

IISTPS Report 97-4

***PROTECTING SURFACE TRANSPORTATION SYSTEMS AND PATRONS
FROM TERRORIST ACTIVITIES***

***CASE STUDIES OF BEST SECURITY PRACTICES
AND
A CHRONOLOGY OF ATTACKS***

December 1997

Brian Michael Jenkins

a publication of the
**Norman Y. Mineta
International Institute for
Surface Transportation Policy Studies
*IISTPS***

Created by Congress in 1991

TECHNICAL REPORT DOCUMENTATION PAGE

| | | | |
|---|--|---|----------------------|
| 1. Report No. CA/R-96/26 | 2. Government Accession No. | 3. Recipients Catalog No. | |
| 4. Title and Subtitle Protecting Surface Transportation Systems and Patrons from Terrorist Activities: Case Studies of Best Security Practices and a Chronology of Attacks | | 5. Report Date November 1997 | |
| | | 6. Performing Organization Code | |
| 7. Authors Brian M. Jenkins, Team Leader | | 8. Performing Organization Report No. 97-4 | |
| 9. Performing Organization Name and Address Norman Y. Mineta International Institute for Surface Transportation Policy Studies San José State University College of Business-BT550 San Jose, CA 96192-0219 | | 10. Work Unit No. | |
| | | 11. Contract or Grant No. 65W136 | |
| 12. Sponsoring Agency Name and Address U.S Department of Transportation California Department of Transportation Research and Special Programs New Technology and Research, MS-83 400 7 th Street, S.W. P. O. Box 942873 Washington, D.C. 20590 Sacramento, CA 94273-0001 | | 13. Type of Report and Period Covered Final Report | |
| | | 14. Sponsoring Agency Code | |
| 15. Supplementary Notes This project was sponsored by the U.S. Department of Transportation's Research and Special Programs Administration, by the Volpe National Transportation Systems Center for the National Security Council, and by the California Department of Transportation. The project was conducted under the original title "Identification of Best Practices in Protecting Against Terrorist Attacks on Transportation Facilities, Equipment, and Passengers." | | | |
| 16. Abstract <p>Contemporary terrorists have made public transportation a new theater of operations. For those determined to kill in quantity and willing to kill indiscriminately, public transportation offers an attractive target. Because it is public and used by millions of people daily, there is necessarily little security. Passengers are strangers, promising attackers anonymity. Concentrations of people in contained environments are especially vulnerable to conventional explosives and unconventional weapons and attacks on public transportation, the circulatory systems of urban environments, cause great disruption and alarm, which are the traditional goals of terrorism.</p> <p>In order to effectively meet the threat posed by terrorism and other forms of violent crime, it is essential that transportation system operators have a thorough understanding of the security measures employed elsewhere, especially by those transportation entities that have suffered terrorist attacks or that confront high threat levels.</p> <p>This volume reports on the first phase of a continuing research effort carried out by the Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) on behalf of the U.S. Department of Transportation. It comprises a chronology of attacks on surface transportation systems; four case studies of transportation security measures (in Paris, Atlanta, and New York, and at Amtrak); security surveys of nine additional cities in the United States; and an annotated bibliography of current literature on the topic.</p> | | | |
| 17. Key Words bombings, crisis management, derailing, emergency communications, emergency response, liaison with authorities, restoration of services, role of the public, sabotage, security, security organization, security technology, threat assessment. | | 18. Distribution Statement No restrictions. This document is available to the public through the National Technical Information Service, Springfield, VA 22161 | |
| 19. Security Classif. (of this report) Unclassified | Security Classif. (of this page) Unclassified | 21. No. of Pages 284 | 22. Price \$15.00 |

TABLE OF CONTENTS

| | |
|--|-----|
| EXECUTIVE SUMMARY | 1 |
| THE PARIS SUBWAY SYSTEM..... | 13 |
| DESCRIPTION OF THE SYSTEM..... | 13 |
| THE INCIDENT | 17 |
| CLEAN-UP AND RESTORATION | 18 |
| LESSONS LEARNED..... | 20 |
| AMTRAK..... | 23 |
| DESCRIPTION OF THE SYSTEM..... | 23 |
| THE INCIDENT | 26 |
| CLEAN-UP AND RESTORATION | 31 |
| LESSONS LEARNED..... | 32 |
| THE NEW YORK CITY TRANSIT AUTHORITY..... | 33 |
| DESCRIPTION OF THE SYSTEM..... | 33 |
| INCIDENT RESPONSE..... | 34 |
| CLEAN-UP AND RESTORATION ISSUES | 41 |
| LESSONS LEARNED..... | 43 |
| THE METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY | 49 |
| DESCRIPTION OF THE SYSTEM..... | 49 |
| INCIDENT RESPONSE..... | 49 |
| CLEAN-UP AND RESTORATION ISSUES | 58 |
| LESSONS LEARNED | 58 |
| APPENDICES..... | 61 |
| CRITERIA FOR TRANSPORTATION SECURITY | 65 |
| 1. DESIGN AND PLANNING (PRE-INCIDENT)..... | 69 |
| 2. RESPONSE (INCIDENT) | 75 |
| 3. RECOVERY (FOLLOW-UP)..... | 78 |
| SECURITY CRITERIA AND THE CASE STUDIES | 81 |
| DESIGN AND PLANNING (PRE-INCIDENT)..... | 82 |
| RESPONSE TO INCIDENT | 93 |
| RECOVERY AND FOLLOW-UP | 98 |
| A CHRONOLOGY OF TERRORIST ATTACKS | 103 |
| KEY OBSERVATIONS | 103 |
| INTRODUCTION | 104 |
| CHRONOLOGY..... | 113 |
| GLOSSARY OF ACRONYMS AND INITIALS..... | 239 |
| ANNOTATED BIBLIOGRAPHY..... | 241 |

LIST OF FIGURES

| | |
|--|-----|
| Figure 1-1 MARTA Rapid Transit System Map..... | 62 |
| Figure 1-2 Olympic Rail and Bus Entries..... | 63 |
| Figure 1-3 MARTA Police Command Staff 1996 Olympics..... | 64 |
| Figure 2-1 Targets | 106 |
| Figure 2-2 Tactics..... | 106 |
| Figure 2-3 Total Incidents With Fatalities | 109 |
| Figure 2-4 The Deadliest Cases..... | 109 |
| Figure 2-5 Countries with the Most Fatalities..... | 111 |
| Figure 2-6 Location of Attacks With Fatalities..... | 111 |

ACKNOWLEDGEMENTS

The Director of Research for the Project, Brian M. Jenkins, Deputy Chairman of the Kroll-O’Gara Company, would like to thank the following authors and contributors for their assistance in making this publication possible.

Amtrak

Author James Graebner, President of the Lombardo Group, (Denver), and contributor Rodney Fraser, the Chief of Police for Amtrak.

New York City Transit Authority

Authors Ken Donnohue, Chief of the New York City Transit Bureau and Thomas J. Savage, Chief of Security of the New York City Transit, and contributor John O’Conner, Chief of Police, Long Island Railroad.

MARTA, Atlanta

Author Major Michael Parker of the Metropolitan Atlanta Rapid Transit Authority and contributors Gene Wilson, Chief of Police, and Captain Joe McKinney of MARTA.

The Paris Subway System case study was written by Brian Jenkins.

The Criteria for Transportation Security were devised by Brian Jenkins.

The Chronology of Attacks was compiled by Carl Kruse, Harry Choi, Research Analysts with Kroll Information Services, and Shaun McCarthy, Ph.D., Director of Special Operations at the Kroll-O’Gara Company. Information used for building the Chronology was made available by Karen Gardela of the Rand Corporation and Professor Paul Wilkinson, Chairman, Department of History and International Relations at the University of St. Andrews, Scotland.

The case study format was developed by Brian Jenkins and the case studies were edited by Shaun McCarthy.

The criteria for transportation security was developed by Brian Jenkins with the help of Olubunmi Falayan, Graduate Student, San Jose State University.

The bibliography was prepared by Olubunmi Falayan.

The material for this publication was copy edited and prepared for publication by John Vargo, IISTPS Research Associate.

Thanks to Dr. Inger Sagatun-Edwards, Chair of the Administration of Justice Department, San Jose State University, for peer review and editorial advice.

Finally, a special note of thanks is due to Rod Diridon, Executive Director of the IISTPS, for his leadership and continuing support of this project.

Copyright © 1997 by IISTPS

All rights reserved

Library of Congress No. 97-76158

To order, please contact us via the following:

IISTPS
San Jose State University
College of Business
San Jose, CA 95192-0219
Tel (408) 924-7560
Fax (408) 924-7565
e-mail: iistps@iistps.sjsu.edu
<http://transweb.sjsu.edu>

Prepared in cooperation with the State of California Business, Transportation, and Housing Agency, Department of Transportation and the U.S. Department of Transportation, Research and Special Programs Administration, University Research Institutes program.

The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the U.S. Department of Transportation, the State of California or IISTPS. This report does not constitute a standard, specification, or regulation.

This document is disseminated under the sponsorship of the Department of Transportation, University Research Institutes Program, in the interest of information exchange. The U.S. Government, State of California and IISTPS assume no liability for the contents or use hereof.

EXECUTIVE SUMMARY

By **Brian M. Jenkins**

Contemporary terrorists have made public transportation a new theater of operations. Algerian extremists set off bombs on the subways of Paris in 1995 and 1996; the Irish Republican Army has waged a long running terrorist campaign against Britain's passenger trains and London's subways; Palestinian terrorists have carried out suicide bombings on Israel's buses; and an individual or a group calling itself "Sons of the Gestapo" derailed a passenger train in Arizona in 1995. Islamic extremists planned to set off car bombs in New York's tunnels and bridges in 1993 and in 1997 they plotted suicide bombings in New York subways. The nerve gas attack on Tokyo's subways by members of the Aum Shinrikyo sect in 1995 raised the specter that terrorists in the future might resort to weapons of mass destruction to which public transportation is uniquely vulnerable.

For those determined to kill in quantity and willing to kill indiscriminately, public transportation offers an ideal target. Precisely because it is public, and used by millions of people daily, there is necessarily little security with no obvious checkpoints, like those at airports, to inspect passengers and parcels. The passengers are strangers, promising attackers anonymity and easy escape. Concentrations of people in contained environments are especially vulnerable to conventional explosives and unconventional weapons. Specifically, attacks on public transportation, the circulatory systems of urban environments, cause great disruption and alarm, which are the traditional goals of terrorism.

As the accompanying *Chronology of Terrorist and Other Significant Attacks on Surface Transportation Systems* indicates, terrorist attacks on surface transportation systems have increased over the past 25 years. Two-thirds of these attacks are intended to kill, 35 percent of them have resulted in fatalities, and of the fatal attacks, 30 percent involve 10 or more deaths.

Terrorists pose unique challenges to those responsible for security. The nation is familiar with the terrorist bombings at the World Trade Center, the Oklahoma City federal building, and Centennial

Park in Atlanta, and a number of terrorist bombings have been thwarted by vigilant authorities. These incidents indicate that the terrorist threat in the United States is real, although there is no consensus on the nature and magnitude of that threat. The United States has not experienced on-going terrorist campaigns like those waged by the Irish Republican Army in the United Kingdom or by various Palestinian extremist groups in Israel. Incidents here have been isolated and statistically rare but sometimes of great consequence.

Because terrorist threats are not easily quantifiable, it is difficult to determine the “right” level of security. Using cost-benefit analysis as the sole criterion to determine the level of security is not very helpful. The risk of death to any individual citizen from terrorism is minuscule, making it difficult to argue for any security measure on the grounds that it will save lives. The problem is exacerbated by the fact that the perceived burden of security is not determined by the number or capabilities of the potential attackers, but by the size and number of targets to be defended.

Since the threat of terrorism is murky and security measures are costly, it is hard to justify the expenditures before an attack. Security against terrorism therefore tends to be reactive.

Scope of the Work

In order to effectively meet the threat posed by terrorism and other forms of violent crime, it is essential that transportation system operators have a thorough understanding of the security measures employed by other operators and especially by those transportation entities that have suffered terrorist attacks or that confront high levels of threat. The objective of this project is the creation of a “best practices textbook” describing the most effective security measures and response procedures.

This volume reports on the first phase of the effort to define which practices are best. It includes four original case studies commissioned by the Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) on behalf of the U.S. Department of Transportation. The four case studies address transportation security measures in Paris, Atlanta, New York, and on the Amtrak rail system. The Paris case study focuses on the immediate aftermath of the 1995 terrorist bombing in the St.

Michel Station. Further terrorist bombings occurred in France in the fall of 1995 and in December 1996 obliging authorities to increase security. The Atlanta case study focuses on the security preparations connected with the 1996 Olympics and the aftermath of the Centennial Park bombing, although this bombing was not directed against public transportation. The Amtrak case study focuses on the response to the deliberate derailing of the Sunset Limited in Arizona in November 1995. New York was included because of the size and complexity of its transportation system and the various incidents and threats that have affected it, including the 1993 World Trade Center bombing, the subsequent plot to blow up bridges and tunnels, and the 1996 explosion at the Battery Park subway station. As these case studies were being completed, police discovered a terrorist plot to carry out suicide bombings on the city's subways.

Each case study examines three issues:

- policies and practices in effect prior to the incident (pre-incident preparedness);
- the response to the event or heightened threat environment; and
- the recovery efforts.

To facilitate comparisons, we have developed a common format, which can be used as further case studies are added to the effort. The format allows for a broad interpretation of security. It includes:

- a description of the transportation system itself;
- all aspects of existing security:
 - threat assessment
 - security organization, personnel, procedures, and training
 - environmental design
 - security technology
 - emergency communications
 - the role of the public
- crisis management planning;

- liaison with authorities;
- and the immediate response to attacks or threats including:
 - additional security measures,
 - emergency response,
 - restoration of services,
 - lessons learned
 - problem areas identified

Although the order in which these topics are addressed varies somewhat from one case study to another, all of these elements are examined to the extent that information is available and can be discussed in a widely-disseminated document.

All of the case studies were conducted with the full cooperation of the operating entity and are based on reviews of plans and after-action reports, interviews with company officials and public authorities, and media accounts of events.

During the course of this research, an additional task was added. In 1996, the Federal Transportation Agency (FTA) examined existing security practices at nine public transportation systems in the United States. The systems included multi-mode transportation systems, medium and large bus systems, and small and rural bus systems. The reviews were not based on case studies but surveys and they did not focus exclusively on terrorism and other significant violent crime but included a broader spectrum of crimes against property (e.g., Objects thrown at vehicles, arson, and hate crimes), crimes against persons (assaults on passengers, attacks on operators or drivers, weapons offenses, and homicides), and dramatic impact crimes such as bomb threats and terrorism.

We were asked to review and reformat the material compiled in the nine surveys so that it could more easily be compared with the four case studies. As the information gathered in the surveys did not permit a detailed narrative, we have presented the FTA material in chart form using the same list of key topics used for the case studies. The charts are included in Appendix A. The results of the nine FTA surveys are then compared with the four IISTPS case studies in Appendices B, C, and D.

In addition to the four case studies and the results of the nine surveys conducted by the FTA, we were able to gather further material from public sources and briefings by British, Israeli, and Japanese transportation officials, which were particularly relevant given their experience with terrorism. However, it is anticipated that detailed case studies of these experiences will be part of the next phase of research leading to the “best practices” textbook mentioned earlier. The final phase of the effort will be to present the results to operators at various national and regional symposia.

Desirable Attributes of Security

Before summarizing the specific security measures identified in the case studies and surveys, some of the broader issues that emerged should be identified. First, it is clear that effective “security” includes not just the deterrent and preventive measures that normally come under the heading of security practices, but all efforts to mitigate casualties, damage, and disruption and to rapidly restore operations after an attack. Given the inherent advantages that terrorists always have, and the inherent vulnerability of public transportation, in most cases the operating entity and authorities will be reacting to a communicated threat or an actual incident. The point can be illustrated by comparing commercial aviation security with that of surface transportation.

Historically, airlines have been among the favorite targets of terrorism. The extraordinary security measures implemented over the years in response to this threat have greatly reduced the incidents of airline hijacking and sabotage, though much remains to be done to increase the level of confidence among the public that terrorists and other criminals bent upon hostage-taking or destruction will not succeed. In many respects, surface transportation offers a tempting target that is far more difficult to protect.

Commercial aviation security places great emphasis on deterrence; however, prevention is the key element. In contrast, surface transportation security may try to deter potential attackers but actual prevention is much more difficult. There are too many passengers entering the system at too many locations to permit the kind of passenger and luggage screening that protects airliners. Some mitigation measures, that is, measures taken to limit

casualties or damage in case of an attack, are possible in aviation security (e.g., hardening cargo container to reduce the effects of an explosion), but realistically, possibilities are limited. In surface transportation, mitigation can be achieved through the design of cars and stations and by rapid response to incidents that occur. Restoration of service is not a major issue in aviation security. When an aircraft is hijacked or destroyed, it is out of action, but the overall disruption to airline travel is minimal. In contrast, restoration of service is often a key issue in surface transportation. With less weight on deterrence and prevention and more on the mitigation of damages and the restoration of surface transportation, security is essentially reactive. Therefore emergency response and crisis management are the critical components of surface transportation security. The case studies of the St. Michel bombing and the derauling of the Sunset Limited bear out this observation.

The significant costs and the reactive nature of protecting surface transportation systems indicate that security measures should be flexible, that is, they can be increased rapidly during periods of heightened threat and decreased when circumstances permit. The costs of manpower also demand that much of the work be done with technology rather than personnel.

Coordination with Authorities

Security against terrorism requires cooperation and coordination between the private and public sector and between local and national authorities. The line between the operating authority's security contingent and the local authorities' can vary. Some large operating entities have their own police departments while in other cases local police may assume responsibility for all but routine security functions. The operating entity has primary responsibility for security, immediate response to threats, crisis management planning, and the restoration of operations in case of terrorist attacks. Local authorities often share responsibility for security or augment the operating entities' security force when required. Local police also have access to intelligence not ordinarily available to the operating entity and may assume responsibilities for major criminal investigations, and local civic authorities usually assist in the immediate response to threats, crisis planning, and emergency response.

The role of the federal government in security against terrorism is an evolving one. A terrorist attack within the United States is an attack on America and not necessarily just against the specific target. That common bond makes security against terrorism a national concern, a part of providing for the common defense. This notion was advanced by the White House Commission on Aviation Safety and Security and accepted in principle by Congress, although Congress has not always provided the funds requested to augment aviation security. To what extent this principle can or should be applied to surface transportation remains a question. The nature of the terrorist threat makes it impossible for the federal government to assume the entire burden and the imperative of balancing the federal budget makes it unlikely that the government will contribute greatly to ongoing security costs. The operating entity and local authorities will bear the larger burden.

The federal government, however, may contribute to security by sponsoring research and development and by funding the deployment of experimental security technology. Federal agencies play a major role in the collection, analysis, and dissemination of intelligence on terrorism and local authorities depend on the government for this type of information. The federal government may also take over the task of investigating terrorist threats or crimes, assist in emergency response, and provide specialized equipment and material to deal with more exotic threats such as the use of chemical weapons.

The relationship between the transportation entity and the local or state authorities on security issues poses two questions. First, should the federal government set security standards for surface transportation as it now does for commercial aviation? There is no indication that operating entities would welcome federal regulation in the security area, although federally-sponsored research leading to the identification of a textbook on “best practices” may, in a litigious society like America, have the effect of establishing minimum security standards.

Second, should the federal government augment security in extraordinary circumstances, for example, the threat or use of weapons of mass destruction? The sheer size of this problem can

make federal assistance almost inevitable and there are precedents, like the carefully-crafted preparations for the Olympics in Atlanta, but there are constitutional issues to be considered.

Dedicated Security Personnel

The case studies and surveys indicate that all of the larger operating entities examined have dedicated security forces comprised of company personnel, their own police departments, or dedicated bureaus of local police departments. Smaller systems depend more heavily on whatever protection can be provided by local police. The police departments of either kind conduct visible patrols as well as undercover surveillance. A major terrorism threat or attack will require the combined capabilities of both the operating entity's security force and the local authorities.

Security Technology

Along with personal radios and centralized electronic control centers, closed-circuit television (CCTV) is increasingly being used as a deterrent to crime in public areas and to facilitate investigations. Intrusion sensors and alarms monitored by control centers are in place at the larger transportation systems. Technology is also being deployed by a number of operators to provide the accurate location of all trains, buses, and security personnel at all times. In some cases, buses are being equipped with global positioning systems (GPS) to quickly pinpoint the precise location of any vehicle involved in an incident.

Advance Planning

The case studies show that advance planning is essential to ensure a coordinated and effective response to a threat or attack. This is perhaps best illustrated in the case of the RATP's (*Régie Autonome des Transports Parisiens*) highly efficient response to the St. Michel bombing. Frequent joint exercises involving all concerned agencies identify potential problems in advance and ensure readiness.

Environmental Design

The case studies identify a number of examples of environmental design to facilitate surveillance, increase physical security, eliminate potential hiding places (e.g., in trash cans and under

seats), reduce sources of fragmentation (bomb resistant trash containers), combustible materials, and materials that produce toxic fumes. Environmental design can also facilitate emergency evacuation and increase or prevent ventilation.

Communications

The four systems examined in the case studies all have multi-mode communications systems to ensure communications during routine operations and crisis situations. These systems include multiple radio networks, cellular telephones, landlines, and public address systems. Issues that arise include the difficulties of radio use underground, compatibility of communications equipment and frequencies with local law enforcement, communications procedures to ensure coordination with other agencies, standardized language to eliminate misunderstandings that arise from codes or technical jargon, and the need for multi-lingual broadcasts on public address systems.

Training

All of the operating entities reviewed in the case studies placed great emphasis on training. Both regular employees and security staff are seen as part of the security and emergency response team and are trained to carry out their roles. Regular drills, tabletop exercises, no-notice responses, and full-scale simulations are regularly conducted to ensure readiness.

Public Involvement

Several of the transportation systems examined have decided to make the public part of their overall security effort by posting signs and broadcasting warnings that urge patrons not to leave their luggage or parcels unattended and to immediately notify the authorities of unattended or suspicious parcels. Public involvement is highest in locations where there is a continuing terrorist threat (the United Kingdom and Israel). Where the terrorist threat is not immediate, such warnings risk creating a fearful atmosphere and provoking a high volume of false alarms. Generally, however, the trend appears to be in the direction of public involvement.

Augmented Security

The easiest and fastest way to augment security following a terrorist attack, or in times of heightened threat, is to increase the visible presence of security personnel. Sometimes this is necessary if only to reassure a frightened public that something is being done. Since the number of company security personnel may be limited, additional personnel must come from local and national authorities. In an extreme case, France, faced with a continuing terrorist bombing campaign, deployed 37,000 military personnel and police to security functions, including 5,000 soldiers to patrol trains, stations, bus terminals, and airports in Paris. Mutual aid agreements among departments can augment police strength for short periods during emergencies. Atlanta's Metropolitan Atlanta Rapid Transit Authority (MARTA), however, had disappointing results in the response to the agreements it had negotiated prior to the Olympics. To reiterate, advance planning is essential.

Restoration of Services

When asked what issues are paramount in responding to terrorist threats or attacks, surface transportation managers identified maintenance or the restoration of operations. This is hardly surprising since operations are their primary responsibility and their capacity to prevent casualties caused by terrorist attacks is limited. Shutting down vital public transportation to avoid potential future attacks makes as little sense as grounding all commercial airliners in order to prevent hijacking or sabotage. The restoration and maintenance of operations requires the agency to quickly reduce the disruptions caused by bomb threats or explosions, keep the trains and buses moving during the crisis, rapidly remove of damaged equipment, make repairs immediately, and establish alternative routes as soon as possible. The Paris case study provides a dramatic example of rapid response to a major terrorist incident. At times the operating agencies' desire to keep transportation moving is in conflict with local authorities' need to conduct crime scene investigations. In these cases the transportation management must cooperate with the outside authorities in order to achieve their goals, even though this may involve political issues.

Crisis Communications

Communication during a crisis is an area often overlooked or inadequately addressed in crisis management plans. Terrorism is calculated to create an atmosphere of fear and alarm and it often works. Moreover, terrorist attacks on transportation systems may result in large-scale casualties which heighten public alarm and impose additional demands from the victims and their relatives. Passengers must be assured that travel is safe or at the least, the threat or the event must not be exaggerated. In the immediate aftermath of a terrorist attack there is a tremendous demand for news in general and for specific information about the identity and condition of the victims. Informing and supporting anxious relatives of actual and potential victims requires a major effort, which, in turn, requires advance planning. Unlike airline disasters, terrorist attacks on local transportation systems can bring a large number of relatives and friends to the site of the incident itself, creating a physical problem as well as increasing traffic on the already busy communications systems. Few transportation agencies or associated police forces or local authorities are able to adequately cope with the demands of public information and victim support. The Paris case study offers the best example, but even here, minor problems were identified among the lessons learned from the St. Michel bombing.

Inter-city Rail vs. Transit

In addition to reviewing the security practices of the four systems included in the case studies, we were especially interested in comparing the security practices and emergency response procedures of the three urban transit systems (Paris, Atlanta, and New York) with those of Amtrak. As the chronology shows, apart from ambushes in conflict zones, the most lethal episodes in transit systems are the result of bombs carried on board by terrorists posing as passengers. Transit systems have high volumes of passengers and many access points, creating numerous potential targets and making surveillance of passengers more difficult. Terrorists have detonated bombs on inter-city trains but advance bookings would theoretically permit some security measures. Passenger identity verification upon ticket purchase or boarding, even passenger and luggage screening, are possible but not

currently utilized by any rail system, and they would probably be considered extreme and unwarranted measures without an immediate and obvious threat.

As the accompanying chronology of terrorist attacks shows, long distance rail systems face a greater threat from derailment caused by sabotage of the rails themselves. Transit systems have an advantage here resulting from the high volume of traffic, which gives saboteurs only brief intervals between trains in which to sabotage the rails or plant explosives. Although technology is in place to alert drivers to breaks in the rails ahead of the train, this technology can be circumvented as was seen in the derailment of the *Sunset Limited*. Unfortunately, these systems cannot detect the presence of explosives which can be detonated as a train approaches. The physical protection of long lines is inherently difficult and while increased visual surveillance is possible, it would be very costly.

Different types of emergencies require different responses. Urban transit systems have the advantage of being located in areas where company personnel, medics, and police can be rapidly mobilized.

By contrast, when an emergency occurs in a remote area, like the derailling of the *Amtrak Sunset Limited*, it may take company personnel hours to reach the scene and the primary response effort depends on local authorities. Different situations call for different approaches to emergency response training. Operators of transit systems can design training for their own employees and for dedicated police forces which can be brought to remote locations as reinforcements. Operators of inter-city rail systems will need to train personnel in local jurisdictions along the right of way.

Future case studies no doubt will identify additional differences. However, it should be noted that while it is easy to draw sharp distinctions between an urban system like Atlanta's MARTA and an inter-city carrier like Amtrak, large metropolitan systems may contain elements of both, thus requiring an appropriate mixture of security and emergency response and planning approaches. For this reason, we do not believe that it would be useful to separate the analysis of security measures for transit systems from those of inter-city rail.

THE PARIS SUBWAY SYSTEM

The Paris Subway Bombing at St. Michel

by **Brian M. Jenkins**

The terrorist bombing of the St. Michel train station of the RER Line B in Paris on July 25, 1995 provides an excellent insight into the security and emergency response procedures of the city's transportation system. This case study, created by the Paris authorities to deal with such crises, examines the advance preparations, the immediate response, and the lessons learned from the episode. It is based upon media accounts and after-action reporting by the regional authority, the RATP, the suburban train system.

DESCRIPTION OF THE SYSTEM

The Paris metropolitan area or “commuter zone”, an area of 70 to 100 square kilometers around the center of the city, contains 11 million inhabitants. Public transportation services represent 30.5 percent of all traffic in Paris.

Régie Autonome des Transports Parisiens (RATP)

The Régie Autonome des Transports Parisiens (RATP) was created in 1948 to manage and operate the *Réseau Express Régional (RER)*, the Metro, the bus and the tramway system. This system includes 96 percent of the public transportation in Paris and carries 80 percent of the traffic. The French National Railroad, *Société Nationale des Chemins de Fer Français (SNCF)*, carries 16 percent of the traffic in the Paris area.

The RATP reports directly to the *Syndicat des Transports Parisiens (STP)*, a holding company. The system is heavily subsidized by the state with only 40 percent of its costs covered by ticket sales. It carries 2.1 billion passengers annually.

The RATP has nearly 40,000 employees: 25,000 in rail transport services, 12,000 in bus transportation services, 11,000 in maintenance, and 200 in commercial and administration services.

Réseau Express Régional (RER)

The RER is the commuter train network for suburban Paris and an express subway within the city. It operates 978 coaches and engines on four lines through a total of 65 stations, some of which it shares with the Metro. RER trains make fewer stops than Metro trains and thus offer faster service. Only a

portion of this network is managed by the RATP. The other part is managed by the SNCF and most tickets are interchangeable between the two systems. Service usually runs from 5:30 a.m. to 12:15 a.m.

Metro

The Metro operates 3500 coaches and electric engines on 201 kilometers of track with 368 stations on 15 lines, identified by the final destination or by numbers. It was designed by Hector Guimard and engineered by Fulgence Bienvenue for a July 19, 1900 opening. The Metro runs daily from 5:30 a.m. to 12:45 a.m. Trains arrive every three to five minutes, rising to a frequency of 95 seconds between trains during rush hours.

Assessment of the Threat

The efficient response after the bombing incident indicates extensive prior planning, which is not surprising given the long history of terrorist activity in France. During the war in Algeria in the late 1950s and early 1960s, both those fighting for Algeria's independence and those determined to keep Algeria French carried their terrorist campaigns to the French mainland. From the late 1960s on, terrorists representing various countries and groups in the Middle East seized hostages, carried out assassinations, and set off bombs in the French capital. The notorious terrorist Carlos conducted a bombing campaign in France in the early 1980s which included detonating a bomb planted in a train coach that killed several people. In the mid-1980s, "*Action Directe*", a small group of left-wing fanatics, carried out a number of assassinations and bombings in Paris. In 1986, Middle Eastern terrorists set off 12 bombs in public locations around Paris in a campaign of terror aimed at forcing the French government to release a number of terrorists held in prison. In all, between 1970 and 1995, the date of the St. Michel bombing, terrorists had attacked surface transportation systems in France no less than 22 times.

With the renewed civil war in Algeria, which began in 1991, came the threat of new terrorist campaigns in France. Backed by the French government, the Algerian government security forces were fighting combatants representing outlawed Islamic elements. Only a short time before the bombing at St. Michel, French authorities had rounded up more than a hundred suspects in an effort to thwart the possibility of more terrorist attacks. Thus, the perception of the terrorist threat at the time of the attack was very high and intelligence activities were intense.

In France, intelligence collection and threat analysis are conducted by the country's intelligence services with appropriate warnings passed on to the rail operators. Coordination between government authorities and state-owned companies is ordinarily very close.

Security Organization and Personnel

Normally, 700 members of the RATP security force patrol the RER and Metro trains and stations; these are RATP employees. Four hundred police provide additional security. Because of France's history of terrorist activity, public awareness and tolerance of security measures are high.

Security Plans

The RATP has prepared plans that address various aspects of terrorism including bomb threats and reports of suspicious objects, as well as actual bombings and other terrorist tactics. In the tense weeks following the St. Michel bombing, any threat or report brought about extremely rapid intervention by police and military units to evacuate the station, conduct a search, and restore normal operations. It is virtually certain that the RATP and French government authorities have planned for more exotic terrorist threats especially in the wake of the chemical attack on Tokyo's subways but the details of these plans are not known. Nor is it known whether existing security plans call for increases to predefined levels of security. The terrorist bombing campaign which began with the attack at St. Michel led to a special security effort called operation "*Vigipirate*." As of this writing, "*Vigipirate*," described later, continues.

Reports provided by the RATP and discussion with the French authorities indicate that there are also a variety of responses planned to deal with the consequences of terrorist attacks including evacuation, medical response, and crisis communications.

Security Technology

Existing security technology includes physical barriers to protect vital systems, intrusion alarms, and expanding use of closed-circuit television (CCTV) surveillance with an increasing capability to record images for later investigation and forensic purposes. Radio positioning systems are in place to monitor RATP security measures, police vehicles, and personnel in Metro and RER tunnels.

Closed-circuit TV has been used in the system for many years. In 1991, the RATP began to increase its ability to remotely monitor the system from its safety and security headquarters. As of 1996 there were 4,000 television cameras in place monitoring escalators, enabling drivers to check passengers boarding trains, and committed to other security applications. The video system employs very sophisticated software that combines the television system with other types of data input and enables the operators to instantly summon the image from any one of the thousands of cameras. Installation of

additional cameras is continuing at Metro and RER stations. A new “Headquarters 2000” will integrate the alarm system with the CCTV network to better coordinate the activities of police and the RATP security staff.

Personnel on foot in the tunnels are also being equipped with locating devices that use the existing radio infrastructure. These devices are integrated with the vehicle locating system to provide a graphic display of the position of all security and safety elements connected with the system. In addition, alarms are available for passenger use to temporarily cut power in case of emergencies.

Environmental Design and Construction Features

Drawing lessons from fires in the Paris Metro and other urban rail systems, the RATP has pursued an active program aimed at reducing fire hazards. Measures include the elimination of all highly combustible materials and potential sources of toxic fumes from underground stations, the installation of fire doors and blinds, fire detection devices, ventilation shafts, and additional reversible fans to provide rapid smoke evacuation. Combustible materials and sources of toxic fumes have also been replaced on the cars. The fire hazard reduction efforts apparently paid off. In the St. Michel bombing, although the explosion generated very high temperatures, there was no subsequent fire.

In response to the bombing campaign, which continued after the attack at the St. Michel station, trash bins were sealed. In February 1997, the RATP began installing devices on all RER cars that prevent people from placing bags or packages under the seats. These devices eventually will be installed under 80,000 seats. A number of subway entrances were also sealed.

Communications

The RATP has two radio networks. The surface radio network covers the city and suburbs of Paris. A working channel is available for operation in open network in both a collective mode and a local mode which is divided into five zones. A separate channel allows non-urgent service communications. The drivers of 100 vehicles and 650 safety staff all have radios. The underground radio network covers Metro stations and those in the central section of the RER. That the radios do not work in tunnels is a recognized weakness.

In addition to the radio networks, there are dedicated phone lines in the stations and at control posts, with direct lines to outside services such as the Fire Brigade. There are also phones for passenger use connected to an alarm system that displays the location of the caller, and there is a public address system.

Training

Training is extensive. Each employee has a designated role in an emergency and exercises are regularly conducted by the Paris Fire Brigade (BSPP) in the RER and Metro in which RATP personnel participate, especially the “Rolling Stock Lifting Team.” Coordination is facilitated by the fact that many members of the RATP safety team are former firemen. In addition, the RATP conducts 10 to 12 exercises a year involving all management and staff. Some of these are conducted during normal service, others are conducted at night when the system is shut down. At least once a year there is a “major exercise” which simulates an explosion, fire, or collision at a station or in a tunnel.

THE INCIDENT

At approximately 5:30 p.m., in the middle of the evening rush hour on July 25, 1995, a powerful terrorist bomb exploded at the front of the sixth car of an RER train as it was nearing its normal stopping position in the St. Michel-Notre Dame Station in Paris. Seven persons died and more than 80 persons were injured in the blast, 14 of them critically. The explosion caused extensive damage to one coach but only minor damage to the station. Operating according to previously-rehearsed contingency plans, RER employees, Paris firemen, and medical personnel removed the dead and wounded while police cordoned off the area and conducted an on-scene investigation. The damaged car was sufficiently repaired to allow it to be pulled to another area while other crews repaired minor damage and cleaned the station. Trains were back on their normal routes and schedules the next morning.

Emergency Response

Upon notification of the explosion at St. Michel, three plans of action were promptly initiated. The first was the Emergency Control Plan applicable to serious accidents in the Metro and RER. This plan provides procedures for the intervention of the Fire Brigade and RATP on the scene and at the RATP headquarters. It creates a combined Fire Brigade-RATP hierarchy with joint teams at the operational level. This provides firemen with RATP interlocutors who are knowledgeable about the layout of the installation. It also provides the means by which information and requests can easily be transmitted between the Fire Brigade and the RATP. This plan interfaces with *Plan Rouge* which is implemented when, whatever the cause, the number of victims reaches ten. *Plan Rouge* mobilizes the Fire Brigade and Civil Defense Brigades. Its counterpart is *Plan Blanc*, which mobilizes the emergency medical services and local hospitals.

The second plan initiated after the explosion was the Crisis Communications Plan. This plan provides RATP management with procedures for setting up a crisis center and for activating a telephone information service, and for determining company policy for public communications.

The third plan covers measures to be taken in the event of terrorist attacks. It is concerned primarily with security and therefore remains confidential. All of these plans are regularly reviewed and rehearsed. (See the *Training* section of this study.)

CLEAN-UP AND RESTORATION

Although the bomb caused only superficial damage to the station itself, the explosion destroyed a portion of the overhead contact line and damaged the signal systems. Electrical arcs from the damaged power line, in turn, disrupted the communication system. Fortunately, the bomb caused no subsequent fire to delay or complicate rescue operations and restoration of service. In addition to the removal of the dead and injured, which was completed within three hours after the blast, the biggest problem was the removal of the damaged coach. The force of the explosion caused the sides and roof of the car where the bomb exploded to bulge out making it too large to pull through the tunnel.

The duty desk of the Electrical Systems and Equipment Department received notice of the explosion within 20 minutes and promptly dispatched personnel to survey electrical and signaling equipment and assess damage to the station. (See the Appendix of this case study for a *Chronology* of the response.) The Rolling Stock Lifting Team responded rapidly, although in a subsequent review, it was noted that the “working bus,” a mobile tool-shed and workshop, arrived at the scene somewhat late.

Initial efforts focused on the rescue of the victims and the police investigation of the crime. Within five hours, work crews were able to begin replacing the overhead contact line. The Rolling Stock Lifting Team removed blown-out doors and bent the bulged metal in sufficiently to permit the damaged car to be towed through the tunnels. Police finished their on-scene investigation within six hours and permitted the damaged car to be towed to another location where investigative activities could be continued without interrupting train service. The explosion had interrupted service on the one RER line but by shifting trains to alternate tracks and advising passengers to use the Metro lines, the RATP was able to keep moving passengers.

Minor repairs and cleaning at the St. Michel Station were completed during the night permitting the RER to restore normal service the next morning, all things considered, a remarkable achievement! However, in the weeks following the explosion, passenger service was frequently disrupted by bomb alerts and the discovery of suspicious objects. At their peak, these interruptions occurred at the rate of 50 a week.

Public Relations

In the St. Michel bombing, a local contact center was set up at a café near the entrance to the station. This provided a site that was easy for people to find, near the scene of the disaster, yet far enough away from the station to prevent its activities from interfering with rescue efforts. The center, which became operational within 15 minutes of the explosion, was manned by six regular RER employees plus two persons from the RER's legal department and two government social workers. The contact center offered information and assistance to family members of victims. People at the scene could also use the center to call their homes to provide worried families with information. Over 1,000 requests for information were handled on the spot; in addition, 500 people were later called back by the center as information on the victims became available. The contact center was closed at 11:00 p.m., five and a half hours after the bombing, but the RER continued to provide information updates from its headquarters.

In addition to this practical assistance, the RER's Public Relations Department also managed media inquiries and provided continuous information to RER and Metro passengers and employees.

Augmented Security

Authorities correctly suspected that Algerian terrorists had carried out the bombing. The attack was part of an ongoing bloody civil war in which foes of the Algerian government sought to punish France for its support of the regime. Since bombings in previous years had been part of terrorist campaigns, most notably in 1986 when Middle Eastern terrorists carried out 12 bombings in Paris and the surrounding area, it was prudent to expect further attacks. Immediate measures including sealing all 8,000 trash containers in the RER and Metro stations to deny terrorists easy hiding places for bombs. Both overt and covert surveillance were increased and posters were put up urging public cooperation. Passengers were requested to carefully mind their parcels, cooperate with searches, and alert authorities to suspicious objects. The RATP's 700-person security contingent was reinforced by an additional 3,000 agents. They coordinated their activities with police and later with the French military. As a further measure, 50 Metro

and RER entrances and exits were closed for security reasons. Additional security measures were implemented as terrorists set off more bombs, the next one only 23 days after the St. Michel bombing.

Following a third bomb found on a rail line between Paris and Lyon on August 26, 1996, police began a large scale round-up of suspects in southeast France. After a bomb exploded in front of a school near Lyon, the seventh bomb in the terrorist campaign, the government initiated operation “*Vigipirate*,” which mobilized 37,000 soldiers and police, stepped up security on France’s frontiers and around likely targets of terrorism within the country. In Paris, 5,000 soldiers and additional policemen were mobilized to patrol the city’s regular train stations, Metro and RER trains and stations, bus terminals, airports, commercial malls, government buildings, schools, power plants, waterworks, telecommunications facilities, and other potential terrorist targets. Identity checks were stepped up. All public gatherings were required to have government authorization and approved security plans. Public restrooms were closed and thousands of public garbage cans were sealed or removed.

The extraordinary security measures appeared to have some effect from the very beginning. The first bomb had been detonated in a train coach. The second bomb went off on August 17 at the entrance to a Metro station. After the second bombing, no further bombs were detonated on trains or in stations, although a third bomb was found on the track of the high-speed train (TGV) that runs between Paris and Lyon, a less risky location for a bomber. After that, terrorists shifted their targets to outdoor markets, public restrooms, and a school. Operation *Vigipirate* appeared to have been successful and security measures were relaxed somewhat until December 3, 1996 when, 15 months after the previous bombing, another bomb exploded in the RER station at Port Royal in Paris. This resulted in a renewed security effort. As of May 1997, *Vigipirate* continued.

LESSONS LEARNED

While RATP management and employees and government agencies responded rapidly and efficiently, which is a testimony to extensive prior planning and training, inevitably some problems arose. These were identified in a candid after-action report.

- There were some delays in the initial communication within the RATP.
- Local control centers were not properly notified that a family contact unit and toll-free telephone number had been established.

-
- It was not clear during the crisis, who (government or RATP) starts what actions with regard to informing the public.
 - The RATP had a problem getting information from the scene of the explosion in the underground station to others on the outside at street level.
 - Some RATP staff involved in emergency assistance were unable to reach the scene due to strict police surveillance. In the future, some RATP managers will be deployed at the scene to serve as contacts with the police.
 - Evacuation broadcasts in French should also have been broadcast in English.
 - Radio communications were poor owing in part to damage caused by the explosion.
 - Disclosure of information to the families was incomplete because the dead had not been identified, a problem in all disasters.

While organizational problems revealed during the incident cannot be ignored, reaction to the bombing was fast and effective. The RATP has a history of dealing with terrorism so plans were in place and personnel were prepared. Remarkably, just twelve hours after the explosion, regular train service was restored and the terrorists' goal, to create an atmosphere of uncertainty and turmoil, was denied. The experience of the St Michel bombing proves that planning and training pay off.

Chronology of the Response

The Paris Subway Bombing at St. Michel

- July 25, 1730 A terrorist bomb explodes in an RER coach at the St. Michel underground station killing 7 and injuring 80 people.
- 1730 The driver provides initial information indicating casualties.
- 1732 The Safety Headquarters notifies the safety engineer on duty.
- 1733 Members of the Network Safety Unit go to the scene; the on-duty manager goes to the Safety Headquarters to coordinate the response; teams patrolling the network are also sent to the scene; the Headquarters supervisor notifies members of the crisis response team.
- 1737 The Paris Fire Brigade arrives at the scene; *Plan Rouge* (fire and rescue) is implemented; all Railway Police are alerted; *Plan Blanc* (medical) is implemented.
- 1745 A crisis communications center is established at a nearby café.
- 1745 The crisis communications center becomes fully operational.
- 2030 Evacuation of the injured and removal of the dead from the wreckage are completed.
- 2230 Employees begin work on replacing the overhead power line. The on-scene investigation is completed; work crews repair the damaged coach to enable it to be towed through the tunnels to a site where police can conduct further investigations without interrupting RER traffic.
- July 26, 0530 Repair and clean-up crews have completed work and normal train operations are restored.

AMTRAK

The Derailment of Sunset Limited

by James Graebner

Amtrak's Sunset Limited was derailed early on the morning of Monday, October 9, 1995 at Hyder, a desolate spot in the Arizona desert. This event provides an insight into the security and emergency response capabilities of Amtrak. This case study demonstrates the vulnerability of rail systems to sabotage. It examines the preparations involved in detecting and counteracting such incidents, and in emergency response, and it examines the lessons learned from the episode.

DESCRIPTION OF THE SYSTEM

Inter-city rail passenger transportation in the United States dates back over 150 years. Initially provided by the privately-owned railroads, these services fell victim to the post World War II growth in private automobile travel and, to a lesser extent, of commercial air transport. The result has been the decline in passenger volumes and an emphasis on freight transport services.

In 1970, Congress created the National Railroad Passenger Corporation (Amtrak) as a quasi-public entity to provide continued national rail passenger service. Trains and routes with long histories, which might have disappeared, continue to operate under federal management.

Initially, Amtrak's equipment was a mixture of second-hand cars and locomotives purchased from the railroads. Although generally built to common standards as regards strength, clearances, and other regulatory norms established by the Association of American Railroads and the Interstate Commerce Commission, there were many variations dictated by the operating conditions of the individual carriers. By the time of the *Sunset* incident, Amtrak had replaced most of its old equipment and had developed and applied common standards to its fleet.

In 1995, Amtrak operated approximately 220 inter-city trains over some 24,000 miles of track in 45 states. However, with the exception of certain corridors (notably between New York and Washington, and between Los Angeles and San Diego), traffic density was generally limited to one train per day in each direction. The passenger trains share tracks with freight trains operated by the railroads which owned and maintained the tracks in most cases. In particular, the tracks over which the *Sunset* runs belong to the

Southern Pacific Railroad which has since merged with the Union Pacific Railroad.

Security Organization and Personnel

When Congress created Amtrak, it recognized the need for a dedicated police force to protect the passengers, employees, and physical assets of the system within its operational environment. Statutory authority for the Amtrak Police Department is provided under Section 104.305.45 of the United States Code 545J. Under this authority, Amtrak spends in excess of \$24,500,000 per year to assure the security of its passengers. Approximately 18 million dollars of this money are allocated to Amtrak's uniformed police division, and some two million dollars to criminal investigations. The corporate budget also supports the Office of Amtrak's Inspector General.

Amtrak's 346 police officers are assigned to 28 reporting locations throughout the United States. The vast majority, over 82%, are assigned to the intensely populated and high service frequency line from Boston, Massachusetts to Washington, D.C. This territory encompasses some 621 miles of railroad which Amtrak both owns and operates. It also accounts for a large proportion of the total ridership and, concomitantly, a large proportion of the total trains operated.

Outside of the Northeast Corridor on the remaining 23,000 miles of track comprising its routes, Amtrak maintains contractual agreements with freight railroads to maintain tracks and to allow for passenger service. Amtrak also contracts with freight railroads for security through these operating agreements. For example, the tracks on which the *Sunset* derailment occurred are covered by an operating agreement with the Southern Pacific Railroad (now merged with the Union Pacific Railroad). A total of eight railroad-employed police officers assigned throughout the State of Arizona provide coverage as required. It is important to place this level of coverage in perspective. There are approximately 2,000 railroad special agents and police officers throughout the United States. Including the 24,000 miles of track over which Amtrak service is provided, the railroad network totals about 111,000 miles. Statistically this means that there is about one person for each 55 miles of track. This average is quite misleading, however, since coverage is naturally more concentrated in locations where vandalism, the most common crime affecting railroads, occurs most frequently. In the sparsely populated areas of the southwest, such as the area of the *Sunset* derailment, coverage is necessarily thinner.

Nationwide, the Association of American Railroads statistics for 1994 reported a total of 12,280 incidents of vandalism. This figure covers only

about 61% of the railroad network, since many of the nation's smaller railroads do not capture or centrally report crime information. Signal vandalism accounted for roughly 3,000 of these offenses, while 154 were reported in the category "vandalism resulting in derailment." It is important to note that, for 1994, none of the vandalism derailments involved passenger trains.

What these figures make clear is that there is a tremendous dependence on federal, state, county, municipal, and other law enforcement agencies to protect the country's rail infrastructure.

Security Plans

Materials provided by Amtrak and discussion with the authorities indicate that there are also a variety of response plans to deal with the consequences of crises that may be caused by terrorist attacks. For reasons of ongoing security further details cannot be published.

Security Technology

Clearly, assuming the perpetrators were aware of the potential legal sanctions at law, these were not a sufficient deterrent to their activities. Therefore, it is necessary to examine whether the railroad infrastructure and/or the train itself could have been subjected to more intensive and extensive preventative measures.

Whereas technological developments such as Global Positioning Systems (GPS), impact-crumple zones on railcars, and target hardening techniques can enhance the system's security and safety, little if anything can be done to safeguard the system's rail tracks from sabotage. Remote and desolate countryside areas where trains pass over tracks infrequently remain the system's "Achilles heel."

Communications

Amtrak's trains are served by a radio network with links between all its trains and their nearest dispatch centers. All drivers have radios and cellular phones serve as backup communications.

Training

Amtrak police hold regular simulations of "mock-up" emergency incidents that also involve the participation of emergency response services. In addition to these full-scale exercises, numerous table-top exercises are conducted every year.

THE INCIDENT

The ill-fated *Sunset's* journey originated in New Orleans. Normally it would have started in Florida, but a severe hurricane threat had caused annulment of the operations east of the Crescent City, Florida. *Sunset* therefore had proceeded without incident to San Antonio, where three cars from a connecting Chicago train were added. The train left San Antonio at approximately 11:30 p.m. on Saturday, October 7. It was about an hour late leaving El Paso and about two hours late arriving in Phoenix on Sunday night. On leaving Phoenix, the train consisted of two locomotives and 12 cars. It carried 248 passengers and a crew of 20 Amtrak employees.

It was a clear moonlit night as the *Sunset* traveled along the single-track Southern Pacific rails at about 50 mph through the desert of western Arizona. About 59 miles southwest of Phoenix, on the Gila Subdivision of the Phoenix line, the train derailed. Sixty-five passengers were injured in the derailment. One Amtrak employee, Mitchell Bates, age 58, asleep in a top bunk, was thrown to the floor and killed when his car plunged into the river.

The cause of the derailment was almost immediately identified as sabotage by a hitherto unknown terrorist group, the "Sons of Gestapo." Two notes were found at the scene, containing references to "Ruby Ridge" and "Waco," both incidents involving gun battles between armed groups and the US government. There had been no advance warning of the derailment.

The saboteurs committed the crime by removing 29 spikes from the rails. Nuts and bolts were removed from the rail joints which held the sections of rail together, and the joint bars that link the rails together were removed. A wire was spliced to the bond wire of the signal system so that the block signal observed by the engineer would display a "green" light, authorizing the train to proceed at maximum allowable speed. After the wire had been spliced, the loosened 39 foot section of rail was moved inward, causing the track to be out of gauge. The rail was then re-spiked so that it would not be forced back in gauge by the weight of the train as it passed over it.

The location of the sabotage, atop a 30 foot high trestle and some 18 miles from a paved road, appeared to have been chosen to cause maximum damage, thwart discovery, and hamper any rescue efforts. In the derailment, however, while both locomotives and eight of the twelve cars derailed, the basic structure of both cars and locomotives remained intact. The cars did not telescope and in general the passenger space was not encroached upon. Similarly, both engines remained upright and were not severely damaged. There was no fire or release of noxious gases. Passengers were able to release

the emergency window hatches from inside the cars, and initial self-rescue activities were underway within minutes of the derailment

The regulatory design standards and safety devices required for the track, the signal system, and the rolling stock were all in place and working properly. These devices would have prevented an accidental derailment due to a broken rail or rail joint. However, because of the deliberate work of the saboteurs in by-passing the signal fail-safe system to give a false indication, the derailment occurred. This resulted in damage to Amtrak equipment of \$2,979,000, or about the cost of one new railroad passenger car.

Emergency response

Immediately following the incident, police and rescue workers were dispatched to the scene. The Maricopa County Sheriff's Department was the first law enforcement agency to arrive. In all, over 50 deputies and volunteers assisted, in addition to many of the uninjured passengers and crew members. Thirty-five ambulances responded from Maricopa County and numerous surrounding communities. Helicopters from Maricopa County, the Arizona Department of Public Safety, the National Guard and Air Force's Air Evac transported the injured. Firefighters brought in vehicles with ladders, which were essential in getting people off the tops of cars. A medical command post was established about six miles away from the site. In all, about 70 passengers and the crew were evacuated from the site by helicopter.

The question must be asked: "Once the incident had occurred, was the response as prompt and sufficient as could have been reasonably expected?" According to one passenger aboard the train, the first rescue helicopter arrived at the scene 45 minutes after the derailment, and within 15 minutes thereafter rescue personnel "really started to converge." Considering the remoteness of the site, such rapid response is noteworthy. Two more medical helicopters, the Maricopa County sheriff's deputy, other police and volunteer fireman all responded rapidly. Passengers and crew assisted at the scene. The evacuation of the injured was completed in approximately four hours. The Red Cross mobilized a center in Phoenix, to which the remaining passengers were transported. In short, the response was rapid, thorough and organized. Perhaps the best summation was provided by the previously quoted passenger, who wrote:

My lasting memories of the *Sunset Limited* tragedy will always focus on the way passengers, Amtrak employees, and rescue personnel reacted after the crash. You should have seen the way everyone pulled together during the first hour, and the dedication and

professionalism of our rescuers. I was proud to have been associated with such decent and caring people.

While the rescue of passengers and crew was clearly the highest priority, law enforcement also responded promptly. Within hours the site was sealed and a nine-mile perimeter established. FBI evidence teams were combing the area within eight hours. Aerial photographs were taken before the four undamaged cars were moved. Federal Railroad Administration inspectors and the National Transportation Safety Board investigation team arrived at the scene promptly. In all, the response to the derailment appears to have been adequate, prompt, and efficiently executed.

Assessment of the Incident

Prior to the derailment, Amtrak received no specific threats against the railroad or *Sunset Limited* nor was any form of warning given. In this section, analysis of the *Sunset* derailment is considered from three aspects. First, could the incident reasonably have been prevented? Secondly, was the response to the incident sufficient and adequate under the circumstances? Thirdly, if the incident was an act of terrorism, could the incident encourage similar acts?

All evidence points to the conclusion that the derailment was a calculated and deliberate act. It was designed to cause an accident resulting in the maximum amount of property destruction, injury, and loss of life. The perpetrators selected a spot that was remote from observation and detection. The location was on a railroad line with relatively light traffic, which provided ample time to accomplish the work needed to damage the track and bypass the signal system. The last train to pass the site prior to the *Sunset* had gone by 18 hours before the derailment. The Amtrak train was scheduled through the area at nighttime. The site was on a 30 foot high trestle, on a curve leading to the bridge, which obscured the damaged track until the last minute. Possibly, the perpetrators had a radio scanner and knew the railroad frequencies, which would have provided warning of any non-scheduled trains, inspection cars, or "extra" movements. The knowledge that the *Sunset* was running late could have been obtained easily, although that fact would not have had any significant impact. Knowledge of the railroad signal systems needed to sabotage that system could have been obtained from easily available sources.

Tests conducted after the incident showed all safety systems to be in proper order. Thus, it is reasonable to assume that any accidental damage to the track (such as a dislodged boulder falling or a washout of the trestle) would have been detected. What is important to realize is that current technology is designed to prevent accidental harm and not as security against intentional

acts. This delineation between safety and security is an important one. Safety involves the prevention of accidental harm to persons or property caused by unforeseen or foreseeable hazardous conditions, or inherently dangerous activities. Security involves the prevention of intentional acts of harm involving criminal or illegal conduct. In the *Sunset* case, safety systems would have prevented the derailment had the contributing factors to the derailment arisen from accidental causes. However, the deliberate action of wiring a shunt to bypass the signal system negated the “fail-safe” design of that system. Given the current technology and the deliberate determination to commit a criminal act, the *Sunset* derailment could probably not have been prevented.

Although the specific objectives of the group claiming credit for the *Sunset* derailment, the “sons of Gestapo”, remain unclear; references to “Waco” and “Ruby Ridge” indicate a goal of revenge and intimidation. The bombings of the Murrah Building in Oklahoma City and the World Trade Center in New York indicate that the aim of many random acts of terrorism is to attract the maximum amount of publicity. This is achieved by causing the maximum destruction of property and the indiscriminate injury and death of innocent people. The revulsion and horror of such attacks, and the widespread media coverage of them, becomes in itself the immediate goal.

In this respect, and viewed strictly through the criminal and anti-social mind of a terrorist, the derailment of the *Sunset* cannot be regarded as a significantly successful terrorist act. One innocent person was killed, and 65 more were injured. While this is a terrible crime, it is probably less death and injury than that which occurs daily in highway accidents in the State of Arizona. Property damage to Amtrak was roughly \$3,000,000 and damage to the Southern Pacific Railroad probably less than one-third of that amount. Media coverage, while intense immediately after the event, fell off fairly rapidly. Nearly two years after the event, people interviewed at random in several cities around the country remember the event only vaguely, if at all, in striking contrast to the other two terrorist acts cited above.

In this regard an observation should be made regarding the physical construction of rolling stock. Both the cars and the locomotives are designed to incorporate safety features to prevent injury in the event of an accident. Railcar strength standards are calculated to prevent the collapse of car structures. In this instance the structures performed well. The emergency windows were effectively used as intended. Electrical and plumbing systems are specifically designed to withstand derailments and collisions. These systems also functioned as designed. Locomotive cabs did not cave in on the crew. There was no fire from spilled fuel. In short, the safety features

designed into the rolling stock probably played a key role in minimizing death and injury to passengers and crew, just as they would have done were the incident accidental.

