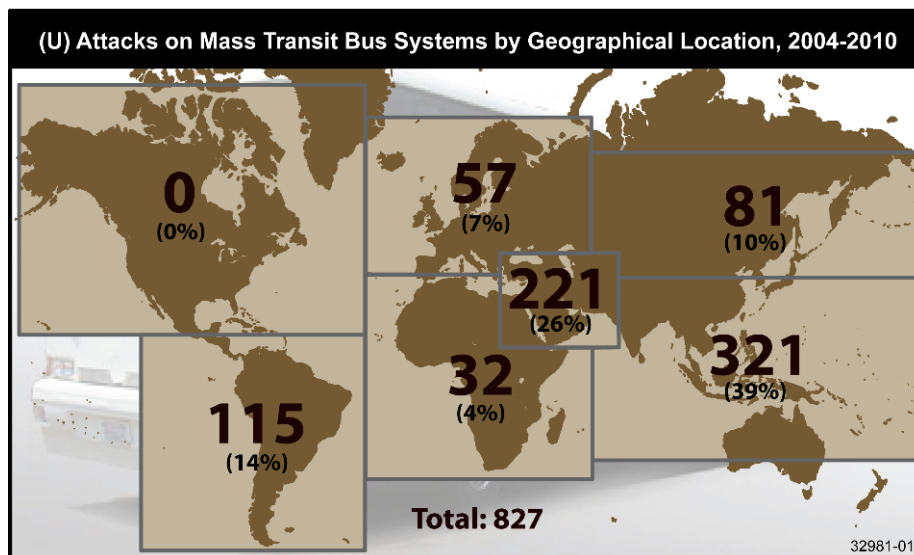
- **(U//FOUO) November 2009:** Suspected FARC members conducted an armed attack against a mass transit bus in the town of Nariño, Colombia, killing 6 people and injuring 12.⁹

(U//FOUO) Violent religious extremists groups were responsible for 15 percent of all *claimed* attacks and 23 percent of all casualties.¹⁰ According to the data, the Taliban, Islamic State of Iraq (ISI), Lashkar-e-Tayyiba (LT) in India, and the Chechnya-based Caucasus Emirate conducted the most attacks. These groups, however, tend to be locally focused and are unlikely to carry out attacks against the United States.¹¹

(U) Patterns

(U//FOUO) Location

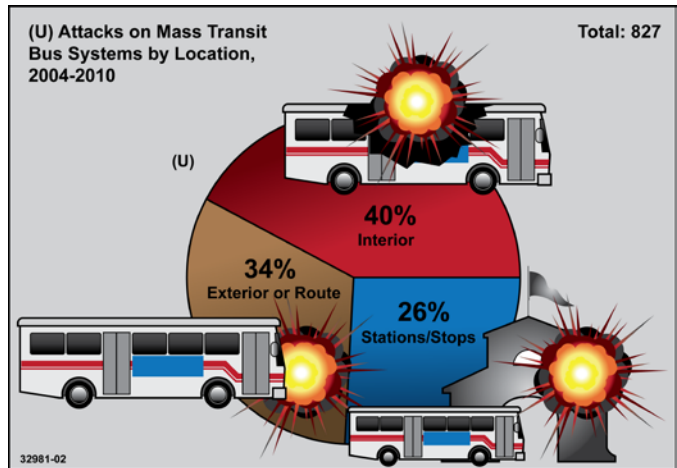
(U) From 2004 through 2010, most attacks against mass transit bus systems occurred in South Asia, followed by the Middle East and Persian Gulf, Central and South America, East-Asia Pacific, Europe-Eurasia, and Africa. *TSA-OI assesses that buses are the primary mass transit transportation mode utilized in Asia, the Middle East, and Latin America, which probably contributes to the high number of attacks in those regions.*¹²



(U) Attacks on Mass Transit Buses by Location within the System

(U//FOUO) TSA-OI assesses that mass transit bus systems are easy for terrorist groups to attack because they are open to the public, operate on predetermined and publicly available schedules, and travel along routes that can be difficult to patrol. For these reasons, bus mass transit systems will remain attractive targets for the foreseeable future.

(U//FOUO) Attacks occurring inside (interior) a mass transit bus comprised 40 percent of all attacks against mass transit bus systems.



