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Carnage Interrupted: An Analysis of Fifteen Terrorist Plots against Public Surface Transportation, Research Report 11-20

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Carnage Interrupted: An Analysis of Fifteen Terrorist Plots Against Public Surface Transportation



MTI Report 11-20



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REPORT 11-20

CARNAGE INTERRUPTED: AN ANALYSIS OF FIFTEEN TERRORIST PLOTS AGAINST PUBLIC SURFACE TRANSPORTATION

Brian Michael Jenkins
Joseph Trella

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EXECUTIVE SUMMARY

This report examines 13 terrorist plots against public surface transportation that were uncovered and foiled by authorities between 1997 and 2010 and two failed attempts to carry out attacks. The report focuses on terrorist plots in the West.

Case studies are presented of the following plots:

- 1997 – Flatbush plot (New York)
- 2002 – Poison gas on London Underground plot
- 2003 – Heathrow Express ricin plot (London)
- 2003 – New York subway poison gas plot
- 2004 – London Tube poison gas plot
- 2004 – Herald Square bomb plot (New York)
- 2005 – Attempted train and bus bombings in London
- 2005 – Melbourne and Sydney terrorist plots
- 2006 – Milan Metro bomb plot
- 2006 – PATH tunnel plot (New York)
- 2006 – Attempted German train bombings (Cologne)
- 2008 – Barcelona Metro bomb plot
- 2008 – Bryant Neal Vinas case (New York)
- 2009 – Zazi bomb plot (New York)
- 2010 – Washington Metro bomb plot (Washington, D.C.)

Most of the major terrorist attacks and probably at least some of these plots are familiar to many in 2012, but for a growing number of people, 9/11 is already a distant historical event. To future readers, this report may appear to be a mere assemblage of terrorist plots against one category of targets—public surface transportation. These plots, however, occurred in a unique historical context. They were part of an ongoing global campaign of terrorism directed against a variety of targets in Western nations that were branded by jihadists as enemies of Islam. Heading the target list were those nations that had deployed troops to Afghanistan and Iraq.

The terrorist campaign was inspired by continuing exhortations from al Qaeda leader Osama bin Laden and other al Qaeda communicators, and it was waged by individuals who subscribed to al Qaeda's ideology, some of whom had trained in its training camps or had learned from information posted on its websites and other jihadist websites. This is not to say that the campaign was centrally directed.

Some of the plots were instigated by al Qaeda or by Pakistan's Taliban. Others were merely inspired by al Qaeda's ideology. All, however, appear to have been the products of local initiative—individuals or small groups determined to be part of the global armed struggle, with or without al Qaeda's direct support. The campaign reached a high point in mid-decade, with three major terrorist attacks on trains in Madrid, London, and Mumbai, and seven foiled plots between 2004 and 2006, after which it declined.

The early part of the campaign (from 2001 to 2004) focused on various forms of chemical attack, reflecting al Qaeda's own exploration of chemical and biological warfare, possibly inspired by the 1995 nerve gas attack on Tokyo's subways, which killed 12 people and sent more than 5,000 to hospitals. Three of the four plots to use chemical-biological weapons involved poison gas and one involved ricin.

Given the difficulty of acquiring chemical or biological substances in large quantities, it seems doubtful that any of the plots would have resulted in mass casualties. (In fact, none of the plotters had yet acquired any poisonous materials, except for a handful of castor beans.) Yet sensationalist news media and government officials tended to exaggerate both the capabilities of the terrorists and the consequences of their intended schemes. In part, this was a manifestation of post-9/11 nerves, but the 9/11 attacks had also altered perceptions of plausibility.

To be fair, in autumn 2001, there had been an attack with anthrax letters, which, although killing few, caused dangerous contamination and widespread disruption. The anthrax attack was not connected with al Qaeda, but the discovery of laboratories and evidence of chemical-weapon tests having been conducted at al Qaeda's training camps in Afghanistan made it clear that the architects of 9/11 were pursuing an active chemical and biological weapons development effort. It is therefore not difficult to understand official apprehension.

Even if the plots were no more than talk, they say something about terrorist thinking at the time. Al Qaeda's global terrorist campaign was still in its early stages. The 9/11 attacks encouraged imagination and audacity. Armed with superficial knowledge, the plotters understood that the crowded, confined spaces of subway trains offered an ideal venue for the dispersal of poison gas and lethal toxins. Even if only handfuls of people died, the novelty and terrible effects of these invisible weapons would cause panic and widespread alarm.

None of the plots succeeded, and by mid-decade, the poison fad was over. Meanwhile, terrorists in Madrid in 2004 and London in 2005 demonstrated that by using more-reliable explosive devices on trains and subways, terrorists could achieve the slaughter they desired. Multiple bombs became the new prototype for terrorist attack. This pattern continued through the end of the decade.

Jihadist terrorist manuals emphasize iconic targets—landmarks that have emotional value—but in the plots discussed here, target selection was a local decision. In six of the cases, the plotters considered a variety of targets before settling on public transportation. Those targets included ferry terminals, landmark bridges, stock exchanges, sports stadiums, a shopping center, an entertainment complex, a church, police stations, and government buildings. Bringing down bridges and blowing up stock exchanges were grandiose fantasies far beyond the capabilities of these would-be terrorists, but terrorist planners typically start with an ambitious catalog of targets. As they become more serious about carrying out an attack, operational requirements oblige them to settle for more-realistic scenarios and targets.

Limited means may also be a factor in selecting public-transportation targets. In the Zazi bomb plot, the terrorists' ability to make only a small amount of explosives pushed the group toward targeting crowded subways, where it could still hope to achieve a high body count.

Although more than 47 percent of all attacks on public surface transportation are directed against buses, bus terminals, and bus stops, all of the terrorist plots discussed here were directed against major city metro and commuter rail systems. The single plot involving three trains and a bus was an attempt to imitate an earlier attack.

One plot was intended to breach the subway tunnels under the Hudson River in New York. Bombs were to be carried onto the subway train and detonated when the train was under the river. Three plots targeted subway stations.

The operations envisioned by the plotters were by their very nature indiscriminate attacks aimed simply at racking up high body counts, but in several cases, the plotters sought to ensure a high percentage of a particular group among the casualties. The Flatbush plotters chose a particular subway line because it would have a preponderance of Orthodox Jewish passengers. The would-be bomber of the Washington, D.C., Metro selected stations where there would be many military riders.

In some cases, the plotters chose locations where the attack would have secondary effects, thereby increasing the body count. Beyond that, they simply sought busy stations—major transportation hubs where an attack would cause the greatest disruption.

Ten of the plots involved bombs, four involved the dispersal of lethal chemicals or ricin, and in one, the method of attack had not yet been decided. Police worry a great deal about individual gunmen or groups of shooters, but none of the plots discussed in this study involved armed assaults.

Suicide bombings were contemplated in at least five of the plots. Suicide attacks were definitely not part of the plan in four cases. It is not clear whether the other plots would have been suicide attacks.

Most of the plots were interrupted before the plotters got around to deciding the date and time of the attack. We know that the Milan plotters wanted their attack to be carried out on the eve of Italian elections to affect the election results, as the 2004 Madrid attacks had done in Spain. Plotters in Australia talked about carrying out their attacks during Australia's final football match or Grand Prix Formula 1 race. The German terrorists initially wanted their attack to coincide with the World Cup football matches.

Information on the time of day the plotters planned to carry out their attack was available in six of the plots. In the Flatbush plot and the London Tube poison gas plot, the attackers chose the morning rush hour. In the Washington Metro bomb plot, the attacker recommended the evening rush hour. In the Zazi plot, the plotters also spoke of rush hour. The successful terrorist attacks in Madrid in 2004 and London in 2005 took place during the morning rush hour, while the 2006 Mumbai attack occurred during the evening rush hour. Morning

rush-hour attacks on crowded trains and buses historically have produced the greatest numbers of casualties.

In two of the plots, authorities arrested a single individual. In three others, two persons were arrested. Four plots involved three to five people, and eight or more persons were arrested in five plots, although it is not clear that all of those arrested would have participated in the actual attack. In one case, the number of likely attackers is unknown. The larger plots were outside the United States.

Seven of the plots involved homegrown terrorists who planned the attacks on their own initiative. Five of the plots were foreign-directed or assisted. Al Qaeda was linked to at least three of the plots. Some of the Sydney cell members had connections with Lashkar-e-Taiba, while the Barcelona plotters were connected with the Pakistan Taliban. The PATH tunnel plotters were members of an autonomous terrorist group based in Lebanon, although it, too, may have had an al Qaeda connection. In two of the cases, it is not clear whether there were foreign connections.

In most cases, the plotters' sources of information were their own observations—they were personally familiar with the targets as passengers. The plotters conducted reconnaissance in at least two cases, using ordinary cameras or video recorders. Readily available information provided the rest of what they needed for the operation. None of the attacks, insofar as is known, involved inside assistance.

Intelligence was a key factor in foiling most of the plots. Eleven plots were uncovered by intelligence operations. One was uncovered when a frightened roommate of the bombers told police about the impending attack, and one was reportedly called off by the terrorists' leader abroad.

Most of the plots were interrupted at an early stage. Five plots were in the mere-mention or discussion stage or in very preliminary planning when arrests were made. Ingredients for explosives had been or were being acquired in four cases. In the one sting operation (the Washington Metro plot), the FBI provided the attacker with what he believed to be an improvised explosive device. Two plots had progressed to an actual attempt (the attempted Tube and bus bombings in London and the attempted German train bombings). Both attempts failed because of faulty bomb construction. It is not clear how far the planning had progressed in the New York subway poison gas plot before it was reportedly called off by al Qaeda's second in command, Ayman al-Zawahiri.

The fact that so many of the plots hardly got beyond the discussion phase limits what is known about how the plotters viewed security. The overall evidence, however, suggests that they were undeterred by the security measures in place. Where awareness of security does appear in the plots, it is a cause for caution, perhaps a reason to modify a date or location, not a reason to call off the attack.

The plotters in these cases saw surface transportation as a target offering them easy access and escape (for operations that were not intended to be suicide attacks). Indeed, there were very few security measures in place to protect public surface transportation

beyond routine police patrols and some closed-circuit television (CCTV) coverage when most of these attacks were being planned, even after 9/11.

Security for surface-transportation protection did not really become a major concern until after the 2004 Madrid bombing. Even then, security resources remained limited. Increased police patrols in stations and on trains, random passenger screening, explosives-sniffing dogs, and the installation of working cameras came along slowly.

One jihadist manual advised would-be terrorists to avoid train stations with CCTV cameras, which suggests that the cameras have some deterrent value. It is, of course, more difficult to deter suicide bombers, but they are harder to recruit than individuals who plan to escape alive. CCTV thus contributes to security indirectly, by raising the threshold for recruiting attackers. CCTV also played an important role in helping to identify attackers who fled the scene of the attack.

Security is known to have affected terrorist planning in at least two of the plots. The Herald Square plotters adopted disguises to avoid attracting attention to their reconnaissance, and the two men who attempted to blow up the German trains delayed their attempt because of increased security on the trains during the football finals.

I. INTRODUCTION

We can learn much from terrorists' failures. Not only do they increase the total number of cases to be examined—there are far more terrorist failures than terrorist successes—they also provide insights into terrorist ambitions, clues to possible new directions in tactics and weapons, and details on how terrorist plots evolve, which are often more difficult to discern when an attack has succeeded and its perpetrators are dead or have fled.

This report examines 13 terrorist plots against public surface transportation that were uncovered and foiled by authorities between 1997 and 2010 and two failed attempts to carry out attacks. Certainly, this is not the total universe of foiled or failed terrorist plots in these years.¹ We selected these 15 on the basis of what is known about them and the accessibility of information.² The report focuses on terrorist plots in the West. The United States, with seven plots, and the United Kingdom, with four plots, are probably overrepresented, but these two countries figure prominently as targets of terrorism. In addition, American and British officials have dealt with terrorist plots through publicized arrests and trials, which provide additional information.

Although motive was not a criterion in the selection of the plots, all but one involve individuals or groups inspired by al Qaeda's ideology of violent global jihad against the West. The exception is the 1997 Flatbush plot, in which two terrorists, both of whom had connections with Hamas, angered by events in Palestine, simply wanted to kill as many Jews as possible to express their opposition to U.S. support for Israel.³ (There is, however, no evidence that Hamas was behind the plot.) Other sources suggest that the Flatbush plotters wanted to force the release of jailed Islamist terrorists in the United States, including Ramzi Yousef, who participated in the 1993 World Trade Center bombing, and Sheik Omar Abdul-Rahman, who was convicted for his involvement in a plot to carry out additional bombings in New York.⁴ This would put the Flatbush plotters in the jihadist realm.

Case studies are presented of the following plots:

- 1997 – Flatbush plot (New York)
- 2002 – Poison gas on London Underground plot
- 2003 – Heathrow Express ricin plot (London)
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- 2008 – Barcelona Metro bomb plot
- 2008 – Bryant Neal Vinas case (New York)
- 2009 – Zazi bomb plot (New York)
- 2010 – Washington Metro bomb plot (Washington, D.C.)

II. BACKGROUND

SOURCES OF INSPIRATION AND MODELS FOR IMITATION

Terrorists tend to be imitative and will try to replicate attacks (targets, tactics, techniques) that they consider successful. It is not possible to identify the source of inspiration or instruction for each of the 15 cases presented here, but some spectacular precedents are likely to have inspired them. Four of the plots involved chemical or biological substances (poison gas or ricin), and it seems highly likely that the plotters were inspired by the 1995 sarin attack in Tokyo in which terrorists dispersed nerve gas on Tokyo's subways, killing 12 people and sending more than 5,000 to hospitals (Figure 1).



Figure 1. Victims of the 1995 Sarin Attack on Tokyo's Subway

The 1995–1996 terrorist campaign in Paris, which began with an explosion on a commuter train in which eight people were killed and more than 100 others were injured, was carried out by Islamist extremists from Algeria. This initial attack may well have inspired the March 2004 terrorist train bombings in Madrid, most of which were carried out by Moroccan jihadists. The Madrid train bombings, in which 191 died and more than 2,000 were injured (Figure 2), clearly were an inspiration for the Herald Square plotters in New York in August 2004.