A brief examination of the current state of signal technology in use on American railroads is illustrative.

The *Sunset* derailment occurred on a single-track main line equipped with an Automatic Block Signal (ABS) system which was arranged for train movements in both directions. Train movement was governed by a dispatcher through Direct Traffic Control, supplemented by the signal indications of the ABS system. These signals are located alongside the track and are visible to the engineer. In some locations signal indications are provided in the cab of the locomotive but not the Southern Pacific line where the incident occurred.

Signals are electronically activated by track circuits. The track itself functions as a low voltage electric circuit using the rails as its conductor. Whenever this current is interrupted or compromised, the system displays a red signal to train engineers. Similarly, if the circuit detects the presence of a train, because the steel wheel and axles of locomotives and cars will form a shunt to the circuit, a red signal will be displayed to trains.

An ironclad rule of railroading for more than a century has been that a red signal requires a stop. Just prior to the *Sunset* derailment, the engineer of that train testified that all signals had displayed green. Accordingly, on October 12, 1995, shunt tests were conducted for the signals at the site. These tests showed that signals had been functioning correctly. However, as previously described, the perpetrators had deliberately spliced a shunt wire around the dislocated rail section, thus bridging and preserving the track circuit and allowing signals to display a green signal even though the track had been sabotaged.

Signal technology and all other safety-related aspects of railroad operation are governed by Federal regulations as well as railroad operating rules. These rules cover such elements as speed limits, movements of trains, rights of trains, and the inspection of equipment. In developing, promulgating, revising and enforcing these rules and regulations, federal agencies and the railroads constantly examine, analyze, and test their application against actual field conditions. In fact, railroad operations and physical plant are among the most heavily and consistently regulated and inspected activities in the United States and signal systems are subject to periodic inspection and function verification.

Among other requirements, all railroads are required to perform periodic physical track inspections. All tracks must be inspected a minimum of twice within a given seven day period, with at least one day between inspections.

The Southern Pacific Railroad had conducted track inspections in full accordance with regulations. These inspections utilized track geometry measuring cars which measure and record track tolerance exceptions in alignment, profile, gauge, cross level, and warp. As yet another element of track condition monitoring, railroads depend on “trip reports” completed and submitted by locomotive engineers to note and identify potentially hazardous conditions. In addition to the regulations which cover track and signal systems of American railroads, the locomotives and cars which make up the trains are subject to industry and governmental design standards in order to assure safety.

CLEAN-UP AND RESTORATION

The derailment site was judged to be a crime scene during the very early stages of the rescue efforts. The site was sealed, with Southern Pacific Railway Police establishing a security ring in the immediate area, and the Maricopa County Sheriff’s Department establishing a nine-mile perimeter. Everyone within the perimeter was interviewed by the FBI or local authorities. By 9:30 a.m., FBI evidence collection teams began searching the area and collecting evidence. This activity lasted throughout the following day. Comprehensive aerial photos were taken. Two Southern Pacific locomotives were dispatched from Phoenix to move the four cars that had remained on the track back to Phoenix, along with the remaining passengers. Arriving in Phoenix about 1:30 p.m., the passengers were taken by bus under police escort to a Holiday Inn near the airport, where the Red Cross had set up a center. FBI agents were on hand to interview passengers and collect detailed questionnaires. Passengers were released later in the day.

Public Relations

Media officers were dispatched to the scene as quickly as possible. Amtrak maintains a policy whereby all media statements are coordinated through its Public Affairs offices in Washington D.C. Amtrak personnel are trained and aware of this policy and of the necessity for coordinating all statements relating to major events.

Investigation

A total of 16 railroad police officers, consisting of eight members from the Southern Pacific and eight detectives from the Amtrak Police Department, responded. The FBI was designated the lead agency to conduct the investigation and over 150 of their agents were involved in the effort.

The Federal Railroad Administration sent inspectors to the area, and the National Transportation Safety Board sent in a team, as per Federal guidelines, to examine the site for cause and to ascertain that the railroad was operating within prescribed Federal regulations.

Both the Amtrak Police Department and the FBI established 1-800 telephone numbers for anyone wanting to call with information regarding the derailment. A reward fund of \$100,000 was established for any information leading to the arrest and conviction of the perpetrators.

LESSONS LEARNED

Under the circumstances and given the desolate location of the incident site, Amtrak management, employees and government agencies responded rapidly and efficiently, a testimony to extensive prior planning and training.

The most important lesson that this incident provided was the necessity for Amtrak to maintain regular and closer contact with law enforcement and rescue services. Towards that objective, Amtrak police are placing greater emphasis on maintaining closer links with the National Association of Sheriffs and the National Association of Police Chiefs.

While offering little solution to the problem, the incident highlights the vulnerability of railroad systems in remote and rural areas. The incident also demonstrates the need to increase the frequency of track patrols. Sensible precautions and efficient response can minimize the effects of an attack but an extended system like Amtrak is never absolutely safe from a determined terrorist. As of this date, no arrests have been made in the *Sunset Limited* incident.

THE NEW YORK CITY TRANSIT AUTHORITY

Contingency Planning for Emergency Response

By Thomas J. Savage

Recent events around the world have underlined the growing threat posed by terrorists and other violent criminals to public transportation systems. To terrorists who appear increasingly willing to carry out large-scale indiscriminate attacks, public transportation offers concentrations of people, enclosed environments that enhance the effects of bombs or chemical weapons, little security, ease of escape, and the guarantee of widespread publicity and public alarm. Extortionists driven by personal greed and mentally disturbed individuals add to the threat. We have witnessed an increase in such attacks: a crazed gunman aboard an MTA Long Island Rail Road commuter train; a bombing in the Paris Metro; an explosive device in New York's subway; suicide attacks on buses in Tel-Aviv; the deliberate derailment of a train in Arizona; and, a most alarming precedent, the chemical weapons attacks on Tokyo's subways. Assuming that these attacks will continue and that a catastrophic incident is possible, The New York City Transit Authority (NYC Transit) has developed a complex array of contingency plans to protect the world's largest urban transportation system.

DESCRIPTION OF THE SYSTEM

MTA New York City Transit Overview

MTA New York City Transit operates one of the world's largest and most complex metropolitan transportation systems, providing 24-hour-a-day bus and subway service throughout New York's five boroughs: Manhattan, Queens, Staten Island, Brooklyn and the Bronx. The agency carries 1.5 billion passengers annually with the largest bus fleet in North America and the largest subway fleet in the world. Every weekday more than five million bus and subway journeys are undertaken by commuters. Nationwide, approximately four out of every ten mass transit journeys occur in New York City. NYC Transit's primary goal is to operate and maintain the system in a state of good repair. Towards this end, the state and federal governments have expended billions of dollars in one of the largest public work efforts ever undertaken.

The mission of NYC Transit is to achieve excellence in providing a safe, orderly, customer-oriented, and cost-effective, public transportation system.

The NYC Transit system is comprised of two primary operating departments: the Department of Subways and the Department of Buses.

About Subway Service

The Department of Subways is comprised of approximately 24,600 employees distributed between two primary divisions: Service Delivery and Maintenance of Way.

The Division of Service Delivery includes:

Car Equipment, responsible for the maintenance and cleaning of NYC Transit's more than 5,800 revenue subway cars and 450 non-revenue work cars;

Rapid Transit Operations, which operates more than 570 trains per day, carrying about 3.5 million customers each weekday; and,

Station Maintenance and Operations, responsible for token and MetroCard sales, cleaning, maintenance, and the quality of life in the system's 468 stations.

The Division of Maintenance of Way includes:

Track, which maintains almost 850 miles of mainline and yard track;

Infrastructure, which maintains the subway's tunnels, elevated structures, buildings and other facilities; and,

Electrical, which operates and maintains Transit's power substation and third rail power distribution system, and signal and communications networks.

About Bus Service

The Department of Buses operates 207 local and 30 express-bus routes out of 19 depots with a staff of 12,000 employees. The bus system's 3,554 buses carry about 1.4 million customers daily and 451 million annually. Each rush hour about 3,100 buses are in operation, picking up customers at more than 14,000 bus stops.

INCIDENT RESPONSE

Assessment of the Threat

The international profile of New York City, together with the very magnitude of the NYC Transit system and its inherent vulnerability, makes it an ideal choice for a terrorist. Political motivations lay behind one series of terrorist acts that were planned but never accomplished. On June 24, 1993, a team of

FBI agents and NYC Police raided a garage in Queens and arrested five persons who were in the act of mixing chemicals for a bomb. An additional ten arrests were carried out during the course of the next few months in connection with a plot to bomb the United Nations headquarters, the main federal office building in New York City, and the Lincoln and Holland tunnels. All of these incidents were connected with Islamic extremists.

In addition to the terrorist threat, the actions of deranged individuals also present a risk. In December 1993, Colin Ferguson began firing randomly at passengers travelling from New York on a crowded Long Island Rail Road train during rush hour. Ferguson, who was finally overpowered by passengers while reloading, killed six passengers and wounded 17 others. In December of 1994, Edward Leary detonated two gasoline bombs on subway trains. The first was on December 15, at 145th Street and Lennox Avenue in upper Manhattan, injuring three people. In the second incident, on December 21 at Fulton Street and Broadway, the device exploded prematurely and 48 people, including Leary, were injured. He was then apprehended.

In November 1995, three criminals attempted to rob a subway token booth at Kingston and Throop Avenues in Brooklyn. In an attempt to intimidate the token booth clerk, they sprayed a flammable liquid through the change aperture of the Halon system-equipped booth. The clerk was badly burned and died from his injuries several days later. Media coverage of this incident resulted in a number of copycat attacks and threats.

In general, threats to the New York City Transit system can be categorized as follows:

- terrorism by either conventional weapons and weapons of mass destruction
- accidental disasters such as derailments
- natural disasters like hurricanes, floods, and winter storms causing power outages

Security Organization and Personnel

The size of New York City precludes the transit authorities from developing anti-terrorist policies and procedures in a vacuum. NYC Transit works closely with the city's emergency services such as the New York Fire Department (NYFD), the New York City Police (NYPD), the International Red Cross, and the Salvation Army's Emergency Services. Managing the overall coordination of the city's emergency services is the Mayor's Office of Emergency Management (OEM). The common goal of these services is to be prepared for, and able to coordinate, rapid and effective responses to a wide range of emergency situations.

The Mayor's Office of Emergency Management (OEM)

Mayor Rudolph W. Giuliani, by Executive Order, established the Office of Emergency Management (OEM) with responsibility for interagency and intergovernmental coordination of NYC's responses to emergencies. This job includes the development of all emergency plans, training, preparation, and response to all emergencies. The OEM is directly responsible for the coordination of all emergency services but does not govern their operational activities. The OEM was born out of the need for clear lines of command and control when responsibility and accountability can become blurred as a result of the dynamics of a complicated and urgent situation. For example, if an explosion occurs on a railway track and the NYFD is the first emergency service to respond, it will take the operational lead. However, should a suspicious object be found to have caused the blast, the NYPD will assume control of the situation until it is satisfied that no crime has been committed or until their investigations have been completed. Once the NYPD has declared the area safe, the control may switch back to the NYFD or the NYC Transit as circumstances dictate.

Security Plans

NYC Transit actively participates in the planning, training, and response to any emergency. To aid in combating terrorism, a task force was created to develop a Chemical/Biological Incident Contingency Plan.

Chemical/Biological Incident Contingency Plan

In 1996, the OEM established a committee to develop a Chemical/Biological Incident Contingency Plan. The Sarin gas attack in the Tokyo subway system and a no-notice test of New York's response to terrorist use of nerve gas in the subway system prompted officials to accelerate the contingency planning process. A review of the no-notice test identified four key areas of concern: communications, training, logistics, and, planning. In addition, five areas of special attention were identified:

- coordination with the FBI
- being prepared for mass casualties
- treating incident as a crime scene
- need for speedy response actions to save lives
- need for specialized training, equipment, and supplies

The committee established four focus groups, all with mass transit representation, to prepare contingency plans. The four groups are:

- law enforcement
- hazardous materials
- communications
- medical

The Law Enforcement Focus Group includes representatives from Federal, state, city, the Metropolitan Transportation Authority (MTA), the parent company of MTA NYC Transit, MTA Long Island Rail Road, MTA Metro-North Railroad, MTA Bridges and Tunnels, and neighboring state transportation authorities. They are divided between criminal justice agencies and mass transit agencies, as shown below.

Criminal Justice Agencies

New York Police Department (NYPD)
 FBI
 US Secret Service
 US Alcohol, Tobacco and Firearms (ATF)
 US Coast Guard

Mass Transit Agencies

MTA NYC Transit
 MTA Long Island Rail Road
 MTA Metro North Rail Road
 MTA Bridges and Tunnels
 NY/NJ Port Authority
 New Jersey Transit
 Amtrak
 Con Rail

The Law Enforcement Focus Group developed plans and policies for interagency protocols to identify the “incident commander” and for:

- site security
- traffic control
- crime scene preservation and integrity
- identifying additional active devices
- first responder awareness

The last item, first responder awareness, is a critical training issue due to the possible lack of previous experience.

The **Hazard Materials Focus Group** includes representatives from the Federal, State, MTA, and neighboring state transportation authorities, and includes first responder agencies and mass transit agencies.

First Responder Agencies

NYPD

New York Fire Department (FDNY),
includes Emergency Medical ServicesNew York Department of Environmental
Protection (NYDEP)

US ATF

US Coast Guard

US FEMA

Mass Transit Agencies

MTA NYC Transit

MTA Long Island Rail Road

MTA Metro North Rail Road

MTA Bridges and Tunnels

NY/NJ Port Authority

New Jersey Transit

Amtrak

Con Rail

The Hazard Materials Focus Group made recommendations on to the following issues:

- hazard identification process
- the establishment of hazardous material incident management procedures and protocols
- the use of detection equipment and training
- and, first responder awareness protocols

The **Communications Focus Group** includes these representatives:

First Responder Agencies

NYPD

FDNY – EMS

NY OEM

NY Department of Information Tech-
nology and Telecommunications (DoITT)Mass Transit Agencies

MTA NYC Transit

MTA Long Island Rail Road

MTA Metro North Rail Road

MTA Bridges and Tunnels

NY/NJ Port Authority

New Jersey Transit

Amtrak

Con Rail

The Communications Focus Group concentrates on implementing the best practices regarding:

- initial emergency incident notification
- on scene interagency communications and joint interagency entry team communications systems
- command and control communications; and
- media and public information issues

The **Medical Focus Group** includes representatives from:

First Responder Agencies

NYPD
 FDNY – EMS
 NY OEM
 NY DEP
 NY Department of Health
 NY Health and Hospitals Corporation
 NY Office of Chief Medical Examiner
 Greater NY Hospitals Association
 American Red Cross

Mass Transit Agencies

MTA NYC Transit
 MTA Long Island Rail Road
 MTA Metro North Rail Road
 MTA Bridges and Tunnels
 NY/NJ Port Authority
 New Jersey Transit

The Medical Focus Group has identified a triage and treatment strategy that includes the utilization of casualty collection points to minimize risks of cross contamination of hospitals and medical facilities. Consideration has been given to critical issues such as symptom recognition and antidote selection, the availability and delivery of medical materiel, and first responder awareness and training.

Security Technology

The New York City Transit has recently developed a Computer Assisted Design (CAD) Fire and Safety System. The system is a computerized database capable of depicting the rail track network with corresponding street grid, emergency exits, access points, and ventilation fans in selected sectors of the rail track system. The operations control center monitors the movement of all trains and maintains constant communication with train operators and line dispatch officers. An emergency mobile command center equipped with a duplicate CAD system as well as other communications facilities is dispatched to the scene of all major emergencies.

Environmental Design and Construction Features

The NYC Transit suffers from a disadvantage due to the sheer size of the system because its 468 stations were constructed over a span of 120 years. Security was not previously a major consideration in design and construction and the cost of system-wide remedial construction would be enormous.

Communications

Radio communications are in some instances limited. Each train operator and train supervisor is in radio contact with the command center by radio but the radios are not always powerful enough to penetrate the physical structures. To supplement the radio network, land-lines have been established at regular intervals along the tracks. To improve police and other emergency communications in the subway, NYC Transit is completing the design of a 130 million dollar radio system.

Training

In anticipation of major emergencies, NYC Transit conducts regular emergency response and rescue exercises. These vary from desktop simulations to organized, planned drills to “no-notice” simulations. The primary objective of these exercises is to identify deficiencies in the emergency plans and coordination and communication problems.

Contingency Planning and Emergency Response

The evaluation process of terrorist contingency plans is an ongoing activity. In conjunction with the Mayor’s Office of Emergency Management, NYC Transit constantly evaluates its emergency management principles, plans, and procedures.

NYC Transit is active in the development and implementation of its emergency contingency plans and procedures. For example, following the Sarin gas attack in Japan, the NYPD and the NYC government formed a task force to review security issues on New York City mass transit systems. The objective of this task force was to develop their response capabilities and to reduce the vulnerability of the system. The committee made five pertinent recommendations, the details of which are confidential, but information and guidance about gas attacks have been distributed to relevant employees and ventilation procedures for cars and stations were reviewed. These initiatives have been supplemented by contingency planning and regular inter-agency simulations and training exercises that focus on responding to chemical or biological incidents.

On November 8, 9, and 10, 1997, NYC OEM coordinated the largest series of terrorism response drills ever conducted by the city. Officials emphasized to the public that the exercise was not prompted by the possibility of an attack but toward reducing the potential danger of a terrorist chemical incident. The drills included testing the reactions of emergency responders in 41 city hospitals; 600 city, state, and federal law enforcement officers and emergency workers, limiting damage from a hypothetical chemical attack in a two-block area, and a tabletop exercise reviewing infrastructure issues.

CLEAN-UP AND RESTORATION ISSUES

A full range of emergency procedures designed for all foreseeable emergency situations has been developed and distributed and is regularly updated. NYC Transit detaches a track maintenance crew to respond to emergencies. Research conducted among a number of transportation authorities reveals that after the immediate safety and security of public, transportation, and emergency personnel, the primary concern of any transportation authority is the speedy restoration of operations. This makes sound business sense and is vitally important for any public utility because a quick return to normality has the important psychological advantage of restoring public confidence. This action sends a signal to the public that despite the efforts of terrorists, the public infrastructure and general population remain resilient and capable of withstanding such assaults. It is an enormous morale booster.

Public Affairs

For all public transit authorities the perception of competence is crucial. Statements concerning the reaction, response, and attitudes to the problem should reflect the appropriate degree of concern, support, reassurance, and empathy for the victims. It is imperative that these concerns are expressed quickly and through a single authority or official spokesperson.

During major emergencies, the OEM is responsible for providing coordinated information to the public. Information about service continuation and the restoration of operations is provided by the NYC Transit's public affairs office and the necessary service announcements are broadcast through the media, on the system's public address system at station platforms, and in subway cars.

Augmented Security and Essential Initiatives

In major emergencies, the NYC Transit is able to call upon the law enforcement resources of the New York City Police. With the recent appointment of the OEM as the overall coordinating body during

emergencies, the OEM is able to muster the additional services under the jurisdiction of the mayor.

There are characteristics common to all major transportation disasters, including terrorist attacks. Disasters can result in numerous injuries and disruption of transportation and they call for a large-scale response. This similarity of characteristics implies that there are several essentials common to all emergency responses.

Accurate and Timely Intelligence

One of the first steps in preventing terrorism is having knowledge about potential terrorist activity. It is equally important to be able to assess the scope and the validity of any threats received. An ongoing dialogue with a variety of agencies and sources in order to be fully apprised of all situations is important. At the national level, the sources include the FBI, the ATF, and the State Department. Local examples include the Intelligence Division of the NYPD. At the scene of a genuine emergency much valuable information should be obtained from the first responders to determine the type and level of response required .

Rapid Deployment

Getting emergency responders to the scene quickly can be the most effective way to minimize the amount of death, injury, and destruction caused by both terrorist acts and natural or accidental disasters. Proper usage of the incident command system in the deployment of personnel is invaluable in accomplishing rapid response.

Effective Tactics and Training

All first responders need to know both their own and each other's emergency response functions. This is achieved through the cross-training of personnel. As an example, the NYC Transit and the New York City police share basic knowledge of transportation, track safety, and the recognition of switches and signals that have been tampered with. Emergency response drills with scenarios drawn from recent incidents are also useful for practicing procedures and recognizing areas for improvement. Transportation agencies must also have proper plans and procedures in place that are constantly adapted to new threats. For example, after the Sarin gas attacks in Japan, New York City Transit developed new procedures regarding the movement of trains through tunnels and the use of ventilation equipment during such incidents.

Coordination

Coordination procedures must be in place before a disaster strikes. Emergency agencies must work to establish effective channels of communication and to standardize procedures in emergency response. Procedures were tested recently with a mock gas attack drill in New York. The exercise revealed that unnecessary confusion was caused by the colors of protective clothing used by the several different agencies involved. One color was used by one agency to identify personnel with a specific function; the same color was used by another group to indicate workers with a completely different assignment. The importance of cross-agency standardization in this otherwise overlooked area became readily apparent. Another source of miscommunication was the interpretation of the words “victim” or “stretcher.” The terms have different meanings depending on whether one is a member of the Fire Department’s Emergency Medical Service, NYPD’s Rescue Unit, or New York City Transit. Again, standardization would appear to be an answer.

Proper Equipment

The increase in the numbers and types of hazardous materials which may be encountered in disasters have made the requirement of having proper equipment more important than ever. In addition to the tools hitherto used to extract victims or to fight fires, emergency response agencies now have equipment and garb that will protect the rescuers as well.

LESSONS LEARNED

To an overwhelming degree the type of emergency response to the scene of a terrorist attack will be the same as that required for emergencies and disasters from natural or accidental causes. Derailments and explosions occur accidentally as well as intentionally, as do hazardous material incidents, and every agency should have in place emergency response procedures that can be adapted to such incidents. Nevertheless, it is regrettably true that in numerous cases of emergency response, by even the most experienced agencies, certain common errors appear time and again. The New York City Transit Police Department (the predecessor to NYPD’s Transit Division) developed a Critical Incident Manual in 1993 that considered a number of these common errors in an effort to discover methods of preventing their occurrence in future incidents. Some of those lessons will now be considered.

Dispatch Adequate Resources

Emergency response units requested and dispatched to the scene should resist the temptation to jump in and try to correct the condition before conducting a

thorough assessment of the conditions surrounding the incident. The results of their assessment must be communicated immediately and appropriate and adequate resources dispatched. First responders at the scene should have the authority to request additional units without having to request authorization because this results in wasted time. Redundant units or resources can always be returned to base or to service.

Direction to Responding Units

Emergency workers often fail to remember that other personnel responding to an incident may not be familiar with the facilities at the scene. Time is lost during those critical first minutes when responding units park in the wrong place, go to the wrong entrance and cannot find the cause of the emergency. It is wise to invest some resources to provide preliminary instructions.

Between emergencies, public utility agencies and emergency response services should allocate the time needed to understand the operational procedures of each institution. A striking example of what can go wrong was seen in the response to the Avianca plane crash on Long Island in January of 1990. The site of the crash was a wooded area on a peninsula with a single two-lane access road. Numerous units from all over Long Island responded but the lack of directions resulted in a massive snarl of emergency equipment heading toward the site. Essential equipment could not get to the site and ambulances and other vehicles that had already arrived could not get out. Much of the confusion could have been avoided with better preliminary information being made available to and by the first responders.

Establish Perimeters

The stabilization of the immediate area where the incident has occurred must be one of the first priorities. To accomplish this, an inner perimeter, located a safe distance from the incident, must be established using either personnel or natural barriers. All non-essential individuals, including those in uniform, must be kept outside this area. An outer perimeter must also be established. Between the inner and outer perimeter, staging areas, command posts, treatment areas, and other facilities can be established. Frequently perimeters are established in the wrong places or effective perimeters are not established at all. In addition, emergency responders must remember that the site may also be a crime scene. After initial responders have rendered aid to victims, all non-essential personnel must be cleared from the scene to preserve as much of the remaining evidence as possible.

Establish a Single Unified Command

The hive of activity that characterizes mass casualty scenes often creates confusion. Without a single unified command with established and recognized control, units frequently work independently and at cross-purposes, or simply waste time duplicating efforts. The result is disorganization. This mistake can be compounded when the police, fire, emergency medical services and the transit authority establish separate commands for their own services but with little or no communication with other services. Communication and coordination are therefore essential. As was stated earlier, proper use of the incident command system will solve many of these problems.

Delegate Authority

Within an incident command system, sections, branches and teams are responsible for specific functions, such as staging, rescue, field investigations, and medical treatment. Delegating authority to those who are responsible for these functions permits a reasonable span of control for the incident commander. Section and branch supervisors manage tasks and develop and implement tactics within their area of responsibility, which allows the incident commander to concentrate on a strategy for providing support to those who are actually doing the job. The system only works, however, if the incident commander consciously delegates authority to the appropriate personnel.

Maintain an Incident Log

It is impossible for the incident commander to keep all the information he needs in his head especially under crisis conditions. The incident commander, as well as those in control of sections and branches must keep a record of assignments, the times assignments are made, accomplishments, problems, and other pertinent information. It must also be kept in mind, however, that ordinary record keeping resources will not be available at the scene of emergencies. An example of this point occurred after Hurricane Andrew struck Florida. The lengthy disruption of electricity made the photocopying of directives and instructions impossible, and old-fashioned carbon paper became a scarce but vital commodity.

Wear Identifying Clothing or Emblems

The incident commander, as well as those who are responsible for specific functions, need to be identified by vests or caps so they can be easily identified in a crowd, but this is too often not the case. It is far too common to hear the complaint, “No one knew who was in charge.”

Provide Useful Progress Reports

Decisions cannot be made without information. The incident commander must be kept advised of needs and of progress. The incident commander cannot react and provide necessary resources without this information. The branch and section supervisors are in the best position to determine what problems and needs exist within their areas. Problems or progress within a given area will have an impact on other areas, and on the overall incident operation. Too much insignificant information, however, can be a handicap and lead to overload. Supervisors must exercise their discretion in determining what information is relevant.

Supervisors Involved in Physical Tasks

During moments of stress, some supervisors try to avoid making decisions by becoming workers instead of managers or they may just be swept up in the urgency of the situation. In either case, once they become involved in the physical tasks, they lose control of their resources and responsibilities.

Establish Staging Areas

Usually incident scenes are only able to absorb a limited number of vehicles and personnel. Therefore, the incident commander must establish personnel and vehicle staging areas as quickly as possible. It is much more efficient to direct all resources to a central staging area to await organized introduction to the core area. Staging areas should also be pre-planned as much as possible in order to make their selection during an emergency simple. In New York City, each police precinct has identified a variety of locations in the area that would be appropriate staging areas for any emergency response in the vicinity (e.g., schools with school yards or public buildings with parking lots,).

Accessible Staging Area

The bigger the incident, the more apparatus and personnel are likely to respond and a large staging area will be required. The staging officer must organize the parking of all vehicles to permit easy movement out of the staging areas. It is also most important that the keys to the vehicles either be left in the vehicles or with some designated person.

Parking

The congestion caused by the unorganized arrival and parking of emergency vehicles is a recurring problem that is found even under the best circumstances and with the most experienced agencies. When police, fire-fighters, or emergency medical personnel arrive on a scene, their first thought is usually to get to the core of the incident as quickly as possible.

Consequently little or no thought is given to how other vehicles will be able to get in and out if the incident is a major one. As a result, the fire trucks and police cars frequently block the ambulances; the first ambulances to arrive often hinder or prevent the arrival of other emergency vehicles. To avoid the problem, interagency protocols must be developed for emergency vehicles and all emergency personnel must be continually retrained in these protocols so that their use becomes automatic. When the Lexington Avenue Express derailed under Union Square in August, 1991, the derailment destroyed or damaged a number of the columns supporting the tunnel. This in turn caused the surface of the street above to drop perceptibly. Numerous units from the Fire Department were among the first to respond and, not realizing that the subway ran directly beneath them, parked their heavy equipment directly above the scene of the accident. Fortunately this was noticed in time and a more serious problem was narrowly avoided. Responses to major emergencies are often not over quickly and thought must always be given to how the positioning of a vehicle will affect the provision of appropriate response further on, whether it is ten minutes later or an hour in the future.

Provide Adequate Safety Precautions

Mass casualty incidents always present safety hazards to emergency personnel. The safety needs of rescuers as well as patients must not be overlooked. Wreckage may need to be secured to prevent movement or collapse. Rescuers may need to wear protective clothing such as helmets, gloves, eye protection, and protective coats.

The Incident Commander and Available Personnel

Personnel should match the needs of the incident. Heavy commitments of personnel may be needed in the extraction area during the early stages of the incident because most of those needing assistance will be found there. As rescue operations progress, many of the victims will be moved to the medical treatment area or hospital, so fewer personnel will be required in the extraction area and more in the treatment area. As personnel become available, the rescue supervisor must advise the incident commander of the new resource. The incident commander may then reassign those personnel to other areas as needed.

Treat Patients Where They Are Found

Rescuers tend to treat patients where they are found rather than move them to a triage area. Some types of injuries (for example, blocked airways or serious external bleeding) require on-the-spot medical assistance, but more extensive first aid should be done at a central triage area. A central treatment area permits maximum use of personnel and other resources. If the patient is

trapped, requiring lengthy extraction, then extended treatment within the area may be appropriate.

The Medical Treatment Area

Patients placed helter-skelter in the treatment area will compound an already disastrous situation. They must be placed in some organized fashion, e.g., critical patients to one side, delayed treatment patients to another. First arriving injured should be placed near the exit transportation loading area first, then fill towards the entrance. This eliminates the problem of having to step over patients when carrying in new arrivals. It is also easy to overlook patients or not notice changes in their condition. The medical branch supervisor should assign at least one person (preferably someone with medical experience) to each category of patients, with instructions to check them frequently.

Failure to Alert or Update Hospitals on Situation

Alerting Hospitals

There are still reported cases of hospitals learning of mass casualty incidents when the first patients came through the door. Procedures and protocols should require immediate alerting of hospitals when a major incident is recognized. Reasonably accurate information on the nature and severity of the incident should be provided so that the hospital has time to prepare to receive and treat the injured.

Keeping Hospitals Informed

Hospitals often call personnel back to duty and pull staff from other floors and wards to meet the emergency room needs of a disaster. To keep the hospital on continued alert long after the last patient has been transported is not only costly but jeopardizes other patient care. Hospitals should be informed when the last of the injured have been taken from the scene of the disaster.

Final Comments

New York has so far escaped intense attacks like the gas attacks in Japan and the repeated bombings in Paris. However, as the largest urban transportation system in the world, it is a tempting and vulnerable target. A major attack on New York City Transit would be seen as a blow to the United States. New York's efforts to guard against this possibility is a complex and expensive undertaking but the realities of the national and international situations make them necessary.

THE METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

Contingency Planning for the 1996 Olympics

by Shaun P. McCarthy

The biggest event that the Metropolitan Atlanta Rapid Transit Authority (MARTA) has ever had to confront was the 1966 Atlanta Olympic Games. Complex planning and costly precautions were taken to protect the transit systems and its patrons from ordinary crimes and terrorist attack. As it happened, a bomb did go off during the festivities but the explosion occurred in a public park, not within the transit system. If the bomb had exploded within the confined space of a transit station or a train, the casualties might have been much higher. Perhaps the reason MARTA escaped the attack was because of the extraordinary preventative measures that had been taken.

DESCRIPTION OF THE SYSTEM

MARTA began rail operations in 1979, beginning with its East Line. MARTA has since expanded to five rail lines with 36 rail stations and 46 miles of heavy rail. MARTA owns 240 rail cars and 667 passenger busses. The Bus Division runs 150 routes and averages nearly 30 million route miles per year. The Rail Division runs trains every eight minutes through its stations and averages 23 million route miles per year. MARTA normally carries 470,000 bus and rail riders per average weekday and parks approximately 30,000 commuter vehicles per day. Fares are currently \$1.50 one way, with free transfers. Magnetically coded weekly and monthly passes, or “Transcards,” can be purchased for unlimited rides at \$12.00 and \$45.00, respectively. MARTA also receives a 1% sales tax share in Fulton and DeKalb counties to assist with the funding of its operations.

INCIDENT RESPONSE

Threat or Special Circumstances

The 1996 Olympic Games presented MARTA and its police personnel with unprecedented challenges. Since the PLO attack against the Israeli athletes during the Munich Olympics, this international event has been a high profile target for terrorism and a high risk event for the host countries. MARTA made the commitment to be the Official Provider of Public Transportation for

the Olympics. This would entail moving over one million passengers a day to and from competition venues, public parks, and downtown businesses. Never before had MARTA attempted to move such a large contingent of people over such an extended period of time. The estimated numbers involved were four to five times the system's normal ridership figures.

The Olympic schedule for MARTA's police officers began Monday, July 15, 1996. This was four days before the opening ceremonies on Friday, July 19. The objective behind the early schedule was to establish a highly visible law enforcement presence and to assist with the influx of customers into the system. MARTA's Airport Station and the Five Points and Peachtree Center Stations, which serve the downtown hotel district, experienced large increases in riders prior to the games.

On Wednesday, July 17, a public dress rehearsal of the opening ceremony was held at the Olympic Stadium. With approximately 80,000 spectators travelling to one location, this proved to be the first major test of the West End Station and the designated shuttle bus station for the stadium. A comparatively small station, it was not known how West End would be able to accommodate the large crowd and how its size would affect operations. MARTA conducted a lengthy public awareness campaign prior to this event and informed the public that there would be a waiting period of at least one hour to enter the system.

Under the circumstances, the system performed well and the crowds were moved at an acceptable pace. The key was to keep the trains moving, to regulate queue lines, and to maintain a strong police presence. The crowds behaved in an orderly manner as long as they could see that movement was taking place. Although the trains were jammed, no problems were experienced. Bus shuttles were run by ACOG (Atlanta Committee for the Olympic Games) and OSTs (Olympic Spectator Transportation System). OSTs experienced some problems with moving the crowds as not enough buses were on hand. However, this problem was rectified before the Opening Ceremonies on Friday night. West End proved to be capable of handling the crowds, provided enough police, barricades, and trains were available. During the Olympics the station averaged over 100,000 passengers per day.

The Games proper commenced on Saturday, July 20. The increase in commuters was significant and immediate, with a daily average rail boarding of between 1 and 1.3 million, a record for MARTA. All MARTA parking lots were filled by 7:30 a.m. The punctuality of trains was an essential factor in keeping the crowds moving. In addition, well-designed queue lines and sufficient treasury assistance at the faregates facilitated crowd control. An effective public address system and the use of bullhorns to keep the riders

informed of delays were essential elements in the effective control of the stations.

One major change that was not anticipated, however, was the huge impact the Games had on the Peachtree Center Station. This station serves the hotel district and is one block from the centerpiece of the city, the new Centennial Olympic Park. On Saturday, July 20, the crowds were tremendous, and the public's safety became a crucial issue. The station was transformed into one huge queue. The two north entrance/exits of the station were converted into exit facilities only, and the two south entrances/exits converted into entrances only. Police with bullhorns and barricades were in place to enforce access control. The press was notified of the change and the situation was well publicized. This change worked well, and the crowds were properly managed.

The Games ended on Sunday, August 4. The crowds had moved easily and smoothly, and the MARTA police officers had become accustomed to the pace. By Tuesday, August 6, ridership was back to near normal levels. The Police Olympic Schedule was suspended at 2:00 a.m. on August 7, and the MARTA Police Operations Center (MPOC) was closed. For the most part, comments from the public were positive. They understood that there would be large crowds and long waits, and accepted the conditions.

The MARTA Police Division was responsible for crowd control operations at all MARTA Rail Stations, all law enforcement, and any emergency response required on the bus and rail systems during the Games. The Division was also given the responsibility for target hardening (providing extra physical protection against attack), employee awareness training, and the procurement of necessary equipment for Olympic Security Operations.

Assessment of the Threat

As mentioned previously, MARTA was designated the Official Provider of Public Transportation during the Olympic Games. MARTA was the backbone of the spectator transportation system as public parking was not allowed at any of the downtown Olympic venues. Essentially everyone who was going to any of the Olympic stadia (the Georgia Dome, the Omni Coliseum, or Centennial Olympic Park) had to use the MARTA system to get there. The sheer size of the Games complicated transportation operations. The Atlanta Games were touted as “the largest peacetime event in world history,” with over 12 million spectator tickets available. The Atlanta Games were planned to be larger than the Seoul (Korea) and the Barcelona (Spain) Olympics combined.

Nearly 75% of the Olympic events were to be held inside the “Olympic Ring,” an imaginary circle three miles in diameter in downtown Atlanta. This “ring”

is an area served by MARTA's largest rail stations: Peachtree Center, Five Points and Omni/Dome Stations. (See *Map of MARTA System* in the appendix). Never in the history of the Games had so many events been held in such a concentrated area.

To facilitate and encourage this movement, a precedent was set by agreement with ACOG (Atlanta Committee for the Olympic Games). By simply showing your Olympic event ticket at any MARTA station or bus, one would be allowed to ride MARTA free that day. Daily entries of up to one and a half million riders a day were predicted. The police services recognized that significant planning, deployment, and logistical work had to be done to meet this enormous challenge.

Although aware that the Olympics were a potential target for criminal and political violence, the aggregate intelligence on hand provided no indication of any specific, impending terrorist threat to the Olympics or to the MARTA transportation system.

Security Organization and Personnel

The MARTA Division of Police Services consists of 217 armed, uniformed police officers, 29 sergeants, 9 lieutenants, 5 captains, 3 majors, and a Director/Chief of Police. The Division also conducts its own investigations with a Detective Unit, operates four Bike Patrol Teams, has a special Bus Patrol Unit, and maintains a 10 member Special Operations Response Team (S.O.R.T.) capable of tactical and chemical response. The MARTA Police have full police jurisdiction on MARTA property as well as in the cities and counties in which MARTA operates. MARTA maintains its own records section, radio dispatch system, and Zone Monitors who staff a closed circuit television center (CCTV) and answer customer assistance telephones.

The MARTA Police Division routinely patrols all MARTA rail stations and facilities, adjacent parking lots, heavy rail cars, and bus routes. Ninety percent of the patrols conducted in the stations and on the trains are done on foot. Mobile patrols are conducted by marked police cars on each rail line. There is one uniformed officer on every train from 1500 to 2300 hours each day and plainclothes officers make regular patrols.

Planning

MARTA Police Services began preliminary planning approximately three years prior to the event. Initial planning started with an examination of personnel allocations and projected shift requirements. The Division assigned Captain T.D. Rogers to ACOG Security to assist with the overall Olympic Security efforts. In May 1995, Major M.A. Parker and MARTA Chief Safety

Officer Tracy Pluff traveled to FEMA training headquarters at Mount Weather, Virginia, where they participated in a crowd planning exercise. In July 1995, Lt. Joe McKinney was designated Olympic Coordinator for MARTA Police to facilitate logistics, organize target hardening, act as inter-departmental liaison, and to decide personnel staffing for the Department.

The first task of the planning process was to determine how to best utilize available manpower. The division made a commitment to have at least one MARTA Police officer in each rail station 24 hours a day during the Games. Variations of work hours, length of work week, and numbers of officers per shift were examined to determine how to meet the needs of the Division, without exhausting the officers. As larger crowds were expected to use the system between 6:00 a.m. and 2:00 a.m., it was determined that 12 hour shifts, with four consecutive days on duty, then one day off, would maximize MARTA police coverage.

The shifts were from 0530 to 1730 hours, 1430 to 0230 hours, and 1800 to 0600 hours. This schedule enabled MARTA to have the majority of its officers on duty during the most crowded times, and maintain at least one officer per station during the slower early morning hours. (See the *Staff Chart*)

The schedule was designed to keep individual officers in the same stations during the entire Olympic period to assure that they were familiar with their assigned stations and to maintain accountability. The system was well received and proved successful.

Personnel

MARTA Police recognized that an additional 250 to 300 personnel would be required to ensure adequate security and crowd control on MARTA during the Games. The crowd projections were too large to be handled by only one or two officers at each rail station. Even with the police personnel working 12 hour shifts and only one rest day per week, manpower capabilities were stretched to the limit.

The police requested the MARTA General Manager to temporarily reassign MARTA civilian personnel from their regular duties to assist police during the Games. Fifty (50) to eighty (80) personnel were available to assist the police during the games.

The MARTA Police also requested other transit agencies across America to assign officers to MARTA for the Games. For various reasons, only BART in San Francisco fulfilled its commitment, sending five officers to help for two

weeks. While their assistance was invaluable, MARTA was not able to muster its target of additional transit officers.

During May, MARTA Police Chief Gene Wilson took up the staffing plight with Gil Childers, Special Assistant to U.S. Attorney General Janet Reno. Mr. Childers took special interest in the staffing dilemma and began working with federal and state authorities to help rectify the situation. This enabled MARTA to be recognized as a “State Law Enforcement Venue” and to tap into the resources of the 4,000 member-strong State and Federal law enforcement contingent of S.O.L.E.C., the State Olympic Law Enforcement Command. This agency, set up by the Governor of Georgia and headed by Gary McConnell to provide extra federal and state law enforcement support to the Olympic Security effort, committed 200 sworn law enforcement personnel to MARTA. The allocation of these officers enabled MARTA to meet its commitments and to manage the crowds safely and efficiently.

ACOG paid MARTA for police overtime incurred during the Games. Early on the Division had requested funds to offset the huge cost of overtime that would be necessary to handle the Olympic activities. The Division obtained nearly \$900,000 to cover the extra police coverage required before, during and after the Games. ACOG agreed to pay this cost, as the coverage obviously had a direct effect of the Games coming to Atlanta.

Logistics

A great deal of logistical support was required to support the MARTA Police efforts. The issues of additional personnel, barricades, food, water, signage, shelter for the public, portable toilets, bullhorns, traffic cones, and first aid; all had to be addressed by the department.

MARTA Police were assisted and supported by the Authority’s Facilities Maintenance division in many areas. A total of 330 wooden barricades were fabricated and painted to supplement the existing 200 metal barricades. In addition, approximately 100 signs for crowd and traffic control were prepared. Both of these items proved invaluable in handling the huge volumes of vehicular and pedestrian traffic using MARTA during the Games. The Facilities staff also arranged for the rental of 100 portable toilets, placing them at key rail stations.

A total of 40 bullhorns, 700 traffic cones, and 100 first aid kits were purchased by MARTA from a contingency fund. Although the US military had pledged to provide a number of tents and other portable shelters to MARTA for public use, it turned out that none of these items were available.

Security Plans

Intelligence was supplied to the MARTA system from the State Center. A MARTA representative attended security briefings twice a day. The Bureau of Alcohol, Tobacco and Firearms maintained a bomb center with a dedicated land-line telephone link to MARTA's operations center. The pipe-bomb explosion at Centennial Park resulted in the MARTA police increasing their security program from normal to a "heightened state of awareness." MARTA developed and maintained its "Go Team" for the duration of the Olympics. This team was comprised of representatives from the police, railroad, bus, maintenance, and safety divisions of MARTA. Numerous exercises and table-top simulations were conducted prior to the event, including a simulation held at the civic center that focused on a takeover of a train with hostages.

Security Technology

Although MARTA investigated the possibility of removing all rubbish bins from the stations, it concluded that this step would produce more disadvantages than advantages. The removal would have resulted in refuse being dumped on the platforms, causing health hazards. This could have resulted in more serious conditions had refuse spilled onto the tracks and caused a short-circuit. In the end it was decided to introduce bomb-resistant containers at strategic stations and to implement and maintain a system whereby all the bins were emptied and rotated promptly.

Environmental Design and Construction Features

MARTA conscientiously considered crime prevention during the architectural stage of its planning. All stations are equipped with CCTV monitors. MARTA's power stations are their greatest vulnerability but they have adequate alarm systems and have target-hardening features. One advantage to security is the frequency of trains. This makes it physically impossible for saboteurs to tamper with the rails or the signaling system. All trains and buses maintain radio contact with the Central Control center at Avondale. To date, fifty percent of the bus fleet have been equipped with Global Positioning System (GPS) units.

The Division obtained advice from a counter-terrorism expert on target hardening issues. MARTA improved on many areas considered vulnerable to tampering. All the power station's alarm systems were enhanced, perimeter fences were added to critical facilities, and bomb-resistant trash containers were placed at Olympic Ring stations. Private vehicles were banned from rail and bus facilities. These measures helped to add a level of deterrence to security preparations. Money expended on these issues proved to be well

spent; although a bombing did occur in Atlanta at Centennial Park, only one block from the Peachtree Center station.

Communications

Despite MARTA Police's efforts to create an overall MARTA Operations Center, it did not occur, but they created their own MARTA Police Operations Center (MPOC). The Center was staffed 24 hours a day, beginning a week before the Games and continuing for two days after the closing ceremonies. The Center was equipped with appropriate radio equipment, phone lines, computer support, cable television for viewing news footage, and all the maps and documents needed for the Games. The Center acted as a communication node between the State Command Centers, the MARTA Bus, Rail, and Maintenance Divisions, ACOG, and specialized management agencies such as FBI, the Department of Defense (DOD), and the Explosive Ordinance Disposal (EOD). It also coordinated personnel movements, S.O.L.E.C. officers, and other logistics. It was co-staffed with facilities maintenance personnel, which expedited requests for maintenance from the field. While an overall MARTA Operations Center, with a representative from all MARTA divisions present in the same room, would have been much more efficient, the MPOC proved adequate.

MARTA Police personnel also staffed the State Operations Center (SOC) on Confederate Avenue and the Joint Communications Center (JCC) at Atlanta Police Headquarters, City Hall East. The SOC served as the main control center for all S.O.L.E.C. and State Emergency Management Agency operations involved in the Games. The JCC served as an information clearing house for all federal, state, and local law enforcement agencies at the Olympics. These interfaces helped to speed communications between MARTA and other law enforcement jurisdictions and proved to be valuable as the Games progressed.

The State of Georgia provided all S.O.L.E.C. officers with radios tuned to both of the MARTA Police frequencies. To facilitate communications; the officers were allocated a special radio number and were told to use "plain talk" in their radio transmissions. This procedure worked well and radio discipline was observed.

The heads of the key law enforcement agencies started meeting every other day one week before the Games began. The agencies involved were the FBI, the U.S. Secret Service, the Atlanta Police, the Conyers Police, the Fulton County Police and Sheriff, the DeKalb County Police, the MARTA Police, the Georgia State Patrol, the Georgia Bureau of Investigation (G.B.I.), the

National Guard, S.O.L.E.C., and ACOG. The discussions at these meetings centered around intelligence issues and strategies.

Training

All MARTA Police received extensive training on controlling large crowds, Olympic information, bomb and gas awareness, cultural sensitivity, and diplomatic procedures. They were informed of their role and how to communicate with the MARTA command post. All police supervisors were extensively trained in crowd control procedures and were given table top exercises on how to develop queue and the emergency plans for each rail station.

MARTA Police dispatched its Special Operations and Rescue Team (SORT) to the Army's Fort McClellan for an intensive training course in biological weapons handling to enhance their hazardous materials response capabilities. In addition, they conducted numerous bus and train assault simulations.

Emergency Response

MARTA has developed an emergency response team. Referred to as the "Go Team," this organization is comprised of senior individuals from MARTA management and operations divisions. Its emergency response manuals contain instructions for most foreseeable emergency situations. A fully equipped mobile emergency control center is also available at short notice. Whereas MARTA's Hazmat (SORT) team is capable of providing a first response to a biological or chemical attack scene, it does not have the capacity to deal with an attack on the scale of the Tokyo disaster. If a terrorist campaign consisting of a series of simultaneous attacks were to be launched, support would be supplied by the Atlanta Fire Department and state and federal authorities.

The Games progressed well until early on Day 9, Saturday, July 27. Shortly after 1:00 a.m., a pipe-bomb exploded at a Centennial Olympic Park concert, killing one person and injuring scores of others. MARTA and S.O.L.E.C. Police were placed on full alert and all stations were immediately searched for suspicious devices. All on-duty personnel were held over past their shift. During the next few hours numerous alerts were called in, none of which proved true. The alert was eased at 0700, and the extra personnel were released.

On two occasions transit stations were briefly closed to investigate suspicious packages in the wake of the Park bombing, but EOD teams responded rapidly and determined there was nothing dangerous in the parcels. Delays in scheduled transportation were minimal. One train was taken out of service for

approximately two hours after a suspicious device was found by a MARTA employee. It was alleged that the package was thrown onto the train by a man at the airport, who failed to board the train. The train was moved to a pocket track and EOD called. An X-ray of the package was done by EOD and batteries and wires were seen. EOD exploded the package and discovered a flashlight and headphones in the case. Investigation revealed a pilot accidentally left the case on the train at the airport. This was the nearest to sabotage that MARTA experienced during the games and there were only occasional delays due to mechanical problems.

CLEAN-UP AND RESTORATION ISSUES

After the bomb exploded, Centennial Park was closed for the next three days. The Games themselves were unaffected and the park averaged 250,000 visitors per day. Closing of the park seems to have caused a decline in ridership but the venues themselves remained sold out and people continued to ride MARTA to the events. When Centennial Park reopened on Day 12, July 30, MARTA ridership set new records as people returned to the park. The bombing incident had little to no effect upon the public's confidence in MARTA.

Public Affairs

During the Games MARTA made a conscientious effort to keep the public informed in advance of changes to its service, entry and exit points, and station facilities.

Augmented Security

The New York City Metro-North Railroad Chief of Police, Dean Esserman, NYC Transit Security Chief, Tom Savage, and other key staff spent several days assisting MARTA police with a critique of their crowd management, emergency preparedness, and queue plans. Their knowledge and experience assisted MARTA to prepare detailed crowd flow models and contributed to successes in this area.

MARTA's police personnel were augmented during the Olympics with 220 additional police personnel from the state and city police forces. In addition, MARTA would have been able to call upon support from the National Guard and other sources, had the need arisen.

LESSONS LEARNED

Overall, MARTA Police Services have reason to be proud of their performance. No major incidents occurred within their jurisdiction and the

crowds were handled safely and efficiently. There were many lessons learned, and many theories confirmed, during the Games. A list of them follows.

Advance planning is essential

Start early! Put the best people and planners on the job. This is not an area for problem employees or people who are seeking political or social contact. You need hard workers, good communicators, and leaders as Olympic coordinators.

Self reliance

Be self reliant. Take the responsibility for what you know needs to be done, and aggressively pursue these issues until you are sure they are resolved.

Apply creative thinking

Think outside the lines and exercise creativity. Special or extraordinary events require flexibility and, in many instances, deviation from routine practices. Sound planning and sticking to that plan are essential but you must remain flexible and innovative when it becomes necessary.

Obtain advice and seek expertise

Seek advice from experts in the field. Look to people who have “been there; done that.” Be wary of people who claim to know but have no credentials.

Security is inconvenient

It is essential that the public and employees are aware that with security comes inconvenience. Be prepared to fight for what you know is right in the area of security. Anticipate and manage resistance and opposition when you decide to lock facilities, enforce security regulations such as visible I.D. procedures, and ban private vehicles from critical areas.

Maintain a balance between safety and service disruption

More than 140 suspicious packages were reported in the wake of the Centennial Park incident. The MARTA system had to be cleared on two occasions because of suspected packages. During these incidents, the crucial issue proved to be striking a balance between responsible public safety and service disruption. The advantages in being able to deploy EOD teams at major sites during large-scale events became evident. This practice expedites response time and investigation and facilitates quick operational recovery. A consequence of these incidents was MARTA’s realization of the need to employ sniffer dogs and to train its police personnel in bomb-handling techniques.

Crime

In general, crimes against persons dropped during the Games although there was a huge increase in pickpocketing incidents. The crowded conditions were a paradise for this type of criminal. MARTA was able to enlist the help of some plainclothes Georgia Bureau of Investigation (G.B.I.) agents deployed in the Olympic Ring to help address the problem. Even though some arrests were made, the pickpocket problem continued until the Games ended. Parking lot crimes did not dramatically increase, despite all parking lots being filled to capacity. MARTA attributed this phenomena to the constant flow of people through the lots and to the increased police presence at each rail station.

Communication

Train your personnel well, early, and thoroughly. Keep them informed of plans and objectives. Insure that a good communication network is in place and working. Always keep your personnel advised and informed.

Maintain functional responsibility

Avoid allowing personnel to perform cross functions. Let the police handle crowd control and station coordination; let rail operations personnel move the trains; and let bus personnel manage buses. Do not confuse the roles; let each area perform their specialties.

Logistics and morale

Take care of employees. Food, water and “goodies,” such as special pins and shirts, are very important to employee morale during special events.

Final comments

One of the security problems faced by any large metropolitan transit system is the one-time, big event such as the Olympics, which can push security capabilities to the limit. While Atlanta’s transit system, MARTA, was not the target of the bombing, other transit organizations can profit from the lessons learned while preparing for the event.

