Terrorism: London Public Transport—July 7, 2005

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Introduction

On July 7, 2005 the first suicide terrorist bombing in Western Europe took place on the London Public Transport System. Three bombs at three separate locations on the London Underground, and one bomb on a London Bus, were detonated by hand. This was one day after London was announced as the venue for the Olympic Games 2012, and the same day that the G8 leaders were holding a summit less than 500 kilometers away. The emergency services worked according to a well rehearsed plan while within a week, the perpetrators had been identified. Breaking the full network behind the bombers while resolving the causes of terrorism has become a priority for British intelligence and police officials, given that on July 21, 2005 a further attempt was made to detonate explosive devices on the London Public Transport System.

Intelligence agencies face a key weakness when it comes to their ability to detect and prevent terrorism. Intelligence analysts' predictions can only be 100 percent accurate if there is 100 percent specific and certain information about the future. In general the gatherers of data and subsequently analysts in intelligence agencies face severe limitations given their remit is not as historians in describing the past but to forecast and predict the future.[1] There are few good sources of data on events yet to happen, too many variables exist.[2] Methodologies exist for identifying terrorists across international borders.[3] When the act of terror is by a group of four within a national population of over 50 million people with open territorial borders and access to the European Union that has a population of 450 million people, then the task of detection and prevention is daunting. This was especially the case in the July 7, 2005 attacks on the London Public Transport system where the bombers were young, middle-class, British citizens with good prospects. Not even their families or neighbors suspected them of planning any wrong doing, let alone acts of terrorism. Ultimately then the task is to identify and nullify the causes of terrorism and the networks that provide the capabilities while rehearsing civil-emergency procedures.

The Incident of July 7, 2005

The return of terrorism to the streets of London is a reminder that geopolitical risks have not gone away. The last terrorist attack was by the Irish Republican Army (IRA) on the BBC in 2001 (prior to 9/11) when a Taxi exploded outside of the television studies at White City in West London. Thursday July 7, 2005, had started with euphoria given the previous day’s announcement by the
International Olympic Committee that London would host the 2012 Olympic games. Great Britain also was on a security alert given the G8 summit in Edinburgh—and threats of mass demonstrations—some eight hours travel from London. That summit's goal was to alleviate poverty in Africa and to reach agreement on improving the global ecological environment impacted through industrialization and artificial emissions. Yet, terrorists chose to steal the headlines with death and destruction in London. There was no intelligence to indicate any specific terrorist event would take place anywhere on Great Britain.

While world leaders were meeting in Scotland, the first indication that something was amiss in England came at 8:50 a.m., when an incident on the London Underground was reported between Liverpool Street and Aldgate to the British Transport Police.[4] It was originally thought that there were power surges given the numerous trip-switches being activated across the entire network. The power surges, however, were produced by the detonation of explosives on the third carriage of a London Underground (Tube) train leaving Aldgate Station bound for Liverpool Street Station on the Circle Line. (Train Identified as Number 204 on the Underground Electronic System.)[5] The package contained less than ten pounds of high explosive, small enough to be easily hidden in a bag as ordinary as a backpack. Seven people were killed immediately at the Aldgate station scene with more than 100 wounded, at least ten seriously. This was the first terrorist attack on the London Underground.

Within seconds of the first blast, another package, again with less than ten pounds of explosives, exploded on the second carriage of another Circle Line train, near the Edgware Road station as it departed for Paddington station. This train was identified as Number 316 on the Underground Electronic System. Again, the explosion occurred near the standing area by the carriage's first set of double doors. Five were killed immediately and hundreds wounded in the blast. The explosion also hit an adjoining train traveling in the opposite direction. If one could imagine a rectangle, which is the shape of the Circle line, then the first two explosions happened respectively at the bottom right-hand corner and the top left-hand corner. As the crow flies, this would be around three kilometers from each other but with a travel time of 45 minutes underground or 65 minutes on the surface by road, at rush hour. The Circle Line is one of twelve Underground lines.