Figure 2. Aftermath of the March 11, 2004, Madrid Train Bombing

The Madrid bombings also inspired the London Transport bombings in July 2005, which in turn provided the template for the failed attempt by unconnected jihadists in London two weeks later. By the middle of the decade, public surface-transportation targets—in particular, commuter trains and subways—had entered the terrorist playbooks, inspiring subsequent plots in Australia, Italy, Germany, Spain, and the United States.

TARGET SELECTION

Jihadist terrorist manuals and trainers emphasize iconic targets—landmarks that have emotional value—but in the plots discussed here, target selection was a local decision. In six of the cases (Herald Square, Melbourne and Sydney, Milan, PATH tunnel, Barcelona, Zazi), the plotters considered a variety of targets before settling on public transportation. Those targets included ferry terminals, a major airport, landmark bridges, stock exchanges, sports stadiums, a shopping center, an entertainment complex, a church, an American embassy, police stations, and other government buildings. Bringing down bridges and blowing up stock exchanges were grandiose fantasies far beyond the capabilities of the would-be terrorists, which suggests a certain naiveté. Terrorist planners typically start with an ambitious catalog of targets, but as they become more serious about carrying out an attack, operational requirements oblige them to settle for more-realistic scenarios and targets. Looking at the sleek contemporary metros, the colorful Heathrow Express, New York's Grand Central Station, which attracted the attention of Najibullah Zazi, or Melbourne's historic Flinders Street Station, it is also clear that these targets have considerable iconic value.

In the Zazi bomb plot, Najibullah Zazi's ability to make only a small amount of explosives pushed his group toward targeting crowded subways, where it could still hope to achieve a high body count. Limited means is thus also a factor in selecting public-transportation targets.

The plotters in these cases saw surface transportation as a target offering them easy access and escape (for operations that were not intended to be suicide attacks). Crowded trains and buses also offer terrorists the potential for high body counts, which clearly was the objective in almost every plot.

Terrorist attacks that have succeeded underscore this point. The 2003 Stavropol train bombing in Russia killed 42 people; a bomb on Moscow's Metro in 2004 killed 40. In 2005, the Madrid attackers planted ten bombs on trains, killing 191 people, and the London terrorists detonated four bombs, killing 52 people. The Madrid and London attacks became the models to be emulated. In 2006, 207 passengers were killed by seven bombs planted by terrorists on Mumbai's trains. In 2009, two bombs exploded on the Samjhauta Express in India, killing 66. These figures are not representative of the average casualties resulting from all terrorist bombs. They are the most publicized terrorist train bombings, and they resulted in an average of 24 fatalities per bomb. MTI's database of attacks on public surface transportation indicates that, overall, bombs detonated on trains or in train stations kill an average of only about three persons per bomb.⁵

Although more than 47 percent of all attacks on public surface transportation are directed against buses, bus terminals, and bus stops, all of the terrorist plots discussed here were directed against major city metro and commuter rail systems. The single plot involving three trains and a bus (described below) was an erroneous attempt to imitate an earlier attack.

One plot was intended to breach the subway tunnels under the Hudson River in New York, causing mass fatalities. The bombs were to be carried onto the subway train and detonated when the train was under the river. Three plots targeted subway stations.

The July 2005 plots targeted three subway trains and one bus in London. In the July 7 attacks, three suicide bombers detonated their bombs on the London Tube. A fourth bomb may have malfunctioned, forcing the perpetrator to seek another target, but by then, security at Underground stations, which had been rapidly increased following the first three explosions, prevented him from reentering the Tube. The bomb exploded while he was on a bus, presumably on his way to another Underground station. Not knowing that the explosion on the bus was not part of the original plan of the July 7 bombers, the July 21 plotters sought to replicate the attack exactly, including a bomb on a bus. This is a perfect example of terrorists copying a previous attack.

In the Vinas case, the target was not clear. Bryant Vinas, who had once worked for the Long Island Railroad, offered it as a potential target to his al Qaeda handlers, but he was apprehended before any plan was developed.⁶

The operations envisioned by the plotters were by their very nature indiscriminate attacks aimed simply at racking up high body counts, but in several cases, the plotters sought to ensure a high percentage of a particular group. The Flatbush plotters chose a subway line going to a certain neighborhood because it would have a preponderance of Orthodox Jewish passengers.⁷ The would-be bomber of the Washington, D.C., Metro selected stations that would contain many military riders going to or from the Pentagon.⁸

In some cases, the plotters chose locations where the attack would have secondary effects, thereby increasing the body count. The 2004 Herald Square bombers hoped that the explosion would cause the collapse of a major building above the subway station.⁹ The 2006 PATH tunnel plot was aimed at flooding the subway tunnels.¹⁰ Beyond that, the plotters sought busy stations—major transportation hubs where an attack would cause the greatest disruption.

TERRORIST TACTICS

Ten of the plots involved bombs, four involved the dispersal of lethal chemicals or ricin, and in one, the method of attack had not yet been decided. Police worry a great deal about individual gunmen or groups of shooters, like the ten terrorists who carried out the armed assaults in Mumbai in 2008, killing 152 people. None of the plots discussed in this study involved armed assaults.

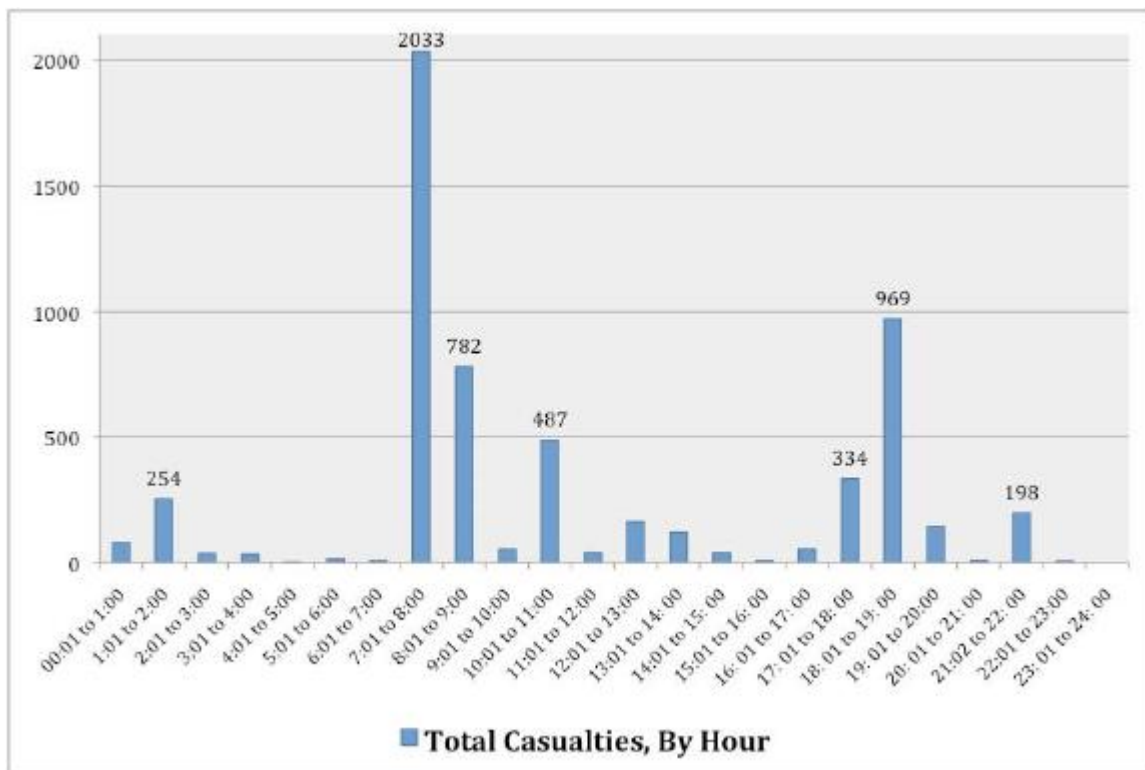
Suicide bombings were contemplated in at least five of the plots (Flatbush, London Tube, Barcelona, Zazi, Washington Metro). The 2006 PATH tunnel plot was also likely to have been a suicide attack. Suicide attacks were definitely not part of the plan in four cases (Herald Square, Heathrow Express, German train bombings, Milan Metro). It is not clear whether the New York subway poison gas plot, the London Tube poison gas plot, the Melbourne and Sydney plots, or the 2008 Vinas case would have been suicide attacks, although Vinas had offered his services as a suicide bomber.

TIMING OF THE ATTACKS

Terrorist plots evolve slowly over months or more. It is difficult to discern precisely how a group of extremists moves from talk to contemplating scenarios to actual preparations to attempting an attack. The available information suggests that many plots simmer for months before the plotters begin active preparations, and even those may take a long time—longer than seems operationally necessary. The fantasy of war must become the reality of commitment.

Timing appears to be significant. The Milan plotters wanted their attack to be carried out on the eve of Italian elections to affect the election results, as the 2004 Madrid attacks had done in Spain. Plotters in Australia talked about carrying out their attacks during Australia's final football match or Grand Prix Formula 1 race. The German terrorists initially wanted their attack to coincide with the World Cup football matches.

Most of the plots were interrupted before the plotters got around to deciding the date and time of the attack. Information on timing was available in six of the cases. In the Flatbush plot and the London Tube poison gas plot, the attackers chose the morning rush hour. In the Washington Metro bomb plot, the attacker recommended the evening rush hour—between 4:00 and 5:00 pm. In the Zazi plot, the plotters also spoke of the rush hour. The successful terrorist attacks in Madrid in 2004 and London in 2005 took place during the morning rush hour, while the 2006 Mumbai attack occurred during the evening rush hour. The plotters were right. Morning rush-hour attacks on crowded trains and buses historically have produced the greatest numbers of casualties, as can be seen in Figure 3. According to the Mineta Transportation Institute’s database, since 1970, terrorist attacks on surface-transportation targets between 7:00 and 9:00 am have produced the greatest accumulation of casualties.



SOURCE: Paul Hernandez.

Figure 3. Casualties Resulting from Terrorist Attacks, By Time of Day

The July 21, 2005, plotters in London attempted to detonate their bombs at midday, and the bombs planted on German trains in 2006 were also timed to detonate at midday.

UNCONVENTIONAL WEAPONS

Three of the four plots to use chemical-biological weapons involved poison gas (hydrogen cyanide, osmium tetroxide), and one involved ricin. There is a fifth possible “plot” involving sarin, about which very little is known. Police in London uncovered that plot in February 2001, but the only publicly available information is that during a Special Branch raid on a house in London, detectives found “detailed plans containing instructions on how to

manufacture and deploy the poison.”¹¹ Authorities reportedly believed that a group was planning to release the gas on the London Underground, copying the 1995 sarin attack on Tokyo’s subways.

All of these plots share an illusory quality. There is a paucity of information about them, and all seem to have been far-fetched. They were all talk. No actual weapons or substances were found (with the exception of the ricin plotters’ possession of a handful of castor beans). The proposed means of dispersal seem dubious. The plotters discussed tossing a cyanide gas bomb downwind—presumably this was not to be a suicide attack, but in a crowded passenger carriage speeding through a tunnel, it seems to be an especially risky undertaking. The 2004 London Tube poison gas plot involved combining osmium tetroxide with conventional explosives, which might not have worked at all.¹² Plotters in the 2003 Heathrow Express ricin plot planned to paint a solution containing ricin on the handrails of a train, in hopes that passengers would pick up the residue on their hands and then inadvertently transfer the poison to their eyes, nose, or mouth.¹³ It certainly would not have resulted in a mass poisoning.

Given the difficulty of acquiring chemical-biological substances in large quantities, it seems doubtful that any of the plots would have resulted in mass casualties. Yet sensationalist news media and government officials described them in terms of weapons of mass destruction, exaggerating both the capabilities of the terrorists and the consequences of their intended schemes. In part, this was a manifestation of post-9/11 nerves, but the 9/11 attacks had also altered perceptions of plausibility. After 9/11, no terrorist plot could be easily dismissed as far-fetched.

To be fair, autumn 2001 had brought the anthrax letters, which, although they killed few, caused dangerous contamination and widespread disruption. The discovery of laboratories and evidence of chemical-weapon tests having been conducted at al Qaeda’s training camps in Afghanistan made it clear that the architects of 9/11 were pursuing an active chemical and biological weapons development effort. Cyanide, botulinum and salmonella toxins, anthrax, and ricin apparently were the substances of greatest interest to al Qaeda. It is therefore not difficult to understand official apprehension.

Moreover, most of the plots involving unconventional weapons were uncovered at a time when the United States and the United Kingdom were expressing growing concerns about Iraq’s alleged possession of weapons of mass destruction. The terrorist plots and Iraq’s weapons programs were linked wrongly, as we know now, but the suspected linkage fueled apprehensions and suspicions. Finally, the plots were used to make the case for the invasion of Iraq. Opponents of the invasion argue that the alleged poison plots, if not complete fabrications, were deliberately manipulated to build public support for war. Skepticism is in order.

But even if the plots were no more than talk, they say something about terrorist thinking at the time, which is why they are included here. Al Qaeda’s global terrorist campaign was still in its early stages, and the 9/11 attacks encouraged imagination and audacity. Three of the four plots were hatched between 2002 and 2003, when would-be terrorists who had trained in Afghanistan dispersed throughout the world. French authorities believed that

cells affiliated with or inspired by al Qaeda in France, Spain, and the United Kingdom were communicating with each other about toxins and poisons. Algerian alumni of al Qaeda's camps were seen to be at the heart of this loose network.

Armed with superficial knowledge, what these plotters understood was that the crowded, confined spaces of subway trains offered an ideal venue for the dispersal of poison gas and lethal toxins. Even if only handfuls died, the novelty and terrible effects of these invisible weapons—choking, suffocation, blindness—would cause panic and widespread alarm.