APPENDICES

to the Metropolitan Atlanta Rapid Transit Authority Study

MARTA Rapid Transit System Map

Olympic Rail and Bus Entries

MARTA Police Command Staff 1996 Olympics

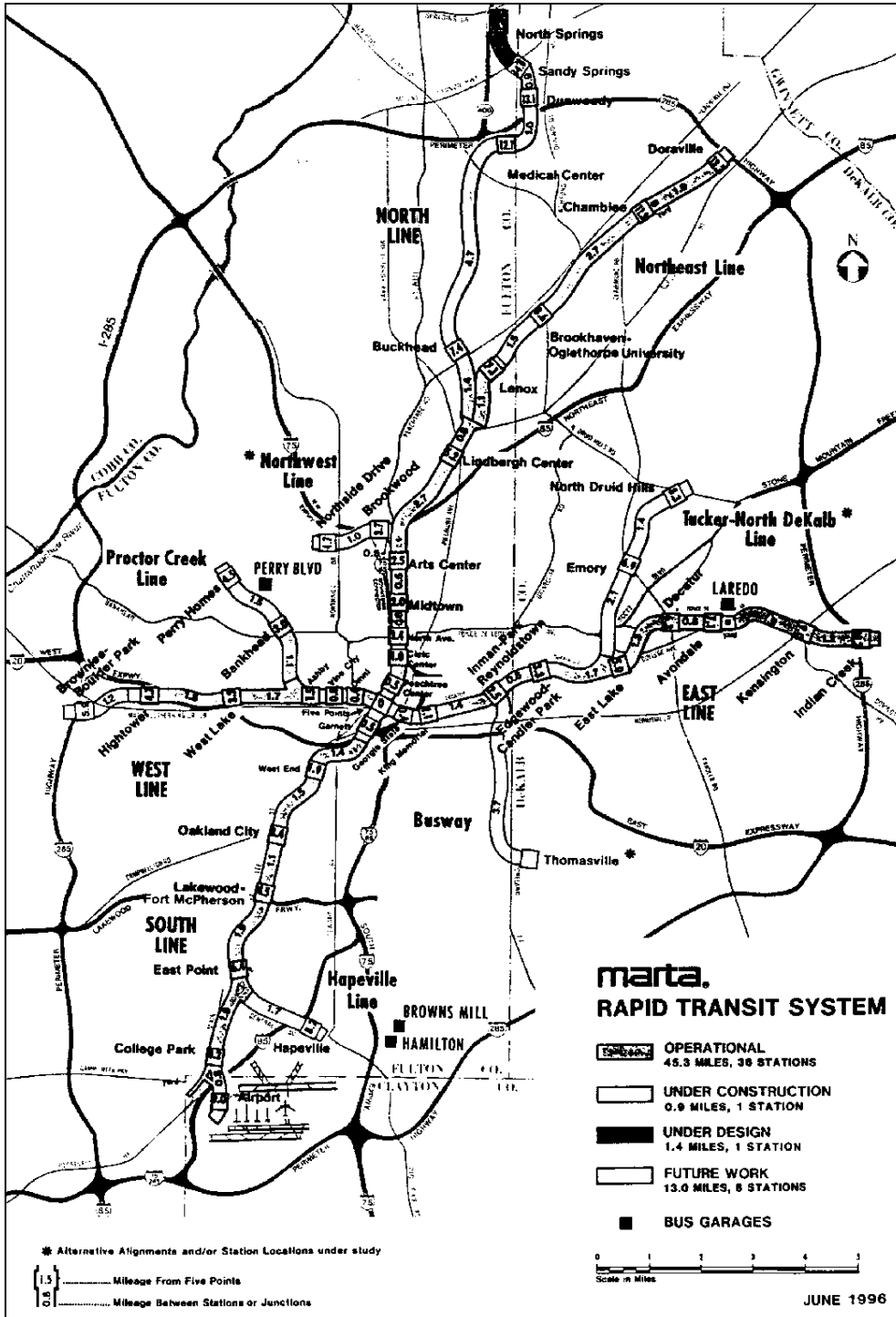


Figure 1-1 MARTA Rapid Transit System Map

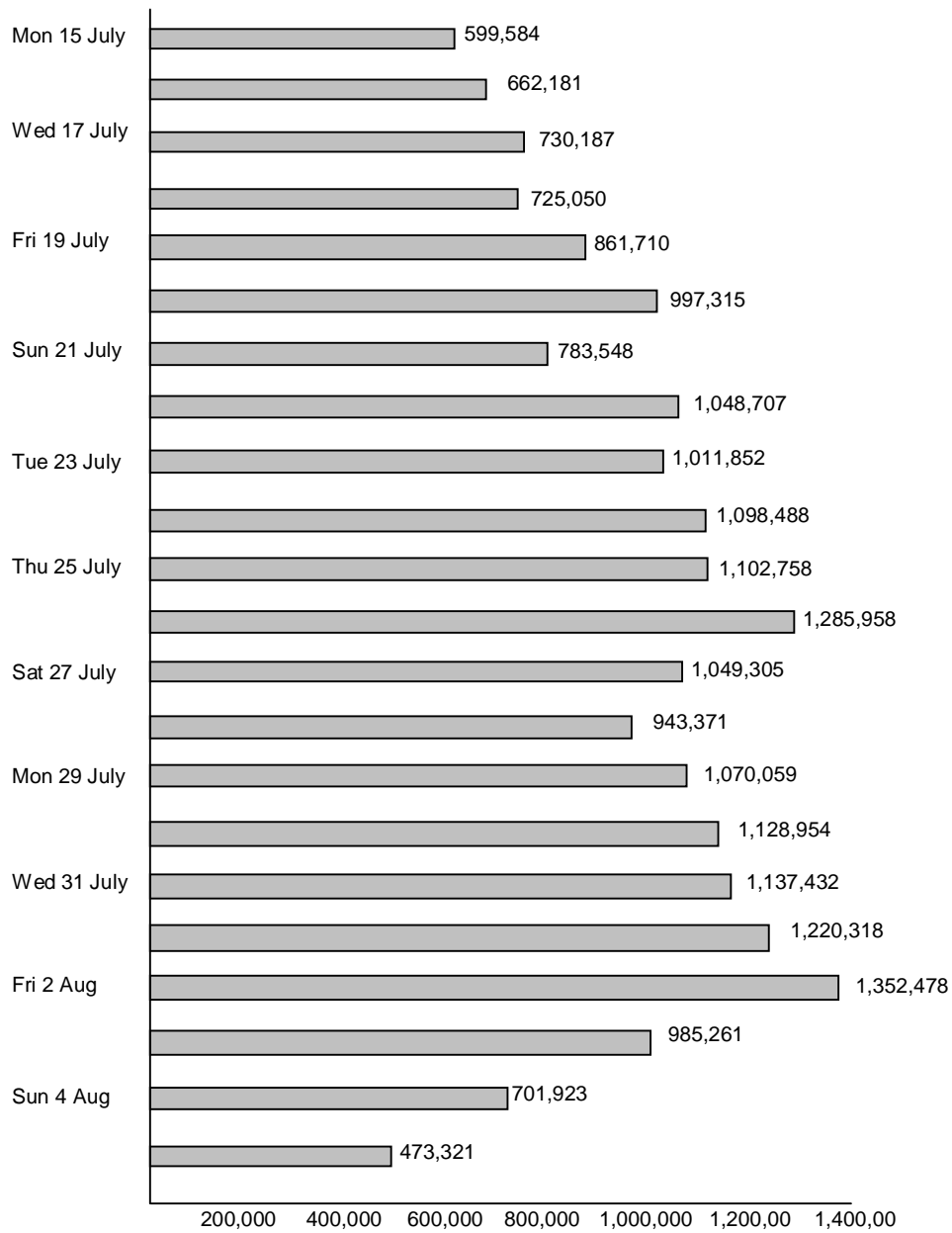
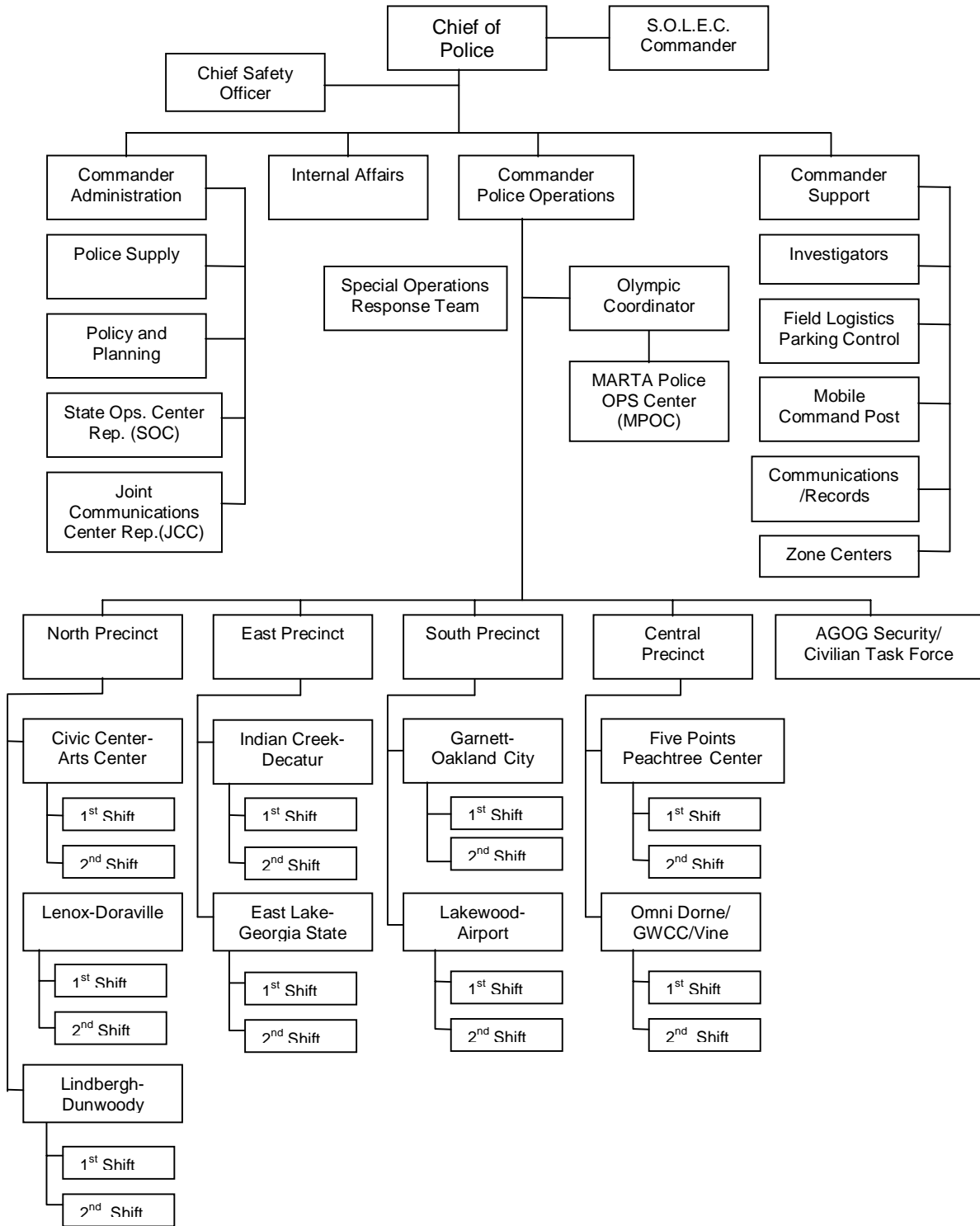


Figure 1-2 Olympic Rail and Bus Entries

Notes:

1. Pre-Olympic Average: 450,000 (weekdays)
2. The Olympics began Friday July 19 and ended Sunday August 4, 1996.
3. Centennial Park was bombed on the morning of July 27 and reopened July 30.

Figure 1-3 MARTA Police Command Staff 1996 Olympics



CRITERIA FOR TRANSPORTATION SECURITY

By Brian M. Jenkins

Introduction

In conjunction with the Volpe Transportation Systems Center, the Norman Y. Mineta International Institute for Surface Transportation Policy Studies at San Jose State University (IISTPS) has been requested to report on the policy framework and best practices currently in place for combating terrorism and major violent crimes on surface transportation systems, including public transit. The objective of this document is to provide an outline of current policies, practices, and procedures for a “minimum state of readiness.” This outline is neither conclusive nor exhaustive, and will continue to be developed in subsequent tasks.

Project Approach

The approach outlined in this document categorizes current policies and practices in three chronological categories:

- Design and Planning (Pre-Incident Preparedness)
- Response (Incident Reaction)
- Recovery (Follow-Up)

This outline and project emphasis focus on incident activity specific to public transit operations and facilities. Activities identified in addressing transit vulnerabilities are further categorized by type and size of operation, specifically problems encountered by multi-modal systems (e.g., rail and bus), large and medium bus-only systems, and small/rural bus systems. The descriptions include specific examples of the precautions, responses, and recovery measures taken in the event of specific incidents.

Policy/Procedures Framework

The general framework of preparedness progresses from planning and mitigation measures through response and recovery. The pre-incident mitigation steps incorporate, at a minimum, security and detection devices, environmental design, training, and outreach activities. The preparedness step focuses on the institutional capacity and capability of both internal and external emergency-response organizations and teams. This stage also includes:

- emergency management and operations planning;
- direction and control;
- communication (internal and external); and
- planning for evacuation, reporting and support measures.

The response (actual incident) stage is the most visible function in the policy and operational framework. If the mitigation and preparedness stages are adequate, this stage is primarily concerned with implementation of the policies. Finally, post-incident recovery involves the processes necessary to return a situation back to its pre-incident state of operation.

It is worth noting that major obstacles to the policy framework include issues such as jurisdiction over various locales and/or types of events, the costs necessary to develop and sustain emergency programs, and the complexity and difficulty involved in determining an “acceptable” level of risk. These problems, along with numerous others, can make vulnerability management a politically salient issue as well as an administrative “hassle.”

One of the biggest issues for any transit agency in developing and implementing an effective “crisis management” program, whether it is aimed at criminal activity or natural disasters, is coordination with other agencies and organizations that are expected to be part of the response scenario. Depending on the magnitude of the problem, these external entities may include:

Local (community, county, city) organizations/agencies

- Local law enforcement (police, sheriff)
- Fire departments, ambulance and emergency medical teams, and related health services
- Search and rescue services
- Local government emergency management office
- Red Cross
- Human services (e.g., crisis counselors)

State organizations and agencies

- State emergency management office
- Department of Transportation
- Public safety
- National Guard

Federal agencies

- FBI
- FEMA

Using the research done by Boyd, Maier and Associates (*Perspectives on Transit Security for the 1990s: Strategies for Success*), general “best practices” that have been identified include, among others:

Deployment Practices:

Uniformed personnel deployment/practices:

Deployment at fixed posts

Random patrolling

Directed patrolling

Saturation patrols

Undercover deployment/practices:

Directed patrolling

Surveillance

Stakeouts

System Design and Technology

Minimizing targets

Controlling corridors of movement and egress

Effective utilization of provided space

Surveillance equipment

Zero tolerance signage

Data Collection

Dispatch logs

Operators’ reports

Incident report forms

Operating Practices

Route design and scheduling

Maintenance

System policies and training

Summaries of how these practices are called into play in response to various incidents for a range of service sizes and modes are presented in the following tables. Note that, while similar practices may be relevant no matter what the size of the transit property, the magnitude of both the problem and the resources available can vary considerably.

It should also be noted that public perception can play an important role in crime protection and prevention. For example, several operators have reported that “dummy” surveillance equipment can be nearly as effective as the real thing in deterring vandalism and property crimes.

Description of Incidents/Problems

Law enforcement agencies generally categorize criminal activity under three “levels”, the latter two of which include the subjects of this analysis:

Level 1: Non-violent crime: Transit-related incidents include smoking in unauthorized areas, graffiti on vehicles, and avoidance of fare purchase. Level 1 is characterized by minor crimes and vandalism on transportation system equipment and infrastructure, including quality-of-life infractions. Level 1 offenses are *not* discussed in this report.

Level 2: Violent and destructive crime: These are characterized by assaults on the transit system itself or on operations equipment, personnel, or passengers.

Level 3: Premeditated violence and destruction: These may be characterized by violent attacks or potentially deadly assaults on operators and patrons of the transit system. Impacts may extend beyond the physical boundaries of the transit agency property or equipment. In some cases attacks may be politically motivated and directed against the government or a specific ethnic or racial group.

The following is a list of the categories of violent crimes extracted from Boyd, in the order of reported severity (low to high). It should be noted that only the first three items are reported to occur in the top half of 28 identified security/crime issues:

1. Objects thrown at vehicles
2. Assaults on passengers
3. Assaults on operators or drivers
4. Weapons offenses
5. Bomb threats
6. Arson
7. Hate crimes
8. Homicides

For purposes of simplicity, the following categories of offenses are reported on in this section:

- A. Crimes against property (includes objects thrown at vehicles, arson, and most hate crimes)
- B. Crimes against persons (includes assaults on passengers, assaults on operators or drivers, weapons offenses, and homicides)
- C. Dramatic impact crimes (includes terrorism, bomb threats, and some hate crimes).

1. DESIGN AND PLANNING (PRE-INCIDENT)

A. Crimes Against Property

(e.g., objects thrown at vehicles, arson, and hate crimes)

Security Organization and Personnel

- Transit Police and undercover operatives
- Visible patrols
- Station agents
- Local law enforcement officials

Security Plans and Procedures (Overall Crisis Management)

- Mandate a crisis management program
- Write emergency operations plan
- Reach mutual aid agreements
- Develop reporting forms and procedures

Environmental Design

- Protect stations, parking areas, trackage, stops (e.g., fencing, use of effective lighting)
- Select materials
- Ensure visibility
- Maintain facilities

Security and Detection Technology

- Surveillance equipment
- Silent alarms
- Emergency exits
- Intrusion sensors

Communications Equipment/ Procedures

- Emergency communication systems and backup
- Establish a clear chain of command and communication
- Surveillance at stations and yards
- Alarms
- Visible patrols

Training

- Train station agents, operators, and all staff for hostile events
- Enact simulation exercises
- Define special procedures for assistance to seniors, disabled, youth
- Develop reporting forms and procedures

Emergency Response (Planning & Arrangement)

Multi-Mode System

- Arrange for alerts to public officials
- Coordinated by police and security units

Augmented Security (e.g., prior to special events)

- Additional security agents
- Incentives for community vigilance

Media and Multi-lingual activity

- Place large notices in vehicles and stations to warn against crime
- Encourage passenger awareness
- Outreach to schools, youth, community groups
- Arrange general public and community meetings
- Publish multi-lingual brochures
- Maintain a Public Relations and Marketing department

Small/Rural Bus System

- Liaison with local media

What “public outreach” materials are available?

- Visible security personnel
- Aggressive outreach to community
- All staff participate in public relations
- In-house and purchased materials
- Promote zero tolerance

1. Design and Planning (Pre-Incident)

B. Crimes Against Persons

(e.g., assaults on passengers or operators and drivers, weapons offenses, and homicides)

Security Organization and Personnel

- Transit Police and undercover operatives
- Visible patrols
- Station agents
- Local law enforcement officials

Security Plans and Procedures (Overall Crisis Management)

- Mandate a crisis management program
- Write emergency operations plan
- Reach mutual aid agreements
- Develop reporting forms and procedures

Environmental Design

- Protect stations, parking areas, offices, stops (e.g., fencing, use of effective lighting)
- Select materials
- Ensure visibility
- Maintain facilities

Security and Detection Technology

- Surveillance equipment
- Silent alarms
- Emergency exits
- Intrusion sensors

Communications Equipment and Procedures

- Emergency communication systems and backup
- Establish a clear chain of command and communication
- Surveillance at stations and offices
- Alarms
- Visible patrols

Training

- Train station agents, operators, and all staff for hostile events
- Enact simulation exercises
- Define special procedures for assistance to seniors, disabled, youth
- Develop reporting forms and procedures

Emergency Response (Planning & Arrangement)

- Arrange for alerts to public officials
- Coordinated by police/ security units

Augmented Security (e.g., prior to special events)

- Additional security agents
- Incentives for community vigilance

Media and Multi-lingual activity

- Place large notices in vehicles and stations to warn against crime
- Encourage passenger awareness
- Outreach to schools, youth, community groups
- Arrange general public and community meetings
- Publish multi-lingual brochures
- Maintain a Public Relations and Marketing department

What “public outreach” materials are available?

- Visible security personnel
- Aggressive outreach to community
- All staff participate in public relations
- In-house and purchased materials
- Promote zero tolerance

1. Design and Planning (Pre-Incident)**C. Dramatic Impact Crimes** (e.g., terrorism, bomb threats, some hate crimes)**Security Organization and Personnel**

- Transit Police and undercover operatives
- Visible patrols
- Station agents
- Local, state, and federal law enforcement officials

Security Plans and Procedures (Overall Crisis Management)

- Mandate a crisis management program
- Establish clear lines of command and communications to outside agencies
- Write emergency operations plan
- Reach mutual aid agreements
- Develop reporting forms and procedures
- Contract hostage negotiators

Small/Rural Bus System

- Local law enforcement takes lead on crisis situations including hostage negotiations

Environmental Design

- Protect all facilities with clear path of sight, travel, and access
- Select materials
- Ensure visibility
- Maintain facilities

Security and Detection Technology

- Surveillance equipment
- (Silent) Alarms
- Emergency exits
- Intrusion sensors

Communications Equipment and Procedures*Multi-Mode System*

- Emergency communication systems and backup
- Establish a clear chain of command and communication
- Surveillance at all facilities
- Alarms
- Visible patrols

Training

- Train station agents, operators, and all staff for hostile events
- Enact simulation exercises
- Define special procedures for assistance to seniors, disabled, youth
- Develop reporting forms and procedures

Emergency Response (Planning & Arrangement)

- Arrange for alerts to public officials
- Coordinated by police and security units

Augmented Security (e.g., prior to special events)

- Additional security agents
- Incentives for community vigilance
- Bring in canine units
- Aerial surveillance
- Enact simulation exercises with outside agencies

Media and Multi-lingual activity

- Large notices placed in vehicles and stations to warn against unusual occurrences
- Encourage passenger awareness
- Outreach to schools, youth, community groups
- Arrange general public and community meetings
- Publish multi-lingual brochures
- Maintain a Public Relations and Marketing department

What “public outreach” materials are available?

- Visible security personnel
- Aggressive outreach to community
- All staff participate in public relations
- In-house and purchased materials
- Promote zero tolerance

2. RESPONSE (INCIDENT)

A. Crimes Against Property

(e.g., objects thrown at vehicles, arson, and hate crimes)

Assessment of the Threat or Problem

- Establish a clear chain of command and communication
- Activate emergency and evacuation plans as appropriate

Security Organization and Personnel

- Transit Police
- Station agents
- Local law enforcement officials
- Emergency training for all staff

Emergency Response

- Alert public safety officials
- Organize emergency medical assistance
- Ensure attention and assistance to the disabled, elderly, and young
- Arrange for transportation alternatives (e.g., "bus bridge")

Media and Multi-lingual activities

- Set up public address system
- Arrange multi-lingual staff assistance
- Identify agency spokesperson

Clean-up activities

- Establish a clear chain of command and communication
- Transit Police
- Coordinate with local law enforcement officials
- Collect and preserve evidence if necessary

2. Response (Incident)

B. Crimes Against Persons

(e.g., assaults on passengers or operators or drivers, weapons offenses, homicides)

Assessment of the Threat or Problem

- Establish a clear chain of command and communication
- Activate emergency and evacuation plans as appropriate

Security Organization and Personnel

- Transit Police
- Station agents
- Local law enforcement officials
- Emergency training for all staff

Emergency Response

- Alert public safety officials
- Organize emergency medical assistance
- Ensure attention and assistance to the disabled, elderly, and young
- Arrange for transportation alternatives (e.g., "bus bridge")

Media and Multi-lingual activities

- Set up public address system
- Arrange multi-lingual staff assistance
- Identify agency spokesperson

Clean-up activities

- Establish a clear chain of command and communication
- Transit Police
- Coordinate with local law enforcement officials
- Collect and preserve evidence if necessary

2. Response (Incident)

C. Dramatic Impact Crimes (e.g., terrorism, bomb threats, and some hate crimes)

Assessment of the Threat or Problem

- Establish a clear chain of command and communication
- Activate emergency and evacuation plans as appropriate
- Identify claims of "responsibility" with negotiations as needed

Security Organization and Personnel

- Transit Police and undercover operatives
- Station agents
- Local, state, and federal law enforcement officials and negotiators
- Emergency training for all staff
- Aerial and internal surveillance

Emergency Response

- Alert public safety officials
- Organize emergency medical assistance
- Ensure attention and assistance to the disabled, elderly, and young
- Arrange for transportation alternatives (e.g., "bus bridge", re-routing, and/or re-scheduling of service)

Media and Multi-lingual activities

- Public address system: issue emergency instructions to passengers and public as needed
- Arrange multi-lingual staff assistance
- Identify agency spokesperson; may need to relinquish "local control"

Clean-up activities

- Establish a clear chain of command and communication
- Transit Police
- Coordinate with local law enforcement officials
- Collect and preserve evidence if necessary
- Begin arrangements for counseling and support activities

3. RECOVERY (FOLLOW-UP)

A. Crimes Against Property

(e.g., objects thrown at vehicles, arson, and some hate crimes)

Augmented Security

- Secure site and evidence

Clean-up and restoration

- Debris clean-up; restoration

Review and evaluation

- Assess damage
- Make a post incident evaluation
- Review policies and practices
- Devise an improvement plan

Reporting of incident

- Release public information
- Establish communications with local officials and media
- Comply with funding requirements (e.g., Sec. 15)
- Other documentation and dissemination as appropriate

3. Recovery (Follow-up)

B. Crimes Against Persons

(e.g., assaults on passengers, assaults on operators or drivers, weapons offenses, homicides)

Augmented Security

- Secure site and evidence

Clean-up and restoration

- As appropriate

Review and evaluation

- Assess damage
- Make a post incident evaluation
- Crisis and trauma counseling
- Review policies and practices
- Devise an improvement plan

Reporting of incident

- Release public information
- Establish communications with local officials and media
- Comply with funding requirements (e.g., Sec. 15)
- Other documentation and dissemination as appropriate

3. Recovery (Follow-up)

C. Dramatic Impact Crimes

(e.g., terrorism, bomb threats, some hate crimes)

Augmented Security

- Secure site and evidence
- Bring in canine units
- Deploy special security, as needed

Clean-up and restoration

- Debris clean-up; restoration

Review and evaluation

- Assess damage
- Make a post incident evaluation
- Crisis and trauma counseling
- Review policies and practices
- Devise an improvement plan

Reporting of incident

- Release public information
- Establish communications with local officials and media
- Respond to other law enforcement requests
- Comply with funding requirements (e.g., Sec. 15)
- Other documentation and dissemination as appropriate
- Possible peer review

SECURITY CRITERIA AND THE CASE STUDIES

By Shaun P. McCarthy

In this section the criteria for security of transportation systems developed by the Volpe Transportation Systems Center is applied to the four case studies presented above.

DESIGN AND PLANNING (PRE-INCIDENT)**Security Organization and Personnel****Security Criteria:**

- ✓ Transit Police and undercover operatives
- ✓ Visible patrols
- ✓ Local, state, and federal law enforcement

Case Studies:**Paris**

- Paris Metro security: uniform and undercover
- Visible patrols
- Local police

NYC

- NYC Police Transit Bureau
- NYPD
- NYFD
- OEM

Atlanta

- 217 sworn, uniformed police officers
- 10 member Special Operations Response Team (SORT)
- City police

Amtrak

- Police department was created in terms of Section 104.305.45 of US Penal Code.
- Annual Budget of \$24.5 million was allocated.
- 346 uniformed police assigned to 28 reporting locations throughout the US, of which 82% are assigned to the Boston-Massachusetts-Washington DC line.
- Freight operators provide contract security.
- Additional support is required from local, state, and federal law enforcement authorities.

Design and Planning (Pre-Incident)

Security Plans and Procedures

Security Criteria:

- ✓ Mandated crisis management program
- ✓ Clear lines of command and communication to outside agencies
- ✓ Write emergency operations plan
- ✓ Reach mutual aid agreements
- ✓ Develop reporting forms and procedures
- ✓ Contract hostage negotiators
- ✓ Local law enforcement takes lead on crisis situations, including hostage negotiations

Case Studies:

Paris

- Emergency Control Plan for serious events
- RATP and Fire Brigade intervention
- Combined RATP and Fire Brigade hierarchy and joint rescue teams
- *Plan Rouge* mobilization of Civil Defense and Fire Brigade
- *Plan Blanc* mobilization of emergency medical services and local hospitals
- Creation of a crisis center and telephone information service
- Classified plan for emergency measures in the event of terrorist attack

NYC

- Emergency Response Plans
- Task force to deal with chemical/biological incidents
- Chemical/Biological Incident Contingency Plan established in 1996
- Established four focus groups:
 - Law Enforcement: with representation from NYPD, FBI, US Secret Service, ATF and US Coast Guard, MTA agencies, NY/NJ Port Authority, NJ Transit, Amtrak and Con Rail
 - Hazmat group: with representation from NYPD, NYFD, Emergency Medical Services, NYDEP, ATF, Coast Guard FEMA, MTA agencies, NY/NJ Port Authority, NJ Transit, Amtrak and Con Rail
 - Communications planned with representation from NYPD, NYFD-EMS, OEM, NY Dept of Information Technology and Telecommunications (DOITT), MTA agencies, Port Authority, NJ Transit, Amtrak and Con Rail
 - Medical coordination designed with representation from NYPD,

NYFD-EMS, NYDEP, NY Dept of Health, NY Health and Hospitals Corporation, NY Office of Chief Medical Examiner, General NY Hospitals Association, American Red Cross, OEM, NY Dept of Information Technology and Telecommunications (DOITT), MTA agencies, Port Authority, NJ Transit, Amtrak and Con Rail

Atlanta

- Advance planning
- Two officials underwent special FEMA training in crowd control planning at Mount Weather, Virginia
- Lt. Joe McKinney assigned as full-time Olympics Coordinator
- Planning focused on logistics, manpower, target hardening, and inter-departmental liaison
- 24-hour physical uniform presence at every station achieved through 12 hour shifts for four consecutive days with one rest day
- Implemented designated responsibility, area matrixes for officers
- 300 additional police officers obtained from other counties and BART
- 40 MARTA administrative personnel re-assigned to assist police
- State Olympic Law Enforcement Command (S.O.L.E.C.) provided an additional 200 officers
- Intelligence coordination arranged through State Center
- Bomb disposal provided by the ATF

Amtrak

- Emergency Response Plans are in existence, however, details are classified.

Design and Planning (Pre-Incident)

Environmental Design

Security Criteria:

- ✓ Protect all facilities with clear path of sight, travel, and access
- ✓ Select materials
- ✓ Ensure visibility
- ✓ Maintain facilities

Case Studies:

Paris

- Fire hazard reduction
- Elimination of all highly combustible materials and potential sources of toxic fumes
- Modification of car seats to eliminate concealment space

NYC

- None

Atlanta

- Extensive site protection
- Crime prevention through design planning and architecture
- Target hardening
- Bomb-resistant trash containers placed at Olympic Ring Stations

Amtrak

- Passenger railcar crumple impact zones
- Station target hardening
- Vulnerability lies in thousands of miles of exposed tracks

Design and Planning (Pre-Incident)

Security and Detection Technology

Security Criteria:

- ✓ Surveillance equipment
- ✓ Silent alarms
- ✓ Intrusion sensors

Case Studies:

Paris

- Physical barriers to protect vital systems
- Intrusion alarms
- CCTV surveillance with increased capability to record images for later investigation and forensic purposes
- Radio positioning systems to monitor RATP security, police vehicles and personnel in Metro and RER tunnels

NYC

- CAD Fire and Safety system
- Operations Control Center
- Emergency Mobile Command system with CAD system

Atlanta

- CCTV systems in position at all stations
- All buses equipped with GPS
- Perimeter fencing and intruder alarms for power stations

Amtrak

- Incorporated GPS for train tracking
- Regulatory track and signal defect detection technology

Design and Planning (Pre-Incident)

Communications Equipment and Procedures

Security Criteria:

- ✓ Emergency communication systems and backup
- ✓ Establish a clear chain of command and communication

Case Studies:

Paris

- Two radio networks: surface channel network covers Paris and the suburbs; a working channel in open network collective mode and local mode
- All drivers have radios
- Dedicated phone lines situated in stations and at control posts
- Direct lines to emergency services
- Emergency phones for passenger use with alarm systems that indicate caller location
- Public address system

NYC

- Two-way Radio network; of limited use, however, in tunnels underground
- Completion of \$130 million improved radio system is imminent
- Dedicated landlines at regular track intervals

Atlanta

- 24-hr MARTA Police Operations Center (MPOC) served as communications node between MARTA operations, State Center, FBI, DOD, and EOD
- MARTA police personnel also dedicated to the State Operations Center (SOC) and Atlanta City Police Joint Communications Center (JCC)
- SOLEC officers have radios tuned to the two MARTA frequencies
- Radio protocol standardized to 'plain talk' to eliminate misunderstandings.

Amtrak

- Radio network
- Cellular phone backup

Design and Planning (Pre-Incident)

Training

Security Criteria:

- ✓ Train station agents, operators, and all staff for hostile events
- ✓ Enact simulation exercises
- ✓ Define special procedures for assistance to seniors, disabled, and children
- ✓ Develop reporting forms and procedures

Case Studies:

Paris

- Extensive training for each employee
- Regular exercises undertaken in conjunction with Paris Fire Brigade
- 10 to 12 exercises held each year involving all management and staff
- One "major exercise" held every year simulating fire, explosion, or collision at a station or in a tunnel

NYC

- Emergency exercises varying from desktop, organized and regularly planned drills, to "no-notice" response simulations conducted

Atlanta

- SORT officers trained in biological weapons handling and hazardous materials response
- Numerous bus and train assault scenarios and simulations held

Amtrak

- Table-top exercises
- Regular full-scale "mockup" simulations held annually

Design and Planning (Pre-Incident)

Emergency Response (Planning and Arrangements)

Security Criteria:

- ✓ Arrange for alerts to public officials
- ✓ Coordinated by police and security units

Case Studies:

Paris

- Three Plans of Action:
 - a) Emergency Control Plan, applicable to serious accidents in the RER and Metro
 - Plan Rouge* when the number of victims exceed 10
 - Plan Blanc* which mobilizes emergency medical services
 - b) Crisis Communications Plan, applicable to management, for setting up a crisis center
 - c) A third plan covers measures to be taken in the event of a terrorist attack. It is primarily concerned with security, the details of which are classified.

NYC

- Periodic evaluation of emergency response plans in conjunction with the mayor's Office of Emergency Management (OEM) and outside consultants
- Task Forces to examine emergency response plans after major incidents affecting other organizations

Atlanta

- Emergency response plan and "Go Team"
- Fully equipped Mobile Emergency Control Center
- Augmented support from state and federal authorities

Amtrak

- Table-top exercises
- Emergency Response Plans in existence, however, they are classified

Design and Planning (Pre-Incident)

Augmented Security (Prior to special events)

Security Criteria:

- ✓ Additional security agents
- ✓ Incentives for community vigilance
- ✓ Bring in canine units
- ✓ Aerial surveillance
- ✓ Enact simulation exercises with outside agencies

Case Studies:

Paris

- Heightened awareness since 1986 when Middle Eastern terrorists detonated 12 bombs in Paris and the surrounding area

NYC

- NYPD City Police
- OEM can muster additional State and Federal Resources

Atlanta

- Assistance from NYC Transit Security and MTA Metro-North Police in planning critique

Amtrak

- Amtrak depends on local, state and federal law enforcement authorities as well as freight contractors for augmented security support

Design and Planning (Pre-Incident)

Media and multi-lingual activity

Security Criteria:

- ✓ Place large notices in vehicles and stations to warn against unusual occurrences
- ✓ Encourage passenger awareness
- ✓ Ensure outreach to schools, youth, and community groups
- ✓ Arrange general public and community meetings
- ✓ Publish multi-lingual brochures
- ✓ Maintain public relations and marketing departments

Case Studies:

Paris

- Planning arrangements for crisis communications and media center

NYC

- Emergency plans identify responsibility for public and media communications

Atlanta

- Contingency planning included provisions for concerted efforts to keep public informed of service schedules and changes

Amtrak

- Standard media policy whereby all media statements are coordinated through the Public Affairs office in Washington D.C.

Design and Planning (Pre-Incident)

Availability of “Public Outreach” material

Security Criteria:

- ✓ Visible security personnel
- ✓ Aggressive outreach to community
- ✓ All staff participate in public relations
- ✓ In-house and purchased materials
- ✓ Promote zero tolerance

Case Studies:

Paris

- Information unavailable

NYC

- Public awareness of general safety issues

Atlanta

- Local media

Amtrak

- Information unavailable

RESPONSE TO INCIDENT

Assessment of the Threat or Problem

Security Criteria:

- ✓ Establish a clear chain of command and communication
- ✓ Activate emergency evacuation plan as appropriate
- ✓ Identify claims of "responsibility" with negotiations as needed

Case Studies:

Paris

- Extensive prior planning
- Previous terrorist activities provided prompt recognition of the nature of the problem and what was needed to respond effectively
- Threat perception at the time of the attack was high
- Intelligence activity and coverage was intense
- As a rule, intelligence analysis and warning from government agencies to commerce and industry in France is good

NYC

(Not a specific incident-related comparison)

- World Trade Center bombing
- In 1993 the NYC Police and the FBI arrested Islamic extremists plotting to blow up the Lincoln Tunnel and the United Nations Headquarters
- Ferguson shooting in 1993
- Petrol bombing by Edward Leary in 1994
- Suicide bombers plot to blow themselves up on the NYC transit system
- Chemical attacks on the Tokyo subway increase perception of threat

(These incidents have all elevated threat perception. Like Paris, NYC remains in a constant state of "high alert".)

Atlanta

- Assessment of the Olympics as a "high risk" event
- With estimated number of 12 million spectators, a four to fivefold increase in passenger numbers was expected
- MARTA was the backbone of spectator transport system
- Centennial Park bombing, although not affecting MARTA itself, resulted in increased security awareness following the incident
- Despite threat expectation, no specific intelligence provided any warning of any planned attacks against the MARTA system

Amtrak

- No prior threat assessment or warnings were received

Response to Incident

Security Organization and Personnel

Security Criteria:

- ✓ Transit Police and undercover operatives
- ✓ Station agents
- ✓ Local, state, and federal law enforcement officials, and negotiators
- ✓ Aerial and internal surveillance

Case Studies:

Paris

- Patrols by 700 RATP security force on RER and Metro trains and stations
- Augmented by 400 National Police
- French troops mobilized and deployed in Paris when bombings continued

NYC

(Not a specific incident-related comparison)

- NYC Transit Bureau
- NYPD uniform and undercover patrols
- Law Enforcement Focus Group
- Hazardous Materials Focus Group
- Communications Focus Group
- Medical Focus Group

Atlanta

- Following the Centennial Park bombing, MARTA and S.O.L.E.C. Police were placed on full alert
- Additional police presence was provided by keeping existing shift officers on duty at stations, augmented by new shift officers
- All stations were immediately searched for suspicious devices
- On two subsequent occasions stations were closed while suspect objects were investigated

Amtrak

- Eight railroad police officers were available in the state of Arizona
- Maricopa County Sheriff's Department was the first law enforcement authority on the scene
- Over 50 deputies and local law enforcement officers responded
- FBI agents were on the scene within eight hours and a nine-mile perimeter was established
- Federal Railroad Administration inspectors and NTSB arrived promptly

Response to Incident

Emergency Response

Security Criteria:

- ✓ Alert public safety officials
- ✓ Organize emergency medical assistance
- ✓ Ensure attention and assistance to the disabled, elderly, and young
- ✓ Arrange for transportation alternatives (e.g., "bus-bridge", rerouting, and/or rescheduling of service)

Case Studies:

Paris

- Initiated three emergency plans
- Initiated Crisis Communications Plan
- Implemented "*Vigipirate*"

NYC

(Not specific incident related comparison)

- NYC Transit Emergency Response Plan
- Mayor's Office of Emergency Management (OEM)

Atlanta

- No additional measures beyond the full alert were in place for a number of hours after the Centennial Park bombing

Amtrak

- First rescue helicopter arrived within 45 minutes after the derailment
- Helicopters from Maricopa County, the Arizona Dept of Public Safety, the National Guard and the USAF Air Evac transported the injured to hospital
- The Red Cross mobilized a center in Phoenix

Response to Incident

Media and Multilingual Services

Security Criteria:

- ✓ Install a public address system: issue emergency instructions to passengers and public as needed
- ✓ Arrange multi-lingual staff assistance
- ✓ Identify agency spokesperson; may need to relinquish "local control"

Case Studies:

Paris

- RER public relations department managed media inquires and provided information to passengers and employees and their relatives

NYC

(Not a specific incident-related comparison)

- OEM has the primary responsibility for communication with the public
- Information pertaining to service operations and train or bus schedules is the responsibility of the operating agency
- NYC Transit Public Address System broadcasts train and service announcements as well as general safety advice

Atlanta

- MARTA maintained a consistent effort to keep public informed of changes to entry and exit points at stations

Amtrak

- Media officers were dispatched to the scene immediately
- All public policy statements were issued through Amtrak Washington, D.C.

Response to Incident

Clean-up activities

Security Criteria:

- ✓ Establish a clear chain of command and communication
- ✓ Use the Transit Police
- ✓ Coordinate with local law enforcement officials
- ✓ Collect and preserve evidence if necessary
- ✓ Arrange for counseling and or support activities

Case Studies:

Paris

- Initial efforts focused on:
 - a) immediate treatment and rescue of victims: dead and injured removed and treated within first three hours
 - b) police investigation completed within six hours
 - c) operational recovery: damage surveys were initiated within 20 minutes of the blast; Rolling Stock Lifting Team deployed immediately; minor repairs completed overnight

NYC

(Not specific incident related comparison)

- Implementation of the incident command system
- CAD fire and safety system
- Operations Control Center
- Emergency mobile command system with CAD system

Atlanta

- Not applicable

Amtrak

- Derailment was classified as a crime scene during the early stages of the investigation
- Site was sealed and a nine-mile perimeter was enforced
- Southern Pacific Railway Police enforced perimeter security and access control
- By 9.30 a.m. the FBI evidence gathering teams were operational and everyone within the perimeter was interviewed by FBI investigators
- Passengers were taken on buses with a police escort to Phoenix and housed in the local Holiday Inn where they were interviewed by the FBI
- Aerial photographs were taken before the four damaged cars were removed

RECOVERY AND FOLLOW-UP

Augmented Security

Security Criteria:

- ✓ Secure site and evidence
- ✓ Bring in canine units
- ✓ Deploy special security as needed

Case Studies:

Paris

- Government launched Operation "*Vigipirate*", mobilizing 37,000 soldiers
- In Paris 5,000 soldiers and additional police were mobilized to patrol trains, stations, bus terminals, and airports
- Identity checks were stepped up
- Immediate sealing of over 8,000 trash containers in RER and Metro stations
- Public restrooms were sealed
- Increased covert and overt surveillance
- Posters were put up enlisting public cooperation
- RATP's 700 personnel were augmented by 3,000 additional agents
- 50 RER and Metro station entrances were closed for security reasons
- City and national police initiated a round-up of suspected terrorists

NYC

(Not a specific incident-related comparison)

- NYC Transit Police
- NYPD Transit Bureau
- Local, state, and federal law enforcement authorities provide additional security if needed

Atlanta

- No additional security measures subsequently implemented

Amtrak

- Sixteen railroad police officers
- 150 FBI investigators
- Federal Railroad Administration (FRA)
- National Transportation Safety Board (NTSB)
- Investigation revealed the necessity of increasing track security measures and patrols

Recovery and Follow-up

Clean-up and restoration

Security Criteria:

- ✓ Debris clean-up; restoration
- ✓ Operational recovery
- ✓ Restore public confidence

Case Studies:

Paris

- Dead and injured removed and treated within three hours
- Work crews replaced the overhead power line within five hours
- Police investigation on the scene was completed within six hours
- Operational recovery was completed overnight

NYC

(Not a specific incident-related comparison)

- After immediate rescue and treatment of victims, operational recovery is considered the most important objective

Atlanta

- Not applicable as Centennial Park explosion was not on MARTA property

Amtrak

- Prompt evaluation of the cause of derailment
- Prompt establishment of incident site security and perimeter access control

Recovery and Follow-up

Review and evaluation

Security Criteria:

- ✓ Assess the damage
- ✓ Make a post incident evaluation
- ✓ Initiate crisis and trauma counseling
- ✓ Review policies and practices
- ✓ Devise an improvement plan

Case Studies:

Paris

- Some delays in initial communications within the RATP
- RATP had problems with communication between rescue teams at the scene and operational command at street level due to explosion damage and a subsequent electrical arc
- Local control centers were not properly notified that a family contact unit and toll-free number had been established
- No clear delineation of authority between the government and the RATP with regard to public notification
- Some RATP staff were prevented from reaching the scene due to stringent police access control and no liaison RATP official assigned to police
- There were no public address broadcasts in English
- Disclosure of information to families was incomplete because victims had not yet been identified

NYC

(Not a specific incident-related comparison)

- Not applicable here as no specific incident has been addressed

Atlanta

- Necessity for advance planning as an essential step in planning for major events
- Self-sufficiency as far as possible
- Self-reliance
- Operational flexibility
- Seek advice and support
- Security is inconvenient, however, it is a necessity
- Strive for a balance between optimal security and service disruption

- Ensure that a good communications system is in place and that a common communication language is used
- Maintain functional responsibility and avoid cross functions
- Logistics management
- Provide security and rescue personnel with support to maintain morale

Amtrak

- Vulnerability of tracks in remote and desolate areas exposed
- Necessity for a closer relationship between Amtrak and law enforcement and local authorities was highlighted
- Closer relationship with National Association of Sheriffs and National Association of Police Chiefs is being developed

Recovery and Follow-up

Reporting of incident

Security Criteria:

- ✓ Release public information
- ✓ Establish communications with local officials and media
- ✓ Respond to other law enforcement requests
- ✓ Comply with funding requirements
- ✓ Publish other documentation and disseminate as appropriate
- ✓ Arrange for possible peer review

Case Studies:

Paris

- RATP established a public information center at a café close to the station entrance which was kept open for five and a half hours following the blast

NYC

- Not applicable

Atlanta

- No problems with reporting were identified at the Centennial bombing incident

Amtrak

- No changes to communications procedures were identified or implemented

A CHRONOLOGY OF TERRORIST ATTACKS ON SURFACE TRANSPORTATION SYSTEMS

1920-1997

(Including Other Significant Incidents)

By Brian M. Jenkins

KEY OBSERVATIONS

- Terrorist attacks on surface transportation systems have increased over the past 25 years.
- Bombing (not counting bomb threats) is the most common tactic and, in the industrialized nations, bombing is the deadliest form of attack.
- Israel has had the most attacks on surface transportation.
- India and Pakistan head the list as the countries where the most incidents with fatalities and deaths overall have occurred.
- Terrorist attacks on public transportation are often intended to kill; 35 percent involve fatalities; more than two-thirds of the attacks are clearly intended to kill.
- While slaughter is not the primary goal of terrorism, large scale deaths are becoming an acceptable way of spreading fear, as confirmed by the fact that 80 percent of the attacks on surface transportation with deaths involve multiple fatalities and 30 percent of these involve 10 or more fatalities.
- Western Europe, North America, and Japan account for 27 percent of the total number of incidents but only nine percent of these incidents involve fatalities. This indicates that alarm and disruption, and not fatalities, are the principle threat faced by industrialized nations. However, incidents with large-scale casualties have occurred in the industrialized world (i.e., the Bologna train station bombing, the attacks on Paris subways, and the Tokyo nerve gas attack.)

INTRODUCTION

The following chronology of attacks on surface transportation systems was compiled by the Kroll-O’Gara Company to support an ongoing Department of Transportation-sponsored project to identify "best practices" in security against terrorist attacks on surface transportation. This chronology accompanies the first formal report of that study, *Protecting Surface Transportation Systems And Patrons from Terrorist Activities*.

The chronology is intended to offer a thorough understanding of the terrorist threat to surface transportation systems by reviewing the incidents that have occurred during the last three-quarters of this century. Entries derive from three principal sources: The first is the book, *Railway Disasters of the World, (1994)* by Peter Semmens.¹ Although limited to major rail disasters, this source provides a useful historical background to incidents that occurred before 1968. (Entries from this source are indicated by the initials *P.S.*)

The second source is a chronology of incidents of international terrorism originally compiled by the Rand Corporation as part of its research program on sub-national conflict, and in recent years maintained by the Center for the Study of Terrorism and Political Violence at St. Andrews University in Scotland. The author wishes to note the excellent and important research being done and valuable assistance provided by these two institutions.

The third source is a computerized chronology of armed conflicts, significant incidents of terrorism, and other major crimes maintained by the Information Services of the Kroll-O’Gara Company (KINS). The KINS database provided most of the material on the incidents that occurred in the 1990s. All of the information in the chronology originally comes from public domain sources. No government classified or proprietary information is included and the Department of Transportation provided no input.

The chronology includes guerrilla attacks, terrorist attacks, and incidents of serious crime where the transportation system or passengers were the principal target. It excludes conventional warfare (e.g., aerial bombings of railroad yards) and acts of wartime sabotage. Admittedly, the boundary between wartime sabotage and guerrilla or terrorist attacks is blurred. Armed conflict is not easily bounded. Guerrilla warfare may ascend to levels approaching conventional war (e.g., the civil war in Angola) and terrorists often assert that

¹ Peter Semmens, *Railway Disasters of the World: Principal passenger train accidents of the 20th century*, (Patrick Stephens Limited, Somerset, 1994)

they legitimately wage war and thus ought not to be separately categorized as terrorists or criminals.

On somewhat arbitrary grounds, the chronology includes the IRA's campaign in the United Kingdom, the Palestinian campaign against Israel, and armed assaults and acts of sabotage carried out by guerrillas throughout the developing world. It excludes the historically more distant campaigns conducted by partisans, guerrillas, and resistance fighters in China in the early years of the century, Spain during the Civil War, Indochina during the first Indochina war, and Algeria during its struggle for independence.

Although this chronology may at the moment be the most complete chronicle of attacks on surface transportation systems, it is certainly not comprehensive. It includes some of the more serious bomb threats but certainly not the total number of bomb threats which, for example, averaged 50 a week in France following the detonation of a terrorist bomb in the Paris subways. It cannot possibly include all of the incidents of sabotage that have occurred during periods of labor strife. It should be seen as broadly representative of the threat.

The chronology lists 631 incidents. Some of these include multiple events, i.e., bomb threats or bombings. As a result, and in some cases owing to incomplete information requiring judgments about categories, the numbers indicated in the following charts may not precisely match. The entries include threats and attacks on trains and subways, train and subway stations and the rails themselves, buses and bus terminals, bridges and tunnels, and other transportation targets. (See Figure 2-1, *Targets*) The incidents are almost equally divided between attacks on rail transportation (trains, subways, stations, and rails) and bus transport (buses and terminals).

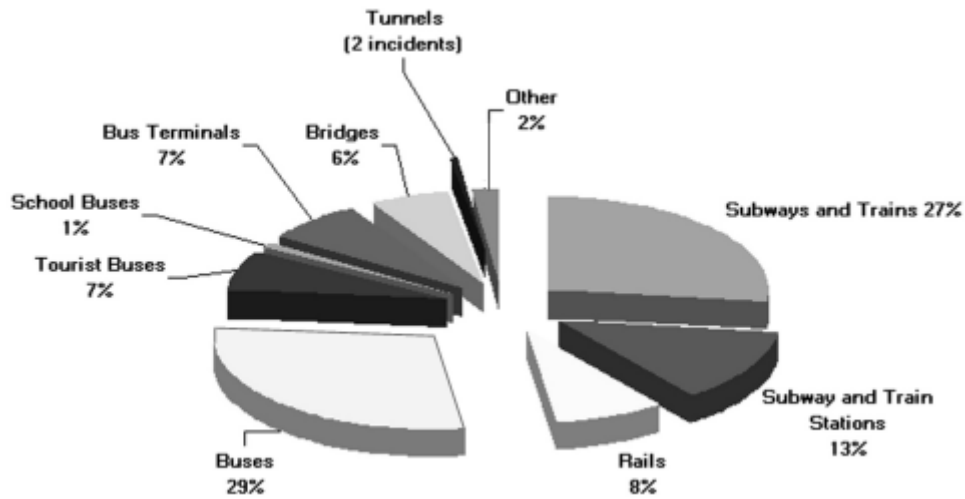


Figure 2-1 Targets
Targets of Attacks on Public Surface Transportation Systems (1920 – 1997)

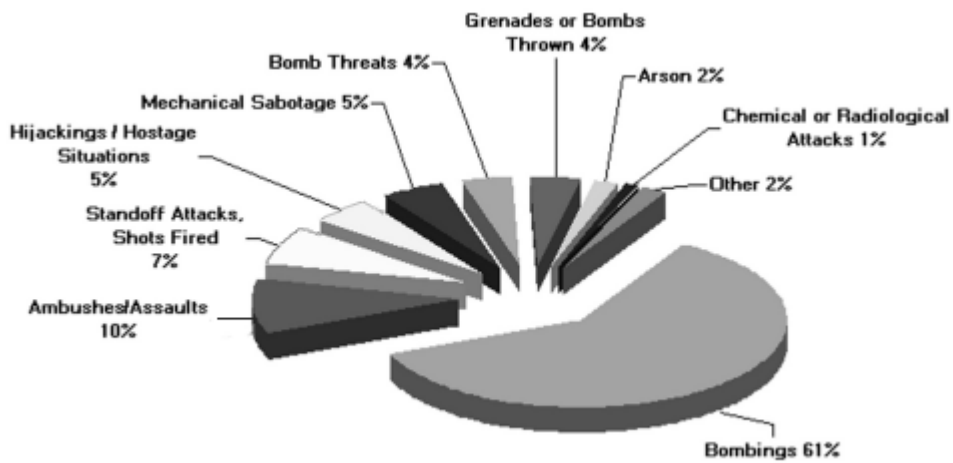


Figure 2-2 Tactics
Used against Surface Transportation Systems (1920 – 1997)

Bombing is the most common tactic, accounting for 61 percent of the attacks. This is generally true of terrorism overall. Ambushes and armed assaults account for 10 percent of the attacks. These include incidents when guerrillas or terrorists set up road blocks, ambush buses, derail or block trains, and then murder passengers. Seven percent of the incidents are standoff attacks when guerrillas or terrorists fire rockets, machineguns, or rifles at passing trains or buses. Five percent involve hostage situations and four percent mechanical sabotage, usually against rails. (See figure 2-2, *Tactics*.)

Are terrorist attacks on surface transportation increasing? They appear to be. However, the increase is difficult to quantify precisely and it is not as dramatic as the totals for the most recent years suggest. The chronology lists only 17 incidents for the period 1920 to 1970, a growing number of incidents in the 1970s and 1980s (217 attacks for the period) reflecting the overall increase in terrorist activity during this time. There is a significant jump in the 1990s when 312 attacks are recorded in the five years from 1991 to 1995 and 118 attacks are recorded for the 18 months from January 1996 to June 1997. However, much of this rise is due to the differences in criteria which governed the original sources used in the compilation of the chronology.

The first 50 years of this chronology derive exclusively from Peter Semmens' *Railway Disasters of the World* which focused on incidents involving significant casualties and excluded attacks on bus systems. Entries for the next two decades derive mostly from the Rand Corporation's chronology, which includes only incidents of international terrorism, that is, incidents where terrorists have crossed national frontiers to carry out attacks or have attacked foreign targets within their own country. It thus excludes attacks on indigenous targets by local terrorists. More complete recording comes from the Kroll-O'Gara database which covers the 1990s and includes all significant attacks: terrorist and criminal, trans-national and local.

Nonetheless, we have seen an increase in attacks on public transportation as terrorism has increased over the past quarter century and more recently as terrorists have demonstrated greater willingness to kill indiscriminately. The Irish Republican Army's long-running terrorist campaign in the United Kingdom has included numerous attacks on rail lines, trains, subways, and stations. Palestinian terrorists have carried out numerous attacks on Israeli buses and bus stations. Algerian extremists directed their 1995 terrorist campaign in France against the subway and rail system. The first large-scale terrorist use of chemical weapons was carried out in Tokyo's subways, an ideal environment for chemical attack. Islamic extremists in New York planned to attack the city's bridges and tunnels in 1993 and its subways in 1997.

These events clearly indicate that contemporary terrorists have made public transportation a new theater of operations. For those determined to kill in quantity and willing to kill indiscriminately, public transportation offers an ideal target. It is public, used by millions of people daily. There is necessarily little security with no obvious chokepoints (like those at airports) to inspect passengers and parcels. The passengers are strangers promising attackers anonymity and easy escape. Concentrations of people in contained environments are especially vulnerable to conventional explosives and unconventional weapons. Also, attacks on public transportation, the circulatory systems of urban environments, cause great disruption and alarm which are the traditional goals of terrorism.

The statistics support the observation that terrorists see public transportation systems as a killing field. Most terrorist violence is symbolic, intended to cause alarm rather than casualties. Historically, only about 20 percent of all international terrorist incidents have involved fatalities, although that figure has risen in recent years, reflecting an erosion of the self-imposed constraints that traditionally limited terrorist mayhem. In contrast, more than 35 percent of the attacks on surface transportation systems involve fatalities and more than two-thirds of the attacks clearly were intended to kill. Serious injuries were caused when bombs went off in crowded passenger terminals and when speeding trains were derailed. The reporting has been generous in the definition of incidents not clearly intended to kill: these incidents include bomb threats, attacks on property, sabotage of rails and bridges where no crash occurred, all hostage situations where no one died, and bombs defused because a warning *may* have been given. When in doubt, the incident was counted as not intended to kill.

Further evidence of the rise in violence is provided by the proportion of incidents with multiple fatalities. (See Figure 2-3 *Total Incidents With Fatalities*) For terrorism in general, the vast majority of all fatal terrorist attacks involve a single death, although again, in recent years, the proportion of incidents with multiple fatalities has moved upward, reflecting terrorists' growing willingness to escalate their violence. However, more than 80 percent of the attacks on surface transportation with any fatalities involve two or more deaths, and 30 percent involve 10 or more deaths. The median fatal incident involves four deaths and the deadliest incidents more than 100 deaths.

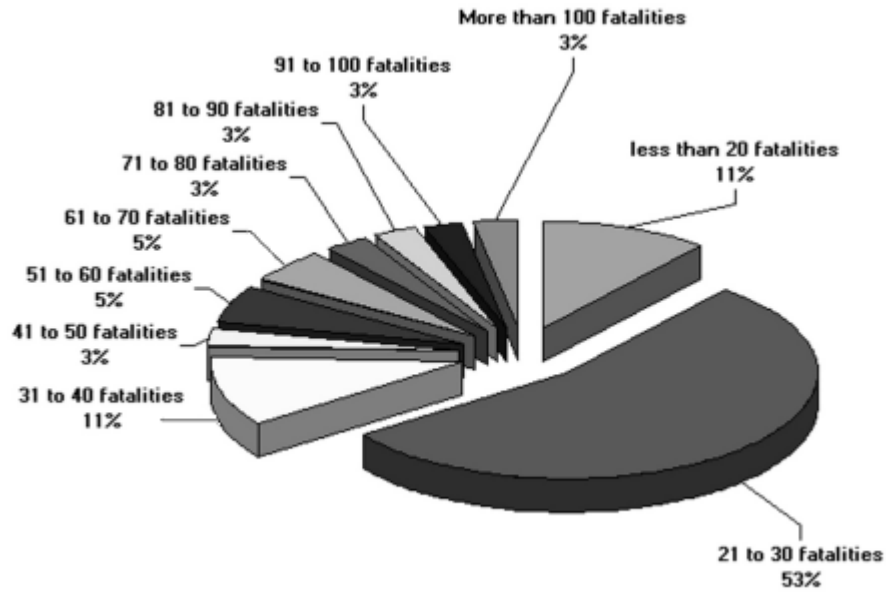


Figure 2-3 Total Incidents With Fatalities
On Public Surface Transportation Systems (1920 – 1997)

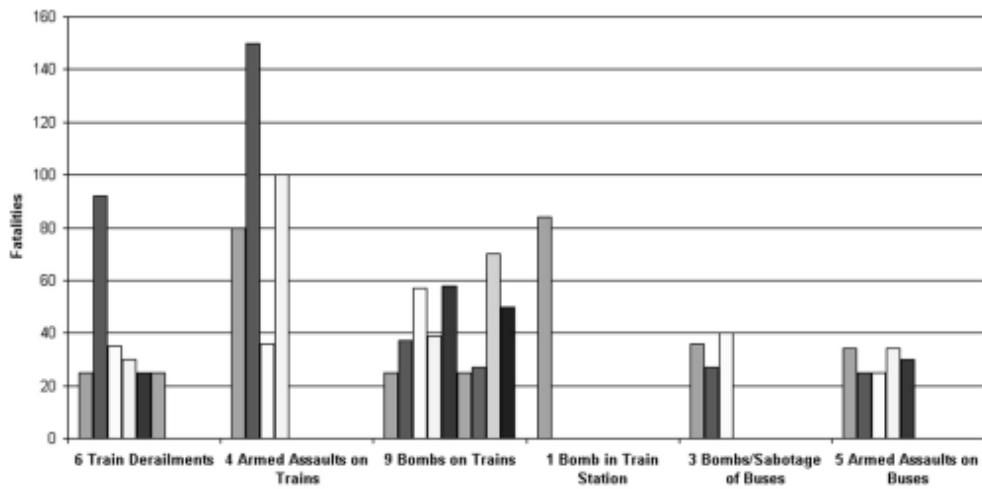


Figure 2-4 The Deadliest Cases
(25 or more fatalities)
of Attacks on Public Transportation Systems (1920 – 1997)

How do the deadliest incidents occur? Armed assaults on trains, that is, when a train is derailed or sabotaged and the passengers are attacked and killed, account for the two deadliest incidents in the chronology. Bombs on trains are the most frequent cause of incidents with 25 or more fatalities, followed by train derailments and armed assaults on buses. (See Figure 2-4, *The Deadliest Cases*)

Armed assaults on trains or buses are a feature of rural guerrilla warfare. They are not likely to occur in the industrialized nations or in urban areas where the deadliest threat comes from bombs. This difference is borne out by examining where the most fatalities have occurred: India, Pakistan, Cambodia, Angola, and Israel head the list. (See Figure 2-5 *Countries With the Most Fatalities*) The areas where the most incidents with fatalities occur gives a similar picture: India, Pakistan, Israel, Algeria, and Egypt are at the top. (See Figure 2-6, *Location of Attacks With Fatalities*)

Israel ranks high in both lists due to the deadly campaign of terrorist bombings on buses and in bus terminals. Israel also heads the list in suffering the most attacks overall followed by India, the United Kingdom, Pakistan, and Egypt. The United Kingdom's record reflects the IRA's terrorist campaign, which includes numerous incidents of sabotage, bomb threats, and bombs with warnings but few incidents with fatalities.