- (U//FOUO) **July 2008:** Members of the Turkistan Islamic Movement detonated an IED on a bus in Kunming, China, killing 2 and injuring 14.¹³

(U//FOUO) **February 2007:** The driver of a bus in Baghdad detonated an IED after picking up passengers. The explosion killed 11 passengers and injured 12 others.¹⁴

- (U//FOUO) **July 2005:** A suicide bomber detonated an IED concealed in a backpack on a bus in London, killing 13 and injuring 110.¹⁵
- (U//FOUO) **February 2004:** Two Palestinian suicide bombers in Jerusalem detonated IEDs on a bus, killing 8 and wounding 62.¹⁶

(U//FOUO) Attacks targeting a mass transit bus from the outside comprised 34 percent of all attacks against mass transit bus systems. TSA-OI defines an attack outside a bus as an attack that occurs on the exterior of the bus or along the route (does not include a station or stop).

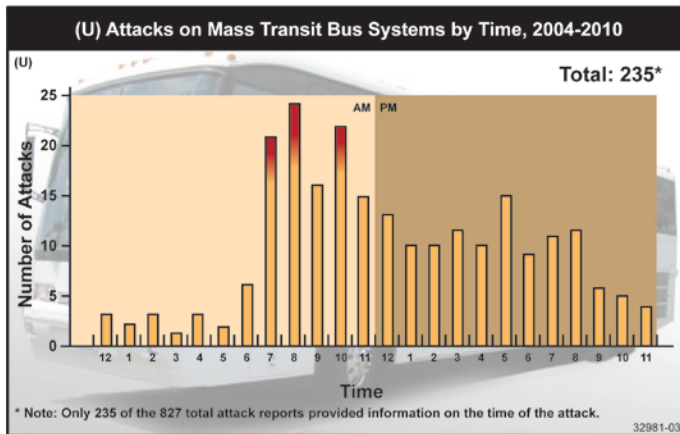
- (U//FOUO) **October 2007:** An unknown group detonated a roadside IED as a bus passed near Mir Ali, Pakistan, killing 14 people and injuring 5.¹⁷
- (U//FOUO) **November 2005:** Members of the Lord's Resistance Army in Uganda fired upon a bus, causing the bus to overturn and catch fire, killing 12 passengers and injuring 5.¹⁸
- (U//FOUO) **October 2005:** A suicide bomber detonated an IED strapped to his body near a bus in Diyala, Iraq, killing five people and injuring three.¹⁹

(U//FOUO) Attacks at stations or stops comprised 26 percent of all attacks against mass transit bus systems.

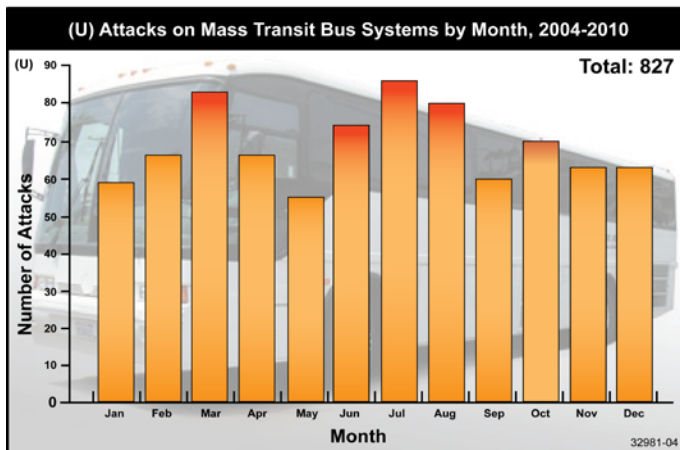
- (U//FOUO) **December 2009:** An IED was detonated outside a bus station in Babil, Iraq. Twenty-five minutes later, a vehicle-borne improvised explosive device (VBIED) was detonated in the same area, killing 25 and injuring 110.²⁰
- (U//FOUO) **April 2008:** The Liberation of Tigers Tamil Eelam (LTTE) detonated an IED at a bus stop in Sri Lanka, killing 24 and injuring 33.²¹
- (U//FOUO) **September 2006:** A timed-IED exploded in a trash can at a bus stop in Balochistan, Pakistan, killing 6 and injuring 17.²²

(U) Attacks on Mass Transit Bus Systems by Time of Day and Month

(U//FOUO) The available data suggests that the morning rush hour—from 7 a.m. to 10 a.m.—was the most likely time for an attack. The data also suggests 5 p.m. to 8 p.m. was the next most likely period for an attack.²³