None of the plots succeeded, and by mid-decade the poison fad was over. Meanwhile, terrorists in Madrid and London demonstrated that by using more-reliable explosive devices on trains and subways, terrorists could achieve the slaughter they desired. Multiple bombs became the new prototype for terrorist attack.

THE PLOTTERS

In two of the plots, authorities arrested a single individual. In three others, two persons were arrested. Four plots involved three to five people, and eight or more persons were arrested in five plots, although it is not clear that all of those arrested would have participated in the actual attack. In one case, the number of likely attackers is unknown. The larger plots were outside the United States.

Seven of the plots involved homegrown terrorists who planned the attacks on their own initiative. Five of the plots were foreign-directed or assisted. Al Qaeda was linked to three of the plots (New York poison gas, Vinas, Zazi), and possibly one more (Heathrow Express). One of the plotters in the Melbourne cell had a previous connection with al Qaeda, while some of the Sydney cell members had connections with Lashkar-e-Taiba. The Barcelona plotters were connected with the Pakistan Taliban. The PATH tunnel plotters were members of an autonomous terrorist group based in Lebanon, although it, too, may have had an al Qaeda connection. In two of the cases, it is not clear whether there were foreign connections.

None of the attacks, insofar as is known, involved inside assistance. The closest one comes to inside assistance is Bryant Vinas, a former employee of the Long Island Railroad who suggested it as a target to his terrorist commanders. He was taken into custody before any plot matured.

In most cases, the plotters' sources of information were their own observations—they were personally familiar with the targets as riders. They conducted reconnaissance in at least two cases, using ordinary cameras or video recorders. Readily available information provided the rest of what they needed for the operation.

INTELLIGENCE OPERATIONS

Intelligence was a key factor in foiling most of the plots. Eleven plots were uncovered by intelligence operations. One was uncovered when a frightened roommate of the bombers

told police about the impending attack, and one was reportedly called off by the terrorists' leader abroad. The two actual attempts failed.

Most of the plots were interrupted at an early stage. Five plots were in the mere-mention or discussion stage or in very preliminary planning when arrests were made (London Tube, Heathrow Express, Herald Square, Milan Metro, Vinas). Ingredients for explosives had been or were being acquired in four cases (Flatbush, Melbourne and Sydney, Barcelona, Zazi). In the one sting operation (Washington Metro), the FBI provided the attacker with what he believed to be an improvised explosive device. Two plots had progressed to an actual attempt (the attempted Tube and bus bombings in London and the attempted German train bombings). Both attempts failed because of faulty bomb construction. It is not clear how far the planning had progressed in the New York subway poison gas plot before it was reportedly called off by al Qaeda's second in command, Ayman al-Zawahiri, who said that the attack was suspended in order to devote attention to a more important operation.

THE ROLE OF SECURITY

What role did security play? Specifically, were physical security measures a factor in terrorist planning? The plotters saw public transportation as an easy target. Security did not put them off. However, there were very few security measures in place to protect public surface transportation when most of these attacks were being planned, beyond routine police patrols and some closed-circuit television (CCTV) coverage, even after 9/11.

Security for surface-transportation protection did not really become a major concern until after the 2004 Madrid bombing. Even then, security resources remained limited. Increased police patrols in stations and on trains, random passenger screening, explosives-sniffing dogs, and the installation of working cameras came along slowly. There was simply not a lot of security to put off would-be attackers.

One jihadist manual advised would-be terrorists to avoid train stations with CCTV cameras, which suggests that the cameras have some deterrent value. The IRA terrorist bombing campaign against British rail and London Transport led to the London Tube being saturated with CCTV cameras, but that did not deter the July 7, 2005 suicide bombers or their July 21 imitators. It is, of course, more difficult to deter suicide bombers. However, they are harder to recruit than individuals who plan to merely leave bombs behind. CCTV thus contributes to security indirectly, by raising the threshold for recruiting attackers.

CCTV played an important role in helping to identify attackers who fled the scene of the attack. It was especially important in enabling German authorities to identify the two men who had placed failed bombs aboard German trains. Pictures of the terrorists were broadcast nationally. Seeing himself on national television, one panicked and called Lebanon. His call was monitored by Lebanese authorities and was intercepted. The other bomber fled to Lebanon, where he later surrendered to authorities. That prevented further attempts. Being able to identify the four July 7 bombers in London, thereby confirming that it had been a suicide attack and that the bombers were not still at large, allayed public fears in the city.

Plotters are known to have been aware of security in at least two of the cases. The Herald Square plotters adopted disguises to avoid attracting attention to their reconnaissance,¹⁴ and the two men who attempted to blow up the German trains delayed their attempt because of increased security on the trains during the football finals.

The fact that so many of the plots hardly got beyond the discussion phase limits what is known about how the plotters viewed security. The overall evidence, however, suggests that they were undeterred by the security measures in place. (Of course, we can only surmise this, as we do not know how many other, if any, attacks may have been deterred by security.) Where awareness of security does appear in the plots, it is a cause for caution, perhaps a reason to modify a date or location, not a reason to call off the attack.

This is consistent with information derived from examining sustained terrorist campaigns like that carried out by the IRA on London Transport. Initially, the IRA terrorists attacked transportation hubs in the heart of London, e.g., Victoria Station. As security measures increased, they continued their campaign but retreated to less risky, but also less lucrative, targets on the outskirts of the city.

The case studies presented in the next chapter are based on public information sources. There are obvious gaps in what is known about the cases, and the authors welcome additional information on these or other plots. New information will be added to future online versions of this report.

III. CASE STUDIES

1997: FLATBUSH PLOT

The Plot

Gazi Ibrahim Abu Mezer, a Palestinian who had served time in an Israeli prison and entered the United States illegally, and Lafi Khalil plotted to bomb a New York subway train in Brooklyn. Tipped off by an acquaintance of the plotters, authorities arrested the two on July 31, 1997.

Motivation

Mezer, who claimed to be a member of Hamas¹⁵ and who had worked for Mousa Abu Marzouk, a Hamas political leader who lived in Virginia until 1992, was angered by U.S. support for Israel.¹⁶ (Marzouk was detained by authorities when he returned to the United States in 1995, unsuccessfully fought deportation for two years, and was deported in 1997.) Mezer was also influenced by Sheik Abdul-Rahman, who had also once worked with Marzouk. It does not appear, however, that Hamas directed or assisted the plot.

Objective

There are contradictory versions of what the two plotters had in mind. One version is that the plan was to carry out a single suicide attack to “blow up the train and kill as many Jews as possible.”¹⁷ But other sources suggest that the attack was to be one in a series of attacks aimed at forcing the release of Sheik Omar Abdul-Rahman and Ramzi Yousef, who were imprisoned in the United States for their part in the 1993 World Trade Center bombing, and Sheik Ahmed Yassin, the Hamas leader imprisoned in Israel.

Target Selection

The plotters decided to blow up the “B” (Borough Park) train, which was used by many Orthodox Jews.¹⁸

Selection of Attack Mode and Weapon

Mezer, who may have learned something about building bombs while in prison in Israel, built five pipe bombs (supporting the idea that this was to be a continuing terrorist campaign) with components he purchased in North Carolina. The devices contained black powder plus nails and bullets to act as shrapnel.¹⁹ Power was provided by lantern batteries, and detonation was controlled by a series of toggle switches. There was no timer or remote detonator, giving weight to the idea of suicide attacks. (If they were indeed to be suicide attacks, with just two plotters, who was going to detonate the other three devices?) Police found two devices ready to go when the plotters were arrested.

Selection of Date and Time

Mezer planned to detonate the bomb at 8:00 am on July 31. This would be during the daily morning rush hour, maximizing casualties.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

There is no evidence of systematic reconnaissance or intelligence collection beyond a general awareness of the subway system, peak hours, and the areas served by different train lines.

Security Measures at the Target

This plot was created well before 9/11, when security measures in effect were geared to stopping normal crime activity. There was, however, a broader failure in U.S. security. In the 13 months prior to the plot, Mezer reportedly had been arrested three times by the Immigration and Naturalization Service for attempting to enter the United States from Canada.²⁰ He was arrested again just a few days before the intended bombing for jumping a turnstile, itself a misdemeanor but an indication that he was in the country illegally. Moreover, he had previously served time in prison in Israel.

How the Plot Was Disrupted²¹

Abdul Rahman Mossabah, a recently arrived Egyptian immigrant, learned of the plot. Frightened, he informed two New York Transit Police officers that Mezer and Khalil had bombs in their apartment and planned to detonate them soon. He drew a diagram of the apartment indicating where the bombs were kept and led a team of officers to the building before dawn on July 31, 1997. When police entered the apartment, a struggle ensued, and one of the plotters tried to reach a bag that police believed might contain a bomb. The officers shot and wounded both men.

2002: LONDON TUBE POISON GAS PLOT

The Plot

In November 2002, police in London arrested three men, Rabah Chekat-Bais, Karim Kadouri, and Rabah Kadre, for plotting to release poison gas, possibly cyanide, on the London Tube.²² Few details are available about this plot, and it is an uncertain inclusion here. British authorities later dropped charges related to the alleged terrorist plot, although Kadouri was convicted of possessing a fake French passport. While dropping the charges led some to claim that there had been no plot, that isn't necessarily the case. Authorities often have to decide between making arrests to disrupt a plot in its early stages and waiting to gather sufficient evidence to ensure successful prosecution. And there was cause for suspicion.

Kadre, born in Algeria, was a member of the Algerian Salafist Group for Preaching and Combat (GSPC), which later in the decade morphed into Al Qaeda in the Islamic Maghreb. He was linked by French authorities with the "Lyon cell" and another Algerian extremist, Merouane Benhamed, in an attempt to produce ricin. In 2004, a court in France convicted Kadre in absentia for his role in a terrorist plot to bomb Strasbourg. He was sentenced to six years, which indicated that he played a minor role. Kadre was extradited to France in 2006 to serve his sentence.

At least one of the three men arrested in 2002 had been identified as a terrorist and was linked to other terrorist plots, as well as to the production of ricin. The case is included here as an example of what terrorists think about, not because it was an operational plot.

Motivation

Chekat-Bais, Kadre, and Kadouri were all described as coming from North Africa (Tunisia or Morocco, although Kadre was Algerian). It is assumed that they were inspired by al Qaeda's ideology of global terrorism.

Objective

The release of cyanide or other poison gas on a crowded subway train, which authorities say was planned to be carried out during rush hour, makes it clear that the objective was mass casualties.

Target Selection

We know only that the plotters planned to attack the London Tube. The plan was in the discussion phase. No specific target had yet been identified.

Selection of Attack Mode and Weapon

We know only that the plotters planned to release poison gas, possibly cyanide. They possessed no material or devices at the time of their arrest.

Selection of Date and Time

No date had been set for the planned attack; however, the plotters wanted to carry it out during the morning rush hour.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

No information is available.

Security Measures at the Targets

The plot was uncovered little more than a year after 9/11, so security awareness was still very high. The London Tube was well covered by CCTV cameras.

How the Plot Was Disrupted

British intelligence had reportedly infiltrated the group six months before the arrests.

2003: HEATHROW EXPRESS RICIN PLOT

The Plot

Sometimes referred to as the Wood Green ricin plot, this was an alleged scheme to disperse ricin by smearing it on the handrails and in the lavatories of the Heathrow Express,²³ a train running between Paddington Station in London and Heathrow Airport (Figure 4). During the investigation of the plot, British authorities arrested 90 people, eventually bringing charges against 12 of them, a number later reduced to nine. The trial of the first five ended with all five being acquitted of the charge of murder conspiracy involving ricin, although the leader of the group, Kamel Bourgass, an Algerian citizen, was found guilty of a lesser charge of plotting to use ricin to create a public nuisance and was sentenced to 17 years in prison. At the time of his sentencing, Bourgass had already been convicted of killing a policeman, for which he had been sentenced to life. With the acquittals in the first trial, British authorities dropped the cases against the second batch of four defendants.²⁴



Photo by Rich Mackin

Figure 4. The Heathrow Express

The case was highly controversial, with some people alleging that the plot was imaginary.²⁵ The plotters possessed no ricin. Investigators searching the terrorists' apartment in Wood Green found only a handful of castor beans, which would have yielded a tiny amount of crude ricin; recipes handwritten in Arabic indicating the appropriate ingredients for use in

the manufacture of explosives and various poisons,²⁶ including ricin and cyanide; plastic bottles containing acetone and chemicals that could have been used to make ricin and/or cyanide; and a variety of equipment such as filters, a mortar and pestle, rubber gloves, and a thermometer.²⁷

Motivation

Bourgass was an Islamist extremist who had entered the United Kingdom illegally three years before the plot was uncovered.²⁸ Although he was believed to be an al Qaeda operative who trained in Afghanistan, and U.S. officials claimed the plotters were part of a global terrorist network led by Abu Musab al-Zarqawi in Iraq, the plotters, at least one of whom also had links to terrorists in Algeria, appear to have operated autonomously. The trail of the defendants did not establish a link to al Qaeda or Zarqawi. Since all but one of the nine held for trial were acquitted, we can only speculate that at least some of them may have thought of themselves as part of the global jihadist enterprise.

Objective

The plotters contemplated using conventional explosives, cyanide, and ricin, suggesting an intent to kill, possibly in quantity, as well as to create terror.

Target Selection

The plotters' reason for focusing on the Heathrow Express is not known. However, the train would have been carrying a large number of passengers, including many foreigners. The effects of ricin contamination are not immediately apparent, and by the time symptoms appeared, those who were exposed on an inbound journey would be scattered across the United Kingdom. Those exposed on an outbound journey would be scattered across the globe. It would not be easy to trace the exposure back to the Heathrow Express. Assuming, however, that the source of the contamination would be eventually identified, the event would have created public alarm. As is always the case in such events, many of those who had ridden on the Heathrow Express and subsequently suffered any stomach ailment, cold or flu symptoms, or even jet lag would have been concerned that they were victims of poisoning, thus adding to the general alarm.

Selection of Attack Mode and Weapon

Ricin is highly toxic. Minute quantities of pure ricin can be deadly if inhaled or injected. A single test tube filled with ricin could theoretically kill thousands of people, as there is no known vaccine or treatment.