This data reflects the general pattern for the countries of Western Europe, North America, and Japan. Although a total of 176 attacks are recorded for these countries in the chronology, representing 27 percent of the total number of incidents, only 20 of the incidents since 1970 involve fatalities. (See Figure 2-6 *Location of Attacks With Fatalities*) The median number of fatalities in the industrialized nations is two.

This suggests that the threat faced by the industrialized nations is primarily one of alarm and disruption, the traditional goals of terrorism, and not deaths. It also suggests that it will be difficult to make persuasive arguments for costly and potentially disruptive security measures unless these are absolutely necessary and promise to be effective in preventing even costlier and more disruptive interruptions of service. These measures must also contribute significantly to reducing ordinary crime, or must be psychologically and politically necessary to reassure an alarmed public that something is being done.

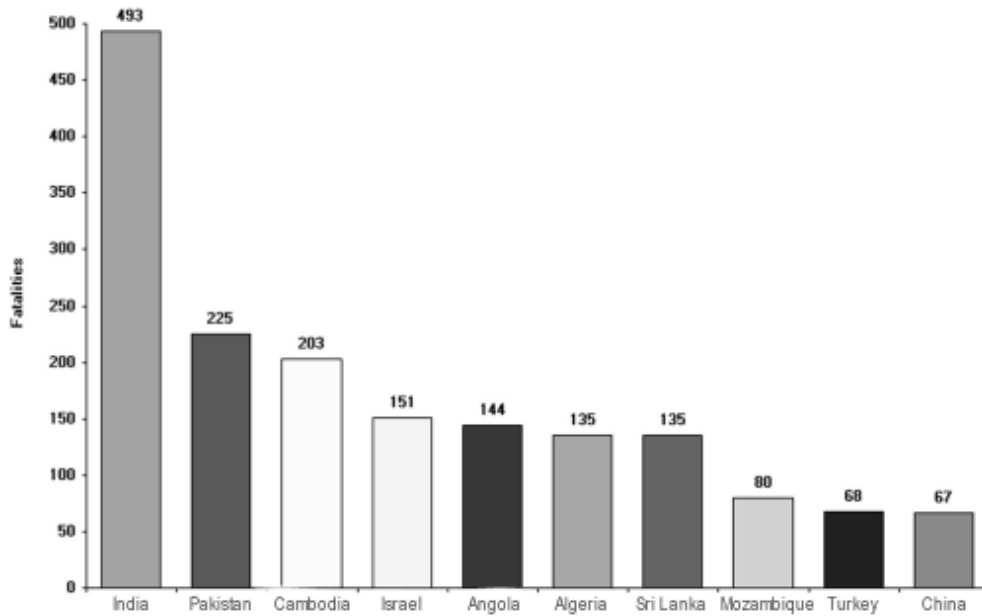


Figure 2-5 Countries with the Most Fatalities in Attacks on Public Surface Transportation Systems (1920 – 1997)

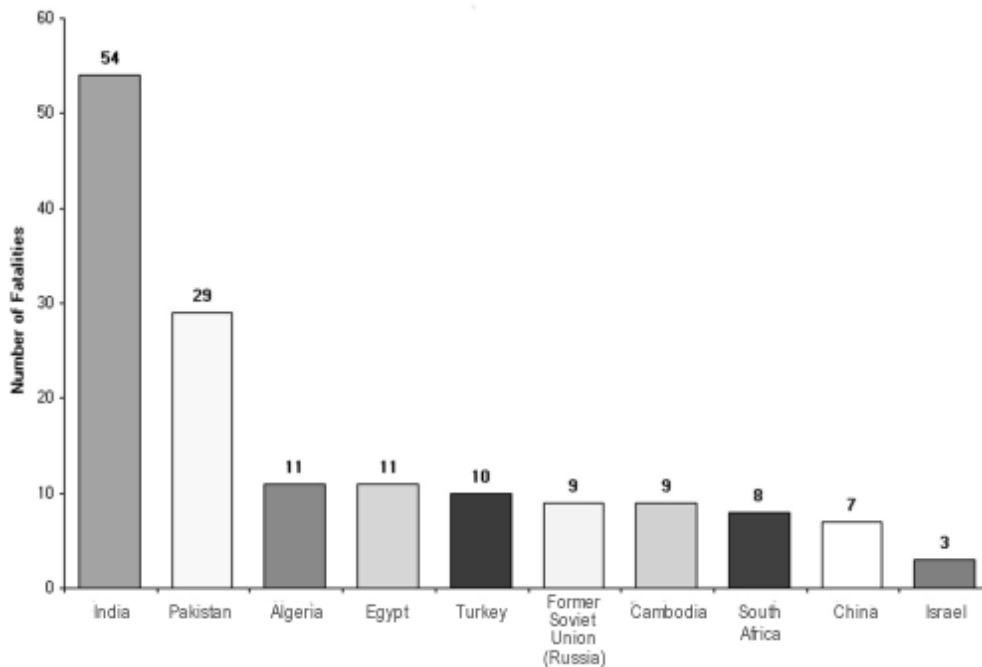


Figure 2-6 Location of Attacks With Fatalities on Public Surface Transportation Systems (1920 – 1997)

At the same time as we have witnessed large-scale attacks in the industrialized countries (84 killed in a train station in Italy; an alarming first use of chemical warfare in Tokyo's subway); we have seen thwarted plots, narrow misses, and fortunate outcomes like the foiled plan to detonate truck bombs in New York's tunnels, the discovery of a potential suicide bombing in New York's subways, and the derailment of a speeding passenger train in which only one person died. These are dangerous indicators of future trends. The challenge will be to define the appropriate level of security against such statistically rare but high consequence events. It is a recurring problem in dealing with terrorism.

CHRONOLOGY
OF TERRORIST ATTACKS ON SURFACE
TRANSPORTATION SYSTEMS

(The initials *PS* following an entry indicate the source to be *Railway Disasters of the World, (1994)* by Peter Semmens.)

India - October 7, 1920 - Train derailed by disgruntled workers

The "Madras-Bangalore Mail" train was derailed by disgruntled workers, who removed a section of the railroad. Thirteen people were killed and 15 others were injured in the incident. (PS)

India - July 8, 1920 - Train derails killing 25 people, injuring 60 others

On July 8, a train was derailed in Belur resulting in 25 deaths and at least 60 injuries. It was the eighth sabotage attempt on the Indian railways in recent months. (PS)

China - December 27, 1930 - Train sabotaged near Beijing

On December 27, bandits caused the explosion of the boiler of a train on the south-west Manchuria railroad, causing 80 deaths and many other injuries. The bandits robbed the train and kidnapped 20 passengers for ransom. (PS)

Hungary - September 13, 1931 - Train attack kills 25 people

On September 13, a bomb exploded on an international express train en route from Budapest to Vienna, Austria, killing 25 people on board. A note found near the explosion site stated, "Brother Proletarians. If the capitalist state cannot provide work, we shall get it ourselves. We have plenty of petrol and explosives." (PS)

India - January 12, 1939 - Train sabotaged, 21 people killed

On January 12, the "Dehra Dun Express" train from Howrah was sabotaged when missing rail tracks caused the train to derail, resulting in 21 deaths and 71 injuries. Two more attempts against the railways were staged in the following two months, and a total of 131 incidents of wrecking or attempted wrecking was reported in the previous 10 years. (PS)

United States - August 12, 1939 - Saboteurs derail train, killing 24 people

The Union Pacific Railroad's streamlined express, "City of San Francisco", was derailed while traveling at 60 miles per hour, 16 miles west of Carlin,

Nevada, as a result of sabotage. A section of rail track was taken out of place, causing the derailment, which resulted in 24 deaths and 115 injuries. (PS)

India - May 16, 1942 - Train derailed by extremists, resulting in 22 deaths

A Sindh sect known as the Hurs attacked the "Punjab Mail" train en route from Karachi to Lahore, some 140 miles from Karachi. The assailants first derailed the train by moving tracks from the railroad, then attacked the passengers who survived the crash with guns and axes, killing 22 people and injuring 26 others. Four days later, another train narrowly averted a similar attempt. In August 1942, 258 train stations were destroyed and 40 trains were derailed by saboteurs when leaders of the Indian Congress were arrested. (PS)

France - December 3, 1947 - Saboteurs derail train, killing 21 people

On December 3, saboteurs derailed a night train en route from Paris to Lille by removing a section of the railroad, killing 21 people on board. This attack followed a general railway strike declared a week before. More derailment attempts were made on the same day but none had such serious consequences. (PS)

Indonesia - May 8, 1959 - Train derails killing 92 people

An express train en route from Bandjar to Bandung derailed and fell into a ravine near Tasikmalaja, killing 92 people and injuring 14 others. Police suspect the train was sabotaged. (PS)

Myanmar - March 26, 1961 - Mine bomb under train kills 23 people

Karen rebels planted and exploded a mine under a Mandalay-Rangoon train on March 26, killing 23 people and injuring 100 others. The rebels also took 60 other hostages. The passengers were mainly government officials and soldiers. (PS)

India - April 19, 1961 - Train derails killing 23 people

A passenger train was derailed near Siliguri, West Bengal, killing 23 people and injuring 77 others, some 28 seriously. Police suspect the train was sabotaged. (PS)

India - February, 1966 - Three attacks on trains by Naga tribesmen

In first of three attacks on trains by Naga tribesmen, 37 people were killed when a bomb exploded on the Assam Mail train. The exact location and the date were not reported. (PS)

India - April 20, 1966 - Naga tribesmen bomb train

Naga tribesmen detonated a bomb on a train standing in Lumding station, killing 57 people. (PS)

India - April 26, 1966 - Naga tribesmen bomb another train

In a similar attack to the one on April 20, Naga tribesmen bombed a train near the borders of Nagaland, killing 39 people and injuring some 60 others. (PS)

Germany - February 10, 1970 - Grenade attack on bus at Munich airport'

Three Arab terrorists killed an Israeli citizen and wounded 11 other Israeli passengers in a grenade attack on a bus at the Munich airport. The three were arrested. Two Palestinian organizations -- the PFLP and the AOLP -- were responsible for the attack. The terrorists were set free after the September 6, 1970, hijacking of one Swiss and two U.S. airliners.

Israel - February 23, 1970 - Guerrillas ambush tourist bus

Guerrillas ambushed a tourist bus near the occupied town of Hebron in the West Bank and killed an American woman.

Israel - November 6, 1970 - Bombing at the central bus station in Tel Aviv

A bomb exploded in the central bus station in Tel Aviv, followed by another explosion there 20 minutes later. Two people were killed and 34 wounded in the attack which was credited to Al Fatah. On November 8, Abu Iyad of Fatah issued a statement in Amman saying that these were "the start of more and bigger operations within our occupied homeland."

Austria - January 27, 1972 - Croatian terrorists bomb train

Croatian terrorists were suspected of placing a bomb that exploded on a train en route from Vienna to Zagreb, Yugoslavia, injuring six people.

Israel - July 11, 1972 - Bombing at Tel Aviv bus terminal

In reprisal for Kanafani's death on July 9, the PFLP threw a grenade in a Tel Aviv bus terminal, wounding nine.

United Kingdom - September 8, 1973 - Bombing at King's Cross and Euston stations

Two men and a woman were injured seriously when terrorists exploded two bombs in King's Cross and Euston railway stations in London. At least ten other persons suffered lesser injuries in the explosions. It was believed that the IRA was responsible for the bombings.

United Kingdom - September 8, 1973 - Bombing at Victoria Station

A bomb exploded at Victoria Station in London, injuring four people. A caller with an Irish accent telephoned a warning four minutes before the explosion. The IRA was responsible for the attack.

United Kingdom - February 3, 1974 - Bombing on bus kills 11 people

A 50-pound bomb that was apparently concealed in a suitcase smashed a bus which was carrying soldiers and their families back from leave to their camp in County Durham, as the bus was traveling through Yorkshire. Eleven people were killed and 14 injured. Officials in London attributed the attack to the IRA.

United Kingdom - April 6, 1974 - Bombing in railway station, shops

Blasts attributed to the IRA damaged an office building and railway station in Birmingham, England, and stores in suburban London, and injured two policemen in Manchester.

Austria - April 17, 1974 - Bomb threat on train bound for Rome

Vienna police received an anonymous call from a man claiming to represent the "Justice Guerrillas" with a message that radioactive material had been placed aboard a train bound for Rome. Police found a substantial but not lethal amount of radioactive material, Iodine 131, under the seat of a first-class compartment of the Vienna-Rome Express in Vienna. There were no threats made to life or property. The contamination was suspected to be the result of an unattended shipment by a Vienna drug company of medical Iodine 131 which was intended for a hospital in Linz for use in medical diagnosis. It was reported missing after the railroad car was contaminated. This shipment, consisting of three packages, remained unattended on a baggage truck in Vienna main railroad station for approximately two hours on April 12, in spite of existing regulations for safe handling of radioactive material. It is not clear from the sketchy reports on the incident whether the packages were marked to indicate their contents. The incident attracted widespread publicity. Hoax callers with threats caused alerts, and these brought about delays as Geiger counter checks were made of trains leaving Vienna. On April 22, the Austrian police offered a reward for the capture of the "Justice Guerrillas." They later announced the arrest of an individual with a history of mental illness. His actions, he said, were meant to be a protest against the treatment of mentally ill patients in Austrian hospitals. The political consequences appear to have been minimal.

France - July 16, 1974 - Bomb attacks destroy 13 buses

A series of bomb attacks destroyed 13 buses in a parking lot and along the route of the Tour de France bicycle race near Lourdes and Saint-Lary, in which Spanish riders competed. GARI claimed responsibility for bombings.

Italy - August 4, 1974 - Train bombing kills 12 people, injures 48

On August 4, a bomb exploded on a train passing through La Direttissima tunnel en route from Florence to Bologna, killing 12 people and injuring 48 others. Right wing extremists were blamed for the attack.

Israel - March 28, 1975 - Bombing injures 13 people

Bomb blasts wounded 13 persons traveling on a bus in Jerusalem. Palestinian guerrillas in Beirut claimed responsibility for the action.

Israel - May 14, 1975 - Parked Arab-owned bus burns

A parked Arab-owned bus was burned in Jerusalem. A new group called "Terror for Terror, and Eye for an Eye" reportedly burned the bus in retaliation for the burning of a Jewish-owned bus in Ramallah, in Israeli-occupied territory on the West Bank of the Jordan.

United Kingdom - October 9, 1975 - Bomb explosion kills 1 person, injures 20

A bomb exploded near a bus stop at the entrance to Green Park subway station in London, causing one death and 20 injuries. The IRA was held responsible for the attack.

Netherlands - December 2, 1975 - Armed extremists kill passengers and take hostage on train

Seven armed extremists, calling themselves the "Free South Moluccan Youths" and demanding independence for the Indonesian Island of South Molucca, seized a passenger train near Beilen in the Northern Netherlands, killing at least three people and taking about 64 hostages. Twenty-six of the original 64 hostages either escaped or were released, leaving a total of 38 hostages on the Beilen train. The terrorists demanded a bus to Schiphol airport near Amsterdam, and a plane to fly them to an unknown destination. Later, in another note, they demanded the release of five Moluccans held in Dutch prisons on charges of terrorist actions, and Dutch recognition of what they called their "government in exile." An explosion aboard the hijacked train injured one of the extremists and slightly wounded a passenger hostage. The young Asian terrorists surrendered to police on December 14, releasing the remaining hostages after a 12-day siege of the train. The terrorists were tried and sentenced to 14 years in prison.

In an apparently separate coordinated terrorist action by South Moluccans in their struggle for an East Indian homeland, six armed South Moluccans shot their way into the Indonesian Consulate in central Amsterdam and took a reported 47 persons hostage. At least three consulate staffers were injured by gunfire or fell as they climbed out of consulate windows and down a rope from the roof of the building in order to escape. One consular official, injured when he jumped from an upper floor, died later in a hospital. Three other staffers inside the consulate were believed wounded in the initial gunfire. The last of 16 children originally captured in the consulate school were released on December 8 by the South Moluccans in return for certain concessions, leaving 27 adult hostages in the building. Gunmen at both sites, the Indonesian Consulate and the Beilen train hijacked on December 2, sought independence for the Moluccan Island group ruled by Holland for nearly three centuries, and presently part of Indonesia, the release of 25 comrades in Dutch jails, and safe passage. The six terrorists surrendered, ending the 16-day siege on December 19. The remaining 27 hostages were released unharmed.

United Kingdom - February 12, 1976 - IRA bomb defused

A twenty-pound IRA bomb was defused by police during rush hour at London's busy Oxford Circus subway station.

United Kingdom - March 4, 1976 - IRA bomb explodes on commuter train

A 10-pound IRA bomb placed under a seat exploded in a commuter train in the morning, minutes after hundreds of rush-hour passengers disembarked at Cannon Street Station in London.

United Kingdom - March 15, 1976 - Explosive on subway

An explosive device was set off in a London subway train at West Ham station, injuring eight people. The perpetrator shot the engineer of the train to death and wounded another man before shooting himself. The IRA was suspected.

United Kingdom - March 18, 1976 - Subway station bombing

A bomb exploded in an empty subway car as it pulled out of Wood Green Station in London. One person was injured in the blast. The IRA is held responsible for the attack.

Israel - July 18, 1976 - Bomb on bus injures 11 people

A bomb exploded on a bus near Tel Aviv injuring 11 people. Three Arabs who were injured by the explosion in the Tel Aviv suburb of Ramat Gan were among the suspects. The bombing was the first since the Israeli raid to rescue

more than 100 hijacked hostages in Uganda, which brought threats of reprisals from Arab guerrillas.

Egypt - August 14, 1976 - Bomb on train kills 8 passengers

A time bomb exploded on an Alexandria train killing eight passengers and wounding 59. There were four perpetrators of the incident. It has been stated that the perpetrators were all Libyan intelligence agents, recruited by the Libyan intelligence service to carry out sabotage.

Egypt - March 9, 1977 - Police arrest five bombing suspects

Police arrested five people for planting bombs on railway tracks west of Al-Alamein. The group confessed to working for Libyan intelligence, which had given them military training.

Israel - April 24, 1977 - Bombing on bus

A bomb exploded on board a bus on its way to Beersheba, injuring 28 and dripping out seats and smashing windows. Arab passengers going to their jobs had left the bus ten minutes earlier and were suspected in the bombing.

Netherlands - May 23, 1977 - South Moluccan terrorists seize express train

South Moluccan terrorists, in two separate actions, seized an express train near Groningen and occupied a school in Bovensmilde. Fifty-six people were taken hostage in the train and 110 children and teachers at the school. The terrorists demanded the release of 21 South Moluccans from Dutch prisons and air transport out of the country. All 105 children and one teacher were released on May 27 after a virus infection struck the hostages at the school. The four terrorists in the school continued to hold the four remaining teachers. Three train hostages were freed between 4 and 8 June because of possible health problems. After several days of stalemated talks, on 11 June, Dutch troops stormed the train and the school in simultaneous operations and two hostages were killed in the assault on the train. There were no casualties at the school. The seven surviving terrorists were taken into custody by Dutch authorities. After trial they were sentenced in September 1977 to prison terms ranging from six to nine years. An eighth defendant, charged with assisting in planning the operations, received a one-year sentence.

United States - September 2, 1977 - Bombs protesting the Panama Canal Treaty

Bombs placed on Route One in Florida by the Luis Boitel Commandos between Homestead and Key West exploded. The bombs were in protest to the Panama Canal Treaty signing being held in Washington, D.C., and also for

the opening, six days earlier, of Cuba's first diplomatic offices in Washington, D.C. in 17 years.

France - October 19, 1977 - Buses bombed

Firebombs were thrown at three West German tourist buses in Paris and two in Nice.

Italy - October 22, 1977 - Buses bombed

A bomb slightly damaged a West German tourist bus parked in Bolzano.

Austria - December 4, 1977 - Bomb aboard train

A bomb exploded in the lavatory of the Belgrade express train after it had left the Austrian border station of Spielfeld and crossed into Yugoslavia. No one was reported injured.

Yugoslavia - December 5, 1977 - Bomb aboard train from West Germany

Police discovered a bomb aboard an international train traveling from West Germany. All 140 passengers were evacuated before the bomb was detonated. The bomb had been planted in the last coach of the West German Railways train. No details were available as to the extent of the damage.

Israel - December 7, 1977 - Guerrilla members arrested

Israeli security forces arrested eight members of an Arab guerrilla group that had been active in the area, and seized arms and explosives found in their possession. The arrested men were all members of Al Fatah, the Arab guerrilla organization. They were suspected of trying to sabotage the railway line near Jerusalem in April and placing a bomb in a village near Jerusalem.

France - December 26, 1977 - Bombs explode in Christmas attack

Two bombs exploded in Paris, the latest in a series of Christmas attacks, one damaging the Villepinte railway station and the other ripping through a cafe in Pantin in the suburbs of Paris. An organization calling itself the Revolutionary Anti-Racist Group claimed responsibility for the blast at Pantin, and the Corsican National Liberation Front said it had blown up the Villepinte railway station.

Israel - April 26, 1978 - Grenade kills West German citizens

Two West German citizens were killed and several others injured when a grenade which was thrown through an open bus window exploded. They were returning to Jerusalem from an outing in Galilee when the attack took place. Several Arabs were taken into custody during the search for the perpetrators.

Czechoslovakia - May 25, 1978 - Attempted school bus hijacking

Czech border guards shot three gunmen who hijacked a school bus carrying 45 children and attempted to force it across the border into West Germany. About 25 Czech soldiers, using at least one armored vehicle, killed one of the gunmen and wounded the other two in a gun battle near the Muehlbach border crossing. A young girl on the bus was slightly injured.

Israel - June 2, 1978 - Five killed in bus explosion

Five persons were killed and at least 20 injured in an explosion on a bus in Jerusalem. The bus was en route from the Arab section in East Jerusalem to the Jewish section in the west. The police suspected that the explosive device had been left in the bus by one or more Arab terrorists. Mayor Teddy Kollek of Jerusalem said he thought that the explosion was linked to plans for the forthcoming celebrations of the 11th anniversary of the unification of Jerusalem. A news agency in Beirut reported that Palestinian guerrillas calling themselves the General Command of the Palestinian Revolution's Forces had claimed responsibility.

Israel - September 20, 1978 - Terrorists captured

Terrorists aiming to plant a bomb aboard a bus in Tel Aviv were captured before they could execute their plan.

Iran - November 14, 1978 - Bus explodes

Two explosive devices rendered a company bus inoperable in Semnan. No injuries were reported to the U.S. citizens who used the bus to travel 40 miles to and from their residences.

Israel - March 4, 1979 - Rail service suspended

The rail service between Jerusalem and Tel Aviv was suspended for several hours following an explosion on the railway line in which a train was derailed. A second mine found on the line was dismantled. A Palestinian military spokesman claimed responsibility, claiming that a number of Israelis had been killed or wounded.

Israel - March 8, 1979 - Tourist buses bombed

Palestinian terrorists planted three bombs on Israeli tourist buses to protest President Carter's weekend Mid East peace mission. Twelve persons were injured. The Pro-Moscow Democratic Front for the Liberation of Palestine claimed credit for the incident. The guerrilla groups said orders had been issued to its fighters "to step up the military operations against Israel to protest Carter's visit." Time bombs planted at Tel Aviv's Plaza Hotel exploded, gutting the upper stories and wounding an unspecified number of Israelis.

Israel - April 16, 1979 - Bomb explodes on bus

A bomb apparently planted by guerrillas exploded on a bus minutes after a 13-year-old boy spotted a satchel and the driver ordered his passengers off. The blast totally wrecked the bus. The PLO dissociated itself from the attack.

France - July 2, 1979 - Train attacked

The Paris-Madrid express was ambushed and machine gunned south of St. Jean de Luz in the French Basque region. The train was stationary when the shooting broke out because the driver had stopped to avoid a barrage of tires which had been placed across the line. When he heard the gunfire, the driver set the train going and smashed through the barricade, arriving 20 minutes late at Hendaye on the Spanish border. No one claimed responsibility for the incident but authorities believe that the Basque separatist movement (ETA) was to blame. More than 15 bullet holes were found in the first three cars.

Afghanistan - September 9, 1979 - Rebels attack tourist bus

Afghanistan rebels ambushed a tourist bus chartered by a British firm, the Masic Bus Company, on a trip from Istanbul to New Delhi. A young Canadian was shot dead; a Swiss man was killed as he crouched for cover on the floor. Another tourist was in critical condition in a hospital in Herat with multiple bullet wounds. Survivors among the 40 European, American and Canadian passengers said that the bus had no business being in Afghanistan where a savage guerrilla war has raged for more than a year. The Turkish bus driver apparently cut across the countryside in order to save fuel; after the attack he disappeared and a Swiss tourist took over the bus and drove it back to Herat. The attack brings to eight the number of Westerners murdered in Afghanistan during the past week. The cause of the guerrilla war is apparently a Moslem revolt against the Soviet backed government of President Nur Mohammed Taraki.

Israel - November 2, 1979 - Passenger train explosion

An explosion under the engine of an Israeli passenger train ripped up a section of track but caused no injuries. The engineer managed to bring the train safely into Tel Aviv; if the train had derailed, it would have plunged into a river. Police blamed Palestinian guerrillas.

Israel - November 19, 1979 - Bomb on train injured thirteen people

Thirteen people waiting to board a bus in Jerusalem were injured when a bomb exploded on the bus. The driver of another bus escaped injury while trying to drive to safety after a bomb had been discovered and the passengers evacuated. The PLO claimed responsibility.

Israel - April 22, 1980 - Grenade thrown at bus

A grenade was thrown at a bus between Jerusalem and Ofra.

France - April 26, 1980 - Right wing group attacks train

A commando group of the extreme right composed of some 20 young people set fire to two cars of the Paris-Moscow express train with the help of several Molotov cocktails. The cars were severely damaged. Fortunately the train was almost empty. The group painted "National Youth Front," and "Boycott" on the side of the train. Later the Agence France Presse received an anonymous letter adding that the demonstration was to persuade the French to boycott the "Jeux (games) de Goulag."

Cambodia - June 10, 1980 - Train attack results in at least 150 deaths

Guerrillas supporting the Khmer Rouge regime attacked a train carrying civilians between Battambang and the capital Phnom Penh, some 40 miles northwest of the capital. A missile or a mine brought the train to a stop and guerrillas opened fire on the train, killing at least 150 people and injuring 250 others. (PS)

Italy - August 2, 1980 - Bologna train station bombed

On August 2, 84 people were killed and 200 more injured when a bomb exploded in Bologna train station. In 1981, seven people were arrested in London and held responsible for this bombing.

Switzerland - October 21, 1980 - Attempted bombing of train

A time bomb was placed aboard a train en-route from Paris to Interlaken in Switzerland, but failed to explode. Authorities believed the bomb was planted by the October 3 Organization.

China - October 29, 1980 - Bomb at Beijing

A bomb exploded in a building near a second floor escalator at around 6 p.m. in Beijing, causing 9 deaths and 81 injuries.

United Kingdom - November 20, 1980 - Attempted bombing foiled

On November 20, police arrested a man who had parked his car on the Westminster Bridge in London. A bomb was found inside his car. He was protesting against nuclear weapons.

United States - December 21, 1980 - Pipe bombs in Pennsylvania Station, New York City

Two pipe bombs exploded in Pennsylvania Station lockers ten minutes apart, spraying shrapnel but injuring no one although the lockers were close to

waiting areas. An anonymous caller told UPI that the previously unknown Puerto Rican Armed Resistance (RAP) was responsible and that the blasts were in retaliation for crimes "against Puerto Rican nationalists" in Puerto Rico. He directed police and reporters to a one-page message typed in Spanish, hidden in a trash container in mid-town Manhattan.

United Kingdom - January 27, 1981 - Bombings on Belfast-Dublin rail line

On January 27, three bombs exploded on the Belfast-Dublin rail line, causing closure of the rail line. It was part of a six-city attack by the IRA.

South Africa - June 29, 1981 - Bomb explodes on Richards Bay rail line

On June 29, a bomb exploded on a section of the Richards Bay rail line in Natal Province, causing freight traffic delay for three hours. It was the fourth bombing of rail links in Natal Province in the previous three months and the second on the main line linking the country's northern coal fields in the previous two weeks. Police blamed the ANC for the bombings.

India - July 18, 1981 - Train sabotaged, 35 people killed

On July 18, a passenger train was derailed half a mile from the station at Dangarva, killing 35 people. The cause of the derailment was believed to be an act of sabotage. (PS)

Switzerland - July 22, 1981 - Bomb in Geneva railway station

A bomb left in a coin-operated locker at the main railway station in Geneva exploded late in the afternoon, injuring four people. This was the fourth bombing in Switzerland in four days. Responsibility for the first three was claimed by the Ninth of June Organization and authorities named them as the perpetrators.

Switzerland - July 22, 1981 - Second bomb left in Geneva railway station

A second bomb left in a coin-operated locker at the main railway station in Geneva exploded about one hour after the first one had caused several injuries. The second bomb caused no injuries because police had cordoned off the area. These were the fourth and fifth bombings in Switzerland in four days. The first three were claimed by the Ninth of June Organization and authorities named them as the perpetrators of the last two.

Pakistan - July 31, 1981 – Train derailed

An Awam express train en route from Karachi to Lahore and Peshawar, and carrying Muslim passengers celebrating the month of Ramadan, was

derailed, killing at least 30 people on board. It was suspected to be an anti-Muslim or racist motivated act of sabotage. (PS)

United Kingdom - August 6, 1981 - Bombings at several locations

On August 6, bombings at stores, offices, and garages in six cities in Northern Ireland and the bombing of a section of the Belfast-Dublin rail line caused property damage.

Germany - September 16, 1981 - Time bombs on rail line defused

The Red Army Faction is believed responsible for two time bombs set on a rail line supplying the U.S. Air Force Rhein-Main Air Base. Two alert American soldiers found the bombs ticking away hidden in 13-pound fire extinguishers. Explosives experts defused the bombs.

France - November 5, 1981 - Bomb explodes in train station

A bomb exploded at Paris' Gare de Lyon train station injuring at least one person and destroying more than two dozen luggage lockers. Officials said the explosion occurred in an underground level of the station, which houses the suburban subway line. Later, responsibility for the attack was claimed by the previously unknown Orly Organization, an Armenian group.

France - November 16, 1981 - Bomb in train station

A bomb placed in a luggage locker exploded in the Gare de l'Est railway terminal, wounding two people. Thirty lockers were destroyed. Responsibility for the attack was claimed by the Orly Group of Armenian extremists.

France - November 18, 1981 - Bomb threat at Paris Gare du Nord

A bomb threat received from the Orly Group sent police searching for a bomb at the Paris Gare du Nord.

United Kingdom - February 14, 1982 - Bomb damages rail station

On February 14, a bomb at Portadown rail station on the Belfast-Dublin line severely damaged the station. No injuries were reported.

United States - February 16, 1982 - Explosive discovered under Bay Bridge

Police discovered on February 16 some 40 pounds of a powerful liquid explosive left in a car parked beneath the Bay Bridge on the San Francisco side.

France - March 29, 1982 - Bomb exploded on train, killing five passengers

A high explosive tore up the second coach of the Paris -Toulouse express, killing five passengers and injuring 27 others. The police believed the explosion was caused either by a deliberately set bomb or by explosives being transported clandestinely. The engineer was able to stop the train without a derailment; then the train proceeded slowly to Limoges where the injured were taken off the train. No claim for responsibility was received from any terrorist group operating in France. In the absence of other evidence, the press and public probably linked the incident with terrorist Ilyich Ramirez Sanchez, known internationally as Carlos, who had threatened a campaign against France if colleagues of his were not released from prison.

On March 31, the ultra-rightist group opposed to the Basque separatists, the Spanish Basque Battalion (BBE), said it carried out the bomb attack. An anonymous telephone caller told the daily DEIA that the BBE "would attack in France every time that the military wing of the ETA (Basque Autonomous Movement) carried out an attack in Spain." According to DEIA, extreme right groups in Spain frequently claim that ETA militants carry out terrorist attacks against police and army officers and then obtain refuge in southern France. The police do not consider the claim credible since the group has often made unfounded claims. Some other groups, such as the Terrorist Internationale, the Delta Commandos (far right) and the far-left movement called the Groupe Bakounine-Gdansk-Paris-Guatemala-Salvador also claimed responsibility for the attack on the "Capitole." One claim was from the "Friends of Carlos", and though it was no more credible than other claims, the possibility that Carlos might really have been involved was not ruled out.

Lebanon - April 30, 1982 - Embassy official's car hijacked

A U.S. embassy official had his car hijacked by gunmen in the largely Moslem west Beirut area.

United Kingdom - August 11, 1982 - Bombing at railroad

A freight train was slightly damaged when a bomb exploded on a section of the main railroad in County Armagh, Northern Ireland. Train services were disrupted due to the incident.

China - October 1, 1982 - Man attempted to hijack tourist bus

A man carrying what he claimed was a bomb tried to flee the mainland by attempting to hijack a busload of tourists and use them as hostages to get a plane flight to Taiwan.

Israel - January 11, 1983 - PLO claimed responsibility for attack on bus

The PLO claimed responsibility for a grenade attack on a Tel Aviv bus. A PLO communiqué related that the attack had been made against troops along a military road leading to Tel Aviv. It said that the attack had resulted in the killing or wounding of all the occupants of the bus. Israeli spokesmen, however, had said the attack had been mounted on a civilian bus in Tel Aviv and that 12 civilians were injured. No deaths were reported.

France - July 28, 1983 - ASALA threats against French government

ASALA threatened more attacks against French territory and government organizations. The Perrache railway station in Lyons was evacuated following a bomb threat by a telephone caller who said he was part of the terrorist group.

France - July 28, 1983 - Bomb threat at railroad station

The railroad station of Lyon Perrache was partially evacuated by police last Wednesday when a warning of an imminent explosion was transmitted by someone speaking on behalf of the Armenian Secret Army for the Liberation of Armenia. Security men conducted a wide search of the railroad station but failed to turn up any bombs or explosives. Police regarded the incident as a false alarm.

India - September 14, 1983 - Bomb thrown at crowded platform injures 19

On September 14, a bomb was thrown by suspected Sikh separatists onto a crowded platform in New Delhi's main train station, injuring at least 19 people.

Israel - December 6, 1983 - Jerusalem bound bus bombed

A bomb demolished a Jerusalem bus, killing six people and injuring 43 others, some of them critically. Responsibility for the attack was claimed both by Yasser Arafat's wing of the PLO and by anti-Arafat PLO rebels.

Israel - December 30, 1983 - Grenades explode in two mosques

Booby-trapped hand grenades exploded in two mosques in the Israeli-occupied West Bank and a potentially lethal bomb was planted on a Jerusalem bus in a new escalation of a furtive war being waged by Arab and Jewish terrorists. There was one casualty, a Muslim clergyman injured by one of the mosque blasts. The bus bomb was discovered by an alert passenger and police defused it harmlessly. The Jewish extremist group Terror Against Terror admitted planting the grenades in the mosques, but no organization

claimed responsibility for the bomb on the bus in the predominantly Jewish western part of Jerusalem.

France - December 31, 1983 - Bombs in Marseilles railroad station killed six people

At least six people were killed and score more injured when bombs went off in the Marseilles railroad station and aboard a speeding train 120 miles north. The international terrorist known as Carlos sent a letter taking responsibility for both bombings. The letter was signed by the Arab Armed Struggle Organization but West German specialists concluded that the handwriting was that of Carlos, a Venezuelan whose real name is Ilyich Ramirez Sanchez.

France - February 15, 1984 - Basques sabotage Paris-Madrid Express train

Basques on the French side of the border sabotaged a stretch of track which caused a Paris-Madrid Express train with 110 aboard to derail at 60 miles per hour. There were no serious injuries.

Israel - March 4, 1984 - Gunmen attack bus carrying Arab workers

Six Palestinians were wounded when gunmen attacked a bus carrying Arab workers north of Ramallah in the Israeli-occupied West Bank. Four masked gunmen opened fire on the bus with automatic weapons believed to be American-made M-16s. About an hour after the attack the Jewish terrorist group Terror Against Terror (TNT) claimed responsibility for the attack, stating it was to "avenge Jewish blood," probably in reference to the explosion the previous week at a clothing store in Jerusalem.

Israel - March 7, 1984 - Bomb rips through civilian passenger bus

Three people were killed and nine wounded when a bomb ripped through a civilian passenger bus in the Israeli port city of Ashdod. Abu Nidal claimed responsibility. The bombing followed an attack the previous week on an Arab bus on the Israeli-occupied West Bank of the Jordan River in which six Arab laborers on their way to work were wounded by submachine gun fire.

United Kingdom - March 11, 1984 - Bomb explodes in nightclub

A bomb exploded in a nightclub catering to Arabs injuring 23 people, minutes after a device blew up at an Arab newsstand. Police warned that the blasts may have been set by Libyan hit squads hunting expatriates. No one was injured in the newsstand incident. Two bombs destroyed a car and injured a couple and their child in an attack that came less than twenty four hours after the bomb in the nightclub. As of 3/14/84 one Libyan businessmen

was being held on conspiracy charges in the bombing blitz and 22 other Libyans were being detained. The government of Libya was denied any involvement, however.

Israel - April 12, 1984 - Team of PFLP members hijack bus

A four-member team of the PFLP armed with hand grenades staged a raid in the Gaza strip, hijacking a bus to the border with Egypt. The group held all 30 passengers hostage demanding in exchange the release of imprisoned terrorists in Israel, including Palestinians, a Jewish collaborator, and a member of the Japanese Red Army. An Israeli army unit stormed the bus, killing two of the four terrorists and freeing all but a few of the hostages unharmed. The other two terrorists were killed while in custody.

India - April 15, 1984 - Multiple arson attacks

A Sikh terrorist group torched 37 railroad stations in the Punjab region. A Sikh group called "Dashmesh Regiment" claimed responsibility for the attacks.

India - April 26, 1984 - Bombs exploded along northern railway sections

On April 26, bombs exploded along three major sections of the northern railway in the Punjab region. A series of bomb blasts completely disrupted railroad traffic. Sikh separatists are suspected.

Israel - April 28, 1984 - Bombs on 4 buses discovered; 20 Jewish extremists arrested

Authorities announced that 20 Jewish extremists had been arrested on suspicion of plotting to blow up Arab-owned buses in Jerusalem. Bombs weighing over 6-1/2 pounds each had been placed on four buses. The bombs were timed to go off during rush hour.

United States - May 9, 1984 - Bomb threat on bridge

On May 9, an anonymous caller claimed to have planted a bomb on Sunshine Skyway Bridge linking St. Petersburg and Bradenton-Sarasota, Florida, and that it would explode some time between 7 a.m. and noon. Traffic shut down for five hours while police searched the area. No explosive was found.

Spain - June 13, 1984 - Members of ETA set fire to truck

Several individuals of ETA set fire to a French truck at Oyarzun in the Basque province of Guipuzcoa.

Spain - July 11, 1984 - ETA attacks five French trucks

ETA attacked five French trucks near the Spanish/French border. Small explosive devices were placed in the motor compartments which when they exploded ruined the engine but did not destroy the truck. One driver who was asleep in the cab of his truck was injured.

France - August 13, 1984 - Bomb explodes in railway station in Lyons

A small home-made bomb exploded in a coin-operated locker at the central railway station in Lyons, but a defect in the bomb casing limited the extent of the damage and probably prevented casualties. Responsibility for the blast was claimed by ASALA. The bomb consisted of about 200 grams of explosive packed into a metal tube, the end of which was welded shut with a plug containing an electronic detonator. The weld on the plug apparently came loose with the explosion, appreciably reducing the force of the blast. Responsibility for the blast was also claimed by the group M-5, which is trying to extort the government for over \$3 million dollars in return for their ceasing bombing efforts.

France - August 19, 1984 - M-5 group bombs Grenoble train station

A group calling itself M-5 claimed responsibility for bombing Grenoble train station on August 19. The bombing caused minor damage. The group demanded nearly \$3.75 million to stop its attacks.

Canada - September 1, 1984 - Bomb explodes in Montreal main railroad station

A bomb exploded in the Montreal main railroad station on Labor Day, killing three French tourists and wounding 29 others. A rambling, barely coherent note had been turned over to police three days earlier by a ticket agent at the station. The letter threatened the life of the Pope who is due to visit Canada in mid-September. Shortly after the bomb detonated an anonymous caller warned a second bomb had been planted in the railroad station. A search failed to locate a second bomb. An American named Thomas Brigham, 65, from Rochester, New York, was ordered held in connection with the bombing.

Israel - September 17, 1984 - Israeli bus shot up in occupied West Bank

An Israeli bus was shot up in the occupied West Bank. Five persons were injured, none seriously. Some of the Israelis on the bus were armed and returned fire.

Israel - October 28, 1984 - Four Israeli soldiers held in connection with attack on Arab bus

Four Israeli soldiers are being held in connection with an anti-tank rocket attack on an Arab bus in Jerusalem. An 18-year old draftee will be charged with actually firing the rocket that killed one and injured another ten passengers. The group which executed the attack identified itself as the "Avengers" but Jewish terrorists cells operate under a variety of names. They form part of a loosely knit underground led by quite prominent rabbis.

Israel - December 1, 1984 - Hand grenade thrown at bus injures three

A hand grenade was thrown at a bus in Jerusalem which injured three people. In Damascus, the PFLP took responsibility for the bus attack but claimed the target was several Israeli soldiers who were on the bus.

Germany - December 21, 1984 - Fake bomb detonated by police

On December 21, police carried out a controlled-explosion on a fake bomb found on Peace Bridge in Frankfurt. No group claimed responsibility, but police suspected the Red Army Faction.

Italy - December 24, 1984 - Train bombing kills at least 15 people

In the bloodiest terrorist attack in the country in two years, terrorists bombed a train en route from Florence to Bologna and passing through La Drettissima tunnel, killing at least 15 people and injuring 80 more. A number of groups claimed responsibility for the attack. Neo-fascist terrorists are suspected.

Sri Lanka - January 20, 1985 - Guerrillas attack train, killing 36 people

Tamil separatist guerrillas attacked a train in the dense jungle between Mankulam and Murukandy. The guerrillas blew up a mine to stop the train and fired on the passengers from both sides of the train, killing at least 36 people. (PS)

South Africa / Mozambique - January 25, 1985 - Bomb severs rail bridge

On January 25, a bomb exploded on a rail bridge that links Maputo and South Africa. The bridge was severely damaged.

Israel - January 31, 1985 - Two wounded when bus fired upon

A bus en route to Hebron from Jerusalem was fired upon by terrorists. Two people were wounded.

Spain - February 27, 1985 - Two trucks damaged by small incendiary devices

Two trucks registered in France were damaged at Irun by two small incendiary devices. ETA was responsible and has been harassing French interests in the Spanish Basque areas of the country.

Peru - February 27, 1985 - Bomb attacks on bridges

Three bridge bombing incidents occurred on February 27. Shining Path guerrillas completely destroyed Anchi bridge near Lima, using dynamite. At Chaupichaca bridge, also near Lima, one guerrilla was killed and another was arrested when the two threw dynamite at police inspecting the bridge. Also near Lima, police discovered 15 boxes of dynamite near Infiernillo bridge.

Canada - March 26, 1985 - Threats by ASALA to bomb city's subway system

Extreme security measures were adopted by authorities in Toronto in connection with threats by ASALA to bomb the city's subway system. Major traffic delays resulted from the increase in auto use during rush hours. The group demanded that authorities free three terrorists arrested after the recent assault on the Turkish Embassy which left one guard dead and the Ambassador wounded. The massive security alert prompted some crank calls and hoaxes, including one fake bomb.

Israel - April 30, 1985 - Palestinian Fedayeen use grenades to attack bus

Palestinian Fedayeen used incendiary grenades to attack a bus. The bus was destroyed and the driver wounded.

Israel - May 30, 1985 - Bomb explodes near the central bus station in Afula

A bomb exploded near the central bus station in Afula. Two days earlier a bomb had exploded in the town's center.

Switzerland - June 3, 1985 - Explosion at Geneva railway station

An explosion at a Geneva railway station has been claimed by a Palestinian group calling itself the "Martyrs of Tel Al-Zaltar." Several hundred Palestinians died when the Tell Al-Zaltar camp in East Beirut was besieged by Lebanese Christian Phalangists in the summer of 1976. The caller said more explosives, which had not been primed, had been planted in toilets at Geneva's Cointrin Airport, a fact confirmed by police. Two Palestinians were arrested in connection with the bombings.

Israel - June 12, 1985 - Bomb explodes at bus station in Jerusalem

A terrorist bomb exploded at a bus station in Jerusalem.

Israel - June 24, 1985 - Bomb explodes near bus stop in northern Jerusalem

A bomb exploded near a bus stop in the northern part of Jerusalem, injuring an eight-year-old boy. The PLO claimed responsibility.

Israel - July 8, 1985 - Bomb explodes at bus station in Holon

A bomb exploded at the bus station in Holon. Five people were wounded.

Mozambique - August 2, 1985 - Suspected train sabotage kills 58 people

A suspected sabotage on a train killed 58 people and injured 160 others. (PS)

Germany - August 12, 1985 - Arson attempt discovered

On August 12 near Frankfurt, fuel-soaked bedding was found in sleeping cars used by U.S. military personnel. A faulty igniting device failed to set them on fire.

Chile - August 13, 1985 - Two bombs explode

One bomb exploded August 13 at Penablanca station near Valparaiso while a navy officer was trying to dismantle it. He was killed in the explosion. Another bomb exploded in Valencia station, also near Valparaiso, disrupting rail service to and from Santiago.

Israel - August 20, 1985 - Bomb-laden car found in Netanya

A bomb-laden car was discovered in the central bus station in Netanya. The area was evacuated and the device detonated by the bomb squad. The PLO claimed responsibility.

Israel - September 5, 1985 - Terrorists throw gasoline bombs at bus

Terrorists threw two gasoline bombs at a bus passing the area. There were no passengers aboard.

Israel - September 9, 1985 - Firebomb tossed at bus in Jerusalem

A firebomb was tossed at a bus in Jerusalem.

Israel - September 19, 1985 - Gasoline bomb thrown at bus stop on Mt. Zion

A gasoline bomb was thrown at a bus stop on Mt. Zion. It was the second attack at the same spot within a week.

Israel - September 25, 1985 - Bomb explodes in the Egged bus station

A bomb exploded in the Egged bus station near the Hadassah hospital on Mt. Scopus. One person was slightly injured by glass shards. The DFLP claimed responsibility.

Israel - September 26, 1985 - Bomb explodes at a bus stop near Gilo, Jerusalem

A bomb exploded at a bus stop near Gilo, Jerusalem. Seven Israelis were wounded.

Chile - November 1, 1985 - Two bridges bombed

On November 1, unidentified bombers exploded a 40-pound dynamite charge on a Pan-American Highway bridge over Achibueno River, near the capital, Santiago. A second bomb exploded on another bridge one hour later.

Israel - November 8, 1985 - Explosives detonate near bus station in Kafr Saba

The Palestinian Revolution Forces General Command claimed responsibility for detonating explosive charges near the central bus station in the settlement of Kafr Saba. The station was crowded with soldiers and settlers and casualties were reported to be high, although no estimate was given.

Lebanon - November 13, 1985 - Israeli passenger bus in southern Lebanon attacked

The Democratic Front for the Liberation of Palestine claimed that a commando group belonging to it attacked an Israeli passenger bus in southern Lebanon with machine-guns and that a number of passengers were either killed or wounded.

India - November 25, 1985 - Bombing on train kills 2, injures 18

Sikh extremists planted a bomb on a passenger train in Punjab region, causing 2 deaths and 18 injuries.

Japan - December 1, 1985 - Radical leftists cut communication cables

Radical leftists cut communication cables in 34 different locations in pre-dawn attacks on December 1, disrupting computer systems that operate trains and subways for some six million passengers. Police arrested two members of the Middle Core Faction for the attack.

Israel - December 22, 1985 - Several explosive charges in bus station in Erez

The Palestinian Revolution Forces General Command claimed responsibility for placing several explosive charges in a bus station in Erez. A huge fire resulted.

United States - January 10, 1986 - Bomb threat on commuter bridge

On January 10, a caller claimed to have planted a bomb on a commuter bridge over New Bedford Harbor, Massachusetts, to support striking fishermen. The bridge was closed for two hours while police searched. No bomb was found.

Spain - January 27, 1986 - French truck machine-gunned outside San Sebastian

ETA machine-gunned a French truck outside San Sebastian. No one was injured in the attack.

Israel - February 14, 1986 - Bus in Jerusalem bombed

A bus in Jerusalem was bombed, injuring six passengers. Force-17 claimed responsibility.

France - March 18, 1986 - High speed train bombed

A high-speed train was bombed 13 miles outside of Paris. Ten people on board were injured. Islamic Jihad claimed responsibility and demanded the release of five Arab terrorists currently in French prisons in connection with an unsuccessful assassination attempt on former Iranian Prime Minister Bakhtiar in July 1980. The Committee of Solidarity with the Arab and Middle East Political Prisoners (CSPPA) claimed responsibility. Evidence has shown that the Iranian government was directly involved in the 1986 Paris bombings.

France - March 21, 1986 - Bomb defused in commuter train in Paris

A bomb was defused in a crowded commuter train in Paris after a passenger noticed an unattended bag and alerted police. The Committee of Solidarity with the Arab and Middle East Political Prisoners (CSPPA) claimed responsibility. Evidence has shown that the Iranian government was directly involved in the 1986 Paris bombings.

Israel - April 8, 1986 - Firebomb hurled at bus

Nine people were injured when a firebomb was hurled at a bus on the northern edge of Jerusalem. The bus was passing through a Jewish-Arab neighborhood at the time of the attack. 17 Palestinians were arrested in connection with this. They claimed to be members of the PFLP.

Syria - April 16, 1986 - Explosions aboard buses in Damascus

Several people were killed and wounded in a series of explosions aboard buses in Damascus. Syrian state-controlled radio blamed Israeli agents for the attacks. The explosions took place on intercity buses and civilians were killed and injured; however there was no report of exact casualty figures.

Bangladesh - May 15, 1986 - Train sabotaged; 25 people killed

A crowded express train was derailed near the western frontier of Bheramara, resulting in 25 deaths and 45 injuries. The Marxist Sarbahara group was blamed for the incident. (PS)

Peru - June 26, 1986 - Tourist train bombed

Sendero Luminoso bombed a tourist train en route to Cuzco, killing seven people and injuring forty. One American was killed.

Israel - June 30, 1986 - Bomb explodes on city bus

A bomb exploded on a city bus, injuring five people. The Fatah Uprising took responsibility for the blast, as well as for another bomb attack on a bus in northern Jerusalem which slightly injured one woman.

Sri Lanka - June 28, 1986 - Bombing on bridge

LTTE Tamil guerrillas bombed a bridge near Paranthan on June 28.

Sri Lanka - June 30, 1986 - Bomb on bridge kills 4 people

Four people were killed and 19 others injured when LTTE Tamil guerrillas bombed a highway bridge outside Vavuniya on June 30.

France - September 4, 1986 - Bomb planted on subway train

In a resumption of their earlier bombing campaign, the CSPPA planted a bomb on a crowded subway train. The bomb failed to detonate.

Peru - September 30, 1986 - Three bombings

Two bombs north of Lima and one east of Lima near central railroad tracks caused one injury.

Pakistan - October 20, 1986 - Explosion injures 2 people

A bomb hidden in a railroad car exploded at a rail station in Peshawar on October 20, injuring 2 people.

United Kingdom - October 27, 1986 - Bombing derails freight train

A bomb blast derailed a freight train and severed a section of the Belfast-Dublin rail line on October 27. The attack was carried out on the day the Pope declared the "International Day of Peace."

Israel - October 26, 1986 - Palestinian tries to hijack bus

A young Palestinian tried to hijack a bus carrying schoolgirls and force the bus over a cliff near Jerusalem. A young female passenger wrestled with the attacker after the assailant struck the driver with a stone. The hijacker was taken into custody but no other information was available.

Philippines - January 20, 1987 - 3 bridges near Iloilo bombed

On January 20, three bridges near Iloilo were bombed. The attacks were made on the 42nd. day of a 60-day cease-fire between Filipino government and rebels. Government accused rebels of responsibility, but local communist insurgents units denied it.

Germany - February 15, 1987 - U.S. passenger train sabotaged

The Autonomous Cells claimed responsibility for an act of sabotage against a U.S. passenger train which caused an estimated \$20,000 damage. Two ship's anchors were dropped onto the overhead cables of the Brehem-Hannover railway in an attack the group said was "directed against the imperialist war machine of the U.S."

India - March 15, 1987 - Bombing under railway bridge

Tamil exiles are being questioned about a railway blast in Madras that killed 25 people and wounded about 150 others. A bomb detonated by remote control went off under a railway bridge as an express train was passing over it. Tamil propaganda leaflets demanding the establishment of a separate Tamil state in Sri Lanka were found at the scene.

India - April 15, 1987 - Police defuse bomb

On April 15, police discovered a bomb located next to a crowded waiting room of main railway station in New Delhi and disarmed it. Sikh separatists are suspected to be behind the incident.

Israel - April 23, 1987 - Bomb found on Israeli bus

A bomb found on an Israeli bus in Tel Aviv was safely defused by police explosives experts. The incident coincided with a meeting in Algiers of the Palestine National Council.

Iraq - June 6, 1987 - 11 Turkish vehicles attacked

Kurdish dissidents attacked 11 Turkish vehicles in the Dehok District, located 60km from Turkey. All of the drivers of the vehicles were severely wounded in the attack.

Israel - June 16, 1987 - Man killed by bomb

In Tel Aviv a man was killed when the bomb he was trying to plant in an abandoned car detonated prematurely. A few hours later an explosive device was found and dismantled in a crowded bus station in the same vicinity.

Israel - July 3, 1987 - Bomb goes off on Israeli bus

A bomb went off on an Israeli bus in Jerusalem wounding two people.

Pakistan - July 5, 1987 - 3 bombings in Lahore

Three bombs exploded at different locations causing 6 deaths and at least 50 injuries. One bomb exploded at noon in a trash can on a railroad platform. A second bomb blasted a kiosk near a taxi stand just outside the station. The two bombs went off less than 10 minutes apart. A third explosion occurred at about 1 p.m. at the main bus station. The attacks coincided with the 10th anniversary of the coup that brought Zia to power.

Pakistan - August 10, 1987 - Bombs explode at bus station

Two bombs exploded at a bus station in Mardan, resulting in seven dead, 45 injured. Afghan agents are suspected.

El Salvador - August 11, 1987 - Guerrillas bomb bridge

In what is the ninth bridge hit in less than a month, communist guerrillas bombed Dado Marin Bridge near San Salvador August 11. This attack is the latest in an economic sabotage campaign being carried out by the guerrillas. The bombers came at about 2 a.m. and laid the explosives, which blew a large hole in center of the bridge. Since 1981, communist guerrillas have destroyed or seriously damaged 83 of 92 major bridges in the country.

Germany - September 1, 1987 - Bomb goes off on railroad tracks

A bomb went off on railroad tracks ten minutes before a U.S. military train was scheduled to be crossing that section of line. The military train was on a regular daily trip to West Berlin carrying personnel and supplies. Because the train was unexpectedly delayed, the bomb instead damaged a West German freight train and the tracks. No other injuries were caused. On November 11, 1989 two members of the PFLP-GC were convicted in connection with this bombing.

Germany - September 1, 1987 - Bomb misses U.S. military train

On September 1, a bomb slightly damaged a German freight train but missed a delayed U.S. military train that police said might have been its target. The trains were traveling on the Goettingen-Kassel line.

Pakistan - September 19, 1987 - Bomb at bus station kills five

A bomb at a bus station in Rawalpendi killed five and injured 16. This is another in a series of bombings in Pakistan which appear to have been carried out by Afghan agents.

Brazil - September 26, 1987 - Homemade bomb injures 11 people

A homemade bomb exploded during the evening rush hour on September 26 at a station some 10 miles from downtown Rio de Janeiro, injuring 11 people.

Pakistan - October 12, 1987 - Bomb goes off in bus terminal

A bomb went off in the main bus terminal of Peshawar, wounding 13 people and causing extensive damage to the building. The attack was blamed on Afghan's secret agents, and occurred at a time when security had been stepped up for the world cup cricket matches which were being held in Pakistan.

United States - November 10, 1987 - Bomb threat on bridge

On November 10, a telephone caller issued a bomb threat on Blanchette Memorial Bridge above Missouri River, Missouri. No bomb was found.

Pakistan - November 18, 1987 - Bomb explodes on bus

A bomb exploded on a bus near Peshawar, killing one person and injuring 19 others. Afghan agents have been blamed for the numerous bombings taking place in Pakistan this year.

United Kingdom - November 27, 1987 - Bomb disrupts rail service

On November 27, a 10-pound bomb exploded on a Belfast-Dublin railroad track, disrupting rail service. The bomb went off in a ditch as an Irish freight train was passing and just after 2 passenger trains had passed. The IRA claimed responsibility.

Pakistan - December 22, 1987 - Bomb discovered on railroad track

A bomb discovered hidden on a tie on a railroad track was rendered harmless.

Mozambique - December 31, 1987 - Attack on train kills 22 people

A train carrying some 1,500 migrant workers home from South Africa was attacked by guerrillas on December 31, resulting in 22 deaths and 71 injuries. (PS)

Pakistan - January 24, 1988 - Bomb goes off on bus

A bomb went off in a government-owned bus killing 10 and wounding 19 others. Afghan agents are being blamed.