At about the same time, a third bomb exploded on the first carriage of a southbound Piccadilly line train, traveling from King's Cross station towards Russell Square station in Central London. The device that exploded in the standing area by the first set of double doors of the first carriage was similar to that of the other explosions, but caused more damage and fatalities. The bomb exploded near the standing area by the carriage’s first set of double doors. A total of 21 people were killed immediately and many others were injured. The Piccadilly Line tunnel was evacuated due to the potential of a collapse. The Piccadilly Line is one of the Underground lines that serve as a mainline railway service, connecting various stations in the city center. The entire Circle line is in Zone 1 of the London transport system with five additional concentric Zones extending outwards as ovals around Zone 1. Hence, the three Underground explosions all occurred within the commuter Zone 1 at morning rush-hour. There are also residential areas on the surface near all these stations.

Even though the explosions had taken place at 8:50 a.m., all trains on the entire network were only moved to platform (Code Amber) by 9:15 a.m., and then evacuated (Code Red) by 9:30 a.m. This was due to the uncertainty of circumstances on the surface and the inability to schedule alternative transport. Normally at this hour of the day there are about 500 trains on the network...
each with a capacity of about 700 passengers. Given such a large number of people, the bombers could easily have slipped on amid the throng of passengers trying to get to work.

Off pattern, a terrorist boarded a Route 30 bus—a double-decker bus that has a maximum capacity of 82—whose normal route is Marble Arch to Dalston but was on diversion, and exploded a fourth bomb on the upper deck of the bus. This was not the first time that a bus had exploded in London. The previous occasion had been in February 1996 on the Aldwych just off Waterloo bridge. There were eye-witnesses to both bombings. Eye-witnesses on the Route 30 bus on July 7 described the bomber as an agitated young man who kept on fidgeting, standing up and sitting down and looking into his bag at his feet. When it exploded, at 9:47 a.m., 13 people died immediately. Most of these people had boarded the bus because of the closure of the Underground lines. The bus explosion took place almost directly above that of the underground Picadilly line explosion. The 49 year-old bus driver, George Psaradakis, survived and rang his wife Androulla on his cell-phone, crying, "My passengers are dead, all my passengers are dead."[6] In the wake of the blasts, senior police officers considered turning off the mobile phone network to prevent terrorists from possibly detonating further bombs. They decided against the move, fearing it would damage public confidence.

The Rescue

The emergency services, under the authority of Gold Command in the Greater London Region, moved into a well rehearsed drill. Gold Command is under the command of the Commissioner of the Metropolitan Police and reports to the COBRA Committee, chaired by the Prime Minister and includes the Security Services (MI5). COBRA is an abbreviation for Cabinet Official Briefing Room A where the emergency committee meets. The last practice exercise of Gold Command had been on June 12 at the Tower Gateway station close to that of the Aldgate explosion. Essential to the flawless success of the emergency services was the coordination of all the emergency services in working to the same plan.

Over a hundred ambulance vehicles and more than 250 ambulance staff attended the incident scenes with added support by staff in the control room.[7] As part of the coordinated plan, the London Ambulance Service worked with the other London emergency services, ambulance services from adjacent areas outside of London—including Bedfordshire and Hertfordshire, Kent, Surrey, and Essex—and voluntary agencies such as St John Ambulance and British Red Cross. Of the eight major emergency hospitals in the region only two were placed on full emergency status under the coordination of University College Hospital. The Royal London Hospital in East London took the casualties from the Aldgate and King's Cross Underground bombs and the bus incident. This hospital also serves as the base for the London Air Ambulance service whose main role during the emergency was to ferry in additional medical staff from outside London. The air ambulance was also able to fly in 31 doctors and paramedics to the four bomb sites. The other Hospital was St Mary's near Paddington, which was a short walk from the Edgware Road Underground b last. The walking wounded were initially treated on the scene at the Hilton Metropole Hotel across the road from the Underground Station given that the station and the train lines are at surface level. They were then transported to hospital by buses. The St Mary's Hospital, famous for Alexander Fleming's discovery of Penicillium, had a few years ago been the major hospital handling a mainline train derailment at Ladbroke Grove and was thus experienced in such emergency matters.