Clearly, al Qaeda was interested in ricin. Between 2001 and 2004, in raids on suspected al Qaeda cells in Britain, France, Spain, Russia, Georgia, and Iraq, police found manuals or papers containing detailed instructions for manufacturing and dispersing ricin, along with ricin-making equipment and/or traces of the toxin.²⁹

Conceivably, weapons-grade ricin could be used as a weapon of mass destruction, and it is often described as such. Initially, the Heathrow Express ricin plot was portrayed in these terms—a senior officer at Scotland Yard is quoted as saying, “This was going to be our September 11.” One newspaper report carried the headline “250,000 of Us Could Have Died.”

That is a gross exaggeration of what was a terrorist fantasy or, at most, an amateurish scheme. The Heathrow Express plotters possessed no ricin, and their planned method of dispersal was dubious.

Without getting embroiled in the politics of this particular case, the question for government authorities and transportation system operators is, What kind of threat is posed by the dispersal of ricin in public-transportation venues? It is not a far-fetched threat. Recipes for ricin are readily available, and ricin is easily manufactured in small quantities. It has appeared in a number of terrorist plots and ordinary criminal cases both in the United States and abroad.

However, small quantities of crudely manufactured homemade ricin bear little resemblance to large quantities of pure ricin ground to precisely the right-size particles for efficient dispersal in the air. Crudely made ricin also lacks the toxicity of pure ricin. Ricin is most dangerous when inhaled or injected (which makes it a weapon of assassination, not a weapon of mass destruction). It is less lethal when ingested—ingestion of crudely made ricin might cause little more than mild stomach upset.³⁰

Unlike nerve gas, ricin cannot penetrate the skin, but it conceivably could enter the body through a cut or abrasion or through the eyes or mucous membranes. A person might be contaminated by touching a surface contaminated with ricin, then rubbing his nose or eyes, much as he might catch a cold or the flu. Unlike a cold or flu, however, ricin contamination is not contagious. It does not spread from person to person, except for the remote possibility of chance contamination through physical contact—a handshake with a person who had just handled ricin, followed by rubbing one’s eyes or nose.

Ricin could also possibly be mixed in a solution that terrorists could “paint” on a surface that is likely to be grasped—a doorknob or handrail. As the liquid dried, it would leave behind a residue of ricin. If the person who touched it had an open cut on the palm of a hand or subsequently touched his eyes, nose, or food with ricin-contaminated hands, he might be infected. It seems highly unlikely that intended victims could absorb sufficient quantities of homemade ricin to cause death or serious illness. The Heathrow Express plot, had it been carried out, would not have produced mass casualties, if it produced any at all.

However, had it become known that the Heathrow Express had been contaminated with ricin, which the terrorists themselves could announce, public alarm, fueled by sensational headlines, might have been considerable. At a minimum, transportation-system operators would have confronted apprehensive passengers, a loss of ridership, and the requirement of a costly cleanup and campaign to reassure people that the affected facilities had been decontaminated. Ricin, therefore, should be seen as a weapon of terror, a weapon not of mass destruction, but of mass disruption.

Selection of Date and Time

The accused plotters, all but one of whom were identified as Algerian nationals, entered the United Kingdom between 1998 and 2000. (Eight of those held for trial were in the country illegally at the time of their arrest.) Because the plot was interrupted before any ricin had been manufactured, no date had been set for the attack. However, Bourgass reportedly asked the father of one of the alleged plotters to bring him castor beans in July 2002. The first arrests took place in January 2003, so the plotters had been contemplating the use of ricin for at least six months.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

The reconnaissance the alleged plotters may have conducted is not known. They were living in the London metropolitan area, so they could easily have ridden on London's trains.

Security Measures at the Target

There is no evidence that the alleged plotters took account of any security measures.

How the Plot Was Disrupted³¹

The original tip that led police to Bourgass and the apartment in which authorities found evidence of preparations to make ricin came from Mohamed Meguerba, an Islamist who had originally come from Algeria to the United Kingdom via Ireland. He joined the radical Islamist movement in 2000 and went to Afghanistan to train with al Qaeda. He was reportedly given the mission of returning to the United Kingdom to carry out acts of terrorism by Osama bin Laden himself. Upon his return, Meguerba was arrested by British authorities. He was subsequently released but was told to stick around. Instead, he fled back to Algeria, where he was re-arrested in December 2002. Under interrogation, he told authorities about Bourgass and the ricin plot. The Algerian authorities notified British authorities, who located and raided the apartment. Bourgass was arrested in Manchester. In 2005, Meguerba, who had been sent back to the United Kingdom, was sentenced to ten years in prison for being a member of a terrorist organization.

2003: NEW YORK SUBWAY POISON GAS PLOT

The Plot

Very little is known about the New York subway poison gas plot. Much of the available information comes from a book by Ron Suskind, *The One-Percent Doctrine*.³² The paucity of information has led to speculation about whether this was an actual plot or a terrorist fantasy.³³ If it was real, why it was not carried out? And how far along did it get before Ayman al-Zawahiri, then al Qaeda's second-in-command, reportedly called it off?³⁴ According to the available evidence, terrorists planned to attack the New York subway system, using cyanide gas. The gas was to be dispersed from several locations by homemade devices placed in subway cars and other locations.

Motivation

The attack would have been part of al Qaeda's continuing terrorist campaign against the United States, a spectacular follow-on to 9/11.³⁵ Al Qaeda, although dispersed by this time, was still dedicated to ambitious terrorist projects. In this case, however, the initiative for the attack did not come from al Qaeda's central leadership. The key figure was Yusuf al-Ayeri, al Qaeda's top operative on the Arabian Peninsula. Ayeri had previously been in custody of Saudi authorities but was subsequently released. After his release, Ayeri visited Zawahiri in January 2003 to inform him of the plan, which by then was well under way, but Zawahiri called off the attack.

Objective

The objective of the plot clearly was to cause mass casualties.

Target Selection

We do not know whether the plotters considered other targets. The enclosed subway system would have provided an ideal venue for a chemical attack.

Selection of Attack Mode and Weapon

Had the attack been successful, it would have replicated Aum Shinrikyo's attack on the Tokyo subways in which the nerve agent sarin was used. In fact, Aum Shinrikyo subsequently attempted to disperse hydrogen cyanide in the subway, using a dispersal device planted in a public toilet. The device failed to work.

The dispersal unit to be used in the New York subway was called the al-Mubtakkar ("the invention"). A manual entitled *al-Mubtakkar al-Farid*, which had been posted on various jihadist websites, described how to make the device and suggested various suitable targets, including brothels, bars and restaurants, markets and shopping malls, cinemas, bank and loan facilities, synagogues, gyms, dancing halls, casinos, trains (but not stations that contain CCTV cameras), churches on Muslim lands, schools, government offices (especially security-related offices), and hospitals.³⁶

According to a 2003 joint Department of Homeland Security/Department of Justice bulletin,³⁷ the dispersal unit can be fabricated from commonly available materials and is designed to asphyxiate victims. The device can produce hydrogen cyanide (HCN) gas but can also be modified to produce cyanogen chloride (CICN) gas. It is simple to construct. It consists of a pierced container or canister, such as a large milk container or paint can (1 in Figure 5). Inside the container are two interior containers, most likely glass bottles or vials (2 in Figure 5). One of the bottles or vials contains sodium cyanide or (depending on the gas to be produced) some other crystalline solid. A hydrogen product, such as hydrochloric acid, is in the other. White or yellow solid cyanide salts may be used (3), or a modified device could also use potassium permanganate (KMnO₄) crystals (4). A detonator or some other device (5) that can be activated remotely is used to break the inner container(s), releasing the acid and allowing the chemicals to mix and form a gas that would be vented from the external container.



Figure 5. The “Al-Mubtakkar” Gas Dispersal Unit

Selection of Date and Time

According to intelligence sources, Ayeri visited Zawahiri in January 2003. By that time, the plan was well advanced—zero hour was only 45 days away. That would have put the date somewhere between early February and mid-March, just before the widely anticipated U.S.-led invasion of Iraq.

Attackers’ Operational Reconnaissance and Intelligence Collection Methods

New York Police Department (NYPD) sources reportedly stated that cell members had undertaken surveillance of the subway system. The operatives who were to carry out the attack were to have transited North Africa on their way to New York in 2002,³⁸ which, if true, meant that they were already in the city when Ayeri met with Zawahiri. This cannot be confirmed, since no individuals were identified or arrested in the United States in connection with the planned attack.

Security Measures at the Target

The New York subway was considered a potential terrorist target even before 9/11, and security measures—primarily additional police and security personnel—had increased. The deployment of detectors to provide warning of a chemical attack came later, but this is not likely to have affected the planning of the attack.

How the Plot Was Disrupted

As indicated earlier, the attack was not interrupted by the authorities; it was called off by Zawahiri, reportedly for “something better.” Authorities did not learn of the plot until U.S. intelligence received a tip from a Central Intelligence Agency mole inside al Qaeda.³⁹ Details came from the contents of a laptop computer belonging to a Bahraini jihadist who had been captured in Saudi Arabia early in 2003. The files contained the plans for the al Mubtakkar dispersal device. Additional intelligence from individuals arrested in Saudi Arabia confirmed the outlines of the plot. A mid-level al Qaeda operative named “Ali” identified Ayeri as the key figure and described his meeting with Zawahiri and the decision to call off the attack.⁴⁰

This account of the plot, which is based on published information, is likely to contain errors. Nevertheless, it is not implausible that al Qaeda was contemplating chemical or biological attacks at this time. Laboratories, notes, and other evidence found at al Qaeda sites in Afghanistan indicated interest in chemical and biological weapons. Al Qaeda leaders themselves spoke of them, and dispersal of lethal chemicals or ricin is mentioned in two other plots.

2004: LONDON TUBE POISON GAS PLOT

The Plot

The London Tube poison gas plot is another illusive chemical-weapon plot. According to limited information, terrorists planned to use conventional explosives to disperse osmium tetroxide, a highly toxic chemical, in a crowded, confined space.⁴¹

Motivation

The plotters were inspired by al Qaeda ideology, although no evidence was offered that the ten people who were arrested had direct connections with the organization. However, they did have communications with co-conspirators in Pakistan.

Objective

The use of conventional explosives and toxic chemicals in a crowded public space indicates an intent to cause large-scale casualties.

Target Selection

The attack was apparently still in the discussion phase when it was uncovered, and a specific target had not been selected. On the basis of intercepted communications, British officials surmised that the target could have been the London Underground or Gatwick Airport.⁴²

Selection of Attack Mode and Weapon

The plan was to disperse, possibly by means of conventional explosives, a highly toxic chemical called osmium tetroxide,⁴³ which is normally used in preparation of cellular structures for electronic-microscope examination in biology laboratories. It is commercially available in small quantities.⁴⁴

Exposure to osmium tetroxide through ingestion, inhalation, or physical contact, especially contact with the eyes and other mucous membranes, can cause coughing, headaches, dizziness, severe chemical burns, and blindness. Substantial inhalation can cause death through a buildup of fluid in the lungs, literally drowning the victim. These symptoms are not immediately obvious but become apparent over several hours.

Revelation of the plot provoked considerable debate about the utility of osmium tetroxide as a terrorist weapon. It is available only in tiny quantities, it is extremely expensive, and any large purchase by other than usual customers would be noted as highly unusual. In larger quantities, it would also be dangerous to work with. Combined with a conventional explosive, it would rapidly decompose into an inert form. It has been suggested that instead of the explosion dispersing the osmium tetroxide, the chemical could have acted as a booster in the explosion.⁴⁵

Selection of Date and Time

The plot was interrupted while still in its discussion phase. No date or time had been selected.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

No information about reconnaissance or intelligence collection is available.

Security Measures at the Target

The plot was uncovered and arrests were made less than three weeks after the Madrid bombings. Authorities were on alert, and security at surface transportation targets had been increased.

How the Plot Was Disrupted⁴⁶

The plot was uncovered as a result of monitoring by Britain's Government Communications Headquarters of phone calls made by terrorist suspects whom British authorities had been tracking for several months. On March 30, 2004, police raided 24 locations in the London area and arrested ten individuals, including eight British nationals, some of Pakistani descent, a Canadian, and an individual with dual British-Algerian citizenship.

2004: HERALD SQUARE PLOT

The Plot

Inspired by jihadist ideology, Shavar Martin Siraj and James Elshafay planned to carry out a terrorist attack in New York City. Elshafay compiled a list of possible targets for a bombing, including three Staten Island police stations, a Staten Island jail, the Verrazano Narrows Bridge, and three subway stations in Manhattan: the 42nd Street Station, the 59th and Lexington Station, and the Herald Square Station.⁴⁷ They decided on Herald Square, but before they could carry out their plot, they came to the attention of the NYPD, which was able to insert a confidential informant into the group.⁴⁸

Motivation

Elshafay was angered by the anti-Arab sentiment that he encountered. He “saw the same people he grew up and went to school with on Staten Island carrying signs that said on the front GOD BLESS AMERICA and on the back KILL ARAB BABIES. He was upset that the police didn’t do anything about it.”⁴⁹ Siraj was enraged by U.S. actions in the Middle East, particularly American support for Israel, the invasion of Iraq, and the Abu Ghraib prison abuses.⁵⁰

Objective

Siraj initially indicated that he wanted to inflict 1,000 to 2,000 casualties in one day, but he later said that he only wanted to damage the economy and not kill anyone.⁵¹ Elshafay was reportedly more enthusiastic about causing a large number of casualties.

Target Selection

The plotters chose the Herald Square Station (Figure 6) for several reasons. It is the third largest subway station and one of the busiest transportation hubs in New York.⁵² The plotters also envisioned the explosion causing the collapse of the Manhattan Mall, which sits above the station. The collapse would increase the casualties and damage.⁵³



Figure 6. The 34th Street Herald Square Subway Station

Selection of Attack Mode and Weapon

Siraj and Elshafay were going to plant explosive devices in garbage cans in the 34th Street Station (part of the Herald Square subway station complex).⁵⁴

Selection of Date and Time

There was no indication of when the attack was to take place. Siraj and Elshafay were arrested in August 27, 2004, three days before the Republican National Convention, which was held at Madison Square Garden.