Israel - March 7, 1988 - Members of Al Fatah hijack bus

Three members of Al Fatah crossed into Israel from Egypt and hijacked a bus, trying to bargain for the release of all Palestinian prisoners from Israeli jails. After the terrorists killed the sole male passenger on the bus, an anti-terrorist police squad assaulted the bus, and in so doing killed all three terrorists, as well as two female passengers on the bus. Fatah claimed to have conducted the attack in retaliation for the killing of three Fatah operatives in Cyprus in February, purportedly by Israeli agents.

Israel - March 11, 1988 - Car bomb discovered near bus station

A car bomb was discovered and safely defused near the central bus station in Jerusalem. Officials believe the aim of the terrorists was to carry out a major attack in a highly populated area in protest of the visit of U.S. Secretary of State George Shultz, who was staying at the nearby Hilton Hotel at the time.

Pakistan - March 15, 1988 - Agent of secret police caught planting bomb

An agent of the Afghan secret police was caught while planting a powerful bomb in a crowded bus station in Islamabad. The bomb was defused several minutes before it was set to explode.

Pakistan - April 11, 1988 - Bomb explodes on train

Two railway workers were killed and three injured when a bomb exploded in a train near Peshawar.

Iran - April 13, 1988 - Bomb discovered at bus terminal

A bomb discovered at a bus terminal in Teheran may have been placed by Iraqi agents.

Pakistan - April 16, 1988 - Bomb goes off at bus station

A bomb went off at a bus station in Charaadda, killing four and injuring 11.

Germany - April 27, 1988 - U.S. military train damaged by blast

A U.S. military train en route from Frankfurt to West Berlin was damaged by an explosion. The engineer of the train was slightly injured by the blast, and the locomotive and a section of track were damaged. On November 11, 1989 two members of the PFLP-GC (Hafez Dalkimoni and Abdel Ghadanfar) were convicted in connection with this bombing. Authorities believe Dalkimoni may also have been involved in the December 1988 bombing of Pan Am Flight 103 over Lockerbie.

Peru - July 19, 1988 - Bombing on railway track

On July 19, a bomb destroyed a small section of the Chosica-Lima railway track. A train carrying workers was halted midway, stopping before reaching the damaged track. The incident appeared to be related to a communist-led strike against government economic policy.

Pakistan - September 3, 1988 - Bomb goes off on train

A bomb went off on a train traveling between Islamabad and Peshawar killing three and wounding 13 others.

Pakistan - September 4, 1988 - Bomb explodes at train station

Five people were injured when a bomb exploded at a Karachi train station.

Sri Lanka - October 14, 1988 - Bomb destroys part of railway station

On October 14, a bomb blast destroyed part of Kadugannawa Railway Station and damaged some tracks. No one was injured in the incident. Police blamed the Sinhalese People's Liberation Front for the attack.

Peru - December 1, 1988 - Guerrillas sabotage a VIP-tourist train

Suspected Sendero Luminoso guerrillas sabotaged a VIP-tourist train between Cuzco and Machu Picchu, killing two women (including the wife of a New Jersey mayor) and wounding nine others.

Peru - December 22, 1988 - Shining Path bombs bridge

On December 22, Shining Path guerrillas detonated dynamite on a railroad bridge outside of Casapalca. No trains were near the area and no one was injured.

United Kingdom - 1988-1989 - More than 60 bombings disrupt rail service

During the years 1988-1989, more than 60 bomb threats and attacks were carried out on the Belfast-Dublin railway line.

Pakistan - February 5, 1989 - Bomb explodes at bus station

A bomb at a bus station in Quetta killed three and injured five others. Afghan agents were blamed.

Canada - April 7, 1989 - Gunman hijacks bus

A gunman of Lebanese descent hijacked a Greyhound bus en route to New York and forced it to drive to the Canadian parliament in Ottawa. The man claimed to be a member of the Lebanese Liberation Front and demanded that Syrian forces withdraw from Lebanon. The incident ended peacefully.

Spain - April 9, 1989 - Bombs explode at railroad tracks in Navarre region

Six bombs exploded beside railroad power line posts at Cioridia in Navarre region and two others damaged a transformer substation near Zuasti on April 9. ETA was blamed for the bombings, which did not cause any injuries.

India - April 19, 1989 - Train derails killing at least 67 people

An express train en route from Bangalore to Delhi was derailed near the town of Jhansi, in central India some 330 miles south of Delhi, killing at least 67 people and injuring 137 others. Sabotage has not been ruled out.

Czechoslovakia - April 26, 1989 Bomb explodes on international express train

No casualties were reported after a bomb exploded on an international express train traveling through Czechoslovakia. The explosion occurred in a rail car belonging to the Hungarian state railway.

Israel - April 30, 1989 - Bombing at bus stop

The Abu Musa organization claimed credit for bombing a bus stop two miles east of Tel Aviv.

Thailand / Malaysia - June 2, 1989 - Bomb explodes as train passes by

A bomb was detonated by remote control as a train neared the town of Narathiwat, some 700 miles south of Bangkok near the Thai-Malaysian border. Three people were injured and four passenger coaches and a mail car derailed as a result of the explosion. A note found near the scene claimed responsibility for Muslim separatist group Pulo Pattani.

China - June 26, 1989 - Explosion on train kills 20 people

An explosion in a toilet of a Hangzhou-Shanghai train killed some 20 people and injured 11 others. Dynamite had been put in the wash-basin, but it was not known whether this was a terrorist attack.

France - June 30, 1989 - Bomb explodes on railway line

The Basque separatist group Iparretarak claimed responsibility for the bombing of a Paris to Madrid railway line which stopped rail traffic for four hours.

Pakistan - July 4, 1989 - Bomb explodes on bus

The bombing of a bus in Peshawar was blamed on Afghan agents. Ten people were killed and another 29 injured by the blast which was the largest bombing in Pakistan in a year.

Israel - July 6, 1989 - Sixteen killed when bus was forced off road

An Israeli bus traveling between Tel Aviv and Jerusalem was forced off the road and into a ravine by a Moslem fundamentalist fanatic. Sixteen passengers were killed (including one American) and another 27 injured in the incident which sparked several retaliatory attacks.

Pakistan - July 17, 1989 - Afghan government accused of being part of bombing a bus station

The Afghan government was accused by the Pakistani government of involvement in the bombing of a bus station in Mardan and another at a railroad workers' housing area in Lahors which injured six people.

India - July 20, 1989 - Bombing kills 8 people

A time bomb exploded in Kokrajhar Railroad Station in Assam state, killing 8 people and injuring 22 others. Police suspected Bodo militants are behind the attack.

Spain - September 14, 1989 - France-Spain railway bombed

The France-Spain railway line was bombed by ETA. Traffic was temporarily halted.

Soviet Union - September 16, 1989 - Timed explosive kills five on bus

A timed explosive which had been placed on a bus near the Azerbaijani city of Evlak killed five people and wounded another 27. No group claimed responsibility.

Pakistan - September 18, 1989 - Bomb explodes on bus

Three people were killed and two others injured by a bomb explosion on a bus in Peshawar. The Afghan government was blamed.

Pakistan - October 10, 1989 - Bombing of bus terminal

Afghan agents were suspected of having bombed a bus terminal in Rawalpindi.

Egypt - February 4, 1990 - Israeli tour bus assaulted

Terrorists used automatic weapons and grenades to assault an Israeli tour bus near Cairo. Eleven people were killed and another 19 wounded in the well-planned attack. The Popular Front for the Liberation of Palestine-General Command (PFLP-GC) delivered a statement claiming that the Islamic Jihad had carried out the attack and calling the group the "heroes of our great Palestinian people." The Organization for the Defense of the Oppressed in Egypt's Prisons also claimed responsibility. More than 20 people were arrested.

Soviet Union - February 18, 1990 - Bomb explodes on bus

Fifteen people were injured when a bomb exploded on a bus traveling through disputed Azerbaijani territory.

Israel - March 2, 1990 - Bomb explodes at bus terminal

A bomb exploded at a bus terminal in Tel Aviv.

Pakistan - May 6, 1990 - Bomb explodes on express train

Afghan agents are suspected of having bombed an express train near Lahore, resulting in 11 fatalities and 35 injuries.

Jordan - May 21, 1990 - Palestinian opens fire on busload of French tourists

In retaliation for recent violence against Palestinians in the Gaza Strip, a Palestinian opened fire on a busload of French tourists in Amman, wounding ten people.

Israel - June 26, 1990 - Bomb explodes at bus stop

Two people were injured when a bomb exploded at a bus stop in West Jerusalem.

Spain - August 14, 1990 - ETA announces bombing against state railway

On August 13, ETA said it would set bombs along railroad lines, and on August 14 detonated a bomb along the Madrid-Valladolid-Leon-Gijon line.

United Kingdom - August 15, 1990 - Army defuse bomb

On August 15, army defused a 40-pound bomb on the Belfast-Dublin railroad line, after receiving a warning from the Irish Republican Army (IRA).

Spain - August 15-16, 1990 - Two bomb explosions

Two bombs exploded in two days against the state railway in a week-long ETA terror campaign.

Spain - August 20, 1990 - Railroad tracks near Leon bombed

On August 20, a fourth bomb in a week-long ETA terror campaign struck a railroad track near Leon, causing damage but no injuries.

Turkey / Iraq - September 10, 1990 - Bomb damages Saklan bridge

On September 10, a bomb damaged one of the lanes of the Saklan bridge, which connects Turkey and Iraq.

Israel - September 17, 1990 - Bomb explodes near central bus station

A bomb exploded near the central bus station in Tel Aviv.

South Africa - November 3, 1990 - 2 explosions cause railway damage

On November 3, two explosions seriously damaged railway lines and halted trains at Bloemfontein, but caused no injuries.

Israel - December 2, 1990 - Palestinian attacks bus

A Palestinian attack on a bus in Tel Aviv left one dead and three wounded. Anti-terrorist police killed one of the three assailants and injured the other two.

France - December 3, 1990 - Three incendiary devices went off along railway line

Three incendiary devices went off along a railway line frequented by U.S. military trains.

Israel - February 8, 1991 - Terrorists attack bus

Three terrorists infiltrated from Jordan and attacked a bus carrying soldiers on the Arava highway. The terrorists fired off a grenade inside of the bus before they were killed by gunfire from the soldiers. Four soldiers were injured.

Austria - February 9, 1991 - Stretch of track bombed

A stretch of track near Innsbruck used to transport U.S. tanks from Germany to the Persian Gulf was bombed, leaving a six-foot crater underneath the track. A second bomb was found nearby on a parallel track. Many Austrians have been angered by the moving of the tanks which they feel violates their country's neutrality.

United Kingdom - February 18, 1991 - PIRA claim responsibility for explosions

The PIRA claimed responsibility for two explosions in the Victoria and Paddington railway stations which killed one person and injured 43 others. Authorities were investigating a telephone threat which had been made against the transportation system when the rush-hour attacks occurred.

Soviet Union - February 24, 1991 - Civilians injured in terrorist attack

Several civilian passers-by were injured during an attack on a bus carrying Azerbaijanis in Shusha, Agdam. The attackers carried guns and explosives

United Kingdom - February 25, 1991 - PIRA suspected in railway bombing

The PIRA was suspected of having placed a bomb which blew up a portion of railway track near St. Albans, Hertfordshire.

Australia - March 1, 1991 - Bomb threat on subway station

A telephone caller told rail authorities that a bomb had been planted in the Eastern Suburb underground subway station. All services between Town Hall and Bondi Junction stations were canceled while authorities searched. Rail services resumed at 4 p.m. after a search discovered no bomb.

Greece - March 3, 1991 - November 17 claim responsibility for bus bombing

Four buses in two Athens suburbs were damaged by explosions. The November 17 group claimed responsibility. The attack was to support bus drivers who were striking to protest government plans to privatize the state-owned Greek Urban Bus Company.

Turkey - April 9, 1991 - Sabotaged bus kills 36 tourists

Sabotage of a Greek tourists bus in Istanbul resulted in the deaths of 36 tourists. Seven people were injured.

France - April 4, 1991 - German tour bus bombed

An incendiary device exploded underneath a German tourist coach parked outside a hotel in Corsica. The FLNC was suspected.

Peru - May 29, 1991 - Shining Path torches a railroad station

Shining Path guerrillas torched a railroad station near Lima on May 29.

Sri Lanka - June 27, 1991 - LTTE bomb tour bus

The LTTE detonated a bomb under a tourist bus, then opened fire on the passengers. Fourteen people were killed, including a Danish tourist, and nine others were injured.

Italy - July 6, 1991 - Spanish tour bus bombed

A Spanish tour bus exploded in central Rome after unidentified assailants threw an explosive device into it. ETA was believed to be responsible.

Soviet Union - July 31, 1991 - Passenger train bombed

A passenger train traveling between Moscow and Baku was bombed. Fourteen people were killed and sixteen injured in the attack. The bomb had been concealed in a briefcase and left in a reserved compartment.

Greece - August 10, 1991 - Tour bus set on fire

An empty Turkish tour bus was set on fire in downtown Athens.

Spain - August 17, 1991 - Bomb explodes on Madrid-Irun railway track

A bomb exploded on Madrid-Irun railway route, a major railroad that links Spain and France, causing an electricity pylon to fall across the track. A freight train collided with the pylon soon after the explosion. No one was injured. Basque separatists were suspected to be behind the attack.

United Kingdom - August 29, 1991 - Three bombs found in subway car

Three incendiary devices were discovered under a seat in a subway car in London. Officials suspect the PIRA.

India - September 6, 1991 - "Goodwill Train" Attacked

The "Goodwill Train" between India and Pakistan was attacked by Sikh extremists. A Pakistani woman was killed in the attack.

India - September 9, 1991 - "Goodwill Train" attacked again

Sikh extremists attacked the "Goodwill Train" that shuttles between India and Pakistan. The attack was the second in only a few days. Three Pakistanis were injured.

South Africa - October 24, 1991 - Train attack in Soweto

Gunmen killed at least nine people and injured 36 yesterday in an attack on a Soweto commuter train full of workers. The train attack is the second of its type in a week.

Pakistan - October 29, 1991 - Bandits attack train in Sind

Bandits believed to be on a robbery and/or kidnapping expedition opened fire the night of October 27 on an express train near Alahdadani in Sind province after failing to stop it by setting fire to wooden slats supporting the tracks. The bullets hit several of the train's coaches but there were no injuries.

Comment: Although no one was hurt in this latest incident, Sindi bandits have a long history of robbing trains and sometimes harming passengers gratuitously. Rail and road travel are best avoided in Sind province. Personnel should travel between cities by air.

Pakistan - October 30, 1991 - Four die when bandits fire on bus

Bandits opened fire on a passenger bus near Mirpur Mathelo in the southern province of Sind when the driver ignored the gang's orders to stop. Four passengers died and an unknown number were injured. Police later killed one of the bandits in a shoot-out.

India - November 2, 1991 - Six die in Assam bus bombing

At least six people died yesterday when a bomb exploded on a crowded bus as it was pulling into a station in the Assam state town of Barpeta. There were no immediate claims of responsibility, although suspicion focused on the terrorist United Liberation Front of Assam.

South Africa - November 5, 1991 - Bomb damages railway line as strike continues

A bomb blast damaged a railway line east of Johannesburg today, disrupting train service during the last day of a two-day strike to protest a new sales tax. No injuries were reported in the bombing, which police said was linked to the strike. At least 19 people died in strike-related violence November 3 and yesterday. An estimated 4 million South African blacks stayed away from their jobs during the work stoppage, which closed thousands of businesses, disrupted the transport system and emptied downtown Johannesburg.

India - November 11, 1991 - Bomb blast on train near Bombay

A bomb explosion late November 8 killed at least 12 people and injured some 60 aboard a commuter train about 50 miles northeast of Bombay. The crude device detonated in a first-class compartment just as the train pulled into the station in the town of Kalyan. Police were not immediately able to attribute responsibility for the attack.

South Africa - November 15, 1991 - Man killed in South African train attack

A man was shot and hacked to death and seven other people wounded in an attack today aboard a packed South African commuter train. A police spokesman said the body of the butchered man, with bullet and slash wounds, was tossed onto the tracks. Two wounded passengers were rescued from the rails after flinging themselves from the train. Three men were arrested and guns and cane-cutting knives with long blades were seized.

United Kingdom - December 16, 1991 - Bomb explodes at rail station

A small bomb exploded just before 6 a.m. near Clapham Junction, the busiest station in South London. A caller to a television station claiming to be a member of the IRA warned that a bomb had been placed at one of London's main rail terminals, but did not say which station. All main British Rail depots in London and some Underground stations were closed and searched. Incendiary devices were discovered on a London commuter train.

United Kingdom - December 23, 1991 - Incendiary devices discovered on Commuter train

For the second Monday in a row, London's transportation network was brought to a halt by small incendiary devices hidden in commuter trains. Very little damage was caused by the devices, and there were no reported injuries, however, the entire 254-mile subway network was shut down for several hours while searches were conducted.

United Kingdom - December 28, 1991 - IRA bombs railroad to end cease-fire

On December 28, the Irish Republican Army (IRA) set off bombs on Belfast to Dublin railway tracks just three minutes after the end of its Christmas 1991 cease-fire. No one was injured in the blast, but the train service was disrupted.

Italy - January 6, 1992 - Time bomb aimed at mass casualty explodes

On January 6, a time bomb exploded just before an express train with at least 1,100 passengers on board passed over the location of the explosion. A massacre was avoided because train left Lecce station 2 minutes behind schedule. The explosion blew a 3-foot hole in the middle of the track and damaged one of the rails but left the other intact.

India - January 18, 1992 - Bomb kills eight, train derailed

Suspected Sikh militants exploded a bomb at a market in the town of Samana, near Amritsar, killing eight people. An explosion at the nearby

Golwar railway station derailed a train and injured seven. The attacks may mark the beginning of a stepped-up Sikh militant campaign before provincial elections are held on February 19.

United Kingdom - January 29, 1992 - IRA bomb causes Belfast train chaos

The Irish Republican Army (IRA) plunged Belfast rail travel into chaos today with a bomb blast on the track near the city's central station. The IRA admitted responsibility for the blast and then warned that other bombs had been planted along the line. Railways have become favorite IRA targets this year with attacks on lines in Belfast, Londonderry, and near the province's border with the Irish Republic.

India - January 30, 1992 - Bomb explodes on New Delhi bus

A bomb exploded in a bus near Delhi University in the old part of the city yesterday, killing one and injuring 26. Police believe militant Sikhs campaigning for independence in Punjab state planted the timer-activated explosive, which was hidden in a bag of cereal.

United Kingdom - January 30, 1992 - Unexploded firebomb

Cleaners found an unexploded firebomb at about 1:30 a.m. today under the seat of a subway train at the Elephant and Castle depot in London. Some commuter services were disrupted this morning while police searched for more devices. Police said the device, similar to others set by the Irish Republican Army, may have been there for 24 hours.

Pakistan - February 5, 1992 - Bandits attack train near Larkana, abduct passengers

About 50 bandits firing rockets and automatic weapons attacked a train at a station near Larkana in Sind province February 4, killing one of its eight-strong police guard and abducting 50 passengers. The bandits, known as dacoits, later released 32 of the hostages before escaping with the remainder into the forest along the Indus River.

Comment: The area between Larkana and Dadu is one of Sind's worst for banditry. Larkana district -- site of the Moenjodaro ruins and once a popular tourist destination -- should be avoided. All travel in Sind province outside Karachi is perilous and requires a security escort.

United Kingdom - February 7, 1992 - Incendiary device on east London track

An incendiary device ignited this morning on a subway track at Barking in east London, causing minimal damage and no injuries. Some rush-hour train services were delayed by security checks following the firebombing. The incendiary device was similar to others used in recent attacks in London and other British cities by the Irish Republican Army (IRA).

India - February 8, 1992 - Six die, 50 hurt in train blast

A bomb exploded on a train traveling from Punjab State to New Delhi today, killing six people and injuring at least 50. The explosion occurred as the train was passing the town of Narwana in Haryana State. Police suspect Sikh militants planted the explosive device.

Peru - February 10, 1992 - Lima bombing wave

Maoist Shining Path (Spanish initials: SL) guerrillas killed at least two people and wounded 35 during a wave of bombings in Lima on February 7. One of the bombs, placed near the door of the National Superintendency of Tax Administration, detonated as a bus passed, killing the driver and wounding 28 passengers and passersby. Three employees were also hurt. The building is located just 50 yards from the U.S. Embassy. Another bomb went off at the offices of the National Institute of Public Administration, killing one of the SL guerrillas who planted the explosive and wounding four others. Bombs also exploded at five banks in Lima, and SL dynamited three electrical pylons, blacking out most of the city.

Guatemala - February 11, 1992 - Gunmen kill five on bus on southern highway

Armed men wearing military-style uniforms stopped a bus on a southern Guatemalan highway in Solola department February 9 and opened fire on passengers at random. Five people were killed and 15 wounded in the attack, which the Guatemalan interior minister said may have involved security forces. Defense Minister Jose Garcia Samayoa insisted, however, that leftist rebels are the prime suspects. The shootings took place days before U.S. Defense Secretary Dick Cheney and U.N. human rights expert Christian Tomouschat are due to arrive in Guatemala City.

China - February 21, 1992 - Muslim separatists blow up bus in Xinjiang

Muslim separatists in the northwestern Chinese region of Xinjiang have set off a time bomb in a bus, killing perhaps as many as six people and injuring 20 more. The attack took place in Urumqi, capital of Xinjiang, on February 5, but reports of the incident did not become public until yesterday. There were

also reports that another bomb went off in a bus terminal in Urumqi. Xinjiang is a vast desert region whose 15 million people are divided between Muslim Turkic speakers, many of whom want to break away from China, and ethnic Chinese.

Jamaica - February 24, 1992 - More than 12 killed in gang violence

More than 12 people have been killed so far in February in gang-related violence in Kingston's western slums. Because of the battles in the West Kingston and Lower St. Andrew neighborhoods, a curfew has been imposed in some neighborhoods and many markets and shops closed. The fighting, linked to a power struggle among well-armed drug gangs, or "posses," has not affected areas that foreigners usually frequent, such as New Kingston and the downtown. The gang war started in early February when drug kingpin Mark Coke was gunned down in West Kingston. Security forces have been deployed throughout the western suburbs to prevent new gang violence. Several bus routes were modified to avoid areas where gunmen have attacked buses, and the Kingston Public Hospital-Victoria Jubilee Hospital complex was shut down on February 21 after receiving bomb threats.

Kenya - February 27, 1992 - Tour groups attacked

Bandits posing as police officers attacked a tour bus on its way from Mombasa airport to the Watamu beach resort on February 25, killing a Kenyan tour guide and robbing a group of 11 Austrian tourists. The attack comes a day after seven British tourists were beaten and robbed in the Masai Mara wildlife reserve.

Greece - February 28, 1992 - ELA claims police bus bombing

The leftist Revolutionary Popular Struggle (Greek acronym: ELA) terrorist group yesterday took responsibility for the February 26 morning blast in Athens that injured 15 riot policemen in a bus and a civilian passerby. The bomb, apparently constructed with TNT explosive, was hidden in a canister magnetically attached to a traffic light pole. The device was detonated by remote-control when the bus stopped at the traffic light. One policeman injured in the blast is expected to lose vision in one eye, and the wounded civilian is expected to lose one leg below the knee. The ELA communique, delivered to the Athens newspaper Ethnos, also announced that the group had merged with the allied May 1 group in October. Because of the modus operandi of the attack, police initially blamed it on the November Seventeen (N-17) group, which has a more lethal history than ELA.

United Kingdom - February 28, 1992 - At least 25 wounded in London subway blast

At least 25 people were injured, two of them seriously, when a bomb exploded during rush hour this morning at the London Bridge subway station. The bomb exploded in a toilet on one of the platforms at the station, located in London's financial district, as hundreds of passengers got off a train. A suspected member of the Irish Republican Army (IRA) phoned in a warning about the bomb to a Northern Ireland television station just minutes before it went off, giving authorities no time to evacuate the underground system. All subway stations were closed after the blast and security measures backed up highway traffic from London to Heathrow airport.

United Kingdom - March 1, 1992 - Bomb hoaxes delay peace trains

Trains carrying more than 1,000 Irish peace campaigners traveling to Northern Ireland to protest against terrorist violence there were delayed because of warnings that bombs had been planted on the railway line. The travelers were heading for Belfast, Northern Ireland for a symbolic shopping spree in defiance of the efforts by the Northern Ireland terrorist organization Irish Republic Army (IRA) to disrupt Belfast's retail operations through a wave of bombings. The trains were able to resume their travel to Belfast after three hours when the police declared that the bomb warnings were hoaxes.

United Kingdom - March 2, 1992 - Three IRA bombs over weekend

At least three suspected Irish Republican Army (IRA) explosive devices were discovered over the weekend in London. One bomb containing two pounds of plastic explosive went off on Furnival Street on February 29 near the Old Bailey, the principal London courthouse, slightly injuring a woman passerby and breaking windows at a Burger King restaurant across the street. The blast came as the area was being evacuated due to an IRA bomb warning. Bomb threats over the weekend forced police to close streets and subways leading to Oxford Street and Regent Street in London's busiest shopping district, but no device was found there. Yesterday afternoon, a rail passenger spotted a bomb on train tracks at White Hart Lane station in northern London's Tottenham district. Police defused the device hours before thousands of soccer fans were to arrive at the station for a soccer match. The injury toll from a bomb February 28 at the London Bridge subway station was raised to 28. The IRA later announced that it planned more violence to influence British national elections.

United Kingdom - March 10, 1992 - Bombing near train station

On March 10, a small bomb exploded along tracks near Wandsworth Common Station in south London, causing major disruption in rail and

subway services. The explosion destroyed signals, slowed trains southwest of the capital and at Victoria Station, but did not cause any injuries. All services were halted at other stations following other hoax bomb warnings following the incident.

Malaysia / Thailand - March 11, 1992 - Travelers injured in bus attack in southern Thailand

Five Singaporean passengers were injured by flying glass yesterday when the bus they were traveling in was fired on near the Thai-Malay border. The assailants reportedly left a note at the scene giving the bus company 10 days to pay protection money or risk further attacks. The bus, carrying Singaporean and Malaysian tourists returning home from Thailand, was en route to the town of Hat Yai. Police have described the incident as the work of "insurgents."

Greece / Germany - March 26, 1992 - Bombs hit train carrying BMW cars

Two time bombs exploded yesterday inside a freight train stopped at the suburban Athens train station of Ath Rendis. The blasts, which destroyed two automobiles in a shipment of German-made BMWs on the train, were preceded by an anonymous warning call to the station. The Greek ultra-leftist terrorist group November Seventeen and the affiliated "Popular Uprising" cell have claimed responsibility for several attacks against German corporate targets in the last year.

Russia - March 27, 1992 - Bus Hijacked

A bus in the town of Lermontov was commandeered by hijackers armed with submachine guns and grenades to the airport at Mineralnye Vody, South of Moscow, where the group demanded a flight to Iraq. The three hijackers released their hostages after winning freedom for two imprisoned burglars and safe passage to a separatist region.

Argentina - April 1, 1992 - Bomb on train line

A bomb exploded on the Roca railway line in the Lanus district of southern Buenos Aires yesterday. The bomb caused slight damage to the rails and interrupted train service. The blast was later linked to an ongoing strike by Argentine rail workers. In addition to the bomb on the train line, the home of a non-striking motorman was hit by a Molotov cocktail yesterday. Buenos Aires police officers are boarding trains to provide security.

Peru - April 2, 1992 - SL attacks train near Bolivia border

About a dozen Maoist Shining Path (Spanish initials: SL) terrorists attacked a train in Puno department near the Bolivian border March 31, killing a railroad official and wounding four other people. One of the wounded was the son of the railroad official and the other three were policemen providing security on the National Railroad train, which was traveling to the town of Juliaca, about 450 miles southeast of Lima.

Kenya - April 3, 1992 - Explosion at train station

An explosion was reported April 1 in an unused toilet located about 50 yards from Nairobi's main rail station. The unexplained blast caused no injuries and minor damage.

Malaysia - April 17, 1992 - Rail lines sabotaged

Unidentified saboteurs removed rail retaining pins on tracks near the town of Sedenak in Johor state in an attempt to derail a train carrying 600 passengers yesterday. However, an alert engineer averted the derauling by stopping the locomotive in time. The incident was reportedly the fourth attempt at rail sabotage in the country in recent days.

Pakistan - April 29, 1992 - Ten die in Sind train attack

Bandits fired on a passenger train with small arms and rockets near Hyderabad in central Sind province on April 27, killing 10 passengers and injuring at least 30. The train's locomotive was hit by two rockets, but the bandits failed to stop it.

Taiwan - May 4, 1992 - Spate of bomb hoaxes

A spate of bomb hoaxes has hit Taiwan: two department stores, a public housing project in Taipei, and a bus and a train station in the southern city of Kaohsiung received false telephone warnings that bombs had been planted on their premises.

United Kingdom - May 8, 1992 - Victoria Station in London evacuated for bomb search

Police evacuated London's central Victoria Station, one of the British capital's busiest train and Underground railway stations, due to a bomb alert during this morning's rush hour. Police gave no reason for the alert. The Irish Republican Army (IRA) has staged several bombings, and numerous waves of telephoned bomb hoaxes, in London this year.

Israel - May 12, 1992 - PLO bomb bus station

The Popular Front for the Liberation of Palestine detonated a bomb at a bus station which resulted in casualties.

Kuwait - May 20, 1992 - Gunmen attack Romanian circus performers

A bus carrying 20 Romanian circus performers was attacked yesterday in Kuwait City by four gunmen wielding automatic weapons. Two circus performers were injured in the attack. The attack follows reports that one of the tents belonging to the circus was set on fire last week. It is not clear who was behind the attacks.

Russia - May 21, 1992 - Terrorists bomb railroad station

Suspected Palestinian terrorists bombed a Moskoviski railroad station in St. Petersburg, killing one and injuring 12 others. The bomb was placed in a trash can near the ticket office, outside the station.

Peru - May 22, 1992 - SL ambush in Upper Huallaga kills 10, wounds 21

Guerrillas of the Maoist Shining Path (Spanish initials: SL) movement yesterday ambushed an army patrol on a jungle highway near Las Vegas-Garganta del Diablo in the Upper Huallaga Valley and then shot at a passing bus, killing 10 people and wounding 21 others. Ten guerrillas were also reportedly killed in the clash, which took place some 200 miles northeast of Lima and started when more than 100 SL guerrillas intercepted a military truck on patrol. Guerrillas armed with high-powered weapons killed five soldiers and wounded five others in the truck. In the course of the shootout, a bus carrying some 50 passengers appeared. The guerrillas, apparently thinking the second vehicle was also carrying military personnel, shot at the bus, killing five civilians and wounding 16 others.

Peru - May 29, 1992 - Bus held up in Bolivia near Peruvian border

A passenger bus traveling from La Paz to Puerto Acosta on the north shore of Lake Titicaca, close to the border with Peru, was held up by hooded individuals May 26. The bus was forced to stop by rocks placed in the road. Hooded individuals, armed with submachine guns and wearing pieces of military uniform, shot the bus driver in the leg and robbed the passengers. Passengers said the robbers might have been Peruvians from their accents and the names they called each other, and one man thought they could be members of the Peruvian guerrilla group, the Maoist Shining Path.

Pakistan - June 5, 1992 - Two killed in bus attack as troops begin patrolling Karachi

Two people were killed and 24 wounded June 4 when gunmen sprayed bullets and tossed a bomb at a bus in the crowded Kharadar area of Karachi. Troops began patrolling the streets of Karachi as part of the continuing crackdown in the southern province of Sind.

United Kingdom - June 11, 1992 - London "tube" hit by IRA bomb hoaxes

A security alert caused chaos on the London underground train system on June 11, delaying at least a quarter of a million commuters heading home from work. The network reopened after searches of four of the capital's busiest stations prompted by bomb scares at about 5:45 p.m. The search caused a near-total shutdown of the underground network, known locally as "the tube." The Irish Republican Army (IRA), which has staged several bombings in London in recent months, often follows attacks with the tactic of bogus bomb warnings timed to draw publicity and cause maximum economic disruption.

United Kingdom - June 16, 1992 - PIRA bombing

In central London two PIRA members forced a taxi driver to drive to a selected spot, left two explosives in the back seat, and told the cabdriver he had 15 minutes to get away. The explosion caused property damage but no injuries.

Panama - June 17, 1992 - Bus hijackings near Colon

Eight buses have reportedly been hijacked in the Colon area of Panama by people claiming to represent the amorphous December 20 Movement (Spanish initials: M-20). The hijackers reportedly boarded the buses traveling between Panama City and Colon, forced drivers to divert the vehicles to isolated areas, and robbed passengers. Four recent hijackers claimed they were stealing to get money to purchase weapons.

Bangladesh - June 26, 1992 - Strikers throw firebomb into bus, injuring passengers

More than 20 people were injured on the night of June 25 when striking transport workers threw a firebomb into a bus in Dhaka. The strikers want a law allowing murder charges to be brought against drivers involved in road accidents to be abolished.

Cambodia - July 8, 1992 - Seven die in bandit bus ambush

At least seven people were killed and two wounded July 6 when 15 bandits attacked a bus on Route 13 between Stung Treng City and Kratie, in Northern Stung Treng province 170 miles north of the capital. A United Nations peacekeeping official said the bandits could have been "uncontrolled soldiers", adding that, in the early stages of the U.N.'s disarmament plan, discipline among the fighters of all four Cambodian factions was becoming lax.

Egypt - July 14, 1992 - French tour bus fire bombed

Islamic fundamentalists threw Molotov cocktails at a bus carrying French tourists. The French tour guide was injured.

Chile - July 15, 1992 - Rebels torch Santiago buses

Two buses were destroyed in a terrorist attack carried out on July 13 by suspected members of the Manuel Rodriguez Patriotic Front (Spanish initials: FPMR). Four individuals entered the Villa Naciones Unidas bus station in the capital's central station district and threatened the bus drivers with machine guns. The assailants machine-gunned the buses, which caught fire, and then fled.

Peru - July 24, 1992 - 2 tourists killed

Two tourists, a German and a Colombian, were singled out and executed July 22 when a bus in which they were traveling was intercepted by suspected SL militants in the central Peruvian Andes.

Argentina - July 28, 1992 - Bomb defused on Mitre rail line

Police defused explosives planted on a Mitre rail line near Villa Gobernador Galvez in Santa Fe province on July 21, 15 minutes before a passenger train passed the spot. Warned by an anonymous telephone caller, police asked railway officials to delay departure of a Buenos Aires-bound train while they defused the explosives. They found three M5-type grenades and 1.5 kilograms of TNT on the rails.

Russia - August 10, 1992 - Bandits rob passenger train

Some 50 bandits halted a Tbilisi-Moscow train near Gali Rayon on the night of August 8 and robbed passengers. Hours later a Tbilisi-Sochi passenger train came under attack. The same night a bomb destroyed a rail bridge support in Poti, interrupting rail traffic. There have been a rash of train robberies and railroad sabotage in recent weeks. The Georgian government blames militant supporters of ousted president Zviad Gamsakhurdia and

criminal gangs for the incidents, which have caused hundreds of thousands of dollars in damage.

Pakistan - August 19, 1992 - Trains searched for bombs

On August 18, government troops searched trains in Karachi after the City and Cantonment railway stations received a telephone threat. Passengers from six trains were forced to disembark while the searches were conducted. No explosive devices were found and police said the threat was a hoax. The threat came a day after three navy personnel were killed and forty-three injured in a bomb blast near a navy base in Karachi.

South Africa - August 19, 1992 - Soweto train attack, one dead

One man was killed and five wounded in another Soweto commuter train attack. The incident occurred early August 19 when unidentified men opened fire on commuters boarding a train at Nancefield station, in the Johannesburg township of Soweto. Later, shots were fired in the moving train. The dead and wounded were removed at the next station. The assailants apparently escaped.

Egypt - August 26, 1992 - Tourist bus attacked in Qena

Muslim militants threw two crude incendiary bombs at a bus carrying French tourists August 21 in Upper Egypt's Qena governate. The Egyptian driver and tour guide were injured by broken glass, but none of the tourists was injured. The incident is the latest of several recent attacks by Muslim fundamentalists against tourists in Upper Egypt.

Philippines - August 27, 1992 - Bus attacked and burned

Unidentified assailants stopped a bus en route to Mati, Davao Oriental province, on August 23, burning the bus and its contents after removing the passengers. The passengers were not hurt or robbed but their belongings burned with the bus. The company that operates the bus line said it had promptly paid its "revolutionary taxes" to both the New People's Army (NPA) and the Muslim Moro National Liberation Front (MNLF) and knew of no reason for the attack.

United Kingdom - August 28, 1992 - IRA bomb hits Belfast train

A three-car suburban train was severely damaged in an Irish Republican Army (IRA) bomb attack in south Belfast on August 20. At 3:40 p.m. the train stopped at Finaghy Station. Two men, one of them armed, left the bomb in the guard's van and raised the alarm. The train's passengers were led to safety and 30 minutes later the bomb exploded. The guard's van was

destroyed and the total damage is estimated at around \$250,000. Train services were disrupted but by early evening were back to normal.

United Kingdom - August 28, 1992 - IRA bomb threat halts London trains

Police reopened five of London's mainline railway stations August 20 after a coded bomb warning brought the capital's transport system virtually to a halt. Thousands of commuters faced an evening of chaos after a radio station received a bomb warning from the Irish Republican Army (IRA). Police cordoned off King's Cross railway station and crowds were stranded at Victoria. London's Underground rail system was also stalled after subway lines passing through the mainline stations were also shut down. Police said all stations, including St. Pancras, Charing Cross and London Bridge were reopened after officers and sniffer dogs searched the stations for more than four hours. No devices were found.

Turkey - September 1, 1992 - PKK attacks multinational oil storage facility, derails passenger train

Guerrillas of the Kurdish Workers Party (Kurdish initials: PKK) set fire August 30 to eight crude oil storage tanks owned by the Royal Dutch Shell subsidiary N.V. Turkse Shell. The attack took place in the southeastern town of Kocakoy, 20 miles from the provincial capital of Diyarbakir. The fire caused extensive damage to the facility, but there were no reports of injuries. In a separate incident, PKK guerrillas derailed a passenger train traveling from Mus to the eastern city of Elazig, seriously injuring four travelers on board.

Turkey - September 1, 1992 - One killed on Istanbul bus

A teenage gunman was shot dead by security forces after killing a bus passenger when his identity was challenged by a bus driver August 31. The 19-year-old man ordered the bus to stop in the business district of Maslak after a quarrel with the driver over his identity. He opened fire before getting off the bus, killing a woman and wounding another passenger and the driver. Istanbul officials said the attacker was a member of the Dev Sol (Revolutionary Left) terrorist organization.

Turkey - September 8, 1992 - PKK attacks train, robs motorists at roadblock

Guerrillas of the Kurdish Workers Party (Kurdish initials: PKK) seized a passenger train today after it stopped at the Gecit station, east of the city of Erzincan, killing one soldier, abducting another and terrorizing passengers. A separate band of rebels set up a roadblock on the main highway between the

eastern cities of Erzincan and Erzurum, robbing passengers at gunpoint and setting fire to two trucks.

Chile - September 11, 1992 - Leftist groups active before anniversary

Leftist terrorists have been active in the lead-up to the September 11 anniversary of the 1973 coup that ousted Socialist President Salvador Allende. On September 10, three police guarding the house of a government official were shot to death by terrorists in a moving taxi in the upscale eastern neighborhood of Las Condes. One attacker also died during the shoot-out, initiated by a woman pretending to carry a baby who got out of a taxi and began spraying the police car with automatic rifle fire. The assailants escaped in the taxi, which they later abandoned along with the body of the guerrilla shot by the policemen. On the night of September 9, three bombs exploded in Santiago at offices of the center-right National Renewal party, a subway station, and a suburban municipal building. None of the off-hours explosions caused injuries. A previously unknown group calling itself the Subversive Coordination for a Popular Fatherland claimed responsibility for all three bombings. The group may be related to the Guerrilla Army of the Poor-Free Fatherland Movement.

India - September 29, 1992 - Bomb on bus kills six in Punjab

Six passengers were killed and more than 50 were injured September 28 when a bomb exploded aboard a crowded bus as it left the city of Pathankot, northwest of Amritsar in Punjab state, en route to Jammu in the state of Jammu-Kashmir. Sikh militants have been blamed for the blast, which blew the roof off the bus.

Turkey - October 2, 1992 - Bomb at Istanbul's train station

A bomb exploded at midnight October 1 at Istanbul's main Haydarpasa train station, causing damage but no injuries. The bomb reportedly detonated in an empty train car.

Egypt - October 6, 1992 - Bomb explodes on train in Dayrut

A bomb exploded on a passenger train near the heavily guarded Dayrut station October 6, killing three Egyptians and wounding ten. Authorities said it is unclear whether the train, which was traveling from Asyut to Cairo, was the target or whether someone was attempting to throw the bomb into the station. Last month, unknown assailants hurled a bomb from a passing train at a police station in Dayrut, which is 50 miles north of Asyut. The militant Muslim fundamentalist group al-Gamya al-Islamiya (The Islamic Groups) has killed more than 60 people in attacks on the security forces and Christians in and around Asyut this year. Last month the group warned tourists against

trips to historic Luxor; on October 1 suspected Muslim gunmen fired on a Nile cruiser headed to Luxor.

United Kingdom - October 9, 1992 - IRA bombers strike again in London

The Irish Republican Army (IRA) exploded two bombs under cars parked near railway stations late October 8, just hours after claiming two explosions October 7 in the theater district. The first blast at 9:30 p.m. outside the popular London Dungeon horror museum, adjacent to London Bridge station, slightly injured a passerby; a second bomb exploded 70 minutes later near Marylebone station in northwest London. The recent bombings, among a dozen staged by the IRA in London this year, are aimed at disrupting night life and embarrassing the ruling Conservative Party, which is holding its annual conference this week in Brighton.

United Kingdom - October 13, 1992 - IRA continues London campaign

The Irish Republican Army (IRA) staged four bombings over the October 10-11 weekend in a campaign of intimidation that has resulted in eight explosions in central London in less than a week. On the night of October 9, a bomb detonated in a parking lot outside the British Legion Club, a hangout for retired servicemen, and a second detonated near the Arnos Grove subway station. On October 10, IRA bombers set off a device in a telephone booth outside the Metropole Hotel and close to a police station, injuring one person. And at lunchtime October 11, a blast wrecked a restroom in the Sussex Arms, a pub in the Covent Garden district, and injured five persons, two seriously. The IRA had made a warning call shortly before the explosion but misdirected police to the Leicester Square district; the tourist-packed area was being evacuated when the device exploded on adjoining Long Acre street.

India - October 14, 1992 - Train bombing in Assam kills 25

Two bombs exploded five minutes apart October 13 in two separate compartments of a passenger train crossing the Barpeta district of northeastern India's Assam state. The blasts killed 25 people and wounded at least 50. Police suspect the bombs were planted by the Bodo Security Force (BSF), a tribal movement in Assam that demands a separate state within India for the animist Bodo people. The BSF is a rival of the Maoist United Liberation Front of Assam (ULFA), which seeks total independence from India.

Colombia - October 15, 1992 - Rebel threats halt buses

Two bus companies October 13 suspended intercity transport between Bogota and Atlantic coast destinations. There is also no bus service to Barrancabermeja, Santander department, and Cucuta, Norte de Santander department. The company decision, which has inconvenienced tens of

thousands of bus passengers, comes as a result of guerrilla threats. One guerrilla communique demanded the suspension of ground, air and water transportation from October 7-14. Another guerrilla communique told bus companies to suspend operations from October 13-16.

Cambodia - October 15, 1992 - Khmer Rouge destroys two bridges

According to United Nations peacekeeping forces in Cambodia, the Maoist guerrillas of the Khmer Rouge on October 14 blew up the Bailey Bridge, 80 miles north of Phnom Penh on the strategic Route 6 highway. The bridge is the main link between southern Cambodia and the central part of the country. A smaller bridge 30 miles southeast of Kompong Thom on Route 21 was also destroyed October 14. The Khmer Rouge has denied any knowledge of the incidents. The destruction of the bridges has caused an uproar in Cambodia because it came only hours after the U.N. publicly warned the Khmer Rouge to abide by the Cambodian peace agreement. If the Bailey Bridge was in fact destroyed by the Khmer Rouge, the attack would be the nearest military action to Phnom Penh by the Maoists in several years. Not coincidentally, according to U.N. observers, the bridges were blown up the same day as the return to Cambodia from New York of Prince Sihanouk and Yasushi Akashi, the Japanese diplomat who heads the local U.N. task force.

Turkey - October 16, 1992 - Seven kidnapped from minibus

On October 8, suspected Kurdish Workers Party (Kurdish initials: PKK) guerrillas stopped a minibus between the villages of Yarimca and Kasimli in Siirt province's Baykan district and forced the passengers off the bus. The guerrillas then set the vehicle on fire and kidnapped the seven passengers. Security forces are searching for the victims.

United Kingdom - October 20, 1992 - IRA bombs train line in Belfast

An Irish Republican Army (IRA) bombing October 20 ripped up railway track between Belfast's central station and suburbs to the south. The blast halted most trains into the city; buses ferried commuters to work. The IRA often targets the rail network for bombings.

United Kingdom - October 21, 1992 - PIRA bomb railway

A PIRA bomb went off on a railway line under Harrow Road Bridge in London.

Egypt - October 21, 1992 - Machine-gun attack on tour bus

El Gama'a el-Islamiya claimed credit for a machine-gun attack on a tour bus. One British female was killed and two men injured. El Gama'a claimed responsibility.

Turkey - October 21, 1992 - PKK kills 18 in bus attack

Rebels of the Kurdish Workers Party (Kurdish initials: PKK) killed 18 people in southeastern Turkey on October 20 when they strafed a bus with automatic weapons and set fire to the vehicle. Six other passengers were critically wounded and the death toll could rise. The bus was attacked around 5.50 p.m. as it traveled from Bingol to Solhan.

United States - October 22, 1992 - Hand grenade discovered at a rail platform

On October 22, up to a dozen trains were stopped during the morning rush hour after a maintenance worker found a grenade with the pin still in place at a commuter railway station in south side Chicago. Police removed the explosive.

United Kingdom - October 22, 1992 - IRA bombs London rail lines, army base

The Irish Republican Army (IRA) detonated three bombs in London October 21, the 13th blast in the capital in two weeks. Employing a tactic it has used with crippling effect in Northern Ireland, the IRA detonated a device on a rail track in the north London suburb of Edmonton mid-afternoon October 21, damaging a passing commuter train and slightly injuring three passengers. Later that evening, a device detonated at an army base in Hammersmith, causing extensive damage and wounding three people. An hour later, a third explosion ripped up tracks in north London. Authorities are asking the public to be vigilant but to go about their normal business. However, Londoners had a nightmare commute the morning of October 22 as bomb alerts closed mainline rail stations while police searched for more explosives. Republican sources claim the bombings this month are a precursor to a pre-Christmas bombing campaign intended to shake up the beleaguered Conservative government, which is under heavy fire for economic mismanagement.

Egypt - October 22, 1992 - Al-Gamya attacks tourist bus in Dayrut, 1 Briton killed, 2 injured

The Muslim fundamentalist al-Gamya al-Islamiya (The Islamic Groups) ambushed a tourist bus October 21 near the town of Dayrut, 170 miles south of Cairo, killing a British tourist and wounding two other Britons. The attack began about 3 p.m. when a boy standing watch whistled to alert al-Gamya gunmen of the approaching bus -- a safari-type vehicle owned by the South Sinai Tour Company and carrying six Britons, two Australians and a Portuguese. When the bus came within range, the two gunmen emerged from

fields on both sides of the road and opened fire. It was the first time fundamentalists had killed a foreigner.

Egypt - October 26, 1992 - Al-Gamya attacks tourists

In claiming responsibility for the October 21 attack against a tourist bus in Dayrut, the militant Muslim fundamentalist group al-Gamya al-Islamiya (The Islamic Groups) stated: "Tourists are our second target after high-level political leaders in the bid to implement Islamic law in Egypt." Following that warning, on October 23 five suspected fundamentalist gunmen fired on a Nile cruiser carrying foreign tourists as the ship neared the town of Nagaa Hammadi, 280 miles south of Cairo in Qena governate. No injuries were reported in the attack. On October 25, three Russian tourists were attacked by a knife-wielding fundamentalist as they photographed a mosque in Port Said. All three tourists suffered stab wounds and were hospitalized.

Turkey - October 26, 1992 - Passenger train hits PKK mine, plunges into river

A passenger train traveling between the eastern cities of Tatvan and Elazig hit a mine October 25 planted by the Kurdish Workers Party (Kurdish initials: PKK) and plunged into the Murat river. At least three people were killed and 47 injured.

Egypt - November 1, 1992 - Militants attack Christian bus

Three gunmen suspected of belonging to the militant fundamentalist al-Gamya al-Islamiya (The Islamic Groups) fired on a bus carrying Coptic Christians on November 1, wounding 10 people. The attack took place in Deir Mawas, 170 miles south of Cairo in Asyut governate, not far from the site where al-Gamya gunmen attacked a tourist bus October 21.

Colombia - November 3, 1992 - Bus hijacking affecting multinational

Two hooded and armed men hijacked a bus contracted by a multinational company in Bogota on October 20 and set fire to the vehicle. The hijackers boarded the bus by mixing in with the crowd of employees waiting at a downtown pick-up spot. Forty employees of the multinational were on the bus, but all of them were set free. The armed men forced the bus company's driver to take the vehicle to a university in Bogota, where the fire was started. The fire was extinguished without causing serious damage. The attack came as leftists -- some of them linked to guerrilla groups -- set fire to dozens of buses around Colombia as part of an October offensive against the government.

Sri Lanka - November 19, 1992 - LTTE bombs bridge

LTTE guerrillas bombed a bridge on November 19.

Egypt - November 12, 1992 - Terrorist fire on German tour bus

Islamic fundamentalists opened fire on a convoy of tourist buses in Qena, injuring eight German tourists.

Peru - November 20, 1992 - Second day of armed strike includes bomb at airport

The Shining Path guerrilla movement continued its "armed strike" in the Peruvian capital for a second day November 19, killing at least three people, wounding 20 and paralyzing much of the capital's transport. One bomb was reported near the international airport. In an attempt to disrupt the November 22 elections to the Constituent Congress, the Maoist rebels launched a series of attacks including the bombing of President Alberto Fujimori's Cambio 90 political party headquarters. Two people were killed and 13 were wounded when a guerrilla entered a restaurant on a highway north of the capital and opened fire on customers eating breakfast. The "armed strike," so-called because the rebels threaten to punish anyone attempting to go about their normal life, began November 18 and is scheduled to last for three days. In Lima a bus driver was killed and his conductor was seriously injured when a rebel set fire to a bus full of passengers on the main street of the poor San Martin de Porres area of the capital. Another four buses were burned in other sectors of the capital and bombs exploded in the center of Lima and San Martin de Porres. Two passersby were injured when the former device blew up. On the afternoon of November 19, a bomb exploded near Lima's Jorge Chavez international airport injuring a 51-year-old man. Two government ministers in the airport at the time were unhurt. Police said the two-pound dynamite device blew a yard-wide hole in the ground beside the fence which separated the airport grounds from a poor barrio.

Brazil - December 1, 1992 - Bomb in Rio's train station

A bomb exploded at 5:20 a.m. November 22 in Rio de Janeiro's central railway station which links city and suburbs. Some 800,000 passengers use the station daily. Two women, one of whom was probably carrying the bomb in a plastic bag, were seriously injured by the blast and taken to a hospital. Three station ticket counters were damaged. There is no speculation yet on the motive for the attack.

India - December 1, 1992 - Sikh militants kill bus passengers in Punjab

Seven Sikh militants from the Khalistan Liberation Force (KLF) shot 16 Hindu passengers to death December 1 after hijacking a bus near the industrial

city of Ludhiana. The KLF has been blamed for killing 25 Hindu farm workers in the Ludhiana area on October 30.

United Kingdom - December 9, 1992 - PIRA bomb subway station

The PIRA detonated a bomb near the Woodside Park subway station.

Peru - December 10, 1992 - Piura rebel leader captured

Security forces have identified a terrorist captured at the scene of a bomb attack as Laura Iparraguirre Saldana, political-military leader of the Maoist Shining Path (Spanish initials: SL) guerrilla organization in Piura department, in Peru's far northern region. Iparraguirre, a teacher, and two men were captured on November 18 after throwing a bomb under a parked bus in Chulucanas. One of the men, also a teacher, died in the incident. The capture of Iparraguirre and 12 other suspected guerrillas, some of whom had weapons and explosives in their possession, was said to be a significant blow to the effectiveness of the SL in Piura.

India - December 18, 1992 - 4 injured in Bombay train blast

Four passengers were injured December 18 when a bomb wrapped in a leather bag exploded in a suburban train in Bombay, near the northern suburb of Borivli. No one has claimed responsibility for the blast. The explosion follows last week's riots in the city triggered by the destruction of a Muslim shrine in Ayodhya on December 6 by Hindu militants.

United Kingdom - December 23, 1992 - IRA bombs Hampstead tube

An explosion ripped through a subway station in London's Hampstead district as evening rush hour began December 22, causing damage but no injury. The blast came as Defense Minister Malcolm Rifkind urged the Irish Republican Army (IRA) to negotiate a permanent cease-fire with Britain. Security forces hope that the IRA, which has staged a ruthless pre-Christmas bombing blitz, will call a 72-hour truce over the Christmas weekend. IRA sources say the issue is under consideration.

Thailand - December 23, 1992 - Bombing at bus station near Bangkok

A bomb left on a bus at the Taladplu station just outside Bangkok exploded December 23, killing four persons and injuring a fifth. A second bomb left on the bus failed to go off. Police in October arrested an army corporal for blasts that month at the Interior Ministry and the Burmese Embassy. Officials say the bombings are intended to embarrass the government.

Israel - January 3, 1993 - Express bus bombed

A small bomb exploded on an express bus belonging to the national carrier Egged. No injuries were reported. Hamas was held responsible.

Egypt - January 5, 1993 - Attack on Japanese tourist bus

Suspected militants of the al-Gamya al-Islamiya (The Islamic Groups) fired at a bus carrying Japanese tourists from the city of Luxor to Cairo January 5, but no one was injured. The attack took place near the town of Dayrut, a hotbed of Muslim fundamentalist violence located 200 miles south of Cairo and the site of previous attacks against tourists. Last week, al-Gamya militants distributed a statement warning that "tourists coming to Egypt and foreigners living here must leave the country because we fear they could be killed in the conflict between us and the secular regime which is fighting against Islam." Al-Gamya generally precedes attacks against foreigners with statements of concern for tourist safety in Egypt.

Egypt - January 8, 1993 - Al-Gamya bombs Cairo tourist bus

A militant of the radical al-Gamya al-Islamiya (The Islamic Groups) tossed a bomb at a bus carrying German tourists near Cairo the night of January 7, causing damage but no injuries. The device shattered the rear window of the bus and damaged a second vehicle carrying Egyptian workers. The attack occurred as the bus stopped at a red light on the Pyramids Road, the main boulevard connecting Cairo to the Giza Pyramids on the western outskirts. Thousands of tourists travel the road every day to visit Egypt's top tourist attraction. The incident marks the first time al-Gamya militants have attacked a tourist target in Cairo. A spokesman for al-Gamya announced "that from now on Cairo has become the stage for holy struggle."

Thailand - January 12, 1993 - Bomb found in bus depot locker

At about 3 p.m. on January 6, police received a report from a mechanic working at the number 72 bus garage that there was a bomb hidden in a locker in the bus garage in Khlong Toei District, Bangkok. Police investigated and discovered a M-26 grenade in a locker. The locker was an unused one in the employee's area and the grenade did not appear to present a hazard to the public. The explosive was removed for destruction and police are investigating the incident.

United Kingdom - February 3, 1993 - IRA bombs London-to-Kent train

Passengers were evacuated from a train traveling from London's Victoria Station to Ramsgate, 60 miles east, shortly before a bomb detonated at 9:45 a.m. February 3. The small explosion, which caused little damage, came about 40 minutes after authorities received coded warnings from the Irish

Republican Army (IRA) of two bombs aboard the train. A second bomb was not found. British Rail said the incident delayed trains throughout the capital.

United Kingdom - February 4, 1993 - Bomb explodes on train

A small bomb exploded on a train in south London. Only minor damage resulted, but traffic all over the city was affected. Talks between the British and Irish governments had started that day in London. The PIRA is suspected. Another bomb exploded on a railway platform in the South Kensington tube station in London at 3:29 pm. A coded warning was given at 3:15 and the station was evacuated. There were no injuries. The IRA is suspected.

Egypt - February 4, 1993 - Tourist bus attacked near Pyramids

Three Muslim militants tossed a bomb at a bus carrying 15 tourists from Cairo to the Pyramids February 4, but no one was injured. The attack occurred outside the Europa Hotel near the Giza Pyramids. The militants were waiting in a car near the hotel and threw the bomb when the tourists boarded the bus. It is the second attack this month against a tourist bus in the Pyramids area.

India - February 9, 1993 - Jammu-Kashmir bus bomb kills three

Three people were killed and 18 injured when a powerful bomb exploded in a bus in the troubled north Indian state of Jammu-Kashmir on February 9. The bomb exploded as the bus was traveling through the Jammu section of the state. Note of the separatist groups fighting Indian security forces in the area claimed responsibility for the incident.

Egypt - February 9, 1993 - Tourist bus attacked in Dayrut

Muslim militants fired on a tourist bus carrying German tourists February 9 near the town of Dayrut, 200 miles south of Cairo, causing damage but no injuries. The incident took place after a police escort accompanying the bus spotted armed men lying in ambush by the road and opened fire on them. The gunmen then fired on the bus and fled into the bush. Several attacks on tourist buses have occurred in or near Dayrut, a bastion of Muslim militants.