(U//FOUO) The most active month was July (86 attacks) and the least active month was May (55 attacks). Attacks against mass transit bus systems remained fairly constant throughout the year regardless of regional weatherⁱ patterns.²⁴

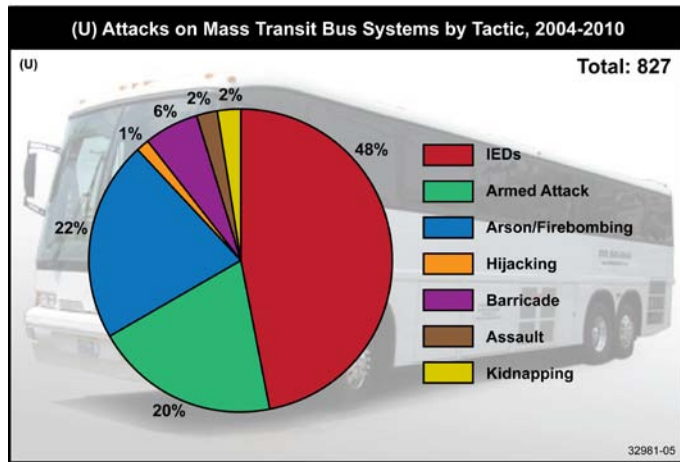


ⁱ (U//FOUO) TSA-OI reviewed global weather data for the northern and southern hemispheres and determined there was no likely correlation between hemispherical climate patterns and attacks to mass transit bus systems.

(U) Weapons and Tactics

(U) IEDs

(U//FOUO) During the assessed period, IEDs were used in 48 percent of all attacks against mass transit bus systems. IEDs require little manpower to manufacture, are easy to transport, and are effective tools for killing passengers, delaying service, or damaging infrastructure. IEDs used against mass transit bus systems were detonated using a variety of methods, including command-operated, time-delayed and pressure-release devices.²⁵



(U) Picture of a sticky bomb with a mobile phone detonator used by the Islamic State of Iraq.

- (U//FOUO) **December 2009:** A command-operated “sticky bomb” attached to the exterior of a bus exploded in Kirkuk, Iraq, killing 3 and injuring 10.^{26,27}
- (U//FOUO) **October 2006:** A pressure-release IED detonated when it was run over by a bus in Tarin Kowt, Afghanistan, killing 14 and injuring 3.²⁸
- (U//FOUO) **August 2006:** A timed-delayed IED exploded in a bus in Kirkuk, Iraq, killing 3 and injuring 10.²⁹

(U) VBIEDs

(U//FOUO) VBEIDs were another tactic terrorist groups used to attack mass transit bus systems. Although VBEIDs comprised only seven percent of all IED attacks against mass transit bus systems, these attacks can cause greater damage and prove deadlier than a typical IED attack.

- (U//FOUO) **October 2009:** A suicide bomber detonated a VBIED near two buses at the Khyber Bazaar in Peshawar, Pakistan, killing 54 and injuring 166.³⁰
- (U//FOUO) **August 2005:** Five suicide bombers conducted a coordinated attack in Baghdad, Iraq, using VBIEDs against two bus stations, the emergency personnel who responded to the incident, and the hospital treating the survivors. The five attacks killed 76 and injured 95.³¹

- **(U//FOUO) June 2005:** A suicide bomber detonated a VBIED near a bus station in Baghdad, Iraq, killing 15 and injuring 20 others.³²

(U) Other Attack Methods

(U//FOUO) Terrorist groups used other attack methods, such as armed attacks, assaults, hijackings, and kidnappings, to attack mass transit bus systems.

(U) The Use of Multiple IEDs in Attacks on Mass Transit Buses, Stations, and Stops

(U//FOUO) Since 2004, coordinated, multiple IEDs have made up almost five percent of all IED attacks occurring against mass transit bus systems.

- **(U//FOUO) December 2007:** Suspected LTTE members detonated an IED as a bus approached the stop, killing 16 and injuring 23. Authorities safely defused two other IEDs nearby.
- **(U//FOUO) February 2005:** The Abu Sayyaf group conducted two attacks with leave-behind IEDs on a bus and a station in Davao City, Philippines, killing 7 and injuring 150.
- **(U//FOUO) February 2005:** A suicide bomber detonated an IED strapped to his body after boarding a bus, killing 24 and injuring 40. Another IED was detonated as police responded to the initial attack. No group claimed responsibility, although it was widely believed violent religious extremists were responsible.
- **(U//FOUO) August 2004:** Two suicide bombers simultaneously blew up two buses in Beersheba, Israel, killing 16 and injuring 85.