Security Measures at the Target

After their initial reconnaissance of various targets, Siraj and Elshafay determined that the subway system was the most vulnerable to attack.

Attackers' Operational Reconnaissance and Intelligence Collection Methods⁵⁵

On August 21, 2004, Siraj, Elshafay, and Osama Eldawody (the police informant) drove into Manhattan to conduct surveillance on the Herald Square Station. To minimize scrutiny, they split up, entering the station separately. To further deflect suspicion, Siraj dressed in what he described as baggy jeans and a “do-rag,” eager to “look hip-hop, like a Puerto Rican,” rather than “Arabic.” (In a recorded conversation with Eldawody, Siraj claimed he had previously dressed as a homeless person to scout out subway security.) During

their reconnaissance mission, the men were interested in gathering various data, including the strength of the police presence, the location of CCTV cameras, and the entry and exit points. The Department of Justice noted that upon returning to their car, they “drew diagrams of the location in order to help them later place a bomb.”

How the Plot Was Disrupted

The NYPD first became aware of Siraj’s extremist leanings after a member of the public called the department’s terrorism hotline. Following a consistent stream of reports, the NYPD instructed Eldawoody to establish ties with Siraj.⁵⁶ Eldawoody presented himself as a member of the “The Brotherhood,” who would be able to provide logistical support for Siraj and Elshafay’s plot.⁵⁷ The planning meetings were secretly taped by Eldawoody.⁵⁸

2005: ATTEMPTED LONDON TRAIN AND BUS BOMBINGS

The Plot

On July 7, 2005, four terrorists carried out suicide bombings on surface transportation in London, killing 52 people. On July 21, other terrorists attempted to replicate the earlier attack, but their bombs failed—the detonators went off, but not the main charge. Three small explosions occurred at the Shepherd's Bush, Warren Street, and Oval Underground stations. The July 5 attacks included the bombing of a bus, but this had probably been the result of a technical problem forcing the fourth bomber to abandon the Underground and seek a new target. The July 21 bombers imitated the July 7 attacks by setting off their fourth device on a bus in Shoreditch. It too failed. They also wanted to surpass the July 5 bombings with a fifth bomb, but the fifth bomber lost his nerve and abandoned his weapon in a park. There were no links between the two attacks, both of which occurred at about midday, although attackers in both plots attended training camps in Pakistan at the same time.⁵⁹

The four July 21 bombers were Muktar Said Ibrahim, the group's leader, who detonated his bomb on a bus; Yasin Omar, who boarded the train with his bomb at the Warren Street Station in central London; Ramzi Mohammed, who targeted a train at the Oval Station in south London; and Hussain Osman, who boarded his train at the Shepherd's Bush Station. All four were subsequently arrested, tried, and convicted, along with Manfo Kwaku Asiedu, a Ghanaian who was the fifth would-be bomber, and 11 others who assisted the bombers or who had knowledge of the plot.⁶⁰

The July 21 plotters came to the United Kingdom from Eritrea, Ethiopia, Somalia, and Ghana. They all appear to have become radicalized after coming to the United Kingdom. At least Ibrahim, Omar, and Osman are believed to have attended the Finsbury Park mosque, which was led by the radical cleric Abu Hamza al-Masri. When that mosque was closed by authorities in January 2003, the group turned up at the Stockwell mosque, where they attempted to remove the imam and harassed worshippers.

The group later came under the influence of Mohammad Hamid, a street-corner preacher who urged his followers to be martyrs and to kill unbelievers. Hamid ran makeshift training camps in the Lake District of England, where would-be warriors did calisthenics and played at being soldiers. The four main conspirators were observed by a police surveillance team at one of Hamid's camps in May 2004. Hamid, who was arrested in September 2006, reportedly exchanged 155 calls and text messages with the would-be bombers.⁶¹

Motivation

The attackers were inspired by al Qaeda's ideology of violent global jihad. They viewed Islam as being under assault by the West and were particularly enraged by British participation in the invasion of Iraq. They also reportedly watched videos of women and children killed in Iraq by American and British soldiers, and at their trial, it was reported that the July 21 would-be bombers got inspiration and instruction from the Internet.

Objective

The mode of the attacks indicates that the clear intent was to cause mass casualties, as well as terror. The July 21 attackers' defense lawyers later argued at trial that the intent had been only to cause fear and that the bombs were designed to be duds. However, their ingredients and design were the same as those of the devices detonated by the July 7 bombers with deadly results.

Target Selection

Although the plotting that led to the July 21 attempt began long before the July 5 bombings, the target selection for the later attacks was obviously influenced by the July 5 attacks, down to the inclusion of one bomb on a bus. The July 21 bombers also chose specific locations that would produce an explosion in the “north, south, east, and west” of London, as cited in a number of Islamist manifestos.

Selection of Attack Mode and Weapon

The attack mode and weapons in the July 21 attacks were exactly the same as those in the July 5 attacks. The July 21 attacks were intended to be suicide bombings—the attackers had no escape plans.

All the bombs contained the same powerful explosive mixture, homemade from readily available ingredients. The main charge comprised a mixture of chappati flour as a fuel source and concentrated hydrogen peroxide. (Chappati flour has no particular explosive qualities—other fuel sources would have worked just as well or better.) The detonator was a combination of peroxide, nail-polish remover, and sulphuric acid, which makes triacetone triperoxide (TATP), a sensitive and dangerous explosive referred to by jihadist terrorists as the “Mother of Satan.” Between April and July 2005, the July 21 plotters purchased 443 liters of peroxide. TATP has been used in numerous terrorist suicide attacks in the Middle East, but British authorities report having found TATP in only the July 5 and July 21 attacks. The detonator in the bomb Richard Reid—the “shoe bomber”—carried in his shoe was made of TATP,⁶² and Najibullah Zazi's bombs were also going to contain TATP. Muktar Ibrahim, the leader of the July 21 plot, reportedly went to Pakistan in December 2004 to learn bomb-making. Mohammed Siddique Khan and Shehzad Tanweer, two of the four bombers in the July 7 terrorist attack, were there at the same time, hence the similarity of the July 7 and July 21 bombs. The bombs were also concealed in backpacks in both attacks.⁶³

Selection of Date and Time

By May 2004, the July 21 plotters were already radicalized. Plotting to carry out their attack reportedly began in September 2004. In December 2004, Ibrahim traveled to Pakistan for training.⁶⁴ Bomb construction began in April 2005, ten or 11 months after the conspiracy began. Why the attackers chose July 21 is not known.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

Little information is available about the attackers' reconnaissance or intelligence collection efforts.

Security Measures at the Target

After the July 5 attack, security on London's Underground was extremely high. The London Tube is monitored by an extensive CCTV camera network, visible and undercover police patrols, and constant admonitions for the public to be alert and to report any suspicious activity to the authorities. In addition, authorities attempt to keep those suspected of involvement in terrorist activity under close surveillance (Figure 7).



Figure 7. Surveillance Photos of the Bombers Entering the Station and Fleeing After Their Devices Failed

How the Plot Was Disrupted

Although the plotters were known to the authorities as radical Islamists, the plot was not disrupted. The bombs in the July 21 attacks failed to detonate because of faulty construction. Police broadcast footage from CCTV cameras in the Underground of two individuals running away from the scene, which led to their identification and a series of police raids and arrests on July 27 and July 29. The police investigation was assisted by intelligence operations. One of the would-be bombers fled to Italy, but he was later arrested in Rome and extradited to the United Kingdom.

The four would-be bombers were tried and sentenced to 40 years. Asiedu, the fifth bomber and police informant, was sentenced to 33 years. Others received jail sentences ranging from three to 17 years.⁶⁵

2005: MELBOURNE AND SYDNEY TERRORIST PLOTS

The Plots

In November 2005, Australian authorities carried out a series of arrests to foil a terrorist plot they had been closely monitoring for 18 months.⁶⁶ The terrorist ring, led by Abdul Nacer Benbrika, a naturalized Australian citizen from Algeria who was the radical imam and spiritual leader of a small cluster of dedicated followers, comprised two cells, one in Melbourne and one in Sydney.⁶⁷ Although the two cells operated independently (and their members were tried separately), they were both linked to Benbrika.⁶⁸

The Melbourne and Sydney plots were still in their preparatory stage when police made the arrests, but a list of potential targets had been discussed and bomb-building preparations had begun. The list of targets in Melbourne included the Flinders Street Station, Melbourne's most important rail terminal and a city landmark, suggesting that the plotters had the Madrid and London attacks in mind as a model.⁶⁹

Motivation

The plotters subscribed to the extremist ideology of armed jihad. Some of the Sydney cell members had previous connections with Lashkar-e-Taiba, while one of the Melbourne cell members had received training at an al Qaeda camp in 2001, where he reportedly pledged, in bin Laden's presence, to carry out jihad.⁷⁰

Members of the group viewed themselves as being in a state of war with Western infidels.⁷¹ The American-led invasions of Afghanistan and Iraq, with Australian military participation in both, provided proof of Western aggression. The plotters were determined to force Australia's withdrawal from the conflicts. The fact that they began to think about terrorist attacks as a means to this end in 2004 (following the terrorist attack in Madrid, which led to Spain's withdrawal from Iraq) and began preparations in earnest in 2005 (following the terrorist attacks in London) suggests that the Madrid and London events, in addition to Osama bin Laden's continuing exhortations, may have acted as a catalyst.

Objective

The plotters talked about launching "a holy war in Australia."⁷² This was to be accomplished by carrying out an ambitious terrorist attack that would "kill a thousand people."

Target Selection

The plotters considered a variety of targets. The Melbourne cell thought about carrying out strikes at the Melbourne Cricket Ground sports stadium, which seats 100,000, during the 2005 Australian Football Grand Final; Melbourne's Crown Casino and Entertainment Complex during Grand Prix weekend in 2006; and the Flinders Street Station, through which 110,000 commuters pass daily.⁷³ All three targets are cultural icons; the image of the Flinders Street Station is often used as the city's most recognizable landmark (Figure 8). During the police raids, officers reportedly also found references to Casselden Place,

the Melbourne headquarters of the Department of Foreign Affairs and the Department of Trade and Immigration, the Australian Stock Exchange, and the Manly Ferry Terminal.⁷⁴



Figure 8. Flinders Street Station, Melbourne

The Sydney cell contemplated attacks on such icons as the Sydney Opera House and the Sydney Harbor Bridge and had earlier cased the city's nuclear power plant at Lucas Heights.⁷⁵

Selection of Attack Mode and Weapon

Authorities interrupted the plot before the conspirators had developed a specific plan for their attack. Although some of them had trained with small arms, they spoke about destroying buildings—landmark properties—and causing mass casualties, suggesting that bombing was the likely mode of attack.⁷⁶ This is confirmed by the plotters' purchase of laboratory equipment and large quantities of chemicals used for making explosives, including hydrogen peroxide and hexamine. The instructional material and chemicals indicate that they were making triacetone triperoxide (TATP), the same explosive used by the London bombers.⁷⁷ At the time of the arrests, the Melbourne cell reportedly had enough explosives for 15 bombs, which in turn indicates that they anticipated multiple bombings as opposed to one detonation of a large vehicle-borne improvised explosive device (IED).⁷⁸ However, the Melbourne cell was also interested in acquiring large quantities of ammonium nitrate. In a discussion with an undercover police officer, the Melbourne cell's leader asked how much explosive would be needed to blow up a house or large building.⁷⁹ In another recorded conversation with one of his followers, the leader talked about blasting buildings.

The Sydney group was also looking at IEDs. They had instructional material on bomb-making and had acquired hydrogen peroxide, sulfuric acid, citric acid, glycerin, and acetone,

along with detonators, digital timers, and batteries.⁸⁰ The group also had a backpack similar to those used in London, as well as firearms and 7,500 rounds of ammunition.⁸¹

Selection of Date and Time

The Melbourne cell began at least thinking about carrying out terrorist attacks not later than June 2004, although they did not begin purchasing laboratory equipment and chemicals until June 2005. The Sydney cell also began its planning around July 2004.

Neither cell had set a firm date for its attacks. It is known, however, that the Melbourne cell was interested in coordinating its attack with a major event—the Australian Football Final or Grand Prix weekend—which would guarantee large crowds.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

Both cells reconnoitered potential targets. The Melbourne cell filmed the Australian Stock Exchange and Flinders Street Station and had maps of other locations. Three individuals connected with the Sydney cell were arrested in 2004 while surveilling the Lucas Heights nuclear power station.

Security Measures at the Target

Security measures varied across the range of targets considered by the plotters. A nuclear power station would be well protected, and the plotters would have encountered some security getting into a government building or the stock exchange, but most of the targets they were considering—the central train station, a large sports stadium, a vast entertainment complex—were crowded public places. There is no indication that security measures were factored into the cells' planning.⁸²

The plotters, however, went to great lengths to maintain their own operational security, using multiple mobile phones registered under false names and addresses. They also exchanged information using USB flash drives and coded Short Message Service (SMS) messages.

How the Plot Was Disrupted⁸³

Some of the plotters had been persons of interest to the authorities for some time before actual plotting began. Several things alerted police and intelligence officials that something was up. In 2004, a walk-in informant told police that the Melbourne group was talking about terrorist attacks. The 2004 arrests of the three individuals connected with the Sydney cell also suggested a larger plot, and police received alerts from chemical-supply companies about the groups' unusual orders for chemicals.

The cells were under surveillance by the Australian Security Intelligence Organization and federal and state police for at least 16 months, during which the authorities recorded hundreds of hours of conversations and weeks of surveillance tapes. On November 9,

2005, police carried out coordinated raids at dozens of locations in Melbourne and Sydney, arresting a total of 17 persons. An eighteenth suspect was arrested on November 11.