El Salvador - February 10, 1993 - U.S. citizen kidnapped, set free in north

A U.S. citizen riding in a private bus was kidnapped by armed bandits near the northern Salvadoran town of San Cristobal on February 5. He was freed unhurt a day later after his captors transmitted a ransom demand but apparently were not paid. The bus was stopped at a roadblock by five armed men wearing camouflage clothing, masks and combat boots. The American, a longtime resident of El Salvador, and three teenage Salvadorean girls were

taken. Such assaults by demobilized former guerrillas and soldiers are becoming more common throughout El Salvador, especially at night. Successful for-ransom kidnappings are still rare.

Myanmar - February 11, 1993 - Rebels blow up train, nine dead

The New Mon State Party rebel group and anti-government students known as the All Burma Students' Democratic Front on February 8 blew up a cargo train traveling between Ye and Moulmein in southeastern Burma, killing nine people and injuring 18 others.

Azerbaijan - February 12, 1993 - Bomb destroys bridge

A bomb demolished a bridge in Kazakh region on February 12. Azeri officials held Armenians responsible for the bombing.

Egypt - February 17, 1993 - Gunmen fire on bus convoy

Two Islamic militants opened fire February 16 on a convoy of four buses carrying 100 German tourists near Manfallout, Asyut governate, but did not hit any vehicle. Police escorting the buses returned fire and engaged the gunmen in a lengthy shoot-out that left one militant dead. The convoy was traveling to Cairo from the city of Luxor when it was attacked.

Russia - March 1, 1993 - Baku-bound train bombing kills 13

A package-bomb exploded February 28 in a sleeping compartment of a train bound for the Azerbaijan capital of Baku, killing 13 passengers and wounding 12. The train had just left the village of Gudermes in the southern Russian republic of Chechen. The blast may have been in retaliation for recent bombings by Azeri militants against Armenian interests, including the bombing of a passenger train February 26 in Georgia.

Pakistan - March 3, 1993 - Rocket fired at Sind train

On February 27, bandits -- known locally as dacoits -- reportedly fired shoulder-held rockets to stop a Lahore-bound train near Lakha, north of Karachi in Sind province. The dacoits, who are believed to have mistaken the freight train for a scheduled passenger train they planned to loot, fled empty-handed. Twelve suspects were later arrested.

Pakistan - March 12, 1993 - Bomb blasts in Bombay kill 300, injure many others

As least 300 people were killed and scores of others injured March 12 in a series of explosions in Bombay, India. All of the blasts took place in a 90-minute time frame, and many are thought to have been car-bombs. One explosion was in the basement of the Bombay Stock Exchange during trading,

and some people in the building were hurt in a stampede while trying to evacuate and others were hurt by flying shards of glass. Witnesses said some of the floors of the new building, opened only a few months ago, were sagging. Another blast at the Air India building, one of the city's major landmarks on the edge of the business district, shattered windows. Other blasts were reported on a train in Victoria Railway Station, Bombay's main terminal, a shopping complex in the Worli district of central Bombay, and a gas station near the headquarters of the Hindu-fundamentalist Shiv Sena Party, widely accused of stirring up Hindu-Muslim violence in December and January. It is unclear which of the bombs caused the casualties. "We suspect an international conspiracy," Home Minister Shankarrao Chavan told Parliament earlier in a statement echoed by Sharad Pawar, chief minister of Maharashtra state, of which Bombay is the capital. Chavan did not say who might be behind the alleged conspiracy, but such statements are usually aimed at Pakistan, predominantly Hindu India's Islamic neighbor.

Egypt - March 16, 1993 - Bombs found on train

On March 15, Egyptian railway guards seized a suitcase containing four homemade bombs on the Cairo-Aswan train as it stopped in the town of Abu Tig near Asyut. The passenger carrying the suitcase escaped.

Philippines - March 17, 1993 - Time bomb found on bridge

Authorities who received a telephoned warning discovered and defused a time bomb -- reportedly minutes before it was due to explode -- on a bridge leading to the 1993 National Games in Ilagan in the northeast of Luzon Island on March 12. No one has claimed responsibility for the bomb, but the Communist New People's Army had earlier warned it would sabotage the sporting event.

Egypt - March 18, 1993 - Al-Gamya claims tourist bus blast

Muslim militants of the al-Gamya al-Islamiya (The Islamic Group) claimed responsibility March 16 for a bomb which damaged five tourist buses outside the Cairo Museum. "Al-Gamya al-Islamiya announces that the unit 'Just Retribution' planted a number of time bombs at noon today and that the bombs exploded as planned," said a faxed statement by the group. The statement said the blast was in revenge for a police raid on a mosque in the town of Aswan last week which killed nine people and injured over 40. The statement warned of "a future violent response" in Cairo if what it termed a police siege on the southern area of al-Badari was not lifted.

India - March 22, 1993 - Railway terminus blast in Calcutta

A bomb exploded the evening of March 19 at the Sealdah railway terminus in central Calcutta, killing one person and injuring 12 others. The blast took place soon after an express train from the northern city of Jammu in Jammu-Kashmir state pulled into the station. A man disembarked from the train carrying a suitcase that exploded, killing him and injuring bystanders, including five policemen. Police say the blast was caused by a crude device. Jammu-Kashmir is the site of a Muslim insurrection widely thought to be supported by Pakistan.

South Africa - March 22, 1993 - Police kill four as mob loots train

Police shot dead four men and wounded five others March 18 when they opened fire on about 30 blacks trying to loot a freight train. A police spokesman said the mob raided the train when it stopped at a red light near the notorious Katlehong township east of Johannesburg. Police were reportedly tipped off about the planned raid and had officers on the train. They jumped off when the looters struck and opened fire when their warnings to stop were ignored.

Mexico - March 26, 1993 - Blast at Guadalajara station

A package containing an unknown explosive substance exploded at the downtown "El Refugio" electric train station at midnight, March 21, gravely injuring a policeman. The policeman was preparing to close the station when he picked up the package from the floor near the entrance; the package exploded in his hands. Authorities announced an exhaustive review of security at all train stations. They said they did not believe the incident was a terrorist attack and that it was not likely to be repeated.

India - April 6, 1993 - Blast on bus in Punjab kills five

Bags of firecrackers in luggage on the roof of a bus exploded April 5 outside the Sikh holy city of Amritsar in the state of Punjab, killing five people and injuring 26. Police first thought the blast was caused by a bomb hidden by Sikh militants.

Pakistan - April 7, 1993 - 13 bus passengers murdered

On April 6, bandits -- known locally as dacoits -- stopped a bus about 300 miles north of Karachi in central Sind province, forced the passengers to disembark and identify their tribal affiliation. They then killed nine members of the Mehr tribe and four members of the Mangrio tribe. Police say the incident was the result of a long-standing dispute between the Mehr and Bozdar tribes.

Egypt - April 12, 1993 - Bombs on tourist bus in Cairo

A member of the al-Gamya al-Islamiya (The Islamic Group) planted five gasoline bombs inside a tourist bus carrying 50 German tourists in Cairo April 11, but the devices were removed before they could explode. A guide aboard the bus spotted the extremist placing a bag under a seat and alerted police who then arrested the man and removed the bombs. The bus was parked outside Cairo's famous medieval Citadel when the incident occurred.

Greece - April 16, 1993 - ELA warns of unexploded bomb

A police dog sniffed out an unexploded bomb on a bus April 15. The discovery was made after Revolutionary Popular Struggle (Greek acronym: ELA) sent a letter claiming to have planted seven bombs on Athens buses to protest the privatization of the bus company. Four bombs exploded in a bus parking lot April 9, and two others were defused. However, an anti-terrorist unit failed to discover the seventh device. ELA's warning prompted another search. Hundreds of commuters had used the bus before the device was discovered.

Philippines - April 20, 1993 - Suspected MNLF rebels kill three

Muslim bandits machine-gunned a bus near Dipolog, 450 miles south of Manila on April 20. The rebels were dressed in army uniforms and attacked the bus from the side of the road where they were standing. Police suspect that the men may have been renegade members of the Moro National Liberation Front (MNLF). The attack killed three and left eight wounded.

United Kingdom - April 24, 1993 - Terrorists hijack taxis for car bombs

Fourteen hours after the bombing in the financial district of London, two taxi cabs blew up simultaneously in two parts of London after being hijacked with orders for one to drive to Downing Street and the other to New Scotland Yard. There were no injuries.

Cambodia - May 6, 1993 - Khmer Rouge attack train

Khmer Rouge guerrillas on the night of May 5 bombed a train on Cambodia's main rail link with the northwest, then opened fire on passengers, killing at least 13 civilians and wounding about 80. It was the latest attack by the fanatical movement to disrupt May 23-27 elections. Attacks earlier this week left at least 10 people dead and 34 injured. The United Nations said the group's recent assaults would not prompt them to call off the vote, but one diplomat warned that terrorist attacks by the group in Phnom Penh might shake U.N. resolve.

Philippines - May 12, 1993 - Rail bombings in metro Manila

Bombs exploded within minutes of each other on an overhead commuter train car in Manila and a terminal in suburban Pasay City during evening rush hour May 11, wounding 23 people. Police said the devices, grenades attached to timers, damaged three train coaches and disrupted one of the capital's most popular modes of transportation. Authorities suspect Muslim extremists, believed responsible for the April 27 explosion at Manila airport and bombings at airports in the southern Philippines, their home base. The May 11 blasts came a few hours after the military claimed 46 Muslim militants had been killed during a five-day assault on the remote hideout of the Abu Sayyaf group on Basilan Island. Police have tightened security at railway stations, banks, and some businesses.

Peru - May 17, 1993 - SL armed strike begins May 17

Peru braced May 17 for the start of a three-day "armed strike" by Shining Path (Spanish initials: SL) terrorists to mark the 13th anniversary of their insurgency. SL armed strikes threaten death for anyone who goes to work in defiance of the stoppage. A pre-strike car-bomb and shooting attack May 14 at a police station in Lima's El Agustino district killed two civilians, and other weekend attacks injured at least 10 people. SL terrorists car-bombed a bridge near a Lima military hospital early May 15, wounding several people and damaging nearby buildings. On May 16, guerrillas dynamited a private bank in Lima's financial district of San Isidro, causing damage but no casualties. The government of President Alberto Fujimori has deployed security forces in the capital and the Andean cities of Ayacucho and Huancayo, where bombings also took place over the weekend. President Fujimori on May 15 urged Peruvians to ignore the strike and promised compensation for damage to public transport vehicles. The U.S. Embassy has urged Americans in Lima to avoid commercial districts, shopping centers, Peruvian government facilities, and diplomatic missions, especially at night.

India - May 17, 1993 - Grenade on Jammu-Kashmir bus kills three

Unidentified extremists threw a hand grenade into a bus in the city of Jammu in Jammu-Kashmir state late May 15, killing three passengers and seriously wounding seven others. The city has been the scene of several major bomb attacks on passenger buses in recent months, blamed variously on Muslim radicals fighting for a separate state in Jammu-Kashmir or Sikh militants operating from the neighboring state of Punjab.

Peru - May 20, 1993 - SL armed strike ends, car-bomb at Chilean Embassy

The three-day "armed strike" called in Lima by the Maoist Shining Path (Spanish initials: SL) expired May 19. Multiple terrorist attacks in the capital since May 16 failed to bring the city to a halt: Business and transportation activity in Lima was visibly down on May 17 but returned to near-normal by midday May 18. At 8:00 a.m. May 19, an SL car-bomb detonated in front of the Chilean Embassy on Avenida Javier Prado in southern Lima, damaging the building's facade and nearby houses; no one was injured. The damage could have been much worse, but the fuel-oil component of the 100-kilo device failed to ignite. SL terrorists also dynamited an empty bus in a poor southern suburb of Lima early May 19, slightly injuring five waiting passengers. Later in the day, police killed one SL militant and captured two others as the terrorists prepared to rocket a military base.

Egypt - May 24, 1993 - Bomb near Cairo train station

A bomb planted under or inside a car exploded May 21 near Cairo's Masr train station, killing seven people and wounding at least 20 others. The train station, located on Ramses Square across from a police station, is one of the busiest intersections in the Egyptian capital. Police immediately accused Muslim militants of staging the attack, but a spokesman for the al-Gamya al-Islamiya, the largest and most active Muslim terrorist group, denied responsibility. The bombing is the most severe attack in Cairo in recent years.

Egypt - May 25, 1993 - Five tourists wounded in shooting

Five tourists were wounded May 25 when the bus they were traveling in came under gunfire on the road to the famous temple of Abu Simbel in southern Egypt. When news of the attack surfaced, Egyptian security forces said Muslim militants were to blame. Shortly after, authorities changed their story saying that Egyptian border guards fired on the bus when it strayed into a restricted military area and did not stop when ordered to do so. Three Australians, one Briton, and a Dutch woman were injured in the incident.

Egypt - May 25, 1993 - Bomb found in subway

Police discovered a powerful time bomb May 23 on the tracks of the al-Marj subway station in northern Cairo. The bomb was concealed in a bug spray canister attached to a timer and was about to explode when it was found and deactivated. Muslim militants are suspected of planting the device.

Greece - May 25, 1993 - Bus attacked in Athens

On May 22, several men threw three firebombs at a bus in the Gizi area of Athens causing damage but no casualties. Police suspect the attackers are

members of the Orse student organization, which had been discussing Marxism at Matsovion Polytechnic.

Angola - May 27, 1993 - Rebels attack train, 100 dead

National Union for the Total Independence of Angola (Portuguese acronym: UNITA) rebels reportedly attacked a passenger train in southern Angola May 27 and more than 100 people are believed to have been killed, with another 100 seriously injured. The incident occurred on the Lubango-Matala railway line in Huila province, about 62 miles east of Lubango.

India - June 7, 1993 - Two blasts in Bombay, security concerns

A bomb exploded in an empty local train parked in a railway yard in Bombay's western suburb of Andheri early June 7. Earlier, another bomb detonated in a mailbox at the busy Bombay Central station, panicking waiting passengers but causing no injuries. No one has claimed responsibility for the blasts. The city has seen a spate of violence in recent months. Security was tightened around local politicians in Bombay on June 4 after the assassination of a third Hindu-nationalist leader in the space of a week. Raju Risaldar, a leader of the Hindu ultranationalist Shiv Sena party, was killed while trying to escape from police custody in Baroda, north of Bombay. He had been arrested for the murder last month of a newspaper editor.

Egypt - June 8, 1993 - Tourist bus bombed near Pyramids

A suspected Muslim militant threw a bomb at a tour bus carrying 49 British tourists near the famous Giza Pyramids June 8, killing one Egyptian motorist and wounding 14 people, including five Britons. The bus was entering an underpass on the main road between Cairo and the Pyramids when an assailant dropped a bomb on the vehicle from the bridge above. The explosion wrecked a Mercedes-Benz car traveling in front of the bus and blew out the windows of the bus, which then crashed into the Mercedes.

United States - June 29, 1993 - Nine Muslim fundamentalists caught in plot

On June 29, police arrested nine Muslim fundamentalists who were planning to blow up the George Washington Bridge and Holland and Lincoln Tunnels in New York.

Turkey - June 29, 1993 - PKK attacks train with tourists

PKK guerrillas opened fire June 28 on a train carrying tourists in an undisclosed location in southeastern Turkey, injuring six people. It was not clear if any foreigners were hurt. The attack comes a day after the suspected PKK attack on two tourist hotels in Antalya.

Philippines - June 30, 1993 - Bomb on Cotabato bus

An unclaimed bomb attack destroyed a bus in Cotabato on the southern island of Mindanao on June 29. The passengers had just alighted, and no one was injured in the blast.

Angola - July 1, 1993 - At least 19 die in railway attack

At least 19 civilians were killed and two others seriously wounded June 27 when a mine planted by rebels of the National Union for the Total Independence of Angola (Portuguese acronym: UNITA) exploded on a railway track in southern Angola. The blast occurred between the towns of Matala and Olivenca in Huila province. The victims worked for Caminhos de Ferro do Namibe company, which runs Angola's southernmost rail line. This is the second attack in little over two months on the same railway line. On May 27, UNITA attacked a train carrying 3,000 people, killing between 300 and 600 passengers. Most of Huila is held by the government, but UNITA has been staging sporadic attacks there since the renewal of the civil war in October 1992.

United Kingdom - July 15, 1993 - Bombing at Central Station in Belfast

On July 15, a 60-pound car bomb blasted a large hole in front of Central Station in the center of Belfast. The explosion also caused superficial damage to a nearby leisure center. Bomb exploded minutes after a man claiming to represent the IRA phoned a warning.

Colombia - July 19, 1993 - Bus bombed in Medellin

On July 16, a gunman in Medellin forced the driver off a privately owned bus and drove away. A short time later, the gunman placed a dynamite bomb in the vehicle and destroyed it. No one claimed responsibility for the attack and its motive is unknown.

Russia - July 14, 1993 - Explosion derails Caucasus train

An explosion late July 13 on a rail line 28 miles outside Vladikavkaz, the capital of the republic of North Ossetia, derailed a freight train en route to Prokhladnoy. No one was injured, but authorities suspended rail traffic to clear the wreckage. Ossetian separatists are suspected. The Caucasus mountain region erupted in fighting in 1991, when secessionists in Georgia's South Ossetia tried to unify with Russia's North Ossetia. A peacekeeping force led by Russia essentially ended the fighting last year, but insurgents have not given up the war.

Bangladesh - July 20,1993 - Six injured in bomb attacks on school

On July 19, picketers enforcing an opposition Awami League-led general strike against government corruption hurled at least eight home-made bombs at Krishnapur Government Girls School in the northern town of Pabna, injuring six students. School authorities had reportedly ignored calls by activists to close. In Dhaka, the capital, picketers stoned cars and damaged hundreds of bicycle rickshaws, and attacked a bus in the Gulistan commercial area as it defied the strike. Security forces were sent in to guard key centers in the city and the ports of Chittagong and Mongla. The streets in Dhaka, Chittagong, and other main towns were largely free of traffic during the strike. Trains and ferries were unaffected, but some flights were canceled or delayed.

United States - July 27, 1993 - Bomb threat on bridges near Niagara Falls

A caller who claimed to represent the Islamic Jihad warned that the group had planted explosives on all bridges leading to Canada on the Niagara Frontier, near Lewiston-Queenston, Buffalo. No explosives were found.

Egypt - July 26, 1993 - Bomb explodes in Ismailia bus depot

A bomb exploded July 26 in a bus station in the city of Ismailia, 70 miles northeast of Cairo, causing slight damage. Police denied the explosion was caused by a bomb and said a mine left from the October 1973 Arab-Israeli war went off by mistake. But bus drivers on the scene said they saw a masked man toss the bomb near a garbage dump in the station lot. They immediately alerted the police and moved out their buses.

Philippines - July 26, 1993 - Three hurt in bomb blast

Three people were injured early July 26 when an unidentified man hurled a homemade bomb at a Manila bus terminal. The man escaped, and police say they know of no motive for the attack. They are not linking the incident to recent bombings at a domestic airport and a Manila railway station in April and May, which they blame on Muslim fundamentalists.

Cambodia - August 4, 1993 - Railway line ambushed

On August 2, at least 10 people were killed and 30 injured when attackers laid mines on a railroad track and fired on a train about 14 miles east of the southern provincial town of Kampot. A senior railway official blamed guerrillas of the fanatical Khmer Rouge for the attack, saying they attacked the train to steal motorcycles it was carrying. It was the second train attack this month and since the May elections Khmer Rouge guerrillas are suspected of multiple attacks on road and rail bridges in their operational areas.

Cambodia - August 16, 1993 - 2 killed in Khmer Rouge train ambush

Khmer Rouge guerrillas ambushed a train bound for northwestern Cambodia, killing two people and injuring five, the state railway director said on August 16. About 30 Khmer Rouge attackers ambushed the train 60 miles out of Phnom Penh on the way to Battambang on the morning of August 15. A locomotive and four wagons were derailed as the guerrillas bore down on the train with hand grenades, B-40 shoulder-fired rockets, and AK-47 assault rifles after first detonating a mine laid on the track. The attack lasted about 25 minutes before the guerrillas retreated at the arrival of government soldiers. The ambush was the second attack on a train by Khmer Rouge guerrillas in less than two weeks.

Kenya - August 17, 1993 - Bandits attack bus in tourist zone

About 30 armed bandits intercepted a bus August 15 between Lamu Island and the coastal town of Malindi, shot the driver dead, and then drove the 50 passengers into an isolated area and robbed them. The road where the bus was intercepted is used by tour buses, but it is not clear if any foreigners were aboard. Three of eight policemen riding as guards on the bus were injured when they jumped off the vehicle as the bandits hijacked it.

Turkey - August 19, 1993 - Grenade in Istanbul injures tourists

On the afternoon of August 18, a teen-aged boy threw a grenade at an empty Hungarian tour bus parked in front of a hotel in Istanbul's Laleli district, injuring eight people, including two tourists. Police believe the assailant escaped in a waiting car.

Thailand - August 24, 1993 - Muslim separatists attack train

On August 22, members of the Muslim militant Patani United Liberation Organization, armed with assault rifles and rockets, attacked a train in southern Thailand, killing two people and injuring seven. The train was en route from Bangkok to Sungakolok when it was attacked.

Thailand - August 24, 1993 - Bomb kills five in bus terminal

A powerful bomb exploded August 22 at a bus terminal in Roi-et province, 320 miles northeast of Bangkok. The blast killed five and injured 11 others. The bomb consisted of TNT and was hidden in a travel bag. No one has claimed responsibility for the explosion.

Singapore - August 27, 1993 - Luxury train service link faces possible PULO attacks

A luxury train service linking Bangkok and Singapore is due to commence in September. However, a resurgence of terrorist activity in the Muslim-

dominated southern Thai provinces through which the service -- nicknamed the "Eastern and Oriental Express" -- will travel may pose a risk for passengers. On August 22, terrorists attacked a train as it traveled on the main railway line linking Thailand, Malaysia and Singapore, killing two people and injuring seven. Notes left at the scene in the Rangnae district about 30 miles from the Malaysian border were signed by the Pattani United Liberation Organization (PULO), the best-known Muslim secessionist guerrilla group in the area. One letter said the attack was to underline demands for an independent state in Thailand's Pattani province, another said the attacks showed "what will happen to tourists who travel by train and bus if the government does not give justice to the Pattani Muslims."

South Africa - August 27, 1993 - Luxury bus attacked

Early August 27, gunmen armed with assault rifles shot at a bus in the town of Beaufort West, 280 miles northeast of Cape Town, wounding eight people. The bus was traveling from Cape Town to Johannesburg. The attack appears to be racially motivated: Six of the victims were white, and the long-distance luxury bus is normally used by whites. This latest incident came two days after a mob of black youths stabbed to death a white American woman in a black township near Cape Town. She was the first American killed in South Africa's violence.

Egypt - August 30, 1993 - Three time bombs defused in Ismailiya

On August 28, bomb specialists from the Egyptian Second Army defused three time bombs, each weighing five pounds, 30 minutes before they were set to explode. The bombs had been left on a busy footbridge at the railway station which links the old and new parts of Ismailiya. The explosives had been set to detonate in the evening, when three trains arrive one after the other from Cairo, Alexandria, and Port Said.

Poland - August 31, 1993 - Tourist bus robbed outside Warsaw

Armed robbers held up a busload of tourists in Swiecice, a small town about 15 miles from Warsaw on August 25. No other details were available.

Thailand - August 31, 1993 - Tour bus attacked in Yala province

Unidentified gunmen opened fire on a tour bus in the southern province of Yala on the night of August 28, spraying the vehicle with bullets. No one was injured in the incident, which occurred between Hadyai and Yala, and eventually the bus was able to evade the ambush. Muslim separatists are suspected.

Israel - September 13, 1993 - Peace accord signed

Israeli Prime Minister Yitzhak Rabin and Palestine Liberation Organization (PLO) Chairman Yasser Arafat agreed to an Israeli-PLO peace accord September 13 in Washington. Over the weekend, dissident Palestinian groups had staged several attacks in the Occupied Territories to protest the peace agreement. Some of the assaults included: a September 12 ambush in Gaza by militants of the fundamentalist Hamas (Zeal) movement that left three Israeli soldiers dead; an attempted suicide car-bombing of an Israeli military vehicle in Gaza; and a hijacking of an Israeli bus near the Gaza border by a Palestinian extremist armed with explosives and a knife -- the man killed the bus driver before being shot dead by a soldier. September 13, a rally in Beirut by militants of the Hezbollah (Party of God) protesting the accord turned violent, leaving at least two protesters dead and more than a dozen wounded.

Colombia - September 14, 1993 - Guerrillas target Medellin bus station, army base

On September 11, authorities discovered 33 pounds of dynamite and a grenade in front of Medellin's inter-city bus terminal. The explosives were inside a burlap sack and apparently had been abandoned there, presumably by leftist guerrillas. The guerrilla group which most often carries out terrorist attacks in Medellin is the National Liberation Army (Spanish initials: ELN). The same day, urban militants belonging to the ELN-linked "Bolivarian Militias" attacked an army base in Medellin's Villas Tina neighborhood. One soldier was killed in the assault.

Pakistan - September 16, 1993 - Bomb on bus kills 2, injures 9

A bomb exploded aboard a bus in Sherookana village about 15 miles south of Lahore on September 15, killing two people and seriously injuring nine others. Police said the attack may have been part of a campaign to sabotage general elections set for October 6.

Italy - September 21, 1993 - Explosives found aboard Palermo-Turin overnight train

Police acting on a report that apparently came from the SISDE intelligence service halted the crowded Palermo-Turin overnight train September 21 during a stop at Rome's Ostiense station and searched it for three hours until they found between nine and 18 pounds of ammonium nitrate and TNT explosive hidden in the lavatory of the last carriage. Reports so far have varied as to the amount of explosive found and whether or not a detonator was present.

United Kingdom - October 2, 1993 - Three PIRA bombs explode in North London

Three PIRA bombs exploded in north London. Two of the bombs were near a Domino's pizza place, where a warning had been called in. The third bomb exploded opposite a railway station.

Germany - October 8, 1993 - Bombing at train station

A bomb exploded at the main train station in Saarbruecken midday October 7, seriously injuring one man. No one claimed responsibility for the attack, but Revolutionary Cells (German initials: RZ) said it was responsible for an explosion October 3 that destroyed a transformer station at the Frankfurt headquarters of federal border guards. The blast knocked out for several hours the control system that monitors the German-Polish border.

Comment: The ultra-leftist RZ has been very quiet since the arrest of key leaders in the late 1980s. However, the death of Red Army Faction (RAF) militant Wolfgang Grams in June, mysteriously shot to death in a train station during a police raid, has galvanized the left and may have invigorated RZ.

Colombia - October 8, 1993 - Bogota bombing kills three

A police bus was bombed as it drove through the Chapinero district of Bogota on October 7, killing three policemen and wounding some 30 others. The police bus was virtually destroyed in the explosion, which was apparently set off by remote control. Another two bombs exploded about four hours later. No one was injured in the later bombings, one of which targeted a campaign office of Liberal Party presidential candidate Ernesto Samper. No one immediately claimed responsibility for the attacks.

Thailand - October 13, 1993 - Homemade bomb on railway track

Police on October 11 defused a homemade bomb found under railway tracks between Khok Pho and Na Pra Doo stations in southern Pattani province. The bomb was planted in the same area where Muslim separatists have been blamed for several recent attacks. In August, two passengers were killed and seven injured when bandits attacked an express train in an adjoining province.

Bangladesh - October 18, 1993 - 150 hurt in train robbery

On October 16, armed robbers removed a section of railway track and derailed a train on a hilly pass near northeast Shamshearnagar town, looted money and goods from passengers and beat those who resisted. Five carriages and the engine of the Upaban express were derailed in the incident, which

caused the suspension of train service between Dhaka and northern areas for more than 12 hours.

Guatemala - October 19, 1993 - URNG guerrillas blow up key bridge

Guerrillas of the National Revolutionary Unity of Guatemala (Spanish initials: URNG) blew up the Siguacan Bridge near Rio Bravo, department of Suchitepequez, on October 14. Two powerful explosions destroyed the bridge carrying the main road to the Pacific coast, and traffic has had to be diverted to other area roads. The attack came one day after the URNG rejected the government's latest peace plan.

France - October 19, 1993 - Bandits rob tourist bus on Corsica

Two masked gunmen halted a tour bus traveling a mountain road on Corsica October 17 and robbed passengers of \$3,500 in francs before escaping. Crime is an increasing problem on the Mediterranean island, in part because the Corsican National Liberation Front and like-minded separatists often fund their activities with banditry.

India - October 29, 1993 - 15 injured in Bombay train blast

At least 15 people were injured October 29 when a bomb exploded on a commuter train in Bombay. The blast occurred at about 1:40 p.m. -- a busy time -- when the train was stopped at Matunga station in the city's central district. No one has claimed responsibility for the blast. Police have ordered a security alert in Bombay because of the November 13 date for Diwali, the Hindu festival of lights -- the biggest Hindu festival of the year. In March, Bombay was rocked by a series of bombs that killed more than 250 people and were at first attributed to religious violence.

Spain - November 22, 1993 - ETA, Iparretarrak attacks

Two gunmen shot and seriously wounded a Basque police sergeant early November 22 as he was waiting at a traffic light in northern Bilbao. The attack is trademark Basque Fatherland and Liberty (Basque acronym: ETA), still waging its quarter-century war for an independent Basque homeland. On November 20, a bomb damaged an empty high-speed train in a railyard in the French border town of Hendaye. ETA's French counterpart, Iparretarrak, is suspected.

South Africa - November 30, 1993 - Bomb kills 1, injures 6 in Durban

One person died and six were injured when a bomb exploded on a bus in the coastal city of Durban, Natal province. No one has claimed responsibility for the blast.

Israel - December 5, 1993 - Gunmen fire on public bus

Extremist Islamic Jihad Palestinian gunman fired on a public bus and killed a passenger. Israeli Defense Force reservists shot and killed the attacker.

India - December 6, 1993 - Train blast kills 1, injures 22

A series of bomb blasts on four express trains killed one person and injured 20 December 6. One fatality and 16 injuries occurred on the Andhra Pradesh Express on the outskirts of Hyderabad, Andhra Pradesh, as the train set out for New Delhi. A total of six people were injured in other blasts that occurred on express trains bound for New Delhi from Calcutta and Bombay, and on a train heading from the western port of Surat to Bombay. No one has claimed responsibility, but police say the explosions are likely linked to the first anniversary of the demolition of the mosque at Ayodhya, Uttar Pradesh, by Hindu militants, or are the work of Muslim militants fighting Indian rule in the northwestern state of Jammu-Kashmir.

Philippines - December 13, 1993 - Nine Filipinos killed in bus ambush

On December 13, about 40 gunmen stopped a bus in the southern Philippines, separated the Christians from the Muslims, then killed nine people and injured 11. The bus was traveling from Sultan Kudarat province, 570 miles south of Manila, to Davao province.

United Kingdom - December 14, 1993 - Blast disrupts rail traffic

An explosion on rail lines between Woking and West Byfleet, 20 miles southwest of London, disrupted train traffic and forced the closure of nine stations in the area. It is unclear if a bomb was involved, but bomb threats by the Irish Republican Army (IRA) closed four stations in southern England December 13. In Northern Ireland, police in central Belfast defused a 1,000-pound van-bomb parked near a security forces facility.

Italy - December 20, 1993 - Small bomb explodes on railway

A small bomb exploded at a railway station in Florence. A Senegalese citizen was injured. A Spaniard was arrested.

United Kingdom - December 21, 1993 - IRA bombs and bomb scares in London

Incendiary devices exploded December 20 in a north London post office and a pub near Victoria train station, causing no injury and slight damage. A third was disarmed at a mail-sorting office in the City of London financial district. Police said the bombs bore "all the hallmarks" of the Irish Republican Army (IRA). This morning, just before rush hour, authorities acting on coded warnings used by the IRA shut 40 train stations in southeast England and

searched 200 miles of track for bombs. The bomb threats also closed the Central and Northern lines of the London Underground, two of the busiest routes into business and shopping districts. Meanwhile, Sinn Fein, the IRA's political wing, is demanding amnesty for imprisoned guerrillas as a precondition for discussing the Anglo-Irish peace formula for Northern Ireland. At the same time, the Ulster Unionist Party, the largest of the three loyalist political parties, endorsed the peace initiative. Leader James Molyneaux said for the first time both London and Dublin had recognized "the will of the greater number of people in Northern Ireland must prevail in all circumstances." The IRA said it will not comment on the "complicated" peace formula until the first of the year.

Egypt - December 27, 1993 - Tour bus attacked in Cairo

Suspected Muslim militants opened fire December 27 on a tour bus carrying 18 Austrian tourists in Cairo, wounding eight of them, two seriously. About eight Egyptians were also wounded when the gunmen fired randomly while making their escape. The incident took place near the Amr Ibn al-As mosque in the Old Cairo section of the city.

El Salvador - January 4, 1994 - U.S. tourists robbed

The U.S. Embassy reports that a bus carrying 21 American tourists was intercepted by five heavily armed men in a pick-up truck December 31 on a main highway in the tri-border area of El Salvador, Honduras and Guatemala. The bus, owned by Megatours of San Salvador, was taken by the gunmen to an isolated area off the highway, where some of the tourists were robbed of luggage and personal belongings. The tour group was en route to the Mayan ruins of Copan in northern Honduras.

Colombia - January 10, 1994 - ELN attacks tourist bus

On January 7, National Liberation Army (Spanish initials: ELN) guerrillas blew up a van carrying Colombian tourists near San Jose village, some 100 miles northeast of Bogota, killing two passengers and injuring eight others. Guerrillas detonated a bomb as the van passed. Troops have been dispatched to the area in search of the guerrilla unit responsible.

Sri Lanka - January 19, 1994 - Bomb on bus kills 15 in central north

A bomb exploded January 19 on a crowded, privately owned bus about 140 miles from Colombo, killing 15 people and injuring at least 30 others. The blast, thought to be the work of separatist Liberation Tigers of Tamil Eelam guerrillas, occurred at Rambewa Junction as the bus was about to stop at a military checkpoint. The vehicle was traveling from the northeastern town of Pulmoddai to Anuradhapura. No one has claimed responsibility for the blast.

India - January 24, 1994 - Six injured in Uttar Pradesh train blasts

Six people were injured early January 21 when two bombs exploded on an express train near Hardwar in the northern Himalayan foothills. The train was en route from Allahabad to Dehra Dun in Uttar Pradesh state. Police are searching for two youths who got off the train and left luggage on board.

Turkey - February 14, 1994 - Bomb in Istanbul train station

A bomb placed in a garbage can exploded February 12 in a suburban Istanbul train station packed with military academy students, killing five people and injuring at least 26. The separatist Kurdistan Workers Party (Kurdish initials: PKK) claimed responsibility.

Egypt - February 14, 1994 - Gunmen ambush bus carrying Romanians

Two suspected Muslim militants opened fire February 14 on a bus carrying Romanian and Egyptian engineers near the city of Asyut, 200 miles south of Cairo, but the engineers escaped injury. The men are employed by the Asyut Cement Company. It is the first attack on foreigners following warnings that the Muslim extremist al-Gamaa al-Islamiya (Islamic Group) will renew a terrorist campaign against "tourism and investment." The last attack on foreigners was reported December 27 when al-Gamaa gunmen ambushed a tourist bus in Cairo, wounding eight Austrian tourists and eight Egyptians.

Pakistan - February 20, 1994 - School bus full of Children Hijacked

Three Afghani men hijacked a school bus full of children in Peshawar. They drove unhindered to Islamabad where they took refuge with five students and a teacher held hostage in the Afghan Embassy. From there they demanded \$5 million and food to be sent to Kabul. The three men were killed when Pakistani commandos stormed the Embassy. The children had been released earlier that evening. They were not injured.

Egypt - February 22, 1994 - Militants attack luxury train

Militants of the al-Gamaa al-Islamiya (Islamic Group) opened fire February 19 on a luxury sleeper train traveling from Cairo to Luxor, wounding four people, including two foreign tourists. According to witnesses, at least six gunmen wielding automatic weapons riddled the train with bullets at about 1:30 a.m. near the Upper Egyptian town of Asyut, a stronghold of Muslim extremists. Investigators at the scene found spent cartridges inscribed with slogans such as "Islam is coming." The officials also said that the train-driver's cabin was fired upon in such a way as to indicate the assailants wanted to kill the driver, which would have brought the train to a halt. They speculate that the militants planned to stop the train and kill some of the passengers aboard.

Cambodia - February 23, 1994 - Khmer Rouge attacks train

A senior railway official advised that Khmer Rouge guerrillas attacked a train sometime during the week of February 13 in the northwest province of Pursat, killing three passengers and wounding eight. There was no indication as to the exact date of the attack, merely that it occurred.

Egypt - February 24, 1994 - Bomb on train wounds six tourists and five Egyptians

A bomb exploded February 23 in the first-class section of a train traveling from Cairo to the southern city of Aswan, wounding six tourists and at least five Egyptians. The tourists were identified as two Australians, two New Zealanders and two Germans; the wounded Egyptians included two army officers. Police say the bomb was placed on a luggage rack shortly after the train left the Asyut train station. Asyut is a well-known stronghold of Muslim militants. Al-Gamaa al-Islamiya (Islamic Group) claimed responsibility for the attack and warned fellow Egyptians to avoid tourists and tourist sites as they are "targets for our legitimate holy struggle."

Thailand - March 8, 1994 - Bomb damages train in south

A bomb planted on a railway line near the southern city of Hat Yai, 750 miles south of Bangkok, exploded under a train March 8, damaging the engine and track but causing no injuries. Muslim guerrillas demanding autonomy in the south are thought to be responsible. In August 1992, a bomb at Hat Yai railway station killed three people.

Egypt - March 7, 1994 - Trains attacked in Upper Egypt

The Muslim militant Al-Gamaa al-Islamiya (Islamic Group) is suspected of firing on three trains in Upper Egypt early March 7, wounding 12 passengers. The attack occurred at around 2 a.m. as the trains passed through the village of Sanabu in Asyut province, 200 miles south of Cairo. Six men were wounded on the Cairo-to-Aswan luxury train, and two others were hurt on a Cairo-to-Luxor train.

India - March 10, 1994 - 10 soldiers wounded in Tripura bomb attack

At least 10 soldiers were wounded March 9 when a bomb was hurled at a state-owned bus carrying army personnel in the northeastern state of Tripura. The Tripura state government blamed state opposition Congress (I) Party members for the bombing. The attack came during a violence-marred daylong strike called by Congress (I), which was protesting the killing of its youth leader, allegedly by Marxists. Also during the strike, two other people were injured in a separate bomb attack. The strike closed government offices, banks, schools, and colleges and halted road transportation.

Israel - March 13, 1994 - Commuter bus bombed

A bomb exploded on a commuter bus at the Hadera Central Bus Station killing five people and injuring 30. Hamas claimed responsibility for the bombing to avenge the machine gun attack against the Hebron mosque. The bomb was carried on board by a suicide bomber. A member of Hamas was sentenced to death in Nov. 94 for plotting the attack.

United Kingdom - March 15, 1994 - IRA bomb found near rail line

An IRA bomb was found near the rail line in Kent. It is suspected that the bomb was planted months before and had failed to explode.

Azerbaijan - March 19, 1994 - Subway bombed

A large bomb was planted under a seat in the first car and thought to have been detonated by remote-control. The government had recently cracked down on opposition groups.

Algeria - March 21, 1994 - Gunmen hold up train in tunnel

Gunmen held up a train in a tunnel on the coastal line near Boumerdes about 30 miles east of Algiers on March 18 and set it ablaze after forcing about 300 passengers to disembark.

India - March 28, 1994 - Bomb at Jammu-Kashmir bus station kills 2

A bomb exploded late March 27 at a bus station in Jammu, in northwestern Jammu-Kashmir, killing two people and wounding 14. No one claimed responsibility for the blast, which occurred when passengers were about to board two night buses for nearby towns, but Muslim militants are the most likely culprits.

Thailand - March 30, 1994 - Train derails after explosion

A powerful bomb exploded beneath rail tracks early March 30, causing a 15-carriage passenger train traveling from Bangkok to the Malaysian border town of Sungai Kolo to derail near Chana station in Songkhla province, injuring some passengers. The bomb appeared to have been homemade, but was sufficiently powerful to severely damage the tracks, the locomotive and two carriages. No one has claimed responsibility, but authorities blame "separatists."

Israel - April 6, 1994 - Suicide bomber blows up bus

A Hamas suicide bomber blew up a bus in Afula in Northern Israel. The young West Bank resident crashed his car, which was carrying 385 lbs. of explosives and nails, into the bus. Eight people were killed including four

teenage boys. Most of the injured were high school students. The bombing was in reprisal for the Hebron massacre.

Cambodia - April 11, 1994 - Guerrillas kidnapped three westerners from a taxi

Khmer Rouge guerrillas kidnapped three westerners from a taxi as they headed towards Sihanoukville. One was Australian (a woman) and the other two were British (a man and a woman). Their remains were found in July 1994 at a Khmer Rouge camp near Sre Amble. It is believed that they were beaten to death a few days after being kidnapped. The Khmer Rouge had demanded a huge ransom but did not produce evidence that they were alive.

Russia - April 14, 1994 - Train blast kills 4 in south

An explosion early April 13 ripped apart a passenger train carriage in the south Russian province of Dagestan, killing four persons. The blast occurred at Dagestanskiye Ogni station, 30 miles from the border with Azerbaijan. The area has been the scene of a series of bombings over the last year linked with ethnic conflict. About 20 people were killed last year when a bomb exploded on a train at the border between Azerbaijan and Dagestan.

Egypt - April 18, 1994 - Gunmen fire on train near Asyut

Suspected Muslim militants fired on an Aswan-to-Cairo sleeper train as it approached the city of Abu Tig in Asyut governate late April 16, damaging several rail cars but causing no injuries. The train had several foreign tourists aboard. At least eight sleeper trains have been attacked this year in the Asyut region by al-Gamaa al-Islamiya (Islamic Group), which is probably responsible for this attack as well.

Thailand - April 25, 1994 - Bomb kills 3 at southern railway station

A bomb exploded April 23 at a railway station at Nakhon Sri Thammarat, some 400 miles south of Bangkok, killing three people and wounding 22. Police, who found an unexploded grenade at the site, are looking for a man who left a parcel at a restaurant in the station. Police have determined the explosive was an M-26 hand grenade which went off when the plastic tape holding the pin down dissolved after being soaked in diesel fuel, police chief Pratin Santiprapob told a meeting of top military officers. Authorities say the blast appeared to have been timed to coincide with the departure of a Bangkok-bound train, when the station platforms were especially crowded. After initial investigations, police are saying the bomber was motivated by a frustrated love affair.

Venezuela - May 3, 1994 - Bomb on Caracas Metro wounds 5

A leaflet-scattering device exploded just before 7 a.m. May 2 inside a carriage of a Caracas Metro train stopped at the Parque del Este station in the Palos Grandes area. Five passengers were slightly injured by the blast, which also damaged the carriage roof and blew out several windows. The leaflets found at the scene claimed responsibility for the terrorist incident -- the first ever on the Venezuelan capital's underground railway, which opened in 1982 - - on behalf of the hitherto unknown "Urban Commando Union of the Popular Resistance Front."

Venezuela - May 4, 1994 - Metro blast a teenage prank

The small explosive device that slightly injured five people early May 2 inside a carriage of a Caracas Metro train turns out to have been a dangerous prank by teenagers using high school laboratory equipment. Police reportedly have two middle-class high school students under arrest, and they reportedly have confessed. The teenagers, apprehended after witnesses gave police detailed descriptions, had taken their "joke" to the length of scattering leaflets at the scene claiming the attack in the name of the nonexistent "Urban Commando Union of the Popular Resistance Front."

Turkey - May 17, 1994 - Bombs on train and telecommunications center

Two people were slightly wounded late May 15 when a bomb they were going to plant on the "Blue Train" in Istanbul's Haydarpasa station exploded prematurely. The Blue Train travels between Istanbul and the capital Ankara. On May 16, one person was killed while planting a bomb that exploded in a bathroom of a telecommunications center in Istanbul. Both bombs follow the May 14 blast at Istanbul's popular Galleria shopping center, which caused minor damage and no injury. The separatist Kurdistan Workers Party is suspected.

Algeria - May 19, 1994 - Bus attacked

A bus with 25 Russian citizens was attacked near Ziam as it was traveling to the airport. Three Russians and 11 Algerian guards were killed. Five others were injured. The attackers were all killed.

Germany - May 19, 1994 - American killed in train robbery

A decorated American Vietnam veteran was fatally shot during an armed robbery May 17 on an overnight Stuttgart-Hamburg train. The conductor told police William Bledsoe, quality control administrator for the U.S. Army hospital in Heidelberg, was alive as the train approached Bremen, where he was to change trains. Minutes later, the conductor noticed a credit card on the floor in front of the compartment. He investigated and found Bledsoe shot

and the compartment ransacked. Bledsoe was carrying about \$5,000 in German marks, which was missing. It was the first slaying on a German train in recent memory.

Egypt - May 23, 1994 - Gunmen fire on tourist train

On May 21, suspected Muslim militants fired on a train carrying tourists as it passed the southern city of Manfalout, injuring a railroad employee. Following the attack, al-Gamaa al-Islamiya (Islamic Group) vowed to step up attacks against the security forces to avenge the recent police killings of two al-Gamaa supporters.

Turkey - May 25, 1994 - Bombs at Istanbul bus station wound 2

Four bombs exploded early May 25 in Istanbul's Harem bus station, wounding at least two people. The separatist Kurdistan Workers Party is suspected.

Colombia - May 27, 1994 - Guerrillas torch buses and disrupt traffic

Leftist guerrillas in Medellin set fire to 10 buses May 26 in the latest attacks before May 29 presidential elections. The incidents disrupted morning traffic and other bus drivers refused to put their vehicles on the roads for fear of further attacks. Troops were deployed at bus depots and traffic later returned to normal. It was the second guerrilla attack in Medellin this week. On May 22, rebels exploded a remote-control bomb near a police patrol, killing six officers.

Russia - May 27, 1994 - School bus hijackers hold hostages

On May 26, four men armed with guns and a grenade hijacked a bus carrying 26 children, parents, and teachers in southern Mineralniye Vody, releasing eight of their hostages in exchange for submachine guns, bullet-proof vests, ammunition, and morphine. The hijackers demanded \$10 million and a crewless helicopter. Authorities supplied the helicopter and \$8 million and the gunmen flew off with four hostages. Police in Bachayurt, about 30 miles east of Grozny, stormed the aircraft when it landed, arresting three hijackers and fatally wounding the fourth. It is the second incident in six months in which gunmen have seized schoolchildren in southern Russia. In December, police captured four criminals after a five-day ordeal in which teenagers and their teacher were held captive.

India - June 6, 1994 - Bomb on train kills 2

Two people were killed and 25 injured June 5 when a bomb exploded on a Delhi-bound express train in the central state of Madhya Pradesh. The blast occurred just after the train left the station at Rajnandgaon. Maoist Naxalite

guerrillas have been blamed for the attack. The Naxalites, an outlawed Maoist movement that originated in Naxalbari in eastern India, were mostly suppressed in the early 1970s but still sporadically launch attacks in a few stonghold states, where they hope to spark a revolution against wealthy landlords.

United Kingdom - June 6, 1994 - Bomb discovered at a railway station

A bomb was discovered at a railway station in Kent after the IRA called in a warning. It took the police five hours to locate the bomb. It was safely detonated.

Russia - June 29, 1994 - Bus passengers freed

Police June 29 captured three gunmen who hijacked a bus on the Rostov-to-Baku highway June 28 and held 40 passengers hostage for ransom. The trio seized control of the bus near Mineralniye Vody airport in southern Russia and demanded \$5.8 million and a helicopter for an escape flight. The gunmen forced one passenger to play dead to convince authorities they were serious about their threat to kill hostages. Early June 29, they were given about half of the money demanded, automatic rifles and a helicopter and crew. They flew off with seven hostages, landed in Chechnya, infamous for general lawlessness, and abandoned the aircraft and hostages. The hijackers boarded a bus headed for the Chechen capital of Grozny, where they were arrested. It was the third such hostage-taking in southern Russia in seven months, all of which have ended in the capture of the criminals without harm to the victims.

Cambodia - June 29, 1994 - Bridge destroyed

Khmer Rouge guerrillas are suspected of destroying a major road bridge located about 60 miles south of the capital. The 65-foot Kaong bridge, situated on Cambodia's strategic Route Four, was destroyed by insurgents early on the morning of June 27, according to a general in the ministry of interior. One Phnom Penh-based businessman said the bridge demolition would result in petroleum shortages. Petroleum is normally hauled overland from bulk depots in Sihanoukville.

South Africa - July 7, 1994 - 11 die in highway ambush

At least 11 people were killed July 6 and another eight wounded when gunmen ambushed eight vehicles during the evening rush hour near Kathelong township, east of Johannesburg. Authorities say about 10 black gunmen took part in the "well-orchestrated attack." Other officials blamed the continuation of "taxi warfare" between rival taxi operators in the area as the cause of the ambushes. The attack is one of the bloodiest since President Nelson Mandela assumed power in June.

Algeria - July 12, 1994 - Seven foreigners killed in Algiers

A total of seven foreigners, not five as previously reported, were killed in two separate attacks July 11 in Algiers. Two Algerian officials also died in the attacks. In the first incident, gunmen posing as police officers stopped a bus in the Algiers suburb of Oued Ouchayeh carrying employees of the state oil company Sonatrach, took four Russians and one Romanian engineer off the bus and "machine-gunned" them. The foreign engineers lived at a hotel near the coastal town of Boumerdes, 25 miles east of Algiers, and every day followed the same route, at the same time, to work in Algiers. In a separate attack July 11, Islamic militants opened fire on patrons of the restaurant at the zoological gardens, six miles from central Algiers, killing two citizens of the former Yugoslavia and two Algerian officials who were reported to have "important posts" with the government. The zoological gardens restaurant is popular with diplomats, foreign businessmen, and wealthy locals. The attacks bring to 49 the number of foreigners killed in Algeria since September 1993.

Kenya - July 22, 1994 - Tourists robbed on Mombasa-Lamu road

About 20 heavily armed bandits on July 18 intercepted a bus full of tourists traveling from the coastal city of Mombasa to the resort of Lamu. The bandits fired shots in the air to scare the foreigners and then robbed everyone on the bus. No one was injured in the incident.

Israel - July 26, 1994 - Bomb found on train

A bomb was found aboard a train traveling from Naharitta to Tel Aviv.

Cambodia - July 28, 1994 - 100 held after Khmer Rouge ambush train

Three foreigners, thought to be French, are among at least 100 people still being held hostage after a Khmer Rouge guerrilla ambush July 26 on a train in the Kampong Trach district of Kampot province, 80 miles south of Phnom Penh. Nine people, including four members of the security forces, were killed in the incident in which the guerrillas detonated two mines on the lines, hitting the locomotive and a carriage. After the attack, the guerrillas took 300 passengers to a major guerrilla base but freed the women and children July 27. Following the breakdown of peace talks last month, the government outlawed the Khmer Rouge and closed down its offices in Phnom Penh. The guerrillas responded by declaring a "provisional government" in the northwestern province of Preah Vihear.

Cambodia - July 29, 1994 - Three foreign hostages tentatively identified

An Australian, a Briton, and a Frenchman may be among the 100 hostages being held by Khmer Rouge guerrillas after a train ambush July 26 in Kampong Trach district, 80 miles south of Phnom Penh. Rumors have

surfaced in the capital that the attack on the train may have been the work of government soldiers, not Khmer Rouge guerrillas. Reportedly, railway authorities have been paying off the guerrillas to secure safe passage for trains.

Turkey - August 15, 1994 - Lethal bombing at Istanbul bus

A time bomb exploded August 12 at a bus station in Istanbul's Topkapi district, killing one person and wounding six. The station services routes to other European cities. The Kurdistan Workers Party, which has been striking at tourist targets in recent months, is suspected.

India - August 25, 1994 - Bomb on bus kills 5 children

Police report a powerful bomb exploded in the northern state of Jammu-Kashmir August 25. The bomb was in a van used to transport children to school in the winter capital of Jammu. The blast killed seven people and 31 people were injured. Muslim Kashmiri separatists are suspected. Jammu-Kashmir is the only predominant Muslim state in otherwise Hindu India and has been the scene of violent clashes since a rebellion against Indian rule erupted in 1990. There have been over 17,000 deaths in the sectarian violence.

Egypt - August 26, 1994 - Gunmen fire on tourist bus, kill Spanish child

Muslim militants opened fire August 26 on a tourist bus in the southern Egyptian town of Nag Hammadi, 280 miles south of Cairo, killing a Spanish child and injuring two other foreigners. Al-Gamaa al-Islamiya (Islamic Group) is suspected.

India - September 6, 1994 - Bombs found on express train in Uttar Pradesh

Five unexploded bombs were found late September 3 on an express passenger train in the northern state of Uttar Pradesh. The devices, hidden in one of the train's toilets, were discovered as the train neared Allahabad after an anonymous caller tipped police. Uttar Pradesh was hit by violence last week as a rural separatist group held rallies to establish a new state within the union.

India - September 9, 1994 - Security forces fire on bus, 9 dead

Members of the paramilitary Border Security Force (BSF) September 9 opened fire on a passenger bus in Bandipore in northern Jammu-Kashmir state, killing at least nine passengers. Witnesses and local police say the shooting was unprovoked, but the BSF says it opened fire after shots were fired at them from the bus. Government officials have reportedly

acknowledged in private that BSF troops involved in the incident were drunk at the time. In the past, the BSF has come under criticism from human-rights groups and is believed to be one of the most trigger-happy of the Indian security forces.

Ireland - September 13, 1994 - UVF bombs Belfast-Dublin train

A small bomb exploded under the seat of a train that had arrived in Dublin from Belfast September 12, slightly injuring two passengers. The Ulster Volunteer Force (UVF) claimed the attack and said it had planted six other bombs, though a search turned up nothing. Northern Ireland police warned Irish authorities last week to expect attacks by Protestant extremists to retaliate for the decision by Irish Prime Minister Albert Reynolds to meet with Sinn Fein, the political arm of the Irish Republican Army (IRA). The meeting came after the IRA declared a cease-fire September 1 but before the minimum three months without attacks insisted on by the British. Loyalist paramilitaries have staged four attacks in Northern Ireland since the cease-fire, but Monday's explosion was the first in the Republic since May, when gunmen attacked a Dublin pub.

Greece - September 20, 1994 - ELA claims deadly bombing

Revolutionary Popular Struggle (Greek acronym: ELA) claimed responsibility for the remote-control bombing of a bus that killed a top police officer, saying it attacked the bus because police were "local representatives of the CIA." The statement vowed to continue to strike at police.

Egypt - September 28, 1994 - Gunmen attack tourist train

Muslim militants hiding in sugar and maize fields opened fire September 28 on a tourist train passing near the town of Mallawi, 140 miles south of Cairo. At least 40 rounds struck the train, injuring two Egyptians.

Israel - October 5, 1994 - Tourist injured in hand grenade attack

Four Tourists, including an Italian and a Spaniard, were wounded in a hand-grenade attack near the Church of Lazarus on the occupied West Bank yesterday. A fragmentation grenade was thrown at the tourist bus parked near the church.

Cambodia - October 10, 1994 - Khmer Rouge sabotage key railway line

Khmer Rouge guerrillas on October 8 blew up two key bridges severing rail links to northwest Battambang province. The Battambang line, one of two railway lines in the country, is a major transport and trade link. Authorities say the damaged bridges can be repaired within days, but ongoing security problems have forced a temporary suspension of rail services. The

government has stepped up security in southern Kampot province since a July 26 Khmer Rouge ambush on the rail line there left 13 people dead. Three Westerners traveling on the train were taken hostage.

Germany - October 19, 1994 - Peruvian stabbed in Berlin subway

A drunk with a pocket knife stabbed a Peruvian waiting for a train in Berlin's Karlshorst subway station October 17. Police recently have tightened security on Berlin's rail network. Earlier this month, "skinhead" gangs rioted on two Berlin trains and tried to throw a man off a train. Last month, police arrested four neo-Nazi youths for pushing a Ghanaian refugee from a moving train.

Israel - October 19, 1994 - Suicide bomber attacks bus

A bus on Disengoff Street in Tel Aviv was blown up by a suicide bomber killing 23 people and injuring 45. The bus was filled with commuters when the bomb exploded at 9 am. Hamas claimed responsibility for the bombing. The attack occurred two days after Israel and Jordan agreed on a peace treaty.

India - October 20, 1994 - Separatists kill 34 in bus attack

On October 20, heavily armed separatist guerrillas in the northeast state of Manipur attacked a commuter bus, killing 34 passengers and injuring 11 more. The militants reportedly stopped the bus, told several passengers to get off, fired at the vehicle and then pushed it off a cliff. According to some reports, the militants were from the Kuki tribe and the victims were identified as Naga rebels. Guerrillas from two major regional tribes, the Kukis and Nagas, have been fighting for independence in Manipur and its neighboring state, Nagaland. In addition, both groups often operate from across the Myanmar border, fighting over a lucrative heroin smuggling route. Late last year, Prime Minister P.V. Narasimha Rao imposed direct central rule over Manipur in a bid to curb continued violence.

Egypt - October 24, 1994 - Militants kill tourist, wound 4

Muslim militants opened fire on a tour bus near the town of Naqada in the southern province of Qena October 23, killing a British tourist and wounding three others and a local driver. The bus reportedly was on a road not designated for tourist vehicles and the driver had not notified police of his journey. The bus was traveling from the tourist village of Korna to Naqada when the incident occurred. The attackers escaped after coming under police gunfire that wounded at least one. The death brings to 11 the number of dead tourists since specific attacks on foreigners began in the spring of 1992.

