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Jenkins, Brian

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THE TERRORIST THREAT TO SURFACE TRANSPORTATION



Brian Michael Jenkins
National Transportation Security
Center
Mineta Transportation Institute

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TERRORISTS GET GOOD

“RETURN ON INVESTMENT”

- Stavropol – December 5, 2003 (1 bomb – 42 killed)
- Moscow – February 6, 2004 (1 bomb – 40 killed)
- Madrid – March 11, 2004 (10 bombs – 191 killed)
- Russia – August 31, 2004 (1 bomb – 10 killed)
- London – July 7, 2005 (4 bombs – 56 killed)
- Mumbai – July 11, 2006 (7 bombs – 207 killed)
- Average fatalities per bomb – 23
- Median fatalities per bomb - 19

TRANSPORTATION TARGETS IN JIHADISTS' PLAYBOOK

- January 2003 – Plot to release cyanide on New York's subways
- August 2004 – Plot to bomb subway stations in New York
- April 2005 – Plot to spread ricin on Heathrow express
- July 2005 – Failed attack on London subway
- August 2005 – Plot to release deadly gas in London subway

TRANSPORTATION TARGETS IN JIHADISTS' PLAYBOOK (cont.)

- November 2005 – Plot to bomb train stations in Melbourne or Sydney
- April 2006 – Plot to blow up a commuter train in Milan
- April 2006 – Plot to seize hostages aboard a passenger ship or ferry in the Philippines
- July 2006 – Plot to blow up subway tunnels in New York
- August 2006 – Bombs discovered aboard a train in Germany

PUBLIC SURFACE TRANSPORTATION TARGETS ATTRACTIVE TO TERRORISTS

- **Easy access and escape**
- **Congregations of strangers guarantee anonymity**
- **Crowds in contained environments vulnerable to conventional explosives and unconventional weapons**
- **Attacks cause alarm and great disruption**

TERRORISTS WHO ATTACK TRANSPORTATION SYSTEMS OFTEN SEEK SLAUGHTER

- Two-thirds of attacks intended to kill
- 37 percent result in fatalities (compared to 20-25 percent of terrorist attacks overall)
- 75 percent of fatal attacks involve multiple fatalities; 28 percent involve 10 or more fatalities
- Every attack in past two years intended to kill
- Bombs kill an average of 15-20 persons

TARGETS OF ATTACKS

- Buses (32%), tourist and school buses (8%) and bus terminals (7%) = 47%
- Subways and trains (26%), stations (12%), and rails (8%) = 46%
- Bridges and tunnels (5%) and other (2%) = 7%

TACTICS USED

- Bombings (60%), bombs thrown (4%) = 64%
- Ambushes, armed assaults (11%)
- Standoff attacks, shots fired (9%)
- Hostage situations (5%)
- Mechanical sabotage (5%)
- Arson (3%), threats (4%), other (1%)

TERRORIST THREAT ANALYSIS HAS FOCUSED ON PEOPLE NOT INFRASTRUCTURE

- Jihadists have contemplated attacks on bridges and tunnels (New York 1993, Brooklyn Bridge scheme in 2003) however...
- No terrorist attacks on bridges, tunnels, or roads
- Only five percent of 900 surface transportation attacks involve bridges or tunnels
- Almost all in on-going conflict zones where smaller bridges have been blown up

MAJOR LESSON OF 9/11 CASE STUDY "SAVING CITY LIFELINES"

- **Crisis management plans, supported by regular tabletop and field exercises, are critical**

PRELIMINARY LESSONS LEARNED FROM MADRID— TERRORIST PLANNING

- Planning for attack began in late 2002 or early 2003
- Specific operational planning in 2004
- Locals knew schedules—planned to the minute
- Attacks clearly intended to kill (10 kgs of explosives plus 23 ounces of bolts and nails)
- Trial runs?
- Terrorists did not travel with assembled bombs

PRELIMINARY LESSONS LEARNED FROM MADRID— WARNINGS

- No prior “chatter”
- Terrorist propaganda was a warning
- Publicity surrounding thwarted ETA attacks
- Partially-assembled bomb found day before a possible indicator

PRELIMINARY OBSERVATIONS FROM LONDON ATTACKS

- Partially inspired by Madrid
- Prior plots involving public transportation
- No prior indicators—cells beneath radar
- CCTV does not deter suicide attackers
- CCTV helped in rapid identification, confirmation of suicide, may have accelerated action by second cell
- Response well done but still some shortcomings
- Random search procedures accepted

ADDITIONAL ISSUES ARISING IN LONDON ATTACKS

- Reaction time?
- Diagnosis
- Communication failure
- Handling massive amounts of information
- Informing the public
- Getting people home
- Ability of second cell to penetrate heightened security
- Psychological effects of second bombing

THE THREAT IS REAL

- Terrorist adversaries think in terms of endless war—long-term planning horizons
- Remain determined to carry out attacks—they are opportunistic
- Until jihadist enterprise completely destroyed, operative presumption must be that attack will occur at some time
- Surface transportation clearly part of terrorist target set

SOME AXIOMS ABOUT SECURITY AGAINST TERRORISM

- Since terrorist threat not easily quantifiable, difficult to determine “right” level of security
- Cost-benefit analysis doesn’t work
- Burden of security determined more by size and number of targets than magnitude of threat
- Security against terrorism almost always reactive
- Security by itself does not prevent terrorism
- Security does work—it displaces the risk
- Security measure more easily increased than reduce

DESIRABLE ATTRIBUTES OF SURFACE TRANSPORTATION SECURITY

- Ability to increase and decrease security (flexibility)
- Emphasis on technology rather than personnel
- Preventive possibilities focus on response training and crisis planning

CONCLUSIONS

- Threat is real, but not easily quantifiable; difficult to determine the “right level of security.” Security will be reactive.
- Effective security includes not only deterrent and preventive measures, but all efforts to mitigate casualties, damage, and disruption.
- Deterrence and prevention difficult to achieve given nature of terrorism and inherent vulnerability of public transportation. More attention to measures to mitigate casualties, damage, and rapidly restore service.

CONCLUSIONS (cont'd)

- Security measures must be flexible.
- Crisis management essential.
- Security should be incorporated in design and construction of transportation systems to discourage attack, facilitate surveillance, mitigate consequences, and contribute to emergency response.

CONCLUSIONS (cont'd)

- Advance planning essential to effective response to threats and incidents.
- Multi-mode communications are essential. Communication breakdowns appear to be common problem.
- Must communicate accurate information to users and public; provide continuing information and assistance to relatives and friends of victims—an extremely difficult task, not always done well.