After a long trial, the five Sydney plotters were found guilty in October 2009 and were given sentences of 23 to 28 years. In Melbourne, 12 defendants pleaded not guilty. Benbrika, the plot's mastermind, was convicted in 2008 of belonging to a terrorist organization and possessing a compact disc containing information on how to prepare for a terrorist attack. He was sentenced to 12 years. Six others were also found guilty. In 2010, the sentences of six members of the Melbourne cell were reduced to between three and six years. Four men were found not guilty. The jury failed to reach a verdict on one, but he pleaded guilty before being retried.

Benbrika and three other members of the Melbourne cell faced the additional charge of conspiring to commit a terrorist act, which carries a life sentence, but a judge subsequently permanently stayed the case, ruling that it would be oppressive to subject the defendants to a second trial. This means that Benbrika could be released in 2017.

2006: MILAN METRO PLOT

The Plot

The plot to bomb a Milan Metro station was uncovered in March 2006 when authorities in Morocco arrested nine suspected terrorists connected with the Salafist Group for Preaching and Combat (GSPC),⁸⁴ which later joined al Qaeda to become Al Qaeda in the Islamic Maghreb. The plot was part of a broader campaign to carry out attacks on targets in Italy, France, and Morocco.

Motivation

The Milan plot was part of al Qaeda's continuing terrorist campaign against Western targets. In 2003, jihadist terrorists based in Morocco carried out a series of bombings in Casablanca, and in 2004, a group of North Africans living in Spain and assisted by al Qaeda carried out the Madrid train bombings. The Madrid bombings provided the model for the Milan plot.

It is also possible that inspiration may have come from an arson attack on the Milan Metro carried out by Domenico Quaranta, a Sicilian street tough who converted to Islam while in prison, then recruited himself as a jihadist warrior and carried out a series of attacks between November 2001 and May 2002. On May 11, 2002, at 10:00 pm, he detonated an incendiary device at the Duomo Metro station in central Milan (Figure 9). The device failed, producing only smoke, but nonetheless caused considerable alarm.



Figure 9. The Milan Metro

The leader of the Milan Metro plotters, Mohamed Benhedi Msahel, was a Tunisian who emigrated to Italy in 1969 and lived in Milan. In 2005, he traveled from Italy to Algeria and Morocco with two other North Africans to recruit additional participants for the plot. He reportedly also recruited five individuals in Italy. While in Algeria, he met with the leaders of GSPC, whose hardline elements had been waging a terrorist campaign against Westerners in Algeria.⁸⁵

Objective

The plot appears to have aimed at both high casualties and highly symbolic targets. The jihadists were angry at Italy for its support of U.S. military operations in Iraq and Afghanistan. The plotters may also have intended to affect the elections in Italy in the same way the 2004 Madrid attacks had affected elections in Spain.

Target Selection

The plotters discussed a number of targets in several countries. In France, targets included the Paris Metro, a shopping center in Paris, and the headquarters of the Direction de la Surveillance du Territoire, France's internal security service. Targets in Italy included the San Petronio Basilica in Bologna, which housed portraits seen by the plotters as insulting to the Prophet Muhammad, and a Milan Metro station.⁸⁶ The plotters also considered targeting the U.S. consulate in Rabat, Morocco.⁸⁷

Selection of Attack Mode and Weapon

Bombings were the chosen means of attack.

Selection of the Date and Time

The attack in Milan reportedly was scheduled to occur on April 9 and 10, 2006, to coincide with the national elections.⁸⁸

Attackers' Operational Reconnaissance and Intelligence Collection Methods

No details are available, but Msahel had been a long-time resident of Milan, so he would be familiar with Milan's Metro. The five individuals recruited in Italy might also have been familiar with the targets in Milan.

Security Measures at the Targets

Security at public transportation facilities had been increased after the terrorist bombings of trains in Madrid and London.

How the Plot Was Disrupted

Anour Majrar, one of the two men who accompanied Msahel to Algeria and Morocco, was arrested in Morocco in late 2005 and under interrogation revealed details of the plot. On

March 24, 2006, Moroccan police arrested nine of the conspirators, including Msahel and the men recruited in Italy.⁸⁹ In 2007, Msahel was sentenced to 15 years in prison. Other members of the conspiracy received sentences of two to 15 years.

2006: PATH TUNNEL PLOT (NEW YORK)

The Plot

According to Lebanese authorities, a group of terrorists in Lebanon planned to detonate backpack bombs on Port Authority Trans-Hudson (PATH) trains while under the Hudson River between New Jersey and New York (Figure 10). The plotters discussed the amount of explosives required to breach the tunnel lining, which would flood the tunnel, underground stations in Lower Manhattan, and other below-sea-level tunnels.



Figure 10. A PATH Tunnel Under the Hudson River

Motivation

The attackers were members of an autonomous ad hoc group assembled by Assam Hammoud (also known as Amer al-Andalusi), a Lebanese jihadist volunteer who admitted to pledging allegiance to Osama bin Laden.⁹⁰ Seven others were arrested in connection with the plot, including a Syrian, a Saudi, a Yemeni, a Jordanian, a Palestinian, and an Iranian Kurd. Some accounts suggest that Hammoud was acting on orders from bin Laden himself, while other accounts claim that Abu Musab al-Zarqawi, al Qaeda's field commander in Iraq, had pledged financial and tactical support to the plotters. Regardless of the alleged connections, the plotters regarded themselves as part of al Qaeda's global jihad against the United States.

Objective

At a minimum, bomb attacks on crowded subways would have resulted in a large number of casualties. Intercepted communications indicate that the group also wanted to breach the tunnel itself.⁹¹

Target Selection

The plotters may have discussed other targets, but they settled on the PATH train.

Selection of Attack Mode and Weapon

In what clearly would be a suicide attack, the plotters planned to carry bombs, presumably like those used in the 2005 London attacks, onto the train and detonate them under the river.

Selection of Date and Time

This was a fairly slow-moving plot. The investigation had been ongoing for more than a year before the arrests in April 2006.⁹² Lebanese authorities said that at the time of his arrest, Hammoud was intending to travel to Pakistan for four months of training. The attack was to take place at the end of 2006.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

According to the FBI's New York office, the plotters, all of whom were still in Lebanon, were about to initiate their surveillance of the target and formulate their operational plan.⁹³

Security Measures at the Target

When the conspirators were arrested, the plot had not reached the point where they would have been able to observe security measures. In the wake of the terrorist attacks on commuter rail and transit systems in Madrid and London, security had been increased on the PATH line. A group of Middle Easterners with backpacks together on the same train (presumably, a group would have been needed to produce an explosion of sufficient size to breach the tunnel) probably would have attracted attention.

How the Plot Was Disrupted

The first indication of the plot came from monitoring communications in chat rooms on the Internet that were suspected by authorities of being used to recruit terrorists.⁹⁴ From these, authorities in Lebanon were able to identify Hammoud, who was arrested on April 27, 2006. Under interrogation, he revealed details of the plot. His fellow conspirators were arrested shortly afterwards.

2006: ATTEMPTED GERMAN TRAIN BOMBINGS (COLOGNE)

The Plot

In July 2006, Youssef Mohamad al-Haj Deeb and Jihad Hamad, both Lebanese nationals living in Germany, boarded two trains at the Cologne train station with large suitcases containing bombs.⁹⁵ The bombs, which had been timed to detonate ten minutes before the trains reached the cities of Dortmund and Koblenz, failed to detonate. German authorities later arrested Deeb in Germany. He was convicted of attempted murder and sentenced to life imprisonment. Hamad, who had fled to Lebanon, turned himself into Lebanese authorities. He was convicted and sentenced to 12 years in prison. Three others believed to be connected with the attack were arrested in Lebanon but were later acquitted.⁹⁶

Motivation

The two would-be bombers sought revenge for the publication of cartoons depicting the Prophet Mohammad that were first published in a Danish newspaper in 2005.⁹⁷ Faced with widespread protest by Muslims, who considered the cartoons to be blasphemy, other newspapers in Europe, including one in Germany, reprinted the cartoons to affirm the right to free speech.

Saddam al-Haj Deeb, Youssef's brother, a member of Fatah al Islam, a jihadist group based in Lebanon with links to al Qaeda, is believed to also have played a role in motivating and possibly planning the attack. According to his fellow students in Germany, Mohamad al-Haj Deeb believed that his brother had been killed in a gun battle with the Lebanese Army three or four weeks before the bombing attempt in Germany. (Apparently, this was a false report, as Saddam was killed by the Lebanese Army in May 2007.) Whether or not Saddam participated, the evidence points to a locally initiated plot.

Attacker Objective

The placement of two large IEDs in two passenger trains indicates that the attack was intended to produce heavy casualties.

Target Selection

It is not known what other targets the plotters may have considered. Both men lived in Cologne, although al-Haj Deeb went to school in Kiel.

Selection of Attack Mode and Weapon

The successful terrorist bomb attacks in Madrid in 2004 and London in 2005 could have provided the model for the attempt. The bombs on the German trains were crudely constructed, based on information taken from the Internet. Each consisted of propane tanks, a gasoline trigger to be set off by a homemade detonator, and an alarm-clock timer. The timer worked, igniting the detonators, but the detonators failed to ignite the gasoline.

Al-Haj Deeb's defense attorney claimed that the bombs were constructed so that they would fail.

Selection of Date and Time

The plotters originally planned to launch the attack between June 9 and July 9, during the World Cup football matches in Germany, but they backed off because of heightened security.⁹⁸ (If so, then al-Haj Deeb's erroneous belief that his brother had been killed in Lebanon three or four weeks earlier could not have been a motive for the attack; the initial time frame for the intended attack was three to seven weeks before the actual attempt. The two plotters would have needed time to gather information on the Internet, buy the materials, and build the bombs.)

Attackers' Operational Reconnaissance and Intelligence Collection Methods

No information is available as to whether the two plotters conducted any reconnaissance.

Security Measures at the Target

Both targets were commuter trains that were not highly secured. Security in place included police patrols and CCTV. Again, the only mention of an effect of security was the postponement of the original attack date.

How the Plot Was Disrupted

Authorities did not uncover the plot—the bombs were found after they failed to detonate. Police then reviewed CCTV footage to see where the two large suitcases had been placed on the trains. This gave them photos of the two suspects, which they broadcast throughout Germany. When al-Haj Deeb saw his own picture on national television, he panicked and called his family in Lebanon. Lebanese authorities intercepted the call, and police arrested him at the main train station in Kiel. Meanwhile, Hamad fled to Lebanon to hide out with his family. He subsequently turned himself in to Lebanese authorities.⁹⁹

2008: BARCELONA METRO BOMB PLOT

The Plot

In January 2008, Spain's Guardia Civil arrested 14 men in Barcelona who were accused of plotting suicide bombings targeting Barcelona's public transportation system. Specifically, the plotters planned to carry out multiple attacks on Barcelona's Metro, replicating the death and destruction caused by the March 11, 2004, attacks on Madrid's commuter trains. The attacks in Barcelona were to be followed by a terrorist campaign across Europe involving similar attacks in Germany, France, Portugal, and the United Kingdom, all of which, along with Spain, had troops deployed in Afghanistan.¹⁰⁰

Six members of the terrorist group were legal immigrants who had come to Spain from Pakistan since 2001. Five others, however, had arrived from Pakistan by circuitous routes in the three months before the planned attack, presumably to participate in the mission. Hafeez Ahmed, the group's leader and bomb builder, a resident of Barcelona, had left Spain for five months in Pakistan, returning to Barcelona only weeks before the others started to assemble in the city.

The plot was thwarted as a result of information provided to French authorities by one of those selected to be a suicide bomber. The French notified their Spanish counterparts, and believing the attack to be imminent, Spanish police raided several locations on the night of July 18, taking 14 individuals into custody.¹⁰¹ The informant was promptly separated from the others and put into protective custody. Three of those arrested were released within days. The remaining ten—nine Pakistanis and one Indian—were provisionally imprisoned. In March, they were joined by an eleventh plotter who had left Barcelona a few days before the arrests and had been arrested in the Netherlands. The 11 were indicted in June, eight of them for being members of a terrorist organization and for possession of explosives, three only for belonging to a terrorist organization. The informant became a key witness at the trial of the indicted terrorists.

Motivation

The strategic context for the jihadist terrorist campaign against Western European targets is provided in a series of messages from Osama bin Laden, beginning with an October 2003 speech urging action against states that sent troops to Iraq, including the United Kingdom, Spain, Australia, Poland, Japan, and Italy. The subsequent bombing of commuter trains in Madrid by jihadist terrorists, assisted by al Qaeda, led to a new government in Spain and the withdrawal of Spanish forces from Iraq. The attack also established the precedent of carrying out devastating terrorist attacks at home and in Europe to affect elections and end what the jihadists regarded as aggression against Muslims abroad.

Citing the Madrid attacks as an example of what could happen if European governments did not heed his warnings, bin Laden offered a truce to the European countries in a speech in April 2004: Al Qaeda would halt actions against those countries that refrained from military intervention in Muslim countries, while those that continued to intervene would be attacked. On July 7, 2005, terrorists attacked London Transport. A second terrorist attack

in London on July 21 failed. Terrorist plots were uncovered in Australia in 2005 and in Italy in 2006. A bombing attempt in Germany failed in 2006.

In November 2007, Osama bin Laden demanded that European countries end their military involvement in Afghanistan. As a member of NATO, Spain had an important military contingent in Afghanistan. By the time of this speech, the Barcelona plot was already well under way; its goal was the removal of Spanish troops from Afghanistan.

Al Qaeda's central command in Pakistan had been hit hard by arrests and U.S. drone attacks. Al Qaeda's continued operations depended heavily on its affiliates in Yemen and North Africa. Al Qaeda in the Islamic Maghreb, which consisted mostly of Algerians and Moroccans, aroused the greatest concern in Europe. The Barcelona plotters, most of whom were Pakistanis, however, had contact with Tehrik-i-Taliban Pakistan (TTP), which was operating in Pakistan's frontier tribal areas. TTP subsequently claimed responsibility for the Barcelona plot, but this claim should be treated cautiously, as TTP itself is an assemblage of many militant groups operating in these areas.¹⁰² The leader of the Barcelona plot did receive training in Pakistan, but by late in the decade, terrorist training there had become a dispersed cottage industry, with volunteers shopping for terrorist trainers. However, it appears that additional reinforcements were sent from Pakistan to Spain for the purpose of participating in the planned Barcelona attacks. This suggests external organizational support.