(U) Indications and Warnings

(U//FOUO) Indicators of terrorist preoperational activity or attack preparations targeting mass transit bus systems may include the following. *(Note: A single indicator may not be suspicious in itself; one or more, in combination, may signify a suspicious activity.)*

- **(U//FOUO)** Unattended bags left on buses, or in stations or stops, to observe reaction times, procedures, and actions of first responders, bus employees, passengers and general public;
- **(U//FOUO)** Passengers who wear oversized coats, dress inappropriately for the weather conditions, or have carry-on baggage that is excessively bulky, stained or emitting fumes;
- **(U//FOUO)** A pattern of bomb threats against a bus, station or stop;
- **(U//FOUO)** Theft of transit agency identification cards, uniforms or equipment; and
- **(U//FOUO)** Encounters with people posing as bus drivers or transit employees.

(U) Outlook

(U//FOUO) In its 2010 Mass Transit Modal Threat Assessment³³, TSA-OI assessed with moderate confidence that the current terrorist threat to mass transit bus systems in the United States is “medium” based on the high number of attacks worldwide.

(U//FOUO) The tactics, techniques, and procedures reviewed in this assessment could help to serve as a model for attacks in the Homeland. Should an attack occur against a mass transit bus system, TSA-OI assesses it would likely be carried out by a violent religious extremist group using a command- or timed-delayed IED inside a bus or station during the morning rush hour or other period of high ridership. TSA-OI does not rule out the use of a VBIED, multiple IEDs, or armed attacks/hijackings in an attack as an alternate course of action. ***Bus owners, operators, and employees should be aware of potential attack indicators and remain vigilant at all times.***

(U//FOUO) Prepared by TSA’s Office of Intelligence. For dissemination questions, contact TSA-OI Production and Dissemination Branch, TSA-OI_Production@tsa.dhs.gov.

(U) Tracked by: HSEC 8.1.1

¹ (U) Mass transit buses are defined as a mode of transit service characterized by a roadway or vehicle that operates on a street or road on a fixed route or regular service. This defined in the APTA 2009 Public Transportation Fact Book Glossary; apta.com; 1 April 2009.

² (U) SITE Monitoring Service, Jihadist Threat; 2011051301; 13 May 2011; “(U) Jihadist Urges Lone-Wolf Attacks, Hacking in Revenge for bin Laden;” (U)

³ (U) SITE Monitoring Service, Jihadist Threat; 2011101404; 14 October 2011; “(U) Jihadist Urge Muslims in the West to Avenge Awlaki Killing;” (U)

⁴ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

⁵ (U) Definitions derived from WITS Data.

⁶ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 25 January 2010; (U)

⁷ (U) Definitions defined from WITS Data and analytical research.

⁸ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

⁹ (U) <http://colombiareports.com>; (U) Six dead in FARC bus attack; 20 November 2009; (U)

¹⁰ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

¹¹ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 17 June 2007; (U)

¹² (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

¹³ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 21 July 2008; (U)

¹⁴ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 February 2007; (U)

¹⁵ (U) www.bbc.com; (U) 7 July Bombings; Tavistock Square; 8 July 2008; (U)

¹⁶ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 22 February 2004; (U)

¹⁷ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 3 October 2007; (U)

¹⁸ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 21 November 2005; (U)

¹⁹ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 25 October 2005; (U)

²⁰ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 24 December 2009; (U)

²¹ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 4 April 2008; (U)

²² (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 8 September 2006; (U)

²³ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

²⁴ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

²⁵ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 1 August 2010; (U)

²⁶ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 23 December 2009; (U)

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²⁷ (U) <http://en.aswataliraq.info>; (U) Civilian killed, 3 wounded as sticky bomb explodes in Baghdad; 12 December 2009; (U).

²⁸ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 27 October 2006; (U)

²⁹ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 30 August 2006; (U)

³⁰ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 9 October 2009; (U)

³¹ (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 17 August 2005; (U)

³² (U) Worldwide Incidents Tracking System; <http://wits.nctc.gov>; 22 June 2005; (U)

³³ (U) TSA-OI Mass Transit Threat Assessment; MTA-83413; 2 March 2011; (U//FOUO)

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