Subsequently patients were transferred to specialist units at eight hospitals: At University College Hospital, 58 patients were seen, and 23 remain with five in intensive care. At Great Ormond Street, 22 patients were brought in, and four were kept in. At Royal London, 208 patients were seen, and 26 remain, with seven in intensive care. At Guy's and S t. Thomas', 22 were brought in, and 13 are still there. At St Mary's, 38 were seen and ten remain, two in critical condition. At Royal Free, 61 were brought in and five had surgery. At Chelsea and Westminster, there were
four patients in the burn unit. An additional 22 hospitals in the London region were placed on stand-by for any further eventuality.

As part of the coordinated plan, all of the initial rescue operations were handled by the London Fire Brigade run by the London Fire & Emergency Planning Authority, while the Metropolitan and City Police forces progressively closed down streets and diverted traffic. Around 200 fire fighters were called to explosions at Aldgate, Edgware Road, and King’s Cross London underground stations and the bus explosion on Thursday, July 7. Twelve fire engines with 60 fire fighters attended the incident at Edgware Road; twelve fire engines with 60 fire fighters attended the incident at King’s Cross; ten fire engines with 50 fire fighters attended the Aldgate incident; and four fire engines with 20 fire fighters were called to the bus explosion. Specialist fire rescue units, deployed to work with the other emergency services to evacuate casualties and make the incidents safe, supplemented these fire fighting units. The emergency rescue unit of the London Underground also deployed from its Vauxhall area HQ to the deepest incident at King’s Cross which was over 100 feet underground. That unit is equipped and trained to handle underground train derailments or suicides by people jumping on the lines in front of trains. The last major incident that it handled was in January 2003 when an engine fell off a Central line near the Chancery Lane station, resulting in the train derailing and crashing into the tunnel wall. The Central line was subsequently closed for three month while all 86 trains on that line were underwent safety modifications.

While the emergency operation was under way on July 7, the COBRA Committee met and decided that there was no need to involve the armed forces. All of London's airports continued to operate, but with tighter security. Eventually, a mortuary was set up at a military base. Progressively through the day, main line stations in the London region were closed and then re-opened to regulate the flow of people and to enable the British Transport Police to monitor any suspicious activities. Initially all Zone 1 bus routes were suspended while checks for explosive devices were conducted on the buses and at depots. A limited bus services had resumed by late afternoon to ensure that City workers could return home at the end of the work day.

By the following morning all bus routes were operating normally. Similarly almost 80 percent of the Underground system was operating with the exception of those areas that were still under forensic investigation. The rapid return to operations attests to the bravery of the staff of the system including the hundreds of bus and train drivers who were willing to return to work. Although some people chose to remain at home on Friday, a willingness to return to the mass transit system was evident over the weekend as hundreds of thousands of people attended the 60th anniversary celebrations of the end of World War II. Londoner's commemorated this with the same resilience that their families had shown during the Blitz years. This rapid return to normalcy might reflect Londoners experience with this kind of violence. London was the subject of bombing throughout the twentieth century, partly with military intention and partly with terrorist aims:

1. During 1940 to 1941—by the Nazi German Luftwaffe;
2. The attack by V1 cruise missiles and V2 ballistic missiles in 1944—by Nazi Germany; and
3. From 1969 to 2001—by the IRA. [8]

**Politics and Society**

While the emergency services conducted their mission, Prime Minister Tony Blair, at the G8 summit in Gleneagles Scotland, informed the world that there had been a series of terrorist attacks in London. Despite his return to London, the summit continued without him. [9] Similarly the Mayor of London was in Singapore for the Olympic Committee decisions and his Deputy took charge for ground coordination. It was during these few first hours that the BBC monitoring
services located a website linked to al-Qaeda with a 200-word statement saying it carried out the bombings. [10]