Cambodia - October 31, 1994 - 6 die, 15 hurt in bomb attack on train

At least six people were killed and 15 injured early October 28, when a time bomb exploded on a crowded train in the northwestern province of Battambang. The device, which detonated after the train had left for Sisophon, was hidden in a vegetable basket. Khmer Rouge guerrillas, who have warned people to travel on trains at their own risk, have been blamed for the attack. Meanwhile, observers are increasingly pessimistic about the fate of three Western tourists kidnapped by Khmer Rouge guerrillas in a July train ambush. Local police October 31 began searching an area where, according to some reports, the three were buried.

India - November 7, 1994 - Bomb on bus kills 2, injures 13

A bomb exploded November 6 on a bus in the northern city of Jammu, killing two people and injuring 13 others. Police say Sikh militants were most likely responsible. Security forces have been successful in expelling Sikh terrorists from neighboring Punjab, the traditional Sikh region, and now believe some extremists have forged links with Muslim militants in Jammu-Kashmir.

Lithuania - November 8, 1994 - Explosion demolishes bridge

An explosion described as "a serious act of sabotage" destroyed a bridge 20 miles southwest of Vilnius November 6. Residents warned a passenger train due to pass shortly after the blast and no injuries were reported. The government called for public vigilance to "prevent criminals from disrupting the security of the state."

India - December 1, 1994 - 15 hurt in bomb blast in Jammu-Kashmir

At least 15 people were hurt November 30 when a bomb on a commuter bus detonated in the city of Jammu, in Jammu-Kashmir.

China - December 8, 1994 - 27 die in explosion on bus

An explosion aboard a bus at Yunzhou, central Hunan province last month killed 27 people and injured 10, including three passersby. The blast occurred November 22 when 370 pounds of gunpowder exploded, apparently set off by a lit cigarette. The owners of the gunpowder loaded it onto the bus in six bags, telling the driver it was rice.

India - December 12, 1994 - 3 killed in bus bomb blast in north India

A bomb explosion in a bus killed three people and injured 15 December 10 in the northern state of Jammu-Kashmir. The agency said the bomb exploded at Parmandal More on the Jammu-Pathankot expressway, about 20 miles from Jammu, the state's winter capital. No one claimed immediate responsibility

for the blast. Last month, seven Hindu pilgrims on their way to a major shrine in the state were killed in a bomb blast in a bus. Hindus are a majority in Jammu, in the southern part of the state. Authorities say Muslim and Sikh separatist militants operate there.

United States - December 15, 1994 - Bomb explodes on subway

A bomb exploded on a subway in Manhattan. Two people were injured. The bombing was part of a campaign of subway bombings to extort money from the city.

United States - December 21, 1994 - Bomb explodes on subway

A bomb exploded on a subway in lower Manhattan. It was the second such bombing that was determined to be part of a campaign to extort money from the city. The bomber was seriously injured when the bomb exploded too soon.

Colombia - December 23, 1994 - ELN attacks buses in Cartagena

On December 22, guerrillas of the National Liberation Army (Spanish initials: ELN) firebombed three buses in the tourist city of Cartagena, killing eight people and wounding four. One of the buses was attacked near the fortified wall of the colonial part of the city, Cartagena's most popular tourist attraction. Police suspect the ELN attacked the vehicles to punish the bus company's refusal to pay an extortion demand. They described the attack as the worst in years in Cartagena and posted a reward for information leading to the capture of the assailants.

China - December 23, 1994 - Explosion on bus

A young man was killed and two others injured December 23, when flammable material he was carrying exploded aboard a bus in central Beijing. In November, 27 people were killed in an explosion aboard a bus at Yunzhou, central Hunan province, when 370 pounds of gunpowder exploded, apparently set off by a lit cigarette. The owners of the gunpowder loaded it onto the bus in six bags, telling the driver it was rice. Bus travel is not recommended.

Israel - December 25, 1994 - Suicide bomber explodes bomb at bus stop

A Hamas suicide bomber exploded a bomb at a Jerusalem bus stop full of Israeli soldiers waiting for buses back to their base. He was protesting the killing of Hamas members. The bomber was on the Palestinian police force. He had probably intended to carry the bomb on to a bus filled with Israeli soldiers.

Turkey - January 3, 1995 - Assailants kill 2 in bus attack

Four assailants, three men and a woman, boarded a bus traveling from Ankara to Istanbul December 31, stopped the bus near Izmit, then opened fire on passengers and hurled a grenade before escaping in a taxi. The attack left two bus passengers dead and 22 wounded. Police said they are unsure of the identity of the assailants, who could be Islamic, Kurdish or leftist militants.

South Africa - January 12, 1995 - Tourists robbed and thrown from train

Two German tourists traveling by train from the University of Natal to Cape Town were robbed January 11 and then thrown from the moving train by their assailants. One of the tourists suffered a fractured skull and is listed in critical condition, the other escaped with minor injuries.

Egypt - January 12, 1995 - Gunmen open fire on train

Two Argentineans and four Egyptians were injured when suspected al-Gama'a al-Islamiya gunmen opened-fire on the train traveling from Luxor to Cairo

Turkey - February 2, 1995 - Bombings in Istanbul

A woman died February 1 while planting a bomb on the main bridge crossing the Golden Horn, an inlet on Istanbul's European side. Police disarmed a second device on the bridge. Two other bombs exploded February 1, one outside a McDonald's restaurant and another at a bank branch on Istanbul's outskirts.

India - February 27, 1995 - Bomb on train kills 27

Twenty-seven soldiers have died since two bombs exploded on a passenger train in the northeastern state of Assam February 25. The soldiers were returning to their base after election duty in nearby Manipur, when the bombs exploded in their reserved compartment. At least 30 others were injured in the blasts, suspected to be the work of the outlawed separatist Nationalist Socialist Council of Nagaland. RDX explosives are thought to have been used in the bombs -- the first time, officials say, such sophisticated devices have been used in the area. The bombs may have been planted aboard the train in Dimapur in Nagaland, bordering upper Assam, an area where several militias, mostly tribal, operate.

Japan - March 20, 1995 - Sarin nerve gas in Tokyo subway

Several toxic gas containers, apparently planted deliberately, flooded subway cars and stations with fumes in morning rush hour March 20, killing eight people and injuring thousands. More than 4,700 people were sickened in 16 stations. At least one American businessman was affected, but is

recovering. Two main subway lines were shut down and 26 stations were closed in the incident. Among the hardest hit was Tsukiki station in central Tokyo. Preliminary reports are sketchy about how the attack began, but suggest the substance -- tentatively identified as the nerve gas sarin -- was planted in wrapped containers in at least five subway cars on three train lines. Sarin is an extremely toxic and volatile nerve gas developed by Nazi scientists in the 1930s and has been the villain in a number of recent, unexplained cases: Earlier this month, a similar but more minor incident was reported on a subway in Yokohama. Eleven passengers were hospitalized but police never found the source of the gas or made any arrests. In another unresolved case last June, sarin seeped through several houses and apartments in the central resort city of Matsumoto, killing eight people and poisoning about 200 others. The source of the gas was never identified. However, in this case, investigators believe sufficient residue from the gas may remain in the carriages for them to identify its "signature" and therefore its origin.

Bangladesh - March 23, 1995 - More than 40 hurt in transport blockade

More than 40 people were injured March 23 when opposition parties tried to shut down inter-city transport in their latest attempt to force an early election. More than 30 were injured as police used truncheons to disperse activists demonstrating in the capital, Dhaka. A dozen activists were hurt in Lalmanir Hat and Mymensingh, in the north. Police outnumbered protestors in and around the capital. Opposition activists attacked a train in the northern region of Lalmanir Hat and halted several others across the country. Buses and trucks did not operate at all, while ferry services were disrupted.

Israel - April 10, 1995 - Suicide bombers kill 6, wound 46

Islamic militants claimed responsibility for two suicide bomb attacks in the Gaza Strip April 9 that killed six soldiers and wounded 46 people. The Palestinian Islamic Jihad took responsibility for the attack on a bus in the village of Kfar Darom, 10 miles south of Gaza City. The Islamic extremist group Hamas claimed it carried out the other attack on a military jeep near the settlement of Netzarim. It was the deadliest attack since a double suicide bombing killed 21 north of Tel Aviv in January. Since the peace accord between the Palestine Liberation Organization and Israel was signed in September 1993, 123 have died in terrorist violence.

Israel - April 9, 1995 - Suicide bomber drove car into convoy

Gaza. A suicide bomber drove a car bomb into a convoy of Army jeeps and settlers cars. One person was killed and at least three injured Hamas claimed responsibility.

South Korea - April 17, 1995 - Exercises for chemical attack

Anti-chemical and anti-biological warfare exercises were staged in Seoul and its suburbs April 14 to practice dealing with any toxic gas attack like that on the Tokyo subway. Civil-defense drills have been practiced periodically, mostly with reference to a possible invasion by North Korea. "What is noted in the civil exercise this time is that we had stepped up drills against possible chemical and biological warfare in Seoul and surrounding areas," an interior ministry official said. He said South Korea faced no immediate danger of a chemical attack but wanted to make sure it was prepared for any incident like that on the Tokyo subway last month in which 11 people were killed and more than 5,000 injured. Military personnel and members of the emergency services practiced evacuating buildings and treating victims of a chemical attack.

Sweden - April 18, 1995 - Bomb found on Stockholm subway

A crude bomb -- dynamite packed into a metal pipe -- was found April 17 at central Stockholm's Hotorget subway station. An unknown man handed the device to a security guard but disappeared before he could be questioned.

Japan - April 19, 1995 - Mystery gas detected in Yokohama

A mystery gas was detected April 19 in a basement walkway connecting the west and east entrances and exits of Yokohama station. Shortly thereafter, a train originating from Yokohama station and traveling south was stopped and evacuated at Kannai station, the second stop from Yokohama, after the detection of an offensive odor. Station officials inspected the train, found no unusual substances on board and the train was allowed to continue. Several passengers got off the train complaining of throat and eye irritation and nausea. None of the injured lost consciousness, but more than 200 people reportedly were sent to the hospital after the incident. No positive cause was immediately established, but bystanders theorized the odor may have been emitted by newly operating train air conditioners. Police are treating the incident as a criminal case. By mid-afternoon, the National Defense Agency issued a statement indicating the chemical was not sarin, although they were not immediately able to identify the cause of the odor, which one passenger said resembled that of sulphur. However, so far they have not linked the incident and last month's sarin gas attack on the Tokyo subway system for which the doomsday cult Aum Shinrikyo has been blamed. A local news report noted two individuals were arrested close to the scene in a car registered to the sect, but that has not been confirmed.

Japan - May 8, 1995 - Another attempted poison gas attack on subway

Late May 5 in Tokyo, Shinjuku subway station employees discovered and extinguished two burning plastic bags of chemicals left in a men's toilet. One of the bags contained sodium cyanide, the other diluted sulfuric acid. Had the vapors combined correctly, they could have formed enough hydrogen cyanide to kill thousands of people in seconds. Shinjuku is one of the city's busiest stations, with more than a dozen train and subway lines converging there to service the district's department stores, restaurants, and nightclubs. Police are looking for a man who alerted station employees to the fire but then disappeared.

Pakistan - June 1, 1995 - Bus crash after across border shooting

On May 31, a bus in eastern Pakistan tumbled into a ravine, killing 25 people, reportedly after it came under fire from Indian troops across the border. The bus driver turned off the headlights in the predawn darkness to avoid detection by the Indian forces. The accident occurred in the Neelum Valley, 100 miles northeast of Islamabad.

Chile - June 7, 1995 - Groups threaten sarin attack

Paramilitary groups who support convicted Gen. Manuel Contrera have reportedly threatened to release sarin nerve gas in the Santiago subway system if Contreras is sent to prison. The general, the former director of the once-feared secret police, was recently sentenced to seven years for his role in the 1976 murder of former Chilean foreign minister Orlando Letelier in Washington. Contreras, who has warned he will not spend a day in prison, has barricaded himself in his farm and is protected by several former subordinates from the DINA. The paramilitary groups reportedly have also announced they will attack government and congressional officials if the sentence is not revoked. According to local news media, DINA and a dozen former aides of the general, who were being watched by the police, have disappeared. Some fear they could stage attacks in support of Contreras.

Cambodia - June 27, 1995 - Khmer Rouge blow up northwest rail link

Khmer Rouge guerrillas have destroyed extensive sections of the railway linking Phnom Penh to northwest Battambang. The Battambang train has been out of service since June 14 due to Khmer Rouge attacks and sabotage. On June 15, insurgents destroyed a major 110-foot rail bridge in Pursat, 85 miles northwest of Phnom Penh. Railway investigators have found at least 108 land mines used to destroy sections of the railway in the northwest provinces of Kampong Chhnang, Pursat and Battambang. According to a spokesman for the Cambodian Railways, the destruction of the northwest rail links are the most serious attacks by the Khmer Rouge against transport

infrastructure so far this year. Railway workers are expected to restore service on the line "within 10 days."

Japan - July 5, 1995 - Cyanide devices found in subway

In the latest scare to hit the public since the March 20 subway nerve gas attack, police July 4 discovered a device designed to release cyanide gas in a Tokyo subway. The device, hidden in a women's lavatory at the Kayabacho subway station in the city's center, had a timing device and vinyl bags containing two liquid agents -- cyanide soda and sulfuric acid -- which could react to form cyanide gas. A second device was found six hours later in a men's toilet at Shinjuku, the city's busiest rail station. Earlier in the day, rush-hour subway trains on the Hibiya line were stopped briefly at Kayabacho station, near the Tokyo Stock Exchange, after the discovery of a mysterious package that turned out to be harmless. Also late July 4, noxious fumes were reported at two other major stations, Ginza and Tokyo.

Investigators say the fumes were probably the work of pranksters. However, this scare resembles an incident in early May, when authorities narrowly averted a cyanide-gas attack at Shinjuku. The abortive attack was blamed on the doomsday Aum Shinrikyo cult, whose leaders have been charged with the March 20 gassing that killed a dozen people and sickened thousands. Since the March case, posters warning passengers to report suspicious persons and items have been displayed prominently in every Tokyo subway station.

South Africa - July 12, 1995 - 2 killed in train station explosion

A bomb exploded Monday night in a train station on the border of South Africa and Mozambique, killing two people, one of whom may have been the bomber. The device, made from a land mine and an AK-47 ammunition clip, caused extensive damage to the station, located 450 miles east of Johannesburg and 250 miles west of Maputo. Authorities believe the blast was meant to ruin a week-long celebration by South Africa's state transport company Transnet and the Mozambique Railway System marking its centenary.

United Kingdom - July 14, 1995 - Ulster bus depot firebombed

Militants hijacked a bus in a republican area of Belfast July 13, ordered the driver and two others off, and then firebombed the vehicle. Police who responded also met a barrage of firebombs. Officers arrested five people.

Israel - July 24, 1995 - Suicide bomber kills 7 near Tel Aviv

A suicide bomber from Hamas (Islamic Resistance Movement) blew up a commuter bus in the Tel Aviv suburb of Ramat Gan July 24, killing at least seven people and wounding more than 30. The blast comes on the eve of a deadline in talks between Israeli and PLO leaders on expanding the Palestinian's self-rule in the West Bank beyond the town of Jericho. Hamas condemns the peace talks and any deals made with Israel.

Pakistan - July 25, 1995 - Bus bomb kills 3 in Punjab province

On July 23, a bomb blew up a bus near Kasur town in the central province of Punjab near the Indian border, killing three people and injuring 25, when the bus was traveling east to the nearby town of Kot Radha Kishan. There was no information about who set off the bomb.

France - July 27, 1995 - Bombing on Paris commuter rail line kills 7

A large bomb triggered by a timer exploded on an RER commuter train stopped at the St. Michel-Notre Dame station in Paris' Latin Quarter during evening rush hour July 25, killing seven people and injuring some 60 others. The bomb had been placed under a seat on the suburban transit train which had been headed south toward Saint-Remy-les-Chevreuse; it exploded while the doors to the carriage were still closed, sparking a fire that hampered rescue efforts carried out in one of the most popular tourist districts in Paris. The bombing was the worst terrorist incident since the Iranian-sponsored bombing campaign in 1985/86 that killed 13. Interior Minister Jean-Louis Debre met with the government's anti-terrorist advisory group late July 25 and ordered tightened security at Orly and Charles de Gaulle-Roissy International Airports. The government also deployed 1,000 extra policemen at government facilities, tourist sites, and railroad stations in Paris and another 800 officers in other major cities, including Marseilles, Lyons, and Nice. Officers carried out random security checks on highways and at borders, while bomb scares July 26 led to the evacuation of a number of public places in Paris, including the shopping complex Les Halles and the Louvre, from which about 8,000 visitors had to leave. Police also urged theaters, museums, and large stores to increase security.

Panama - August 8, 1995 - Protests continue in Panama City and Colon

Dozens were injured and hundreds arrested August 7 as the worst demonstrations in Panama since the era of Manuel Noriega continued. Simultaneous protests were reported at several points throughout Panama City, and demonstrations also blocked roads in Colon. At least three people were injured when a homemade bomb exploded in a bus in which they were riding.

Algeria - August 8, 1995 - Bomb on passenger train kills 7 people

A bomb exploded on a passenger train killing seven people and injuring 20 near the town of Braza.

Switzerland - August 14, 1995 - Arsonists hit French TGV train

Arsonists firebombed an empty French high-speed train parked at a depot in Bern early August 13. The attack, the second on a French TGV train, caused about \$835,000 in damage and is believed to be a protest of French plans to resume nuclear testing in the South Pacific.

Turkey - August 18, 1995 - PKK ambushes bus

Kurdistan Workers Party (Kurdish initials: PKK) guerrillas opened fire on a bus traveling from southeastern Diyarbakir to Istanbul August 17, killing two civilians and injuring nine.

France - August 18, 1995 - Bombing near Arc de Triomphe injures 17

A bomb packed with nails and bolts exploded in a garbage can outside the Charles de Gaulle Metro station a block from the Arc de Triomphe during evening rush hour August 17, injuring 17 people, three seriously. The victims at the tourist-packed district included four Hungarians, four Italians, a Briton, and a German. The blast shattered nearby windows, and police halted traffic around the monument and shut off subway lines to launch a search for more explosives. The device, packed into a butane canister, resembled the bomb that killed seven on a Paris commuter line July 25. The Armed Islamic Group (French initials: GIA), the fiercest of Muslim militant groups waging war on the Algerian government, is the prime suspect in the commuter train bombing as well as the August 17 blast.

Israel - August 21, 1995 - Suicide bomber kills 4 in Jerusalem attack

A suicide bomber from the extremist group Hamas (Islamic Resistance Movement) blew up a commuter bus and damaged another early August 21 in Jerusalem, killing at least four people and wounding 100 more. Prime Minister Yitzhak Rabin temporarily put on hold peace talks with the Palestine Liberation Organization (PLO), who condemned the bombing, and closed the nation's borders with the West Bank. A group of 100 right-wing Jews opposed to the peace talks with the PLO demonstrated at the scene of the blast, throwing rocks at police and demanding an end to the negotiations. Hamas opposes a negotiated settlement with the Israeli government regarding Palestinian self-rule in the Occupied Territories and has been responsible for a wave of suicide bombings since the two sides signed a peace accord in September 1993. The most recent such bombing occurred on July 24 in Tel

Aviv in which six people were killed. Since the signing two years ago a total of 77 people have died in bombing attacks.

France - August 26, 1995 - Unexploded bomb found on train

An unexploded bomb with faulty mechanisms was found on the railway line north of Lyon. It was made from a 25 kg. gas canister packed with explosives. There was no claim of responsibility for the bomb. It is part of a bombing campaign by Algerian Muslim extremists. The fingerprints of an Algerian-born suspect, Khaled Kelkal, were found on the bomb. The suspect was shot and killed by police on September 29, 1995. Authorities believe that he was under orders from the Armed Islamic Group (GIA) of Algeria and was thus involved in the July assassination in Paris of Sahraoui, founder of Islamic Salvation Front in Algeria. They also believe that he was involved in the Paris Metro station bombing of a train in July.

Angola - September 4, 1995 - UNITA rebels ambush bus

Suspected UNITA rebels ambushed a bus and killed 25 passengers including three Britons and five Filipinos near Lucapa in Lunda Norte province. A UNITA representative denied responsibility for the attack.

France - September 5, 1995 - 2 attempted bomb attacks in Paris

A massacre was narrowly averted in a crowded outdoor Paris market September 3 when a powerful bomb packed into a pressure cooker misfired but injured three shoppers. A second device located next to the Convention subway station in southwestern Paris was successfully disarmed. Local officials believe Algerian militant Yahian Rihane, known as "Krounfil," a member of the Armed Islamic Group, is avenging the death of four Islamic extremists who hijacked a French airliner in December.

Russia - September 21, 1995 - Hostages rescued

Anti-terrorist forces stormed a hijacked bus in the southern republic of Dagestan September 20 and freed 18 hostages held by gunmen demanding \$1.5 million and a helicopter. The hijackers said they needed money to help drug-addicted friends.

Algeria - September 28, 1995 - Railway bomb kill 5, injures 11

A bomb exploded under a locomotive near Algiers September 28, killing five people and injuring 11. The locomotive had been sent to recover the wreckage of another train attacked by Islamic extremists September 26 that was blocking the main rail line between Algiers and Blida. In that attack, militants stormed the train, ordered the passengers off and burned the carriages.

Mexico - September 29, 1995 - Angry policeman kills 3 in subway shooting

A policeman who was rebuffed when he attempted to start a conversation with train passengers opened fire in a Mexico City subway car today, killing three people and wounding six.

Georgia - October 1, 1995 - Bus hijacking results in 2 deaths and 10 injuries

Two people were killed and 10 injured in a bus hijacking. The incident began some 125 miles from Kutaisi in western Georgia and ended at the edge of Tbilisi.

Algeria - October 2, 1995 - 18 killed in extremist violence

Islamic extremists opened fire on a passenger bus October 1 in the town of Laghouat killing 18 passengers and wounding 15. In an incident September 30, a car bomb exploded at a security forces housing compound in the town of Tipaza, killing two people and injuring 10.

France - October 9, 1995 - 2 GIA bomb attacks over the weekend

A bomb detonated in a trash can in Paris October 6, slightly wounding 13 people. The attack came hours after the burial of the main suspect in the wave of bombings blamed on Muslim extremists. Police sealed off the area after a mailman spotted the bomb outside the Maison Blanche (white house) Metro train station -- the same name as the village where gendarmes shot dead Algerian-born Khaled Kelkal a week ago. Another bomb exploded before dawn October 9 on a deserted suburban railway line west of Paris, causing light damage but injuring no one. Officials say the bomb, which sent shrapnel up to 100 yards, was a gas canister filled with nails and bolts, similar to devices used by the Armed Islamic Group (French acronym: GIA). An anonymous caller claimed responsibility for the attack for the GIA general command.

United States - October 10, 1995 - Terrorist sabotage possible in Amtrak derailment

Federal officials are investigating leads of anti-government terrorists who may be responsible for the October 9 Amtrak train derailment in southwest Arizona that killed at least one and injured 65 more, 20 critically. The train, en route from Miami to Los Angeles carrying 248 passengers and 20 crew members, crashed October 9 around 1:30 a.m. as it crossed a bridge near the town of Hyder, 60 miles southwest of Phoenix. Two sleeping cars and a dining car plunged 30 feet into a gully after crossing a sabotaged rail connector. In addition, two locomotives and eight of the train's 12 cars

derailed. Authorities found two messages at the scene referring to the deadly government sieges at Waco, Texas, and Ruby Ridge, Idaho, focal points for right-wing, anti-government extremists. The letter was signed by the previously unknown "Sons of Gestapo." Also, authorities say an electrical wire had been rigged up to the rail's connecting joint to prevent the track's warning system from detecting a break in the line. Amtrak notified all freight and commuter railroads carrying its passenger trains to be on alert for more sabotage.

In addition to right-wing militants, federal investigators are looking into the possibility the crash could have been the work of a former employee with a grudge against the railroad or an associated business. In any event, the sabotage was well-planned, as those responsible had extensive knowledge of the computer warning system attached to the rail. Amtrak has increased its security recently after a generalized warning issued by the U.S. Department of Transportation concerning possible terrorist attacks.

Russia - October 16, 1995 - Bus hijacker killed

The hijacker of a bus carrying South Korean tourists was killed October 15 when security forces stormed the vehicle and freed the hostages unharmed. The operation ended a 10-hour hostage drama in the heart of Moscow after the lone hijacker seized the bus with 25 South Korean tourists near the Kremlin residence of President Boris Yeltsin. The seizure was the first mass hostage-taking in Moscow and a blow to the prestige of law enforcement agencies as it took place so close to the Kremlin.

France - October 17, 1995 - GIA bomb blast in central Paris, 24 hurt

A bomb blast injuring 24 occurred during rush hour October 17 on a suburban subway train as it passed through a tunnel between the stations of Musee d'Orsay and Saint Michel in Paris' Left Bank area. The device had been hidden under a seat and the blast destroyed the car. Officials say the bomb appeared to have been manufactured from a propane gas canister, a technique used in most of the recent bombings that have occurred in the city and in Lyon. The Armed Islamic Group (French initials: GIA) is suspected.

India - October 30, 1995 - 4 killed in Assam bomb blast

On October 29, four people were killed and 15 injured when a bomb exploded on a bus in the eastern state of Assam. The blast occurred while the bus was at a public terminal in the town of Diphu. Officials say no one has claimed responsibility for the explosion, but it is probably linked to ongoing unrest in the region -- Bodo tribes people in Assam, who have been fighting

for an autonomous homeland within the state, are blamed for dozens of terrorist attacks in recent years.

Israel - November 2, 1995 - 11 Israelis injured in 2 suicide attacks

Two Palestinian suicide bombers slightly wounded 11 Israeli bus passengers November 2 in separate attacks within minutes of each other in the Gaza Strip. The attacks come one week after the killing of Palestinian Islamic Jihad (PIJ) leader Dr. Fathi Shqaqi in Malta, which the PIJ blamed on Israeli agents. Today also marks the first anniversary of the killing of PIJ activist Hani Abed.

Egypt - November 9, 1995 - Islamic extremists fire on train

Islamic extremists opened fire on a train en route from Aswan to Cairo in the south of Egypt near Farshut village about 600 kilometers from Cairo, injuring two foreign tourists -- one French and one Dutch as well as an Egyptian. The next day the Tal'at Yasin group of al-Gama'a al-Islamiya issued a statement claiming responsibility and warning all tourists to leave Egypt.

Egypt - November 18, 1995 - al-Gama'a members fire on tourist train

Suspected al-Gama'a al-Islamiya members opened fire on a tourist train about 250 miles south of Cairo. The train was en route from Aswan to Cairo. One Egyptian train worker was killed and another injured. Several other passenger were injured and taken to the hospital.

United States - November 27, 1995 - Subway token booth set on fire, clerk seriously injured

A New York City subway clerk suffered burns over 70 percent of his body November 26 after two attackers sprayed a flammable liquid inside his token booth and set it ablaze. Police found a rifle at the scene but did not know if anything was taken from the booth.

Egypt - November 30, 1995 - Another attack on tourist train

Suspected al-Gama'a al-Islamiya members opened fire on a tourist train about 160 miles south of Cairo. The train was en route to southern Egypt. Eleven rounds were fired causing minor damage to the train. There were no injuries. The Islamic Group has threatened the safety of any foreigners refusing to leave the country.

Pakistan - December 1, 1995 - Bus bomb kills 3, injures 14

A bomb hidden in the baggage hold of a passenger bus exploded in Lahore, Punjab province December 1, killing three people and wounding 14. It was the third bomb attack on a bus in the province in less than three weeks.

Kenya - December 18, 1995 - 7 tourists robbed in bus hijack near Masai Mara game park

Gunmen December 14 hijacked a tourist bus and robbed seven Danish tourists en route to the Masai Mara game park. The gunmen shot out the front window, assaulted the bus driver and then robbed the tourists. Kenyan officials have attempted to heighten security for visitors by forming a special tourist police unit.

India - December 19, 1995 - Guerrillas attack bus, 2 killed, 10 injured

Separatist guerrillas in the northeastern state of Manipur December 19 attacked a school bus owned by the paramilitary Border Security Force, killing two schoolgirls and a soldier and injuring 10 others. No group has claimed responsibility for December 19's attack, but the tribally based, Maoist People's War Group and the National Socialist Council of Nagaland, from neighboring Nagaland, are the most prominent extremist groups active in Manipur.

Pakistan - January 8, 1996 - Bus bomb kills 7, injures 35

A bomb exploded on a government bus during the January 7 afternoon rush hour on the Shakra-e-Faisal road in the southern port city of Karachi, killing seven people and injuring 35 others. A Bomb Disposal Squad official said the blast was caused by a homemade bomb weighing at least six pounds that was placed beneath a seat in the center of the vehicle, which was carrying 70 to 80 passengers. The blast follows one on January 2 near government offices in Karachi that wounded three people.

Italy - January 15, 1996 - Attach threats on trains and aircraft found

A message threatening attacks on Italian trains and aircraft was illicitly inserted onto the computer system of the ASCA press agency, based in Rome. Police increased security but no explosive devices were found. The threat was signed by the "Falange Armata" (Armed Phalanx), an obscure organization that had interfered with Italian press agency computer systems in the past.

Egypt - January 26, 1996 - One person wounded in train attack

One Egyptian man was wounded January 26 when Islamic extremists opened fire on a passenger train traveling through the dangerous Asyut governate of southern Egypt. The train, which often carries tourists through

the area, was traveling north from the southern town of Aswan to Cairo. It is unknown if there were any tourists on board. Militants from al-Gamaa al-Islamiya (Islamic Group), who stage such attacks on a regular basis in southern Egypt, are suspected in this ambush.

Macedonia - January 29, 1996 - Bomb threat halts train

Police halted a train traveling between Skopje and Belgrade January 26 after receiving a telephonic bomb threat. Authorities searched the train at the Macedonia-Serbia border crossing of Tabanovce but found nothing.

Estonia - February 2, 1996 - Bomb explosion on bus

On February 1, a bomb explosion on a bus traveling between Oru and Johve in the predominantly Russian northeast region killed one person and injured 10 others. The bus company had received several extortion threats from local organized crime gangs and had refused to pay.

Papua New Guinea - February 8, 1996 - Villagers blow up bridge in Eastern Highlands

On February 3, villagers used a World War II bomb to destroy a bridge on the Eastern Highlands highway in a dispute over a \$150,000 compensation claim for a road accident death. Police responded by attacking villagers' property. The road, a vital link connecting the coastal city of Lae to the highlands and some of the country's major resource projects, including the Porgera gold mine and Kutubu oil project, was reopened under heavy guard February 5 with a temporary crossing replacing the destroyed bridge.

United Kingdom - February 12, 1996 - IRA bomb blast kills 2, injures 100 in London

An Irish Republican Army (IRA) bomb detonated under a railway bridge in Surrey Quay in the Docklands area east of London late February 9. At least two people died, seven others were seriously hurt, and more than 100 suffered slight injuries. The explosion coincided with a report from Ireland's semi-state RTE radio it had received a coded statement from the IRA saying its 17-month cease-fire was over. Gerry Adams, head of the IRA's Sinn Fein political wing, said the attack was intended to get Britain to drop its insistence on calling elections in Northern Ireland and to convene all-party talks to reach a negotiated settlement.

United Kingdom - February 20, 1996 - IRA bomb blast kills 1, injures 8

The Irish Republican Army (IRA) said February 19 it planted the bomb that exploded on a London bus February 18, killing one person and injuring eight. Police say the lack of warning for February 18's attack in the Aldwych

area near Covent Garden indicates the bomb may have accidentally exploded while being taken to its intended target. The explosion is the third IRA action in London in 10 days following a declaration by the IRA ending its 17-month cease-fire. Irish media reported a new commander has taken over the IRA's bombing campaign against Britain. He is described as believing "violence is the only answer Britain will understand." British and Irish security forces fear the new leadership will ignore political pressure and intensify attacks in the short term.

Greece - February 22, 1996 - Bomb destroys train

A bomb detonated February 21, destroying a train carriage in a rail station in the northern city of Thessaloniki. The train had arrived from Sofia, Bulgaria, one half-hour before the blast. No injuries were reported.

Israel - February 26, 1996 - 26 killed, 82 injured in 2 Hamas suicide bombings

On February 25 at around 6:45 p.m. local time, a 22-pound TNT bomb packed with nails and ball bearings and carried by a Palestinian militant exploded on a crowded bus in downtown Jerusalem, killing at least 24 people, including two American students, and injuring 49 others. About 45 minutes later, a second bomb detonated at a hitchhiking stop for Israeli soldiers in the coastal town of Ashkelon, about 30 miles south of Tel Aviv, killing two people and wounding another 33. The second device was also detonated by a Palestinian suicide bomber allegedly dressed as an Israeli soldier. Combined, the two explosions account for the deadliest day of terrorist activity by Palestinian extremists since the Middle East peace process began. Responsibility for the actions was claimed by the Palestinian militant group Hamas and were meant to avenge the death of the organization's leading bomb-maker, Yahya Ayyash, known as "The Engineer," killed in the Gaza Strip January 5 by a booby-trapped cellular phone. Although no organization claimed responsibility, the assassination was widely attributed to Israeli intelligence forces. A Hamas leaflet said "the attacks were a painful blow to those who ordered the assassination of Yahya Ayyash" and that Hamas would cease its violence if Israel stopped targeting its leaders and released those in detention. Since February 12, which marked the end of a 40-day Palestinian mourning period for Ayyash, Israeli security forces have received numerous warnings of an impending attack. February 25's blasts also fell on the second anniversary of the deadly Hebron mosque massacre in which Israeli Baruch Goldstein opened fire with an automatic weapon on a group of worshippers in the West Bank town, killing 29 Palestinians before being beaten to death by survivors.

Israel - March 4, 1996 - Another bus bombing in Jerusalem kills 19, Peres declares war on Hamas

In a near carbon copy of the February 25 bombing that killed 26 people, another suicide bomber from the militant Palestinian group Hamas early the morning of March 3 exploded a 22-pound bomb on a Jerusalem bus, killing at least 19 people and injuring 10 others. Hamas, once again claimed the bombing, saying it was revenge for the January 5 assassination of its master bomb-maker Yahya Ayyash, also known as "The Engineer." Hamas said this would be the last attack against Israel for three months if Peres does not seek retribution against its members. Peres demanded Palestinian President Yasir Arafat work harder to crush Palestinian terrorist organizations in regions he controls or face indefinite suspension of peace negotiations. He also said Israel's demobilization of troops from the West Bank town of Hebron -- scheduled for the end of this month -- will be canceled if Arafat does not fully comply.

Pakistan - March 7, 1996 - Four killed in bus blast in Azad Kashmir

Dynamite on a bus exploded March 6 in the Poonch district of Azad Kashmir, killing four people and wounding five others. Police say the explosives belonged to a passenger, but people in the region say it was an intentional bomb blast. On March 2, three bomb blasts occurred in the area, but no casualties were reported. The district is close to the line of control dividing Kashmir between Pakistan and India, and is always tense.

Algeria - March 13, 1996 - GIA train bombing kills 12

At least 12 people were killed and 20 injured March 12 when explosives placed on railroad tracks between the northwestern towns of Oran and Tlemcen destroyed a locomotive and two cars. Meanwhile, gunmen March 12 shot to death a photographer for the French-language *Algerie Actualite* in the Algiers suburb of Ain Naadja. Authorities blame extremists of the Armed Islamic Group (French initials: GIA) for the attacks.

India - March 13, 1996 - Five killed in Assam bomb blasts

Three policemen and one soldier were killed March 11 night when a bomb planted under a bridge in western Assam's Kokrajhar district exploded. The victims were part of a police convoy sent to check the bridge to ensure it was safe for vehicular traffic. In a separate incident March 12, a bomb exploded outside a cinema, killing one person. Bodo tribal guerrillas from the Bodo Security Force, which often targets Muslim immigrants and other settlers and which is fighting for a separate homeland within the state, are suspected.

Russia - March 18, 1996 - Time-bomb discovered on Moscow bus

A powerful time-bomb was discovered on a Moscow bus March 17 and was defused just 15 minutes before it was to detonate. No one was injured. Police said the driver found the bomb in a parcel on his bus which was traveling in the Kuntsevo district, one of Moscow's nicest. Experts from the Federal Security Service, a branch of the former KGB said the bomb contained nine pounds of explosive wrapped in nails and bolts. Officials suspect the device was planted by separatist Chechen rebels.

Jordan - March 26, 1996 - Three arrested for bus bomb plot

Authorities March 24 arrested three men accused of planning bomb attacks against tourist buses that transport Israelis into Jordan, and confiscated a cache of explosives and mines stolen from an army depot. Officials announced a state of emergency on the border area with Israel and have placed troops on full alert to prevent infiltrations into Jordan from points other than legal border crossings. Security forces have tightened measures around Palestinian and Iraqi refugee camps to prevent possible attacks within the nation as well as possible infiltration attacks into Israel.

South Africa - March 28, 1996 - 3 killed, 5 wounded when gunmen fire on train

Three people were killed and five wounded March 28 when gunmen opened fire on a commuter train in Umlazi township in the violence-plagued KwaZulu-Natal province.

Slovakia - April 3, 1996 - Bus hijack fails

An ex-convict with a package containing explosives tried to hijack a bus to Austria April 2 but was arrested after the bomb detonated in his hands. No other injuries were reported. Police say the driver managed to evacuate all the passengers from the bus. Authorities then surrounded the bus but took no action until after the package accidentally exploded. Officials said the package contained six pounds of SEMTEX and that only the blasting element detonated.

Israel - April 8, 1996 - 5 injured in bomb attack, mass rally

Five people were injured April 7 when two firebombs were thrown at an Israeli commuter bus near Hebron. Earlier the same day, thousands of Jewish settlers participated in a rally outside the Tomb of the Patriarchs in Hebron protesting a withdrawal of Israeli troops from the town.

Greece - April 15, 1996 - Bomb explodes in empty train car

A home-made bomb detonated April 14 in an empty train car in Salonika. The train, with no passengers on board, had just arrived from Sofia, Bulgaria's capital. Officials say the bombing is linked to a similar attack on February 21 and suspect Bulgarian gangsters vying for control of the drug trade in Salonika.

Algeria - April 17, 1996 - Car bomb

A car bomb exploded April 16 on a bridge linking Algiers with the nearby town of Blida, causing major damage and forcing the closure of the roadway. No casualties were reported. Muslim extremists are almost certainly to blame.

Colombia - April 18, 1996 - Powerful car bomb found at Bogota bus terminal

An elite police bomb disposal unit rendered safe a 110-pound car bomb discovered April 17 outside the Bogota Transportation Terminal in the southwestern sector of the capital. The terminal handles buses from around the country and is usually crowded with travelers. Police say the bomb, composed of dynamite and another more powerful explosive, would have caused massive damage and many deaths had it detonated. There has been a recent upsurge in guerrilla activity nationwide and it is entirely possible the car bomb was the work of insurgents.

United Kingdom - April 25, 1996 - IRA bomb blast in London

Two bombs detonated under the Hammersmith Bridge in west London late the night of April 24, following a coded telephone warning from the Irish Republican Army (IRA). No one was injured. The bridge had been cleared and a search was under way when the bombs detonated. The attack occurred only hours after the IRA's political wing, Sinn Fein, ended weeks of uncertainty by confirming it will contest Northern Ireland elections planned by the British as a prelude to peace talks. Britain reacted by saying Sinn Fein will be barred from the June talks.

United Kingdom - April 26, 1996 - Failed IRA bombing UK's largest

Police said late April 25 bombs in two briefcase-style boxes under Hammersmith Bridge in southwest London discovered earlier in the day contained more than 30 pounds of SEMTEX. The detonators went off without setting off the bombs. Police say the bombs would have brought the bridge down if they had been properly detonated.

India - April 29, 1996 - 15 die in bus bombing

In Modinagar town in Uttar Pradesh state, 30 miles north of New Delhi, a bomb on a bus tore the roof off the vehicle and killed 15 people April 27. Two separatist groups from Jammu-Kashmir and neighboring Punjab issued a statement saying they targeted the bus because politicians were among the passengers. Voting in Uttar Pradesh will be held next week. Five people were killed elsewhere and scores injured in other election-related violence. Voting took place Saturday in nine states, two territories and two island chains -- approximately a third of the country. Preliminary results are not expected until May 8. Voting is being staggered over several weeks to give police and paramilitary troops adequate time to minimize election violence.

Philippines - April 29, 1996 - 2 killed, 11 wounded in Mindanao bomb

Two children were killed and 11 wounded the night of April 27 when a bomb exploded on a mini-bus as it was about to leave a terminal in Tubod town, Lanao del Norte province, on the southern island of Mindanao. It was the 11th bombing incident in the southern Philippines in the past month, but it is not clear if April 27's blast is linked in any way to the 10 previous incidents.

Pakistan - April 29, 1996 - Bomb on bus kills 40

A bomb hidden in the gas tank of a passenger bus detonated April 28 in a marketplace some 20 miles from Lahore, killing some 40 people. The bus, a private transport vehicle, was overcrowded with passengers traveling from Lahore to the nearby town of Patoki for the one-week Eid al-Adha holidays that began April 28. No one claimed responsibility for the blast, which was the second in as many weeks in Punjab state. Six people were killed April 14 when a bomb detonated at the outpatient department of a cancer hospital in Lahore.

Germany - April 30, 1996 - High-speed train link closed after bomb threat

Police closed a main high-speed train link on the Hanover-Goettingen line for 90 minutes April 30 after receiving a bomb threat from anti-nuclear activists. There have been a number of sabotage attempts on the line in recent weeks by activists protesting against a delivery of nuclear waste from the French La Hague processing plant expected to take place between May 6 and 9. After closing the line, authorities found a suspicious container on the tracks that turned out to be a fake bomb.

Algeria - May 6, 1996 - Bus stop bomb kills 2, injures 14

A homemade bomb exploded May 4 at a bus stop near an elementary school in Tizi-Ouzou, 50 miles east of Algiers, killing two people and wounding 14.

Bahrain - May 8, 1996 - Bomb blast injures 2, insurance companies hit hard

A bomb detonated May 7 at a bus stop on the island of Muharraq, injuring two people. Insurance companies covering local entities recently hit by arson and bomb attacks are reporting huge losses -- this week's attacks alone reportedly cost insurance firms some \$5 million.

Pakistan - May 8, 1996 - Bomb kills 6, injures 38

A bomb detonated on a bus outside a hospital in Sheikhpura some 50 miles from Lahore in Punjab province May 8, killing at least six people and injuring 38. No one has claimed responsibility for the blast, the latest in a series in the past month that have killed more than 50 people and injured some 100.

Bulgaria - May 20, 1996 - Gunmen hijack bus, rob passengers

On May 17, five masked gunmen hijacked a bus carrying 16 Ukrainian tourists in the Hainboaz pass, 150 miles east of Sofia near the border with Serbia. One person was shot in the leg when he attempted to resist and the hijackers stole an estimated \$40,000. The assailants were able to hijack the vehicle by pretending to be police and flagging it down. Crime has surged five-fold in the country since the collapse of communism in 1989.

India - May 23, 1996 - 14 killed in bus bomb

A bomb exploded May 22 on a bus traveling from Agra, home of the Taj Mahal, to Rajasthan, killing at least 14 passengers. No one has claimed responsibility for the blast. On May 21, at least 12 people were killed and 38 injured when a bomb exploded in a New Delhi market.

Myanmar - May 23, 1996 - 9 killed in train attack

Nine people were killed and seven others injured the night of May 21 when a landmine exploded under a train on the main railway line between Yangon (Rangoon) and the country's second-biggest city, Mandalay. Officials blamed the blast on Karen National Union (KNU) guerrillas, who have been fighting the central government for autonomy since 1949. The KNU is the last major ethnic minority guerrilla army yet to sign a cease-fire with the military government.

Venezuela - June 4, 1996 - Buses firebombed in Caracas

On June 3, eight heavily armed men firebombed six buses in the La Pastora area of northern Caracas, destroying the vehicles and killing two teenagers who were sleeping aboard one of the buses.

Venezuela - June 6, 1996 - More buses attacked in Caracas

On June 5, masked assailants set fire to seven buses in Caracas, causing no injuries but damaging all of the vehicles. The attack follows a similar one that took place the morning of June 3 in which six buses were attacked with incendiary bombs, killing two people who were sleeping aboard one of the buses. Authorities say both attacks are connected to the June 3's 30 percent rise in bus fares in the city. The bus drivers' union has declared a work stoppage until authorities improve security for city buses.

Russia - June 12, 1996 - Subway bomb blast kills 4, injures 12

A bomb detonated June 11 in the Moscow subway system, killing four people and severely injuring 12. The blast destroyed one car a few hundred yards from the Tuskaya metro station, five miles south of the Kremlin. Police say a pound of TNT had been attached to the underside of one of the seats in the subway car.

Pakistan - June 17, 1996 - 2 killed, 18 injured in bomb blast

Two people were killed and 15 injured June 16 in a bus bombing in the town of Kharian in the Punjab province. In another explosion, three doctors were injured when a bomb went off in a government hospital in Abbotabad, located 50 miles north of the bus incident. Authorities claim the bombings were the work of the Indian secret service. Pakistan and India frequently accuse each other of terrorist incidents.

Ethiopia - June 21, 1996 - Train bomb kills 1, injures 5

One passenger was killed and five wounded June 21 when a bomb exploded on a Djibouti-bound train 14 miles from the town of Dire Dawa. No group has claimed responsibility.

Pakistan - June 28, 1996 - Bomb kills 3 and injures 5

At least three people were killed and five injured June 27 when a bomb exploded near a bus station in the city of Faizabad, near Islamabad, destroying a small restaurant and barber shop. No one claimed responsibility.

Russia - June 28, 1996-Explosion in Nalchik kills 5

An explosion June 28 on a bus in the city of Nalchik, Russia killed five people and injured 32 others. The blast completely destroyed the bus as it

arrived at the station in Nalchik, the capital of the Kabardino-Balkaria region. Authorities are not certain if a bomb caused the explosion.

Russia - July 11, 1996 - Bomb on trolley injures 5

A homemade bomb hidden in a bag of vegetables detonated on a trolleybus in central Moscow the morning of July 11. At least five people, including the driver, were injured. The blast occurred around 9 a.m. as the trolley approached Pushkin Square, a popular meeting place in the capital about a half mile from the Kremlin. Minutes earlier, the bus had passed by the Parliament building on its regular route. The driver's compartment, which is separated from the rest of the bus, took the brunt of the blast. The front of the trolley was destroyed and the roof ripped off. A minivan nearby was also heavily damaged and the windows of surrounding buildings were blown out. Police say the incident, the second bombing targeting public transportation in Moscow in one month, was a terrorist attack.

Russia - July 12, 1996 - Another trolley bombing

A bomb hidden in a cloth bag on a trolley in central Moscow detonated the morning of July 12, injuring more than 27 people. Police say today's bomb was the same type as the one that detonated on a bus in Pushkin Square on July 11, but stronger.

July 12's attack was the third on Moscow's public transportation system since a blast in the subway killed four people on June 11, five days before the first round of voting in the country's presidential election. This attack may be yet another signal from the Chechens to the Russians to curtail their recent military activities in Chechnya -- which the Chechens claim violate the pre-election agreement between Russia and the Chechen rebels.

Sudan - July 11, 1996 - Group claims responsibility for destruction

On Wednesday, a Sudanese rebel group based in Eritrea claimed responsibility for the July 3 destruction of two critical bridges linking the Sudanese capital, Khartoum, with Port of Sudan on the Red Sea. The group, The Beja Congress, also said it killed two government officers in the same operation.

Russia - July 23, 1996 - Bus passengers robbed

On the night of July 19, passengers on a bus en route from Rostov to Moscow were robbed by armed men near the town of Voronezh. The men robbed the passengers of about \$97,000 in roubles, despite additional security in the region following the discovery of a bomb in the Voronezh airport on the same day.

Sri Lanka - July 25, 1996 - At least 70 killed, 200 injured in train blast

Two bombs exploded the evening of July 24 on a commuter train in Dehiwala, a town six miles south of Colombo, killing at least 70 people and injuring more than 200. Reportedly, the blasts occurred in two separate train compartments. Police suspect Tamil separatists.

Russia - August 6, 1996 - Bomb found on train

A bomb, which did not detonate, was recently found on a passenger train in the Caspian Sea city of Astrakhan; the second such device found on the Volgograd-Astrakhan route. In June, a bomb exploded on the Moscow subway system, killing four people and severely injuring 12, and in July, two bombs detonated on two separate Moscow trolleys, injuring 33 people.

Algeria - August 12, 1996 - Train derailed by Muslim militants

A fuel train was derailed by Muslim militants August 9 when they blew up the track with a homemade bomb in Naciria, 18 miles northeast of Algiers. The blast caused massive damage but no casualties.

Russia - August 13, 1996 - Bomb on Volgograd-Astrakhan train

A bomb exploded August 12 in a passenger train stopped at the railway station in Trubnaya, some 10 miles south of Volgograd, injuring at least nine people. The bomb was the third to be found on Train 606, which travels from Astrakhan on the Caspian Sea to Volgograd, a city about 550 miles south of Moscow. The first of the two bombs destroyed an empty passenger car sitting on the sidings July 25, the second failed to detonate. Another bomb was also found in a military waiting room of the Astrakhan station on July 26 and rendered safe. No one has claimed responsibility for the latest bombing.

Uganda - August 13, 1996 - Guerrillas kill travelers

A total of 14 people were killed and more than 30 wounded last week in the Gulu area. Two people were killed when a bus in which they were traveling was ambushed by members of the Lords Resistance Army near Bobi, 14 miles from Gulu. Another 12 were killed when their vehicle struck a land mine, also near the town of Gulu.

South Africa - August 14, 1996 - Bombing at Pretoria's Properitas Railway Station

On August 12, a bomb detonated at Pretoria's Properitas Railway Station, causing no casualties but damaging property. Authorities said trains will continue to run on the line. In another incident on August 8, gunmen walked into a bar in south Johannesburg killing five patrons and wounding three others. No motive has been established for the attack.

Turkey - August 16, 1996 - 2 killed in PKK attack

Suspected Kurdistan Workers Party (Kurdish initials: PKK) terrorists August 14 attacked a bus in the eastern province of Sivas, shooting and killing a policeman and another man. Reportedly the gunmen, who were passengers on the bus, issued propaganda statements about the PKK before killing the two victims. The attack took place two days after PKK militants killed eight railway workers in the city of Sivas.

Philippines - August 16, 1996 - Explosives found at Zamboanga bus terminal

Security officials on the night of August 14 discovered some 820 pounds of chemicals that could be used in making explosives, along with solid rocket propellants, at a bus terminal in Zamboanga City on the southern island of Mindanao. The chemicals were odorless ammonium nitrate crystals, and officials say they are part of an arsenal used by terrorists in 13 homemade pipe bomb attacks in the area in March and April. At least 10 people were injured in those attacks.

Sweden - August 19, 1996 - Neo-Nazi rallies

Neo-Nazis commemorating the death of Rudolph Hess marched in Germany and Sweden on August 17. The German government banned neo-Nazi rallies on August 16, and on August 17 police broke up an illegal march in the southwestern city of Worms. Leftists staged a counter-demonstration, but police reported no significant rioting or injuries. However, in Sweden, demonstrators turned violent. Neo-Nazis and counter-demonstrators both clashed with police in the city of Trollhattan. The neo-Nazi demonstrators came from Sweden, Denmark, Germany, and Norway. Both sides threw bottles and rocks at police, and a bus driver found a bag containing what were described as 18 small explosives in the baggage compartment of his bus, which had carried leftist counter-demonstrators.

Turkey - August 26, 1996 - Bombs at Istanbul bridge

Security officials early August 25 discovered four time-controlled explosive devices planted on each of the footings of the 1,570-foot Unkapani Bridge spanning the Halic river. Three of the devices were rendered safe, but the fourth exploded, slightly damaging the structure but causing no injuries. Traffic across the bridge was not halted by the incident, which has been blamed on autonomy-seeking Kurdistan Workers Party (Kurdish initials: PKK) rebels or outlawed leftists.

Philippines - September 16, 1996 - Mindanao bus company bombings tied to extortion

At least 18 people were injured the evening of September 13 when a bomb exploded on a Weena Bus Company bus traveling from Davao City to Cotabato on the southern island of Mindanao. Officials reported the explosive device was hidden in a pile of egg trays. Meanwhile, the driver of another bus was injured in a similar incident on September 12. On August 26 just before closing time, a bomb exploded in a bus parked at the company terminal. Police say an extortion group is demanding about \$75,000 to end the bombing campaign against the company.

Turkey - September 25, 1996 - PKK kidnaps three foreigners

Early on September 23, Kurdistan Workers Party (Kurdish initials: PKK) rebels kidnapped an Iranian and two other foreigners from a passenger bus near the eastern province of Bingol, en route to the city of Van near the Iranian border. Original newspaper reports said the second and third hostages were German, but the German Embassy suggested they might be Polish. The PKK frequently kidnaps foreigners in the southeastern provinces, usually holding them for propaganda purposes and then releasing them without ransom.

Switzerland - September 27, 1996 - Train hijacked

An unidentified man making confused demands hijacked a Swiss train September 27 as it traveled from Chur to St. Moritz with more than 200 passengers on board. The incident ended without injuries in the town of Reichenau when the hijacker surrendered after four hours of negotiations with police.

United Kingdom - September 30, 1996 - IRA had planned Chunnel blackout

British security sources said September 29 that Diarmuid O'Neill, the Irish Republican Army (IRA) suspect shot dead by British police September 23, had been part of a team planning to blow up the electricity supply to the Channel Tunnel between England and France.

Hungary - October 7, 1996 - Bomb on bus injures 4

On October 5, a bomb injured four people on a bus en route from Budapest to the northern city of Esztergom. The bomb detonated in Piliscsaba, a small town 12 miles northwest of Budapest. Police said they did not know what kind of explosive had been used, although a gas cylinder construction had been ruled out.

Algeria - October 8, 1996 - 9 passengers on bus killed by Muslim militants

On October 7, Muslim militants killed nine passengers on a bus in Ksar el Hirane, 212 miles south of Algiers. Authorities suspect the Armed Islamic Group (French initials: GIA) staged the attack. The GIA has staged a series of brutal raids against passengers on buses or trains.

Algeria - October 10, 1996 - 34 killed in ambush

On the night of October 7, after establishing a roadblock near the town of Hassi R'mel, Muslim militants stopped a bus and slit the throats of 34 passengers. Initial reports indicated nine people were killed. Hassi R'mel is a government-restricted zone, some 200 miles south of Algiers, where many expatriates working for multinational oil and gas companies reside. The attack was apparently sanctioned by a local chief, Mokhtar Mokhtari, a veteran of the Afghan war, who in July split with Djamel Zitouni, leader of the radical Armed Islamic Group (French initials: GIA) and started his own organization.

Hong Kong - October 14, 1996 - Anonymous threat of gas attack on Hong Kong subway

On October 11, a Mandarin-speaker reportedly called the police threatening a gas attack would be staged the night of October 15 on the MTR subway network. Police said October 14 they are on high alert and have designed inter-agency security measures to handle the situation. Local Chinese-language media accuse the Japanese sect Aum Shinrikyo, that was responsible for the sarin gas attacks on the Tokyo subway in 1995, for the threats.

Germany - October 24, 1996 - Railways sabotaged

On October 23, sabotage on two major railway lines in northern Germany forced hundreds of trains to be re-routed. Grappling hooks were hung on power lines overhanging the tracks on the Hamburg-Bremen and Hamburg-Neumuenster routes, bringing down the lines and damaging trains that crashed into the hooks. One injury was reported. Authorities suspect anti-nuclear activists were responsible for the damage. The activists periodically use violent means to protest the shipment of nuclear waste to a dumpsite at Gorleben, 75 miles from Hannover. Authorities in the state of Lower Saxony said a shipment of waste scheduled for next month would be postponed until next year, arguing that the state did not have the financial resources to adequately protect it. Full train service resumed later in the day.

Algeria - October 28, 1996 - Train bombing kills 8 and injures at least 30

On October 26, eight people were killed and at least 30 others were injured when bombs planted under train tracks exploded as a passenger train passed over them. The incident occurred between Baba Ali and Oued Smar, 10 miles south of Algiers.

Australia - October 31, 1996 - Bomb in toilet of Sydney subway station

A bomb that officials said appeared to be a home-made device blew up a stall in a men's restroom in Sydney's St. James Cityrail station October 31, injuring no one but causing extensive damage to a row of toilets. Local media reported the bomb was constructed using plastic bottles filled with a chemical accelerant such as fertilizer. In the last week, similar attacks have been made on other railway station toilets. City officials said they will close all toilets on the City Circle and eastern suburb lines and increase security patrols.

Colombia - November 1, 1996 - Bombs explode in Medellin and Bogota

On October 31, two bombs exploded in Medellin and one in Bogota, causing moderate damage and injuring one person in the capital. The two bombs in Medellin exploded outside two separate betting offices, one of them located in the main bus terminal. The bomb in Bogota, consisting of about 23 pounds of dynamite, exploded in a southern commercial area, shattering windows for a one-block radius and injuring one person. The explosions come as Congress considers legislation to end the country's ban on extradition of drug traffickers.

Pakistan - November 4, 1996 - Explosion on passenger train kills 5 people

On November 3, an explosion on a passenger train en route from Karachi to the northeastern city of Rawalpindi in Punjab province killed five passengers and injured 20 more. The train, Tezgam Express, was passing Tandoi village, some 40 miles south of Rawalpindi, when a bomb planted in a toilet compartment of the second car exploded.

Japan - November 19, 1996 - Gas attack on Tokyo train

On the night of November 15, several teenagers sprayed gas on a commuter train in Tokyo, forcing about 40 people to get off the train coughing. The attackers got off one train, sprayed more gas on a second train, and then fled. The attack temporarily suspended service on the train line. Police said they do not know who released the gas or the nature of the substance.