The Barcelona plot illustrates the organizational fluidity within the jihadist movement. Al Qaeda sets the broad strategic outlines. Then, homegrown terrorists, either as individuals or in small groups, plan terrorist attacks and seek training and assistance abroad. Those that manage to connect with al Qaeda or other groups may receive training and support and are sent back to carry on the armed struggle at home.

Objective

The plotters clearly intended to cause mass casualties and create terror among the population.

Attacker Selection of Target

According to the informant, the Barcelona Metro (Figure 11) was the preferred target because "if an explosion takes place in the Metro, the emergency services cannot come." The plot's leader had designated several stations as targets.



Figure 11. A Barcelona Metro Station

Selection of Attack Mode and Weapon¹⁰³

The plotters planned to carry out bombings with explosives-filled backpacks that could be used both in suicide bombings, as in the London attacks, and as leave-behind bombs that could be detonated remotely. Police found small quantities of chemicals that could be used to manufacture explosives at the locations they raided. There were not enough chemicals to make bombs for major attacks, leading to the suspicion that the plotters had a large cache of explosives hidden elsewhere.

Selection of Date and Time

An attack was not imminent, as Spanish authorities first believed when they moved in to make the arrests. The plotters were still in their preliminary planning stage, and no date had been set.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

We have no information on whether the plotters had carried out any reconnaissance or on how they collected intelligence.

Security Measures at the Target

Spain had lived with terrorist bombings by Basque separatists for decades. The 2004 Madrid bombing resulted in an increase in security at Metro stations. Subsequent attacks, attempts, and uncovered plots in Europe underscored the continuing threat. But apart from

the usual CCTV coverage and an increased police presence, no extraordinary security measures were in place.

How the Plot Was Disrupted¹⁰⁴

One of the plotters was reported to have been an informant for French police. He infiltrated the group, although he later denied this at the trial. He said merely that he had telephoned a friend in France, voicing his concerns after the leader of the group told him that he had called his wife for the last time.¹⁰⁵ The friend in France promptly notified French authorities, who, in turn, presumably notified their Spanish counterparts that a terrorist attack may be imminent. Spanish police immediately put the group under surveillance.

On January 13, 2008, police observed eight of the suspected terrorists carrying backpacks to another quarter of the city where, shortly before, two other individuals had arrived carrying similar bundles. Fearing an imminent operation, the decision was made to arrest the group.

2008: BRYANT NEAL VINAS PLOT

The Plot

Bryant Neal Vinas, a U.S. citizen and convert to Islam, was increasingly attracted to a radical interpretation of Islam.¹⁰⁶ He became involved with the Islamic Thinkers Society, an extremist group that supported al Qaeda's ideology of global jihad. Determined to join al Qaeda, Vinas traveled to Pakistan. He made contact with some militants there and declared his readiness to become a suicide bomber, but his Western appearance, poor Arabic, and lack of contacts to vouch for him aroused suspicion, and he was unable to connect with al Qaeda.¹⁰⁷ He was nearly killed by suspicious militants on his second attempt to connect, but he ultimately met a person who was able to put him into contact with al Qaeda members in North Waziristan. In March 2008, he took his oath of allegiance and became a member of the group, assuming a new name, Bashir al-Ameriki (Bashir the American).¹⁰⁸ He suggested the Long Island Railroad to al Qaeda as a possible terrorist target, and he was able to provide detailed inside information because he once worked there.

Motivation

In all probability, Vinas suggested attacking the Long Island Railroad to curry favor with his al Qaeda comrades and to demonstrate his importance. There was no plan.

Objective

By 2008, passenger rail was well established as a terrorist target. The objective in all such attacks was a high body count.

Target Selection

Vinas's familiarity with the Long Island Railroad provided him with an opportunity to offer inside information, thus increasing his importance.¹⁰⁹

Selection of Attack Mode and Weapon

The mode of attack had not been selected at the time of Vinas's apprehension.

Selection of Date and Time

No decision had been made regarding timing.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

While in Pakistan, Vinas would have had to rely exclusively on his own memory. However, if al Qaeda had decided to go ahead with a terrorist attack, his familiarity with the railroad would have been significant.

Security Measures at the Target

As a consequence of various attacks on surface-transportation systems abroad and terrorist plots uncovered in the United States, surface transportation was understood to be a possible terrorist target. Security measures had been increasing since 9/11, especially after the Madrid and London attacks. The Metropolitan Transportation Authority, of which the Long Island Railroad was part, took security seriously. Like all systems, however, high volumes of passengers and financial constraints limited what could be done.

How the Plot Was Disrupted

Vinas was arrested by Pakistani authorities and returned to the United States for trial. He spoke to U.S. authorities about his experience and told them that he had suggested the Long Island Railroad as a target.

2009: ZAZI BOMB PLOT

The Plot

In September 2009, authorities arrested Najibullah Zazi for preparing to carry out suicide bombings on New York's subways. Zazi's two co-conspirators, Adis Medunjanin and Zaarein Ahmedzay, were arrested in January 2010. The three were part of a terrorist plot initiated by al Qaeda's central leadership in Pakistan.¹¹⁰

Zazi and Ahmedzay were naturalized U.S. citizens from Afghanistan, and Medunjanin was a Bosnian immigrant. The three were classmates at Flushing High School in Queens, and they prayed at the same mosque. By various personal paths, they all had adopted a radical expression of Islam, and in 2008, they decided to travel to Afghanistan to join the Taliban in order to fight against American forces.¹¹¹ They flew to Pakistan but were unsuccessful in their attempt to enter Afghanistan. Seeking local assistance, they were then recruited by al Qaeda and taken to a training camp in Waziristan, where they received weapons training.¹¹² Medunjanin returned to the United States while the two others stayed to receive further specialized training in explosives.¹¹³ It was during this training course that they were urged to carry out terrorist attacks in the United States and agreed to do so.

Motivation

The plotters mentioned various motivating factors, including the influence of radical speakers they listened to on the Internet, their anger at the mistreatment of Muslims at Abu Ghraib prison in Iraq, and civilian casualties caused by American military operations in Afghanistan. Their initial intention was to take up arms against American soldiers in Afghanistan—one of the plotters envisioned himself becoming a great Taliban commander—but the al Qaeda commanders they met convinced them that they would be more useful carrying out terrorist attacks in the United States.

Objective

The plan to carry out multiple suicide bombings on subways during rush hour indicates that the objective was to produce mass casualties, as was the case in the 2005 London bombings.¹¹⁴

Target Selection

Al Qaeda's trainers emphasized iconic targets and the need to achieve high body counts but left target selection to the plotters. The plotters discussed a number of targets but decided that they could achieve the greatest number of casualties by detonating bombs on crowded subways during rush hour, following the Madrid and London model. The fact that Zazi was able to produce only small quantities of explosives also may have influenced their decision. A large iconic target was beyond their reach, but with a limited quantity of explosives, they could still hope to kill many on crowded subways.

Selection of Attack Mode and Weapon

The plotters initially wanted to fight for the Taliban rather than join al Qaeda, because, they said, they had little interest in carrying out suicide attacks. Nevertheless, at least two of them committed themselves to suicide attacks, and the plot as envisioned called for all three to participate in a suicide bombing attack similar to the four simultaneous suicide bombings in London.¹¹⁵ The attackers planned to attack the subway line in Times Square and trains going into and out of Grand Central Station.¹¹⁶

The explosive fabricated by Zazi employed triacetone triperoxide (TATP), a homemade explosive based on concentrated hydrogen peroxide, which Zazi had purchased from beauty-salon suppliers in Colorado.¹¹⁷ He produced two pounds of the explosive at his home and transported it to New York, where the plotters planned to assemble three bombs.

Selection of Date and Time

The proposed date of the attack was September 14, 15, or 16, 2009, roughly corresponding with the September 11 memorial services.¹¹⁸ To maximize casualties, the plotters planned to attack during rush hour.¹¹⁹

Attackers' Operational Reconnaissance and Intelligence Collection Methods

During Zazi's brief return to Queens from his home in Denver, he rode the subway multiple times to the Grand Central and Wall Street stations, observing both locations. He also filmed around Grand Central Station.¹²⁰ One source, however, indicates that no casing of targets was known to have occurred.¹²¹

Security Measures at the Target

The New York subway system had an array of security measures in place, including CCTV, a visible police presence, and random passenger screening. There is no indication that these measures influenced the choice of target or the preparations for the attack.¹²²

How the Plot Was Disrupted

Authorities in the United States were unaware of the plot until August 2009, when Zazi communicated with his al Qaeda contact in Pakistan, telling him that the operation was ready to proceed but asking for additional instructions on how to complete the explosive devices.¹²³ This exchange reportedly was picked up by British intelligence, who relayed the information to the United States.

The FBI put Zazi under surveillance. On September 9, Zazi drove from his home in Colorado to New York City, arriving on September 10.¹²⁴ The plotters intended to assemble the bombs over the weekend and carry out the attack between September 14 and 16.¹²⁵ As Zazi crossed the George Washington Bridge coming into New York, his car was stopped by Port Authority police, acting under instructions from the FBI. The police failed to find the explosives Zazi was expected to be carrying and allowed him to continue.

Meanwhile, the NYPD asked Ahmad Wais Afzali, a long-time resident of Flushing and an occasional police informant, if he recognized photos of Zazi and others.¹²⁶ Afzali told police that he recognized Zazi and several others, but after the police departed, Afzali warned Zazi through his father, Mohammed Zazi, that police were asking about his son.¹²⁷

On September 11, Zazi spoke with his father, who told him about the police visit to Afzali. The father advised his son to talk to Afzali “before anything else.”¹²⁸ Zazi reportedly spoke with Afzali twice on September 11. Zazi told Afzali that his car had been stolen and he feared that he was being watched. Afzali asked Zazi if there was any evidence in the car. In fact, FBI agents had taken the car and conducted a search¹²⁹ in which they found no explosives, but they did find a laptop computer containing nine pages of handwritten notes about bomb construction, which Zazi had sent to himself from Pakistan.¹³⁰ It turned out that shortly after arriving in New York, Zazi, fearful that authorities were onto the plot, had discarded the explosives.

On September 12, Zazi flew from La Guardia Airport in New York back to Denver, where he was interviewed by FBI agents on September 16.¹³¹ When he was asked about the notes regarding explosives found on his laptop computer, he falsely asserted that he had never seen them before. However, after further questioning on September 17 and 18, he admitted that during his 2008 trip to Pakistan, he attended courses at an al Qaeda training facility in the Federally Administered Tribal Areas of Pakistan, where he received instruction in weapons and explosives.¹³²

Afzali was interviewed by authorities in New York on September 17, and he falsely asserted in a written statement that he did not tell Zazi or his father that authorities had approached him seeking information.¹³³ Afzali also falsely asserted that he never told Zazi that they were being monitored on the phone and that he never asked him about evidence in his car.¹³⁴

On September 16, 2009, Mohammed Zazi was interviewed by the FBI in Denver. He was asked whether anyone had called him and told him about his son’s activities and any trouble regarding his son, and he denied that he had called anyone in New York other than his son and said that he had never received a call from anyone there. He allegedly later revised his statement to say that he had received one call from an individual who informed him that his son had missed his flight.¹³⁵ Mohammed Zazi was also asked if he knew anyone by the name of Afzali, and he said that he did not.

Najibullah Zazi was arrested and subsequently pleaded guilty to conspiracy to use explosives against persons or property in the United States, conspiracy to murder abroad (while in Afghanistan), and providing material support to al Qaeda.¹³⁶ The other two plotters, Medunjanin and Ahmedzay, were arrested in January 2010 and also pleaded guilty.¹³⁷ Afzali was also convicted of lying to the FBI.¹³⁸ Mohammed Zazi was convicted of obstruction of justice for destroying evidence at his son’s home in Colorado.¹³⁹

2010: WASHINGTON METRO BOMB PLOT

The Plot

This plot differs from the others in that it was an FBI sting, in which a single individual, Farooque Ahmed, believing he was working with al Qaeda operatives, carried out reconnaissance on the Washington, D.C., Metro. It is not clear in his indictment who first suggested the Metro as a target. Ahmed, a naturalized U.S. citizen from Pakistan, had become increasingly radicalized by developments in the Middle East and Southwest Asia and wanted to join al Qaeda's global jihad. He wanted to fight and kill Americans in Afghanistan, and while asking around to see how he could join a terrorist group,¹⁴⁰ he met individuals he believed to be affiliated with al Qaeda, but who, in fact, were FBI undercover agents, and he agreed to participate in a terrorist attack in the United States.

Ahmed was assigned to conduct surveillance and photograph Metrorail stations around Washington, D.C., which were to be the targets (Figure 12). Over a period of six months, Ahmed conducted reconnaissance of the stations and made operational suggestions regarding the concealment of the explosive devices and the timing of the attack. FBI agents arrested him on October 27, 2010, charging him with providing material support to a foreign terrorist organization and planning multiple bombings to cause mass casualties. He pleaded guilty and was sentenced to 23 years in prison.



Figure 12. The Washington, D.C., Metro

Motivation

Ahmed had been influenced by radical American cleric Anwar al-Awlaki, who had preached in Northern Virginia until he fled to Yemen.¹⁴¹ Awlaki urged Muslims in the United States to carry out terrorist attacks, and Ahmed listened to his sermons online.

Objective

Ahmed planned to carry out a rush-hour attack because it would cause the most casualties, clearly indicating that his objective was a high body count.

Target Selection

Ahmed scouted several Metrorail targets, including the Arlington Cemetery, Courthouse, Crystal City, and Pentagon City stations.¹⁴² The Arlington Cemetery Station is on the Metro's Blue Line one stop north of the Pentagon Station. The Crystal City and Pentagon City stations are on the Blue Line one and two stops from the Pentagon Station. The Courthouse Station is in Arlington, Virginia, on the Orange Line just before it connects to the Blue Line. All of these stations are heavily used by military personnel commuting to and from the Pentagon, and Ahmed's expressed desire was to "kill as many military personnel as possible."