Throughout the day Sir Ian Blair, Metropolitan police commissioner, said it was likely that a terrorist cell could still be active. He and his colleagues from the British Transport Police, the London Ambulance Service, and London Underground held frequent press conferences for local and foreign journalists at the QE2 Conference Centre adjacent to the House of Parliament. [11] These were also broadcast live by BBC 24 news on digital TV and Internet Services. In addition a Support Center for victims and relatives was set up at the Queen Mother Sports Center a short distance down the road near Victoria Station. This support center reported an initial 52 fatalities with 25 people missing. The figure of fatalities subsequently rose to 56 given that some of the injured died in hospital. Indeed, some victims are still fighting for their lives in hospital—22 remained in a serious or critical condition. Overall, more than 700 people were injured in the blasts, with about half taken to hospital and half treated at the scenes for minor injuries. The casualty bureau, set up to help people locate family members and friends, had taken 104,000 calls within the first 24 hours.

Not surprisingly for such a multicultural city, the casualties came from many different countries, including Sierra Leone, Nigeria, Australia, Portugal, Poland, China as well as the United Kingdom. Professor Jim Ryan, a senior consultant in accident and emergency at University College Hospital, also an ex-army surgeon and veteran of the Falklands conflict, was quoted in the press stating: “Most of the operations are on limbs. There have been amputations. You have penetrating wounds, indented stone, debris, glass or metal. There is also head injury management, and lung inhalation, and injuries to the chest. Our plans for dealing with such a situation have gone better than we could possibly have dreamed.” [12] The next day the Queen visited victims in the Royal London Hospital stating that “Terrorists would not change the British way of life.” Her defiant message was echoed by the Prince of Wales, who paid tribute to the resilience of the British people as he visited those injured being treated at St Mary’s Hospital, Paddington. [13]

Whilst the mourning continued the Prime Minister proposed a package of tough measures, including tighter entry and deportation procedures, and new legislation to combat what he branded an ‘evil ideology’ embraced by the suspected Muslim extremists behind the London terror attacks. Further Home Secretary Charles Clarke lobbied for a European Union agreement to speed up the implementation of existing and new security measures at an extraordinary meeting of EU interior ministers. For crime-fighting purposes, Britain is pushing notably for new legislation throughout the European Union allowing data from telephones and the Internet to be kept for at least a year.

The attack on July 7, was the nightmare scenario that nobody in British society wanted to face. The British suicide bombers believed their faith justified their actions. But this is not just a nightmare in terms of the threat of violence from within, the fallout in the coming weeks and months will have the capacity to severely test—perhaps in some cases test to breaking point—the cohesion of British society and civil liberties. The public to some extent see terrorism as a foreign threat—just as in years gone by the IRA threat was presented as something that came from the unique, alien circumstances of Northern Ireland’s sectarian society, rather than something that sprang from ordinary folk in ordinary neighborhoods. But the revelation that the four London bombers were British citizens, middle class, educated, and with good prospects will confirm observers’ worst fears. There is a certainty of a severe backlash against ordinary folk going about their business. But just as importantly, any further reaction may, in turn, create deeper divisions in society—and create more opportunities for those seeking to radicalize the young. Anxiety levels are up across the country and if this turns to anger, then it could have an immensely destabilizing effect.

**Solving the Crime**
Efforts commenced immediately to apprehend the perpetrators and the planners no matter where they are. An examination of the debris in the hours immediately following the bomb blasts and the piecing together of eye-witness accounts was part of the investigation. Investigators believe that the explosives were hand detonated by the bombers with prior planning and intent, given that the three Underground explosions all took place within 50 seconds. Scientists gathered clues about the source of the explosion from the way objects have been deformed. There was an intense burning mark where the blast happened. From the levels of deformity, investigators determined out how much energy was released in the explosion. They also could tell from the residue what type of explosive was used. The source of the explosives may lead to the prevention of further attacks.[14]

In addition to encouraging eye-witness statements and other intelligence by announcing a special information hot-line telephone number, police examined hundreds of Closed Circuit Television (CCTV) tapes in an attempt to identify the bombers. Both in its scope and scale, it was the biggest CCTV forensic examination ever attempted in the United Kingdom, not only because of the growth of CCTV cameras in London in recent years but because of the spread-out nature of the multi-location terrorist attacks. Footage examined included images captured by CCTV cameras along the affected tube lines and along the route of the bus before the blast. In addition, this is probably the first terrorist attack that has been recorded by the still and video image capture facilities on thousands of individual cell-phones. Police investigations highlighted that these images contained vital information and provided a crucial piece of the investigative jigsaw. With three million passengers using the underground every day, however, the task of identifying the individuals who launched the attacks from this data was daunting. But the attacks, terrible as they were, did not involve chemical or biological weapons, as had long been feared.