India - December 2, 1996 - 12 killed, 37 injured on train blast in Punjab

Early December 2, 12 people were killed and 37 injured when a bomb, reportedly made from RDX, exploded in a sleeper car of the Jhelum Express traveling from Pune in the western state of Maharashtra to Jammu in the northern state of Jammu-Kashmir. The explosion occurred shortly before 3:00 a.m. as the train sat in the Ambala cantonment station near the Punjab capital of Chandigarh. No one claimed responsibility for the blast but police said it could be part of an escalation of violence in the lead up to next February's state assembly polls in Punjab.

Mexico - December 2, 1996 - U.S. and Mexican volunteers' bus attacked

On November 29, a lone gunman fired on a bus carrying U.S. and Mexican volunteers of a Minnesota-based group delivering food, medicine, and other supplies to small villages in Chiapas state. No one was injured. The motive for the attack is not known, and it is not clear if the gunman knew who was on the bus. It may have been an isolated random attack. Nevertheless, Chiapas state is unstable with the Zapatista insurgency and ongoing land disputes between peasants and ranchers.

Algeria - December 4, 1996 - 12 Muslim militants killed

On December 4, security forces shot dead 12 Muslim militants whom they allege were responsible for the deaths of 38 bus passengers at a fake roadblock in Ghardaia in October. Many of the passengers had their throats slit.

France - December 4, 1996 - Bomb at Paris RER station kills 2 people, injures 83 others

At about 6 p.m. Paris time on December 3, a 28-pound gas canister bomb packed with nails in the fourth carriage of an evening commuter train exploded while the train was stopped at the Port Royal RER station in the Latin Quarter, on the Left Bank. The bomb killed 2 people and injured 83 others, 7 of them seriously. Both passengers and waiting commuters on the platform beside the train were injured. Last July, a bomb at the Saint-Michel station on the same line killed eight people and injured nearly 100 others. President Jacques Chirac and Prime Minister Alain Juppe announced the *Vigipirate* anti-terrorist security measures implemented last summer, which have since been relaxed, would be fully re-implemented. Some 1,800 soldiers have been assigned to Paris to assist police. Police and troops will also be sent to provide security in major regional centers such as Lille and Lyon. Security will be tightened at railway stations and airports, and trash bins around the city will be sealed.

India - December 5, 1996 - Bombs rendered safe along train track in Jammu-Kashmir

Late December 2, a man riding a motor scooter near the town of Samba, 25 miles southeast of Jammu, the winter capital of Jammu-Kashmir, found two unexploded bombs wrapped in a bag near the railroad track. These explosive devices were found the same day a bomb exploded on a train in the Ambala cantonment station near the Punjab capital of Chandigarh, killing 12 people.

India - December 10, 1996 - Guerrillas kill 30 and wound 24 rival tribe members

On December 9 in the northeast Nagaland state near the India-Myanmar border, guerrillas from the Naga tribe attacked a bus load of the rival Kuki tribespeople, killing 30 passengers and injuring 24 others. The incident occurred in the town of Maiamnala, some 60 miles from Kohima, the state capital. At least 20 gunmen armed with grenades stopped the bus carrying some 60 passengers, ordered the exit of ethnic Naga tribesmen, and fired on the bus. An ongoing feud between Naga and Kuki tribes since 1993 has killed more than 1,000 people in the state. The tribes are reportedly fighting for control of drug trafficking routes near the India-Myanmar border. On December 10, national security forces increased patrols along strategic highways to stem further violence.

Algeria - December 11, 1996 - Muslim militants kill 20 passengers aboard bus

Muslim militants slit the throats of 20 passengers, whose bus they forced to stop in the Benhamdani area, Blida province December 11. The province, some 30 miles south of Algiers, is the headquarters of the Algerian army and a Muslim militant stronghold.

Poland - December 13, 1996 - Robber sentenced

On December 12, a man who gave drinks laced with drugs to at least 26 train passengers in order to incapacitate and rob them was sentenced to 15 years in prison. The drinks, a mixture of vodka and potent drugs, resulted in the deaths of two people.

Switzerland - December 13, 1996 - Train robbery

Late on December 11, five armed robbers boarded a train en route from Zurich to Geneva and forced the driver to bring it to a halt between Bern and Lausanne. They stole some 20 sacks from a postal car attached to the train and fled into nearby getaway cars. No one was injured in the incident.

Russia - December 16, 1996 - Bus hijack attempt

On the night of December 12, three men hijacked a chartered bus en route from Naberezhnye Chelny, in the middle Volga region, to Moscow, stealing approximately \$13,000 in cash and escaping in a waiting car. The criminals were later arrested by police, but one escaped.

France - December 23, 1996 - Bomb rendered safe in Marseilles

On December 21, police in Marseilles rendered safe a powerful explosive device that had been left in front of the post office near the St. Charles train station. A customer found the package at 8:15 a.m. in a plastic bag leaning against the front wall of the building. Police evacuated the building and rendered safe the 7.5-pound device, which was made of dynamite and set to have exploded between 4 and 5 a.m. Security officials said no one claimed responsibility for the bomb.

India - December 31, 1996 - Bomb on passenger train kills at least 50 people; bombed bridge may be linked

On December 30, a bomb exploded on a passenger train in the northeastern Assam state killing at least 50 people on board. The New Delhi-bound Brahmaputra Express train carrying some 1,200 passengers was passing through the town of Kokrajhar when the blast ripped through the train. At least three coaches were badly damaged and three others derailed before the train came to a halt. The explosion destroyed two sleeper coaches carrying some 160 people, none of whom are expected to have survived the blast. By early December 31 some 50 bodies were recovered and more bodies are expected to be found, although it is likely the death toll would be less than the initial estimate of 300. Reportedly there was more than one blast, one of which blew a nine-foot crater in the ground and completely destroyed a 20-foot section of the railroad, which is the main link between the northeast region and the rest of the country. No one has claimed responsibility for the attack yet. Authorities speculate, however, the train blast is linked to December 29's bombing of a bridge that links the state of Assam to the rest of the country across the small Rakhaldubi river, near the town of Bijni. The tribal guerrilla group Bodoland Army, which has been fighting for a separate nation, has been blamed for the bridge attack and is suspected in the latest bombing as well. Rescue efforts for the train victims are hampered due to the bombed bridge.

India - January 2, 1997 - Bomb on railroad bridge in Assam state

On January 1, a remote-controlled bomb exploded on a railroad bridge near the town of Goreswar, some 60 miles north of the Assam state capital Gauhati, heavily damaging the bridge but causing no injuries. The blast

destroyed a 26-foot section of the railroad and damaged two spans of the bridge over the Bornodi river, cutting the link to the northeastern state of Arunachal Pradesh. This bombing follows two bombings in the state in four days. A bomb destroyed a road bridge December 29, injuring several people. On December 30, a bombing of a passenger train, some 100 miles away from the latest bombing, killed some 50 people and injured many others. No one has claimed responsibility for the series of bombings. Police blame Bodo separatist rebels for the attacks.

Syria - January 3, 1997 - Bomb blast kills 9

A bomb blast aboard a bus in the capital Damascus killed nine people and injured 44 others on New Year's Eve. The bus was headed for the northern city of Aleppo. Syrian authorities have accused Israel of staging the attack. A series of bomb blasts that occurred in Damascus and the Mediterranean port of Latakia in May last year prompted the U.S. Department of State to issue a warning to American citizens to be cautious while in Syria. Of late, Syrian interests have been targets of bombing incidents in Lebanon. One person was killed and two others were injured in Lebanon two weeks ago in bomb attacks that targeted Syrian facilities. Syria has an estimated 40,000 troops in Lebanon whose presence is opposed by the local Maronite Christians. No group has claimed responsibility for the attack.

India - January 6, 1997 - 10 injured in Delhi bomb blasts

Two bombs exploded, one in a bus and the other in a taxi, in New Delhi January 4, injuring at least 10 people. No one has claimed responsibility for the blasts, which occurred moments apart in the Samaipur Badli section, some 15 miles northwest of Delhi's center. The first bomb exploded in a state-owned bus at around 5:00 p.m. The conductor saw a plastic bag with a jar inside when the bus departed from the Delhi terminal. After no one claimed the bag, he placed it behind the driver's seat and began to drive the 60 passengers to Sonapat in neighboring Haryana state. The second explosion, which destroyed a taxi some two miles away carrying 10 people, was also traveling to Sonapat.

Israel - January 10, 1997 - Bomb blast in Tel Aviv injures 13

On January 9, two bombs hidden in garbage cans detonated near the old central bus station in Tel Aviv within minutes of each other, injuring 13 people. All the victims were slightly injured. The explosions occurred in a lightly populated commercial center that is home to Tel Aviv's large community of foreign workers. Prime Minister Binyamin Netanyahu broke off talks with U.S. special envoy Dennis Ross and rushed to the scene. He warned of severe consequences if an investigation pointed towards

Palestinians in territory under Yasser Arafat's rule. He added, "it should not be automatically assumed that we will carry on with peace talks in that event." He was referring to the stalled but ongoing peace talks between the Jewish state and Palestinians over the issue of self rule for the Palestinians. Both Israeli and Palestinian officials fear radicals would launch attacks to abort the peace agreement. Last week, a mentally ill Israeli soldier opened fire at Palestinians in a Hebron market, injuring five people. In both cases, the light nature of the injuries seems to have averted a crisis. There has been no terrorist bombing in Israel since a series of attacks in the winter and spring of last year killed 63 people.

South Korea - January 16, 1997 - Man holds 34 hostages on bus for an hour

January 16 in Seoul, a man wielding a seven-inch knife held 34 passengers hostage on board a bus for over an hour, complaining the country was "full of communists." He demanded the bus driver to drive the vehicle to the presidential Blue House. The driver refused and drove to a government complex instead, where police fired tear gas into the bus and seized the man. The driver was slightly injured in the incident and none of the passengers were injured.

Russia - January 16, 1997 - Chechen rebels attack train

On January 14, some 50 Chechens launched two attacks on a train en route from Makhachkala, the capital of the region of Dagestan, to Moscow. One of the policemen guarding the train was killed and several others were wounded, but no passenger casualties were reported. The attackers broke into one of the coaches and freed some prisoners held there and then fled the scene.

Germany - January 17, 1997 - Pylon damages train in extortion attempt

On the night of January 15, a pylon crashed down on a train in central Germany but injured no one. Police said the incident was caused by sabotage, and that attackers had sawed through the pylon. Although anti-nuclear environmentalists have been responsible for a number of attacks on trains in the country, police say the motive in this case is extortion. A letter titled "extortion note to German railways" has reportedly been found by authorities.

India - January 17, 1997 - 4 killed on a bus

On January 16, four people were killed when unidentified gunmen opened fire on a bus near the town of Sopore, 30 miles north of Srinagar, the summer capital of the state of Jammu-Kashmir.

Russia - January 17, 1997 - Bomb threat in 2 train stations

On January 16, police searched Moscow's Kazansky railway station for two hours after receiving an anonymous bomb warning, but discovered no device. The Kursky station was also closed for two hours due to a similar false threat.

Turkey - January 21, 1997 - Bomb in Istanbul rendered safe

On January 20, police rendered safe a 22-pound bomb at the Sirkeci train station in Istanbul after receiving a warning call. The bomb had been left at a bank cash machine and set to explode at 10 p.m. The Turkish press reported the warning call was made by passers-by who found the device. No one has claimed responsibility for the bomb.

India - January 29, 1997 - Train robbers in Bihar kill four and others abducted

On January 28, four people were killed when they resisted thieves on a passenger train in the eastern state of Bihar. Officials said the robbers boarded the train at a station and began robbing passengers at gunpoint once the train began to move. The robbers then pulled the emergency brake to escape, taking with them four women passengers. Police launched a search of the nearby areas in an attempt to secure the release of the abducted women.

India - February 3, 1997 - Bomb blast kills one, injures 18 in Haryana state

On February 1, one person was killed and 18 others injured in Panipat town in the northern state of Haryana when a bomb exploded as passengers were disembarking from a privately-owned bus at the town's main bus station. Officials said the bomb was a low-intensity improvised explosive made with a mixture of potassium chloride, sugar, and acid. Blame for bomb attacks in northern India usually rests with Kashmiri or Sikh militants. The state of Haryana imposed a ban on the sale of alcohol last month, however, and some observers suspect the region's liquor mafia.

Algeria - February 14, 1997 - Rails sabotaged

On February 13, two freight trains smashed into grappling hooks attached to overhead power cables on the rail line between Stuttgart and Mannheim, blocking the line for several hours. Police suspect anti-nuclear protesters sabotaged the line. Last week, a train carrying nuclear waste through France derailed, causing concern about methods of transport for nuclear materials.

India - February 24, 1997 - Grenade attack near bus station kills 1, injures 9

Separatist guerrillas threw a grenade at a security patrol near a bus station February 24 in Srinagar, the summer capital of northern Jammu-Kashmir state, killing one person and injuring nine others. The grenade missed the patrol and exploded on the road, harming pedestrians nearby.

Germany - February 25, 1997 - Saboteurs attack train lines

Saboteurs on February 25 disrupted several train lines across the country by throwing grappling hooks onto overhead power lines, causing damage to property but no injuries. One train ran into the hooks near Frankfurt's International Airport just before 2:00 a.m. Rail traffic was being re-routed for several hours. Similar attacks also occurred near Hamburg and Berlin. No one claimed responsibility for the acts but anti-nuclear activists have tried to block rail transport several times in the past few months to protest a nuclear waste dumping ground in Gorleben, northeast of Hannover. Two rail containers of spent nuclear waste from France and four others from German power plants are scheduled for transport to the site at Gorleben next week.

Lebanon - March 4, 1997 - Angry driver fires at Japanese tourist bus

A car driver fired at a bus carrying Japanese tourists near the city of Baalbek, 55 miles east of Beirut, on March 4 after a traffic dispute. No one was hurt in the incident and the tourists proceeded to the ruins of the Roman temples, the country's biggest tourist attraction.

China - March 4, 1997 - Report of another bus bombing in Xinjiang province

An exiled spokesman for Uighur nationalists claimed the group had staged another bombing near the town of Yining in Xinjiang province on March 3, in retaliation to Beijing's strict measures in the area in recent days. Last week, when three bombings on buses resulted in seven deaths and some 60 injuries, the Chinese government deployed security forces and arrested hundreds of Uighur nationals. The government March 4 denied the report of the latest bombing.

China - March 10, 1997 - Bus bomb in downtown Beijing injures at least 10

A homemade bomb exploded the evening of March 7 on a Number 22 bus as it drove down North Xidan Street in a highly congested central shopping district of Beijing, seriously injuring at least 10 people. Reuters news agency reported two people were killed by the blast, although police officials said no one was killed. Police immediately closed off the area to remove the debris.

A few checkpoints were reportedly opened around the city to allow police to search vehicles, but witnesses report authorities tried to make everything appear normal. Security in the city was already increased because the National People's Congress is in the middle of its two-week long annual session. According to a notice issued by Beijing police and published in the Beijing Daily newspaper on March 9, the explosive was planted "beside the left-hand seats three and four rows from the front of the bus." It also announced a reward for information leading to the arrest of the bombers. The explosion resembled three blasts that occurred February 25 on public buses in Urumqi, the capital of the northwestern province of Xinjiang where the Uighurs, a Turkic Muslim population primarily reside. On March 10, a group calling itself the Eastern Turkestan Freedom Organization telephoned a cultural center for Chinese immigrants in Istanbul to claim responsibility for the bombing.

India - March 14, 1997 - Bomb in Punjab injures at least 6

At least seven people were killed and 10 others injured March 14 in Jalandhar, a city in the northern state of Punjab, when a bomb detonated moments after a passenger train en route to Amritsar from New Delhi left the train station. Police gave no explanation for the blast and said they are investigating.

Turkey - March 25, 1997 - 12-pound bomb rendered safe in subway

On March 22, local television reported a 12-pound bomb had been placed at the Aksaray metro station in Istanbul and was subsequently rendered safe by police. No one claimed responsibility for the attack.

Albania - March 27, 1997 - Gunmen fire on bus killing 2 passengers

On March 26, gunmen in a four-wheel drive vehicle fired automatic rifles at public bus in the town of Sauk, just south of the capital Tirana. Two passengers were killed and six others were wounded.

Israel - April 2, 1997 - Suspected firebomb on a bus injures 13 Israeli soldiers

On April 2, 13 Israeli soldiers were injured when the bus they were traveling in overturned down a slope in the West Bank, 12 miles from Jerusalem. Observers said a firebomb was responsible for the accident. The Israeli army imposed a curfew on the town of Jelazoun and searched the surrounding areas for terrorists. On April 1, two Palestinian suicide bombers died when their effort to bomb a Jewish settlement failed. Israeli authorities arrested 30 people, mostly members of the Islamic Jihad, in connection with the bombing. The Islamic Jihad denied responsibility for the blast. Also on

April 1, Israeli security forces killed two Palestinians in the West Bank. The crisis began when Israeli Prime Minister Binyamin Netanyahu approved the construction of 6,500 apartments in disputed Arab East Jerusalem. Alarmed at the spiraling violence, U.S. President Bill Clinton has made a pledge to get involved in the peace process personally. He will meet with Netanyahu in Washington D.C. early next week.

Hong Kong - April 4, 1997 - Sarin gas hoax in Tsimshatsui

On April 1, police carried out a controlled explosion of a beer bottle suspected to have contained the nerve gas sarin that was found in the back of a city bus during rush hour traffic in the Tsimshatsui district, on the southern tip of the Kowloon peninsula. The poison threat turned out to have been a hoax. A note expressing "discontent about property prices" was attached to the bottle, according to a police official.

India - April 7, 1997 - Bus bombing kills 2 people, injures at least 14

On the morning of April 6, a crude bomb exploded on a bus traveling near the town of Pathankot, some 120 miles north of the Punjab capital Chandigarh, killing two people and injuring at least 14 others. The bus was en route to the state of Jammu-Kashmir, which borders Pathankot, when the explosion occurred. Authorities suspect Kashmiri militants are responsible for the attack.

United Kingdom - April 7, 1997 - Bomb threats disrupt Grand National race, London transportation

On April 5, the Grand National steeplechase horse race at the Aintree racetrack was postponed due to two telephoned warnings of a bomb on the grounds. Both warnings, made a half-hour before the race was to start, used a recognized Irish Republican Army (IRA) codeword, but the IRA has not yet claimed responsibility. Some 70,000 people were evacuated and thousands were stranded in the Liverpool area overnight as police carried out a search of the grounds and parking lots. Authorities carried out three controlled explosions of suspect packages, but found no bombs. Spectators were allowed to retrieve their cars on April 6, and the Grand National will be held the afternoon of April 7 amid heavy security. Authorities had feared April 6's soccer cup final at London's Wembley Stadium would also be disrupted, but it was held without incident. On April 4, police evacuated the King's Cross subway station, a transfer point for four London subway lines, at the height of the evening rush hour, in response to a bomb threat. Threats also prompted police to evacuate the St. Pancras station and close the Waterloo and Euston stations. Service at King's Cross and St. Pancras stations was disrupted for five hours, with regular service not due to resume for 24 hours. On April 4,

the M5 and M6 highways, which had been closed to traffic for more than 30 hours due to bomb threats, were reopened. Prime Minister John Major warned the public against taking recent bomb threats, which have caused no injuries, lightly, saying "There's a great danger that people will be lulled into a false sense of security and then there will be a bomb."

Spain - April 8, 1997 - Disturbances in Basque region, attack on train

Over the weekend, demonstrations in the Basque region were marked by violence when young Basque separatists attacked vehicles, electric transformers, and bank branches. One rioter attempted unsuccessfully to set a bus on fire. On April 7, hooded activists threw two firebombs at a train en route between Barcelona and the Basque city of Irun near the station of Alsasua, in Guipuzcoa province, but the bombs failed to detonate and caused no damage or injuries.

Croatia - April 15, 1997 - Mine kills 2 people

On April 12, an anti-tank mine killed two workers clearing mines from a destroyed bridge near a United Nations checkpoint in the mainly Serb area of Eastern Slavonia and injured two others. The bridge had formed part of the dividing line between Serbs and Croats in the enclave, which has been administered by the U.N. until recently but is due to return to Croatian control.

United Kingdom - April 18, 1997 - 2 explosions and bomb threats cause rush hour havoc

Early morning on April 18, explosions at railroad stations in Leeds and Doncaster in northern England caused property damage and severe disruption to morning rush hour railroad and highway traffic, but resulted in no injuries. The first explosion took place at Leeds station, destroying a signaling equipment near a parking lot. The second explosion damaged a section of the railroad near North Bridge at Doncaster station. Police also reported they carried out two controlled explosions on suspected packages at Stoke station. Police received a telephone call with a code word used by the Irish Republican Army (IRA) shortly after 7 a.m., warning bombs had been placed in Stoke, Doncaster, and Crewe railroad stations, as well as on a section of the M6 highway. Police closed off all affected stations and the highway, and evacuated homes and businesses in threatened areas.

United Kingdom - April 21, 1997 - Bomb threats strand commuters

Commuters were stranded this morning after the Irish Republican Army (IRA) made a series of bomb threats against subway and train stations and major highways. A Royal Automobile Club spokesman said the resulting delays to commuters caused "some of the worst traffic chaos that we have

seen in London for many years, if ever." Rail and subway transportation came to a standstill, and commuters were evacuated from the King's Cross, Charing Cross, Paddington, St. Pancras, and Baker Street rail and subway stations. Service was also severely disrupted at London's Heathrow, Luton, and Gatwick airports.

United Kingdom - April 29, 1997 - IRA bomb threats cause more transportation chaos

Police closed parts of several main highways in the London area and parts of Heathrow and Gatwick Airports April 29 in response to telephoned bomb threats by the Irish Republican Army (IRA). Police said the threats affected some 50 miles of highway, including sections of the M-1, linking London with northern England, the M-25 London ring road, the M-20 and M-26, which serve Dover and the southeast coast, and the M-3 and the M-27, serving the south and southwest. Heathrow's terminal for European flights and Gatwick's two terminals were evacuated. However, the railway and subway systems were not directly affected by April 29's alerts.

China - May 14, 1997 - Explosion on bus in Guangdong province kills at least 5

On May 12, five people were killed and six others wounded when a bomb exploded in the rear of a local bus in Shunde in the southern province of Guangdong. The blast was reportedly set off by a young couple who were both killed by the explosion. Officials are investigating. It is not clear whether this bomb was intended to explode on the bus or whether the couple was transporting explosives that unexpectedly detonated. Both the anniversary of the June 4, 1989, Tianmen Square massacre and the handover of Hong Kong to British sovereignty may provide incentives for individuals or groups to act who seek to discredit Chinese authorities.

Iraq - May 20, 1997 - 2 bus passengers killed; Turkish incursion into Iraq continues

Two unidentified gunmen killed two passengers and wounded seven others on a bus near Diyarbakir May 20. The Kurdistan Workers Party (Kurdish initials: PKK) rebels also fired rockets at government buildings in the town of Derik in Mardin province, and blocked the southeastern Mardin-Sirnak road. More than 10,000 Turkish troops continue May 20 to wage an offensive against the PKK in southeastern Turkey and northern Iraq.

Thailand - May 21, 1997 - Bomb destroys train track in Narathiwat province

On the evening of May 16, a bomb exploded on a railway bridge in the Rangae district of the southern border province of Narathiwat. The explosion caused no casualties but destroyed part of the track. No group has claimed responsibility for the bombing, which police say was "professionally executed." Rail links to the province were restored the following day.

India - June 4, 1997 - Naxalites damage railway in Andhra Pradesh

Early June 3, Maoist insurgents known as Naxalites sabotaged a railway station, locomotive, and telephone station east of the capital Hyderabad in the state of Andhra Pradesh, forcing the interruption of train service between Warangal and Vijaywada. Train service has since been restored.

India - June 6, 1997 - Bomb on bus in Punjab kills 7

A bomb planted aboard a bus traveling from Himachal Pradesh state to the city of Jammu in Punjab state exploded June 6, killing seven people and injuring more than 12 others. An army vehicle traveling behind the bus was damaged by the blast. Police suspect either Sikh or Kashmiri separatists in the attack.

India - June 11, 1997 - Bomb explodes on train track in Jammu-Kashmir

On June 9, a bomb made from RDX exploded near Raya Morh, some 11 miles southwest of Jammu, the winter capital of Jammu-Kashmir state, ripping up at least 12 feet of track and forcing the suspension of rail traffic between the states of Punjab and Jammu-Kashmir. The bomb destroyed seven cars of a passing cargo train. Security officials said the bomb exploded minutes before a crowded passenger train was scheduled to pass. On June 8, one kilogram (2.2 pounds) of RDX was found on a passenger bus bound for Jammu.

Algeria - June 26, 1997 - Bomb explodes on a train

A bomb exploded on June 25 in a train in the south Algiers suburb of al-Harrach, wounding 40 people. The homemade device was placed in a railway coach and exploded about half a mile past al-Harrach station. The explosion came two days after three people were killed by a bomb in the southern town of M'Sila and 18 people massacred in remote areas in rural Algeria.

Algeria - June 27, 1997 - Bomb on minibus kills three in Algiers

A bomb exploded June 26 on a minibus operating between the Algiers districts of al-Harrach and Oued Smar, killing three people and wounding more than 20 others. The explosion came one day after a bomb wounded 40

people aboard a train in the same al-Harrach district. Authorities imposed increased security in the capital, making it compulsory for officials to check the identification of people going to shops, buses, government and private business buildings, cinemas and theaters.

GLOSSARY OF ACRONYMS AND INITIALS

| Initials | Name | Locale |
|-----------------|---|------------------|
| ACOG | Atlanta Committee for the Olympic Games | Atlanta, Georgia |
| ANC | African National Congress | South Africa |
| AOLP | Organization for the Liberation of Palestine | Palestine |
| ASALA | Armenian Secret Army for the Liberation of Armenia | Context: France |
| ATF | Alcohol, Tobacco and Firearms | USA |
| BART | Bay Area Rapid Transit | San Francisco |
| BSF | Bodo Security Force | India |
| BSF | Border Security Force | India |
| CAD | Computer Assisted Design | |
| CSPPA | Committee of Solidarity with the Arab and Middle East Political Prisoners | Context: France |
| DOD | Department of Defense | USA |
| DoITT | Department of Information Technology and Telecommunications | New York |
| ELA | Revolutionary Popular Struggle (Greek acronym) | Greece |
| ELN | National Liberation Army (Spanish initials) | Colombia |
| EOD | Explosive Ordnance Disposal | USA |
| ETA | Basque Fatherland and Liberty (Basque acronym) | Spain |
| FEMA | Federal Emergency Management Authority | USA |
| FTA | Federal Transportation Authority | USA |
| FLNC | Corsican National Liberation Front (French initials) | Corsica |
| FPMR | Manuel Rodriguez Patriotic Front (Spanish initials) | Chile |
| FRA | Federal Railroad Administration | USA |
| G.B.I. | Georgia Bureau of Investigation | Georgia, USA |
| GIA | Armed Islamic Group (French initials) | Algeria |
| J.C.C. | Joint Communications Center (Atlanta Police) | Atlanta, Georgia |
| KLF | Khalistan Liberation Force | Punjab, India |
| KNU | Karen National Union | Myanmar |
| LTTE | Liberation Tigers of Tamil Eelam | Sri Lanka |
| M-20 | December 20 Movement (Spanish initials) | Panama |
| MARTA | Metropolitan Atlanta Rapid Transit Authority | Atlanta, Georgia |
| MNLF | Moro National Liberation Front | Philippines |
| MPOC | MARTA Police Operations Center | Atlanta, Georgia |
| MTA | Metropolitan Transportation Authority | New York City |
| N-17 | November Seventeen | Greece |
| NPA | New People's Army | Philippines |
| NTSB | National Transportation Safety Board | USA |
| NYC | New York City | USA |
| NYDEP | New York Department of Environmental Protection | New York City |
| NYFD | New York Fire Department | New York City |
| NYPD | New York Police Department | New York City |
| OEM | Office of Emergency Management | New York |
| OSTS | Olympic Spectator Transportation System. | Atlanta, Georgia |

| Initials | Name | Locale |
|-----------------|--|------------------|
| PFLP | Popular Front for the Liberation of Palestine | Palestine |
| PFLP-GC | Popular Front for the Liberation of Palestine-General Command | Palestine |
| PIJ | Palestinian Islamic Jihad | Palestine |
| PIRA | Provisional Irish Republican Army | Northern Ireland |
| PKK | Kurdish Workers Party (Kurdish initials) | Turkey |
| PLO | Palestinian Liberation Organization | Palestine |
| PULO | Pattani United Liberation Organization | Thailand |
| RAF | Red Army Faction | Germany |
| RAP | Puerto Rican Armed Resistance | Puerto Rico |
| RATP | Régie Autonome des Transports Parisiens | Paris |
| RER | Réseau Express Régional | Paris |
| RZ | Revolutionary Cells (German initials) | Germany |
| S.O.C. | State Operations Center | Georgia |
| S.O.L.E.C. | State Olympic Law Enforcement Command | Georgia |
| SISDE | Service for Information and Democratic Security (an intelligence agency, Italian initials) | Italy |
| SL | Maoist Shining Path (Spanish initials) | Peru |
| SNCF | Société Nationale des Chemins de Fer Français | France |
| SORT | Special Operations and Rescue Team | Atlanta |
| STP | Syndicat des Transports Parisiens | Paris |
| TNT | Terror Against Terror (Jewish) | Israel |
| ULFA | Maoist United Liberation Front of Assam | India |
| UNITA | National Union for the Total Independence of Angola (Portuguese acronym:) | Angola |
| URNG | National Revolutionary Unity of Guatemala (Spanish initials) | Guatemala |
| US FEMA | Federal Emergency Management Authority | USA |
| UVF | Ulster Volunteer Force | Northern Ireland |

ANNOTATED BIBLIOGRAPHY

By Olubunmi Falayan

GENERAL

Aftandilian, Eric and Alison Thompson. Safety Management Information Statistics; 1993 Annual Report. U.S. Department of Transportation, John A. Volpe National Transportation Systems Center, 1994.

A compilation and analysis of mass transit accident and casualty statistics reported by transit systems in the United States in 1993. Reported under the FTA's Section 15 reporting system.

Appleton Inquiry Report. Report of an Inquiry into Health and Safety Aspects of Stoppages Caused by Fire and Bomb Alerts on London Underground, British Rail and Other Mass-transit Systems. Health and Safety Executive, 1992.

This report is the result of an inquiry into the safety aspects of fire alerts and bombs on major mass transit systems in England. The report includes recommendations for improved security on the transit systems and also suggests methods for developing quantifiable risk assessment.

Balog, John N. et al. Evacuation and Rescue of Elderly and Disabled Passengers from Paratransit Vans and Buses. U.S. Department of Transportation, Federal Transit Administration, Office of Technical Assistance, 1985.

Standard methods of evacuation from mass transit vehicles are not always useful for elderly and disabled passengers due to their physical and mental condition and their inability to evacuate themselves. This report identifies effective methods and equipment for this purpose.

Balog, J. N. Safety Planning Information Directed to Emergency Response: Resource Manual. Presentation Guide, S.P.I.D.E.R. Program. Charleston, WV: Division of Public Transit, West Virginia Department of Transportation, 1989.

Preventive measures and analysis, standard operating procedures, emergency operating procedures, and system safety plans.

Balog, J. N et al. Guidelines for the Development of Passenger, Vehicle, and Facility System Security Program Plans. Vehicle and Facility System Security Program Plans, n.d.

How to write and organize security program plans that can be understood by both transit personnel and passengers.

Balog, J. N. et al. "Maximization of Transit Security Through Effective Use of Procedures." Transportation Research Record 1433 (1994): 187-194.

This paper focuses on how the methodologies developed in the "Transit Security Procedures Guide" can be used to accomplish the highest practical level of safety on our transit systems. In line with the procedures guide, the paper focuses on the following aspects of transit crimes: severity, location, type, and frequency. In an attempt to provide remedies, the paper focuses on: solutions, equipment, personnel, and effectiveness of approaches to solutions.

Balog, John, N., Anne N. Schwarz and Bernard C. Doyle. Transit Security Procedure Guide. Federal Transit Administration. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, Apr. 1996. (Pub. No. FTA-MA-90-7001-94-2).

This document is a compilation of the measures necessary to effectively prepare for and mitigate against crimes and breaches of security on transit systems. The document attempts to present best practices and methodologies for attacking all level and stages of security breaches. The document also stresses post-incident evaluation and procedure effectiveness.

Balog, John N., Anne N. Schwarz and Bernard C. Doyle. Transit System Security Program Planning Guide. Federal Transit Administration. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, Apr. 1996. (Pub. No. FTA-MA-90-7001-94-1).

This document discusses the necessary aspects of security plans that when completed should provide a complete program for system security, assessment and preparedness.

Bloom, Richard F. Closed Circuit Television in Transit Stations: Application Guidelines. Cambridge, MA: Dunlap and Associates, Inc., Report No. ED-80-1, DOT-TSC-UMTA-80-33; UMTA-MA-06-0048-80-5, Aug. 1980.

A guideline on preventive security measures and surveillance techniques applicable for use in transit stations.

Bown, Don. "Oklahoma City, April 19, 1995: Managing When Disaster Hits." Public Management 77 (1995): 6-9.

Description of the emergency response operations implemented and organizations involved in response to the bombing of the Alfred P. Murrah Federal Building in Oklahoma City.

Boyd, M. Annabelle, M. Patricia Maier and Patricia J. Kenney, Perspectives on Transit Security in the 1990's: Strategies for Success. Federal Transit Authority Office of Safety and Security. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, Jun. 1996. (Pub. No. FTA-MA-90-7006-96-1).

This report presents the finding of a study on the state-of-the-practice in transit security throughout the U.S. The report also presents the types and levels of crimes, and the measure (best practices) used to combat these crimes in transit systems. Specifically, the report documents the practices in nine transit agencies with similar to varying characteristics across the U.S.

Chaddock, Gail Russell. "Why Terrorists Pick on the French." The Christian Science Monitor 5 Dec. 1996: 7, 11.

With the exception of France, European countries have been experiencing a decline in terrorist incidents. Despite this trend, France has continued to suffer from one terrorist incident after another. This has resulted to a decline in tourism and a decline in mass transit ridership.

Cooney, N. A. Development of an Automated Security Incident Reporting System (SIRS) for Bus Transit. Report No. DOT-TSC-UMTA-86-13, 1986.

The SIRS is designed to provide up-to-the-date security data to dispatchers, security officers and police. Information is gathered and entered into the system and the system provides data and information that can be readily used in determining frequency of crime and other statistically relevant information.

Dart, Robert W. "Urban Transportation Security." FBI Law Enforcement Bulletin Oct. 1991.

Crime reduction efforts by the Chicago Mass Transit System. The program primarily addresses the effective use and management of security personnel.

Downey, Ray. "Terrorism and the Fire Service: Analyzing the Problems." Fire Engineering 149.6. (1996): 102-105.

This article is directed at the need to address the preparedness and allocation of resources to ensure that fire safety personnel are adequately equipped, educated and informed about procedures and techniques for combating potentially catastrophic events including terrorist attacks.

Federal Bureau of Investigation. Bomb Summary, 1993. Quantico, VA: FBI Bomb Data Center, FBI Academy, 1994.

Report on bomb incidents and attempts in 1993 categorized by type, target, region, etc. Special attention is given to the World Trade Center bombing.

Federal Transit Administration. Case Study of Transit Security on Bus Systems. US Department of Transportation. Cambridge, MA: Research and Special Programs Administration. John A. Volpe National Transportation Systems Center, 1996. (Pub. No. FTA-MA-90-7001-94-1).

Examination of measures taken by Los Angeles, Detroit, Seattle, and Pittsburgh transit systems to combat crime and violence on their systems. Includes data from respective law enforcement agencies.

Federal Transit Administration. Safety Management Information Statistics. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe National Transportation Systems Center, 1992.

Statistics related to transit (e.g., accidents) and commentary on the applicability and validity of the provided data.

Federal Transit Administration. National Leadership Conference on Transit Security: Report and Recommendations. U.S. Department of Transportation Sponsored Conference, Philadelphia 15 - 17 Mar. 1995.

This conference was held to identify problems in transit systems and recommend solutions to these problems. Funded by the FTA, the conference was attended by a cross section of agencies from across the country.

Federal Transit Administration. Implementation Guidelines for Drugs and Alcohol Regulations in Mass Transit. U.S. Department of Transportation, Office of Safety and Security, 1994.

Manual on employee drug testing and abuse prevention for local transit systems.

Federal Transit Administration. Transit Security in the 90's. Conference Summary. Atlanta, GA: Office of Safety and Security, the Office of the Secretary of Intelligence and Security, and the Volpe National Transportation Systems Center, 1996.

In preparation for the Olympics, the FTA organized a conference to discuss the potential for terrorist attacks and the necessary preparation and measures needed to prepare for terrorist attacks during the games.

Federal Transit Administration. Transit System Security Program Planning Guide. Cambridge, MA: US Department of Transportation Research and Special Programs Administration, John A. Volpe National Transportation Systems Center, 1996.

Outlines activities to assist transit systems in the development, implementation, and maintenance of security plans and programs.

Federal Transit Administration. Recommended Emergency Preparedness Guidelines for Urban, Rural, and Specialized Transit Systems. Cambridge, MA: US Department of Transportation Research and Special Programs Administration. John A. Volpe National Transportation Systems Center, 1991. (Pub. No. UMTA-MA-06-0196-1).

Emergency management and preparedness guidelines for transportation systems in a variety of locations with different demographic and security needs. The manual also addresses issues related to transit safety and measures necessary when handicapped and elderly patrons use these systems.

Foster, B. and R. Freeland. Crimes on Maryland Transit Administration Light Rail Line: Myth or Reality? Seventh National Conference on Light Rail Transit: Building on Success - Learning from Experience. Sponsors: Transport Research Board and American Public Transit. Conference Proceedings, 1995: 253-256.

Following the introduction of the light rail system in Baltimore, there was an apparent increase in crime in the suburbs. It appeared that the crimes were linked to the light rail since that was the only major change to the suburbs in the decades. To rectify the situation and change the perception of the residents towards public transit, the transit authority used a variety of techniques to regain public confidence including public relations, community outreach, and an increase in police enforcement. Ridership has since improved.

Goldsack, P. J. "Video Cameras Cut U.K. Bus Assaults, Statistics." Mass Transit 14.6 (1987): 13-14.

Describes the use of video cameras as a deterrent to crime and to capture offenders on buses in the U.K.

Grodzins, L. "Bombs Away!" Transportation 5 (1991): 6-7.

A review of FAA funded research into technologically advanced systems of detecting for explosive devices especially in luggage at airports. Funded projects include research in vapor sniffing technology and advanced x-ray devices.

Hargadine, E. O. Case Studies of Transit Security on Bus Systems. Federal Transit Administration. Cambridge, MA: U.S. Department of Transportation Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, 1984. (Pub. No. UMTA-VA-06-0088-83-1).

Authorized by the FTA, these case studies examine the procedures and measures adopted by the Los Angeles, Detroit, Seattle, and Pittsburgh transit systems in their respective attempts to combat security violations on bus systems.

Hartgen, David T., Gerald L. Ingalls, Timothy W. Owens. Public Fear of Crime and its Role in Bus Transit Use. University of North Carolina Charlotte, Center for Interdisciplinary Transportation Studies, 1993.

Investigates the perceptions of crime on small city transit systems and compares such perceptions with the actual occurrence of crimes on these transit systems.

Hathaway, W. T. and Stephanie H. Markos. Recommended Emergency Preparedness Guidelines for Urban, Rural and Specialized Transit Systems. Federal Transit Administration. Cambridge, MA: U.S. Department of Transportation Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, Jan. 1991. (Pub. No. UMTA-MA-06-0196-91-1).

Emergency management and preparedness guidelines for transportation systems in a variety of locations with different demographics and security needs. The manual also addresses issues related to transit safety and measures necessary when handicapped and elderly patrons utilize the system.

Hathaway, W. T., Stephanie H. Markos and John Balog. Recommended Emergency Preparedness Guidelines for Elderly and Disabled Rail Transit Passengers. Cambridge, MA: U.S. Department of Transportation, Urban Mass Transportation Administration, Transportation Systems Center, 1989. (Pub. No. DOT-TSC-UMTA-89-4)

This guideline addresses the emergency needs of the elderly and the disabled who are increasingly relying on rail transit. The document makes recommendations intended to assist rail transit and emergency response organization personnel in evaluating their emergency response plans in terms of the needs of elderly and disabled passengers. Contains minimum recommendations which will assist in the evacuation of elderly and disabled passengers from rail transit vehicles and facilities in emergency situations.

Hathaway, W. T. and B. Doyle, Jr. A Proposed Methodology for Addressing Terrorism in Transportation. Fourth Annual Joint Government-Industry Symposium, Arlington, VA, 1988.

[No Abstract Provided]

Hathaway, W. T., D. A. Knapton, and R. A. Rudich. New York Metropolitan Transportation Authority Safety Investigation. Cambridge MA: U.S. Department of Transportation, John A. Volpe National Transportation Systems Center, n.d.

Stresses the “system safety” concept and “top-down” method of security. Reviews past safety assessments conducted by state and federal agencies to ensure that all previous deficiencies have been corrected.

Hathaway, W. T. and S. H. Markos. Recommended Emergency Preparedness Guidelines for Urban, Rural, and Specialized Transit Systems. Report No. DOT-VNTSC-UMTA-91-1, 1991.

Provisions for emergency response to various threatening incidences. Guidelines are provided for various types and sizes of systems.

Hathaway, W. T., S. H. Markos and R. J. Pawlak. Recommended Emergency Preparedness Guidelines for Rail Transit Systems. Pub. No. DOT-TSC UMTA-84-26-1985.

Contains emergency preparedness guidelines to help rail transit systems to assess, develop, document, and improve their capability for responding to emergency situations.

Hubaud, L. “Security for Los Angeles Metro Blue Line.” Transportation Research Record 1361 (1992): 312-319.

This paper discusses the security precautions and measures taken by the Los Angeles County Transportation Commission (LACTC) to ensure safety on and off the Metro Blue Line. Precautions were implemented during construction to prevent vandalism and destruction of the system. Upon completion, the Transit District contracted with the Sheriffs Department to provide security and law enforcement visibility at the transit stations. To date, there have been few security related problems on the Metro Blue Line.

Ingalls, G., D. Hartgen and T. Owens. “Public Fear of Crimes and its Role in Bus Transit Use.” Transportation Research Record 1433 (1994): 201-211.

This paper concluded that the perceived image of bus systems is not necessarily the reality. While most riders take precautions to avoid drunken people, rowdy teenagers and avoid traveling alone at night, non-users perceive the danger of using bus systems to be more dangerous than it is. This is true especially if the systems run through downtowns and minority neighborhoods.

Jenkins, Brian. "The Future Course of International Terrorism." Contemporary Trends in International Terrorism. n.d.

Predictions about future terrorist tactics. The author predicts that terrorists will likely use the same conventional tactics. Attacks on vulnerable targets such as transit systems are expected to increase even more.

Jenkins, Brian. "Terrorism-Prone Countries and Conditions." On Terrorism and Combating Terrorism. Jaffee Center for Strategic Studies. Tel Aviv University, n.d.

[No Abstract Provided]

Jenkins, Brian. Selected Terrorist Threats and Attacks Against L/Railways, Subway, and Train Stations. Kroll-O'Gara Company, Sept. 1997.
Chronology of terrorist events.

Jenkins, Brian. Selected Terrorist Threats and Attacks Against Buses. Kroll-O'Gara Company, Sept. 1997.
Chronology of terrorist events.

Knapton, David. Exploring How to Make System Safety Work in Transit. U.S. Department of Transportation, Federal Transit Administration, Office of Technical Assistance and Safety, n.d.

An investigation of selected transit systems revealed that system safety programs and implementation of the System Safety Program Plan were not functioning properly. In response to this investigation, the FTA, in conjunction with the New York State Public Transit Safety Board and the New York Metropolitan Transportation Authority, sponsored a workshop which addressed system safety issues. Attendees of the workshop identified key issues and solutions. The top 18 solutions are included in this report.

Kennedy, Dennis Jay. Crime, Fear and the New York City Subways: The Role of Citizenry Action. Praeger Publishers, 1987.

The effectiveness of crime fighting through citizenry action and organizations and their effects on crime and the perception of crime. The book portrays the Guardian Angels as one such citizenry group.

- Lewis, Chris. "Vigilance at a Premium." Transport 13 (1992): 15-18.
This article focuses on methods of preventing terrorism on transportation systems with specific reference to Great Britain.
- Lienert, Anita. "Coping With Disaster: Just 48 Hours After a Bomb Destroyed the Alfred P. Murrah Building and Killed 18 of her Employees, Florence Rogers and the Federal Employees Credit Union Were Back in Business." Management Review 85 (1996): 38-42.
Description of the disaster recovery plan implemented by the Federal Employees Credit Union immediately following the bombing of the Alfred P. Murrah building.
- Long, David E. The Anatomy of Terrorism. New York: The Free Press, 1990.
Terrorism defined, motives, terrorist groups, and sources of support. How governments can organize to combat terrorism.
- Marquand, Robert. "Age of Anonymous Terrorism Makes Policing More Difficult." The Christian Science Monitor 29 Jul. 1996.
Analysis of terrorist motives as a key element for development of effective antiterrorist initiatives.
- Markos, Stephanie, H. Recommended Emergency Preparedness Guidelines for Passenger Trains: Final Report. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe, National Transportation Systems Center, 1993.
Guidelines on emergency management and preparedness for passenger trains in the U.S. The report documents measures and procedures necessary to prepare for emergencies and mitigate against security breaches.
- Martin, J. Security Assessment of San Diego Light Transit Service. Seventh National Conference on Light Rail Transit: Building on Success - Learning from Experience. Sponsors : Transport Research Board and American Public Transit. Conference Proceedings, 1995: 257-262.
This paper is a report on a detailed study of the impact of introducing light rail in the San Diego area. This study was commissioned by the San Diego Association of Governments (SANDAG).
- McKenzie, R. High Technology Passenger Information Systems: The Experience of France, The Netherlands and West Germany. TSU Report 7, 1988.

Application of state of the art information systems to passenger security and their implementation in these three countries.

Norman Y. Mineta International Institute for Surface Transportation Policy Studies. Terrorism in Surface Transportation: A Symposium College of Business, San Jose State University, 1996.

The symposium broadly covered security issues as they related to terrorism, including an overview of major terrorist incidents and responsibilities of local, state, and federal authorities before, during, and after terrorist events.

O'Connor, Robert. "Terrorism in Transit." Mass Transit Mar. 1991: n. pag. The London underground is vulnerable to bombings and has been the repeated target of the IRA. This article illustrates this point with an example of a bombing at Victoria station and the resources the transit authorities are utilizing to combat the attacks.

O'Connor, Robert. "Terrorism in Transit." Metro Transit Mar. 1991:n. pag. Recent IRA bombing of London's Victoria Station reinforces the idea of how vulnerable mass transit systems are to terrorist attacks.

Ohio State University. Proceedings: Crime Prevention Through Environmental Design Workshop. Sponsored by the Program for the Study of Crime and Delinquency, Ohio State University, 1972.

Conference on crime prevention through environmental design, and the criminal psychology of delinquents and criminals.

Powell, Kathryn, C. Federal Transit Administration. Transit Security in the 90's - Conference Summary. Federal Transit Administration Office of Safety and Security. Conference held 27-28 Feb. 1996. Document date Apr. 1996. (Pub. No. FTA-MA-26-9009-97-01).

In preparation for the Olympics, the FTA organized a conference to discuss the potential for terrorist attacks and the necessary preparation and measures needed to prepare for terrorist attacks during the games.

Rogers, N. F. "Defuse Bomb Threats." Security Management. (Oct. 1983): 32 - 36.

[No Abstract Provided]

Rumford, W. B. Transit Security: Keeping Perceptions in Perspective. Seventh National Conference on Light Rail Transit: Building on Success - Learning from Experience. Sponsors: Transport Research Board and American Public Transit. Conference Proceedings, 1995: 263-270.

This paper focuses on the problems facing transit systems and the dilemmas involved with the inclusion of homelessness, unclean environments and interaction with other ethnicities in confined environments. The definition of security as it pertains to transit incorporates the perceptions of commuters and their interaction with the environments in and around transit systems and facilities.

Shustov, V. Blast Protective Structural System. Proceedings of the 1996 4th International Conference on Structures under Shock and Impact, SUSI 96, 1996.

Structure need to be able to substance significant shock and impact from explosive devices and remains standing after the event to minimize losses, especially of lives.

Siegel, L et al. Policing Urban Mass Transit Systems. National Institute of Law Enforcement and Criminal Justice, Department of Justice, 1979. Security measures on transit systems, personnel management, and other security concerns related to policing mass transit systems.

Spaid, Elizabeth Levitan. "Lesson from Atlanta Pipe Bomb: Public Can Help." The Christian Science Monitor 30 Jul. 1996: 1, 18. Post-incident response: public as effective police informants.

Swain, D. Crimes on the London Underground: A Study of Preventive Measures. Public Transport Planning and Operations. Proceedings of Seminar C held at the 16th PTRC Transport Planning Summer Annual Meeting, University of Bath, England, 12-16 Sept. 1988. Volume P305, 1988: 239-246.

This paper provides information on the measures taken by the London Underground to combat crimes, including vandalism like graffiti and nuisances. The measures, which include staffing management and equipment provision and location, were the result of research which incorporated the public's reactions and attitudes to crimes on the underground system.

Sylves, Richard T. Renewing FEMA: Remaking Emergency Management. Natural Hazards Research and Application Information Center, Institute of Behavioral Science, University of Colorado, 1995. FEMA, government policy, and disaster relief in the United States.

Transport News. "US Transit Warned to be Watchful After Poison Gas in Tokyo Subway." from LEXIS/NEXIS web site, at <http://www.lexis-nexis.com>.

After Tokyo's sarin gas attack, US transit systems evaluate themselves in terms of how ready they are for such an attack. San Francisco area transit systems are judged to be the best prepared.

United States General Accounting Office. Domestic Terrorism: Prevention Efforts in Selected Federal Courts and Mass Transit Systems. Report to the Chairman, Subcommittee on Civil and Constitutional Rights, Committee on the Judiciary, House of Representatives, Jun. 1988. (Pub. No. GAO/PEDM-88-22).

Report to the House of Representatives on domestic anti-terrorism efforts.

United States General Accounting Office. Terrorism and Drug Trafficking: Threats and Roles of Explosives and Narcotics Detection Technology. Briefing Report to Congressional Requesters. United States General Accounting Office, Mar. 1996.

Change in pattern of terrorism, terrorism counter threat strategy, and planned explosives detection technology deployment.

United States General Accounting Office. Domestic Terrorism: Prevention Efforts in Selected Federal Courts and Mass Transit Systems. Report to the Chairman, Subcommittee on Civil and Constitutional Rights, Committee on the Judiciary, House of Representatives, 1996.

Hearings on antiterrorism programs and vulnerability assessments

United States Congress, Senate. Railroad Safety. Hearing Before the Committee on Commerce, Science, and Transportation. United States Senate. Feb. 27, 1996.

Hearings on the rail industry, safety and labor.

United State Congress, Senate. Federal Railroad Administration's Rail Safety Activities Authorization. Committee on Commerce, Science, and Transportation. Subcommittee on Surface Transportation, 9 Mar. 1984. Washington: U.S. G.P.O., 1984.

Hearings before the Subcommittee on railroad safety measures and compliance.

United States Congress, Senate. Crime in Mass Transit. Hearing Before a Subcommittee of the Committee on Appropriations, United States Senate, 101st Cong., 2nd Sess., 17 Sept. 1990. Special Hearing. Washington: U.S. G.P.O., 1991.

Report to the Senate on crimes in transit systems and other associated issues including policing, mitigation and prosecution.

United States Congress, House of Representatives. Combating Domestic Terrorism. Hearing Before the Subcommittee on Crime of the Committee on the Judiciary House of Representatives. 104th Cong. 1st Sess., 3 May 1995. Washington: U.S. G.P.O., 1995.

Hearings on the Oklahoma City bombing and counter-terrorism.

University of Toronto and the G7 Research Group at the University of Toronto. Secretary Pena Announces Conference on Land transportation security. <http://ut11.library.utoronto.ca:80/www/G7/p8transp.html>

Announcement of a conference on transportation security to be attended by land transportation official from the group of seven nations plus Russia. No date was given for the meeting. Announcement date was Tuesday, November 19, 1996.

Urban Mass Transportation Administration. Documentation and Assessment of Transit Security Data Reporting and its Utilization. U.S. Department of Transportation, Mar. 1985. (Pub. No. UMTA-VA-06-0111-85-1).

Documentation of local transit crimes and measures taken to reduce crimes on transit systems.

Urban Mass Transportation Administration. Recommended Emergency Preparedness Guidelines for Urban, Rural, and Specialized Transit Systems. U.S. Department of Transportation, Jan. 1992. (Pub. No. UMTA-MA-06-0196-91-1)

Authorized by the UMTA, this document examines emergency preparedness guidelines with the intent of helping transit systems improve their abilities to assess, develop, document and improve emergency response policy, techniques and administration.

Working Group on Violence to Road Passenger Transport Staff. Assault on Bus Staff and Measures to Prevent Such Assaults. London: H.M.S.O., 1986.

Crimes and crime prevention measures aboard buses. Report is specifically directed at measures to ensure safety and security for transport staff.

Yearsley, I. "Assessing the Risk." Surveyor (1992): 16-17.

This article is a discussion of the risk assessment approach recommended by the Appleton report. The Appleton report is included in this bibliography.

DETECTION

Berry, C. R. and D. G. Stuart. Electromagnetical Transit Security Equipment. Urban Metropolitan Transit Authority, 1982 (Pub. No. UMTA-79-185).

Introduction of new devices and their application in preventing breaches of security in our metropolitan transit facilities. Electromagnetic devices are rated as very effective .

Bozorgmanesh, Hadi. "Bomb and Weapon Detection." Terrorism (1987): 285-297.

[No Abstract Provided]

Deming, Romine. High Speed Detection of Plastic Explosives. Paper Presented at the 1986 Carnahan Conference on Security Technology, held on 14-16 May 1986 at the University of Kentucky: 79-81.

[No Abstract Provided]

O'Connor, Leo. "High Tech Security Devices." Mechanical Engineering, 11.11 (1995): 89-91.

Engineers are playing a major role in the development of technologies to prevent acts of terrorism. Devices including surveillance robots, remote gun detectors, and glass made out of composite materials.

Scherer, Ron. "New Antiterrorist Weapon: Lassie v. Carlos the Jackal." The Christian Science Monitor. 8 Aug. 1996: 3.

Canine patrol is proving to be an effective security technology. Dogs are mobile and are able to climb over luggage or walk along a long line of people. They are especially effective in detecting car bombs.

ENVIRONMENTAL DESIGN

Bynum, Timothy S. and Dan M. Purri. "Crime and Architectural Style: An Examination of the Environmental Design Hypothesis." Criminal Justice and Behavior 11 (Jun. 1984): 179-196.

[No Abstract Provided]

Coltharp, David R. "Designing Buildings Against Terrorists." Military Engineer (Aug. 1987): 427 - 429.

[No Abstract Provided]

Falanga, M. Reducing Crime Through Design in the Chicago Subway System. Ann Arbor, MI n. p., 1989.

[No Abstract Provided]

Fleissner, Dan. and Fred Heinzelmann. Crime Prevention Through Environmental Design and Community Policing. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Aug. 1996.

Community policing and crime prevention through architectural design.

Miller, Jacqueline (ed.) The Improvement of the Built Environment and Social Integration in Cities. European Community Official Publications Office, 1992.

Selected papers from a workshop held in Berlin in 1991. Paper topics include transportation and crime prevention in multicultural cities.

Plano, S. "Transit-Generated Crime: Perception Versus Reality - A Sociographic Study of Neighborhoods Adjacent to Section B of Baltimore Metro." Transportation Research Record 1402 (1993): 59-62.

This paper is directed at assessing the influence of transit systems on crimes in areas adjacent to transit stations. Most crime statistics do not devote attention to the correlation between transit station location and crimes in adjacent neighborhoods.

Smith, Mary S. Crime Prevention Through Environmental Design in Parking Facilities. National Institute of Justice, Apr. 1996.

How Crime Prevention Through Environmental Design (COPT) concepts can be applied to parking facilities together with active security measures such as guards and emergency communication systems.

MISCELLANEOUS

Gannet News Service. "Top Ten Terrorist Groups." From LEXIS/NEXIS web site, <http://www.lexis-nexis.com>.

Melia, M. "How to Improve Parking Lot Safety." Traffic Safety 3 (1996): 16-19.

This article provides suggestions for improving safety at parking lots. Measures suggested include improved lighting, security patrols, and surveillance equipment. There is evidence to show that if these and other appropriate measures are employed, violent crimes and vandalism are significantly reduced.

Worldwide Acts of Terrorism. Section on the MILNET web site, <http://www.milnet.com/milnet/terror.htm>.

IISTPS Research Project Pre-Publication Peer Review

San Jose State University, of the California State University system, and the IISTPS Board of Trustees have agreed upon a peer review process required for all research published by IISTPS. The purpose of the review process is to ensure that the results presented are based upon a professionally acceptable research protocol.

Research projects begin with the approval of a scope of work by the sponsoring entity, with in-process reviews by the IISTPS Research Director and the project sponsor. Periodic progress reports are provided to the IISTPS Research Director and the Research Associates Policy Oversight Committee (RAPOC). Review of the draft research product is conducted by the Research Committee of the IISTPS Board of Trustees, and may include invited critiques from other professionals in the subject field. The review is based on the professional propriety of the research methodology.