Selection of Attack Mode and Weapon

Although he told undercover agents he was willing to be a martyr, Ahmed planned to carry out multiple bombings. He had no terrorist training but prepared himself for jihad by training in martial arts and the use of firearms.

Selection of Date and Time

Ahmed began to plan the operation in April 2010. He told undercover agents that he would be ready to begin his attacks in January 2011 after he completed a pilgrimage to Mecca in January. He said that an attack carried out during the afternoon rush hour, between 4:00 and 5:00 pm, would cause the most casualties.

Attackers' Operational Reconnaissance and Intelligence Collection Methods

Ahmed recorded video images of the targeted stations. On the basis of this reconnaissance, he made suggestions about where the bombs should be placed to kill the most people in simultaneous attacks.

Security Measures at the Target¹⁴³

Security measures at Metro stations included CCTV, random patrols by Metro Transit Police Department officers, and a measure introduced in early 2010 called Blue TIDE (Terrorism Identification and Deterrence Effort), which teamed police officers with law-enforcement officers from other agencies to conduct high-visibility, anti-terrorism shows

of force at Metro stations. After Ahmed's arrest, the Washington Metro Area Transit Authority implemented random passenger screening and increased emphasis on enlisting passengers' assistance in identifying suspicious behavior.

How the Plot Was Disrupted¹⁴⁴

Ahmed's quest to join violent jihad first came to the attention of the authorities in January 2010 as a result of a tip from a source inside the Muslim community. The FBI created the elaborate sting operation to assess Ahmed's intentions and capabilities.

IV. PUTTING THE PLOTS INTO HISTORICAL CONTEXT

Most of the major terrorist attacks and probably at least some of the plots are familiar to many in 2012, but for a growing number of people, 9/11 is already a distant historical event. To future readers, this report may appear to be a mere assemblage of terrorist plots against one category of targets—public surface transportation. These plots, however, occurred in a unique historical context, as the following chronology illustrates.

The plots were part of an ongoing global campaign of terrorism directed against a variety of targets in Western nations that were branded by jihadists as enemies of Islam. Heading the target list were those nations that had deployed troops to Afghanistan and Iraq.

The terrorist campaign was inspired by continuing exhortations from al Qaeda leader Osama bin Laden and his second-in-command Ayman al-Zawahiri, and it was waged by individuals who subscribed to al Qaeda's ideology, some of whom had trained in al Qaeda's training camps or had learned from information posted on al Qaeda's and other jihadist websites. This is not to say that the campaign was centrally directed. Some of the plots were instigated by al Qaeda or by Pakistan's Taliban, while others were merely inspired by al Qaeda's ideology. All, however, appear to have been the products of local initiative—individuals or small groups determined to be part of the global armed struggle, with or without al Qaeda's direct support.

The early part of the campaign (from 2001 to 2004) focused on various forms of chemical attack, reflecting al Qaeda's own exploration of chemical and biological warfare. None of these early schemes were successful. In the next phase of the campaign, the March 11, 2004, bombings of the Madrid commuter trains, in which 191 people were killed, became the model for future terrorist plots. This pattern continued through the end of the decade. The campaign reached a high point in mid-decade, with three major terrorist attacks (Madrid, London, and Mumbai) and seven plots between 2004 and 2006, after which it declined.

Events in Russia overlap those in Western Europe, the United States, and Australia but follow the separate trajectory of the conflict in Chechnya. Chechen rebels, however, were increasingly influenced by Islamist ideology, and their terrorist attacks provided additional examples that no doubt influenced the jihadists' selection of trains and subways as their preferred killing field. The one outlier is the 2007 bombing of the Samjhauta Express in India, which may have been the work of Hindu extremists.

V. THE CHRONOLOGY

The events examined in the report are indicated by dates in boldface.

- **July 1997** – Two terrorists are arrested in Brooklyn for plotting a suicide bomb attack on the New York subway (Flatbush plot).
- **February 2001** – Police in London uncover a terrorist plot to carry out a chemical attack, possibly on London's Underground.
- September 2001 – Al Qaeda terrorists carry out suicide attacks on the World Trade Center and the Pentagon.
- October 2001 – U.S. and allied forces invade Afghanistan.
- March 2002 – Italian police uncover what they believe is a plot to disperse cyanide from tunnels beneath the U.S. embassy in Rome.
- **July 2002** – Plotting in the Heathrow Express case begins around this time.
- **November 2002** – Authorities arrest three individuals for plotting a poison gas attack on the London Underground.
- December 2002 – French authorities uncover a plot to attack the Russian embassy in Paris with chemical or biological weapons. In a related case, French authorities arrest a graduate of an al Qaeda training camp who is believed to be manufacturing ricin. (Between 2001 and 2004, police in France, the United Kingdom, Spain, Russia, and Georgia find traces of ricin or other evidence that local terrorists are acquiring equipment or the ingredients for making ricin, along with instruction manuals.)
- **January 2003** – Terrorists are reported to have been plotting to release poison gas on New York's subways since 2002. Al Qaeda's second-in-command reportedly calls off the attack, which was scheduled to take place in February or March 2003, in January 2003.
- **January 2003** – Individuals are arrested for plotting to disperse ricin on the Heathrow Express in London.
- March 2003 – U.S. and allied forces invade Iraq.
- October 2003 – Osama bin Laden urges action against those states that have sent troops to Iraq, specifically mentioning the United Kingdom, Spain, Australia, Poland, Japan, and Italy. Within the next two and a half years, all except Poland and Japan will be the targets of terrorist attacks or plots.
- December 2003 – A suicide terrorist detonates a bomb on a Stavropol train in Russia, killing 42 people.

- February 2004 – A suicide terrorist detonates a bomb on Moscow’s Metro, killing 40 people.
- March 2004 – On March 11, only days before the Spanish elections, terrorists detonate bombs on Madrid’s commuter trains, killing 191 people. (The attack comes to be known as 3/11.) As a consequence, Spain withdraws its forces from Iraq.
- **March 2004** – Several individuals are arrested for plotting a chemical attack on the London Underground. The plot had begun several months earlier.
- April 2004 – Jordanian authorities announce foiling a terrorist plot to carry out chemical attacks on embassies and other government buildings in Amman.
- April 2004 – Osama bin Laden offers a truce to European countries that withdraw their forces from Afghanistan and Iraq. He suggests that the 9/11 attacks in the United States and the 3/11 attacks in Spain are the alternative.
- **July 2004** – Plotting for the planned attacks in Melbourne and Sydney begins around this time.
- August 2004 – A suicide bomber kills 10 people outside a Moscow Metro station.
- **August 2004** – Two individuals are arrested for plotting to bomb a subway station in New York (the Herald Square bomb plot).
- **September 2004** – Plotting begins for the July 21, 2005, failed bombing attempt on London Transport.
- **April 2005** – Plotting for the PATH tunnel plot reportedly begins around this time.
- July 2005 – Four terrorists carry out suicide bombings on the London Underground and a London bus, killing 52 people. (The attacks come to be known as 7/7.)
- **July 2005** – Four terrorists attempt to carry out suicide bombings on the London Underground and a bus, but their devices fail; a fifth ditches his bomb and flees. (This attack is often referred to as 7/21.)
- **November 2005** – Australian authorities arrest members of alleged terrorist cells in Melbourne and Sydney, Australia, for plotting to carry out bombings at targets including Melbourne’s main railway terminal.
- **March 2006** – Moroccan authorities arrest nine persons suspected of planning a terrorist campaign in Western Europe. Targets include the Milan Metro. The attack is planned to take place on the eve of elections in Italy.
- **April 2006** – Lebanese authorities uncover a terrorist plot to carry out bombings in the PATH tunnel under the Hudson River between New Jersey and New York.

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- July 2006 – Terrorists leave bombs hidden in a suitcase on Mumbai’s commuter train, killing 207 people.
 - **July 2006** – Two individuals, possibly acting on behalf of al Qaeda, plant bombs hidden in suitcases on trains in Germany. The devices fail.
 - February 2007 – Two bombs explode on the Samjhauta Express in India, killing 66 people.
 - **January 2008** – Spanish authorities arrest 14 members of a terrorist cell assisted by Pakistan’s Tehrik-i-Taliban Pakistan (TTP) for allegedly plotting to carry out suicide bombings and remotely detonate bombs on Barcelona’s Metro. The TTP commander, who objects to Spain’s military participation in Afghanistan, claims the goal of the attack was to extend his jihad outside Pakistan.
 - **November 2008** – Pakistani authorities arrest Bryant Neal Vinas, who admits suggesting New York’s Long Island Railroad as a possible terrorist target to his al Qaeda hosts while receiving terrorist training in Pakistan.
 - **September 2009** – Authorities arrest Najibullah Zazi for plotting with two co-conspirators to carry out suicide bombings on New York’s subways. The foiled attacks were to occur around the eighth anniversary of the 9/11 attacks. Zazi had dedicated himself to a suicide attack while with al Qaeda in Pakistan in late 2008.
 - March 2010 – Two suicide bombers kill 40 people in two Moscow Metro stations.
 - **October 2010** – Federal authorities arrest Farooque Ahmad for assisting in what he believed to be a terrorist plot to bomb Washington, D.C., Metro stations.
 - May 2011 — Osama bin Laden is killed in Pakistan. In his personal notes, U.S. authorities find instructions to his followers to carry out attacks on trains in the United States.

VI. SUGGESTED READING LIST

The authors have relied heavily on original legal case documents collected by the Nine Eleven Finding Answers (NEFA) Foundation (www.nefafoundation.org), as well as on available news media accounts. Below are some of the longer analytical and descriptive works.

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ENDNOTES

1. The case studies also include mentions of two other plots: a February 2001 plot to release gas on the London Underground and a failed arson bomb attempt on the Milan Metro in May 2002.
2. Not included, for example, is the plot to bomb a passenger train in Turkey that was uncovered in October 2011. Also excluded is the plot to detonate a large bomb derailing the bullet train between Moscow and St. Petersburg that was uncovered by Russian authorities in August 2011. Numerous attempts by terrorists to derail trains have been made outside of the United States.
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BRIAN MICHAEL JENKINS

Brian Michael Jenkins received a Bachelor of Arts degree in fine arts and a Masters degree in history, both from UCLA. He also studied at the University of Guanajuato, Mexico, and in the Department of Humanities at the University of San Carlos, Guatemala, where he was a Fulbright Fellow and received a second fellowship from the Organization of American States.

Commissioned in the infantry at the age of 19, Mr. Jenkins became a paratrooper and ultimately a captain in the Green Berets. He is a decorated combat veteran, having served in the Seventh Special Forces Group in the Dominican Republic during the American intervention and later as a member of the Fifth Special Forces Group in Vietnam (1966–1967). He returned to Vietnam on a special assignment in 1968 to serve as a member of the Long Range Planning Task Group; he remained with the Group until the end of 1969, receiving the Department of the Army's highest award for his service. Mr. Jenkins returned to Vietnam on an additional special assignment in 1971.

In 1983, Mr. Jenkins served as an advisor to the Long Commission, convened to examine the circumstances and response to the bombing of the U.S. Marine Barracks in Lebanon. In 1984, he assisted the Inman Panel in examining the security of American diplomatic facilities abroad. In 1985–1986, he served as a member of the Committee of the Embassy of the Future, which established new guidelines for the construction of U.S. diplomatic posts. In 1989, Mr. Jenkins served as an advisor to the national commission established to review terrorist threats following the bombing of Pan Am 103. In 1993, he served as a member of the team contracted by the New Jersey–New York Port Authority to review threats and develop new security measures for the World Trade Center following the bombing in February of that year.

In 1996, President Clinton appointed Mr. Jenkins to the White House Commission on Aviation Safety and Security. From 1999 to 2000, he served as an advisor to the National Commission on Terrorism, and since 2000, he has been a member of the U.S. Comptroller General's Advisory Board. Mr. Jenkins is also the Director of the National Transportation Security Center at the Mineta Transportation Institute and since 1997 has directed the Institute's continuing research on protecting surface transportation against terrorist attacks.

Mr. Jenkins is a Special Advisor to the International Chamber of Commerce (ICC) and a member of the advisory board of the ICC's investigative arm, the Commercial Crime Services. Over the years, he has served as a consultant to or carried out assignments for a number of government agencies, including the Department of Homeland Security (DHS). As part of its international project to create a global strategy to combat terrorism, the Club of Madrid in 2004 appointed Mr. Jenkins to lead an international working group on the role of intelligence.

Mr. Jenkins is the author of *International Terrorism: A New Mode of Conflict*; the editor and co-author of *Terrorism and Personal Protection*; the co-editor and co-author of *Aviation Terrorism and Security*; and a co-author of *The Fall of South Vietnam*. His latest books are *Unconquerable Nation: Knowing Our Enemy, Strengthening Ourselves* and *Will Terrorists Go Nuclear?* He is also the author of numerous articles, book chapters, and published research reports on conflict and crime.

JOSEPH TRELLA

Mr. Trella has extensive experience in homeland security at the state level. He served for three years as special assistant to Maryland's governor, for homeland security, public safety, emergency management, military affairs, and veterans affairs. While serving in this capacity, Mr. Trella was the governor's liaison with the state's public safety agencies on September 11, 2001, and the subsequent anthrax attacks in Washington, D.C. In 2003, Mr. Trella began working for the National Governors Association as a senior policy analyst in homeland security, specializing in homeland defense/National Guard issues, intelligence, information sharing, and interoperable communications. Prior to joining the governor's staff, he served as an officer in the U.S. Army for six years, with international experience in strategic and tactical planning, negotiations, security, counterterrorism planning and operations, and disaster relief. Mr. Trella has a Bachelor of Business Administration degree in business economics from Loyola College in Maryland and a Masters degree in international negotiations and conflict resolution from the University of Baltimore and the School of Advanced International Studies.

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