The first lead to confirming the identity of the bombers came when the family of one of the bombers (19 year-old Hasib Hussain) reported him missing on the night of the bombing. His family was unaware of his beliefs and his actions. His severed head was found on the Route 30 bus. Back tracking the CCTV cameras showed Hasib Hussain and three other people arriving at London’s King’s Cross mainline railway station at 08.30 a.m. Thursday, July 7, 2005 on a Thameslink commuter train from Luton, mainline railway station which is around 45 kilometers north of London. Two of these people were identified as Shehzad Tanweer, 22, a University of Leeds sports science graduate and Mohammed Sadique Khan, 30, a father and teaching assistant/learning mentor at a Leeds primary school. Further back-tracking CCTV showed that they had traveled to Luton in rental cars from the city of Leeds which is in the county of Yorkshire 320 kilometers north of London to meet the fourth bomber. These three terrorists were Muslims of Pakistani origin. They left the cars in parking lots in Luton, one with explosives in it. The fourth terrorist bomber was Jamaican-born 19 year-old Germain Lindsay, a Muslim convert who had married a local British girl, Samantha, from Aylesbury Buckinghamshire near London. Lindsay's mother had lived in Cleveland, Ohio.

The confirmation of their identity and as being the suicide bombings came in part from the identification of their personal possessions and DNA at the specific point of explosion of the four London bombsites. Subsequently a relative of one of the bombers was arrested and questioned. Explosives (TATP/acetone peroxide) also found at one of the six houses searched in Leeds were the same kind of explosive that Richard Reid had in his shoes when he tried to blow up a trans-Atlantic flight in 2001. However, there remain many unanswered questions about the July 7 incident in London: for example, were the locations and timings intentional.

It also remains to be determined whether these bombers were operating on their own initiative, if they were part of a larger cell still operating in Britain and the nature of any foreign involvement. For example, as part of the investigations an Egyptian born student who undertook a Ph.D. in biochemistry at the University of at Leeds sponsored by Egypt's National Research Center, Magdi Mahmoud al-Nashar 33, was arrested in Cairo, Egypt on July 15. Mr. al-Nashar is believed to have handed over keys to a house in Leeds used by the bombers, although during initial
questioning he denied any connection or involvement. Other examples come from Pakistan, where the bombers were believed to have visited a year prior to the bombings. Ten days after the bombings, 28 people in Karachi were detained, including a senior figure in Pakistan's largest Islamic group, Jamaat-e-Islami, and a cleric allegedly linked with Sipah-e-Sahaba, a Sunni Muslim group banned for suspected involvement in attacks against Shiite Muslims, a minority in Pakistan. Another 35 people were detained in the eastern province of Punjab, and dozens were detained in Pakistan’s capital, Islamabad after President General Pervez Musharraf renewed a pledge to eliminate religious extremism amid concern that Islamic schools in Pakistan promote militancy.

Alarmingly, this is the first instance of suicide bombings in Western Europe in contemporary times. Suicide bombing, however, is not a new phenomenon: 25 countries have been targeted and thousands have been killed. Suicide bombings are recorded to have taken place in the 11th Century during the Crusades; in World War II by the Japanese Kamikaze pilots; in Beirut Lebanon in 1981; in the 9/11 attacks in the United States; in Israel; and in Iraq. Britain's first suicide bomber was Asif Hanif, 21, from London, who together with his fellow bomber Omar Sharif, blew themselves up in Tel Aviv Israel in April 2003, killing three people when they attacked the Mike's Place Bar near the U.S. Embassy.[15]

The track record of many investigations into attacks around the world suggests that it is easier to find the foot soldiers—such as these bombers—rather than the recruiters, the financiers, the organizers, and the bomb-makers. Breaking this broader infrastructure is vital to try to prevent further attacks. There may be other groups of individuals who have the desire and intent to carry out further attacks. The challenge is preventing them having the capability.

**Conclusion**

The key issue for investigators—whether these attacks will be a unique event—was answered on July 21 when attempts were made to detonate another four explosive devices on the London Public Transit System, but with no casualties. The failed attack left behind significant forensic evidence. The July 7 attacks might herald a series of assaults on the transport system of the United Kingdom, or indeed of other countries. But most people will probably take the philosophical view that an attack could occur anywhere, at any time, and there is little to be gained from attempting to avoid them in paranoia.

Global investigators may have to get used to the idea of the occasional terrorist atrocity, just as Britons got used to IRA bombs in the 1970s and 1980s, and tourists to Spain have not been put off their beach holidays by ETA attacks. It is essential, in the words of Prime Minister Tony Blair, to tackle the causes of terrorism given the almost impossible security task of preventing such sporadic and localized attacks. This was echoed by the Metropolitan Police, whose plain clothes anti-terrorist police have been patrolling the Tube network since the March 2004 Madrid train bombings in Spain, which killed 191 people.

There are three main causes of the type of terrorism that was inflicted on the London Public Transport System:

1. The first is a familiar feature in a Europe dominated by left-wing intellectual ecosystems using terror is a means of extremist politics to further the goal of national self-determination. This is typified by the IRA and ETA organizations, where a possible solution is to persuade towards more appropriate means of politics such as negotiation—a process under way as part of devolution in the United Kingdom.
2. The second is radical militarism by individuals or organizations occasionally indulging in self-sacrifice (suicide) to gain self or communal recognition, or to attain dignity or
significance to a cause or on behalf of their community, or because they are disgruntled. A possible solution is to dissuade future acts of this nature through punishment of their originator community—a process practiced by the Israeli Army in the demolition of the homes, businesses, and properties of suicide bombers. Alternatively, task forces within local communities can be set up to work together with government offices and the security forces to weed out individual militants.

3. The third cause is the individual criminal or insane person, whose isolated or sporadic acts take place without consideration to the cost or the consequences of their actions—to which there is no solution other than arrest and detention of the culprit, as was the case following the Soho, Brixton, and Brick Lane bombings in London by David Copeland in 1999.

London has faced all three types of terrorism, on different targets and dates, yet the terrorists have been shown not to have achieved their objectives in the near millennium of democracy since the Magna Carta.

About the Author

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5. The data on the explosions was provided to the author by the British Transport Police during an interview held at the British Transport Police on July 12, 2005.

7. The data on the London Ambulance Services, London Fire Brigade and other emergency services was provided to the author by the Civil Emergency Secretariat of the Cabinet Office during an interview held on July 8, 2005.

8. The Imperial War Museum website offers an excellent reference point for further reading and information on World War II whilst a time-line of major terrorist events, compiled by the Centre for Defence and International Security Studies, can be found at TimRipley.co.uk.

9. Transcript of briefing given by the PMOS in London on Thursday 7 July 2005 from the website of Number 10 Downing Street.

10. The BBC has undertaken comprehensive research and publication on Al Qaeda, "Timeline: Al-Qaeda, The history of Osama Bin Laden's network and major attacks linked to it," located on BBC.com.

11. The Author was present at these press briefings and briefings of the security services and recorded the information as it was delivered.

12. From The Mail on Sunday's health news.

13. Details of the Royal Visits and the Queen's Speech can be found on the British Monarchy website.

14. Details on the investigation were provided to the author by the Metropolitan Police during interviews held on July 13, 2005 and July 21, 2005.

15. Details on these two bombers and other incidents can be found in “The British suicide bombers,” The Guardian, May 1, 2003.