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in
Surface Transportation

A Symposium

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16. Abstract

This document is a transcript of a symposium held on March 15, 1996 as part of the IISTPS charter of continuing education in the area of surface transportation policy.

The topic for this symposium was selected to help meet the need for awareness of, and preparedness for, possible terrorist attacks on the surface transportation systems within the United States and the world.

The expert panel consisted of the following individuals:

- Tom Savage, Chief Security Officer NY Transit Authority.
- Patrick Webb, Supervisory Special Agent, Counter-Terrorism Squad, FBI.
- Ernest R. Frazier, Chief of Police, Amtrak
- Denis Jackson, VP for Technical Operations, American Medical Response West, Inc.

A question and answer period followed the formal presentations.

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FOREWORD

I am pleased to forward a copy of the proceedings of the Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) March 1996 Symposium on "Terrorism in Surface Transportation." This symposium was presented at San José State University on March 15, 1996, as part of the IISTPS charter of continuing education in the area of Surface Transportation Policy.

The topic for this Symposium was selected to help satisfy the increased need for awareness of and preparedness for possible terrorism attacks on the surface transportation systems within the United States and the world. A group of experts was assembled to present a summary of their vast experience and concerns in the areas of terrorism to an invited group of delegates drawn from transportation agencies, law enforcement, other government agencies and the private sector. After the formal presentations, time was made available for increased understanding of the various issues through interactive discussions is included in these proceedings.

Many people helped in the creation of this symposium. I would like to thank especially our expert speakers, Tom Savage, Chief Security Officer, New York Transit Authority; Patrick Webb, Supervisory Special Agent, Counter-Terrorism Squad, Federal Bureau of Investigation; Ernest R. Frazier, Chief of Police, Amtrak; and Denis Jackson, Vice President for Technical Operations, American Medical Response West, Inc. In addition to our fine speakers, I would like to thank Rod Diridon, Executive Director of IISTPS; Rob Vitale, Education Director for IISTPS; Dr. Dirk Wassenaar, IISTPS Marketing Director; Claudia Hull and Patrick A. Rooney, IISTPS Graduate Assistants; and Benedicte Sigwalde, Symposium Assistant, as well as the other IISTPS' staff members, for their professional assistance in the presentation of this symposium.

Finally, I hope that you, the reader, will find these proceedings to be both stimulating and useful as a guide to further awareness in the important areas of surface transportation terrorism response and prevention.

Miles B. Welter
Symposium Director

EXECUTIVE SUMMARY

The second symposium presented by the Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) was held March 15, 1996, on the San José State University campus. This timely discussion was co-sponsored by the Research and Special Programs Administration (RSPA) of the United States Department of Transportation (U.S. DOT) and the California Department of Transportation (Caltrans). The topic, *Terrorism in Surface Transportation*, was addressed by leading experts in several related fields.

Chief Security Officer of the New York Transit Authority, Tom Savage, described lessons learned from recent terrorist attacks. Mr. Savage spoke not only of past occurrences, but also of the challenges presently facing most cities.

FBI Counter-terrorism Squad Supervisory Special Agent, Patrick J. Webb, addressed the responsibilities of the local authorities when the FBI is called in to assist. He cited specific incidents of the collaboration now common between agencies, and he spoke of ideas for furthering the effectiveness of such interdependence of affiliated agencies.

Amtrak Chief of Police, Ernest Frazier, spoke about the Arizona derailment, specifically about whether such an occurrence can be predicted. He also addressed the significance of proposed Senate Bill 2949 (copy appended). Also speaking tot he assembled group was Denis Jackson, Vice President for Technical Operations for American Medical Response West, the largest ambulance and paramedic provider in the United States. Mr. Jackson discussed terrorism attacks, similar to the Oklahoma City bombing and the emergency response systems in place to deal with them.

All of the speakers provided insight into the problems facing our cities today under the threat of terrorism as it applies to transportation. The value of the symposium was

enhanced by the panel discussion moderator, Rod Diridon, Executive Director of IISTPS. Mr. Diridon holds both national and international leadership positions in the field of mass transportation.

TERRORISM IN SURFACE TRANSPORTATION
Second Symposium of the Norman Y. Mineta International Institute for Surface Transportation Policy Studies

The second International Institute for Surface Transportation Policy Studies (IISTPS) symposium, *Terrorism in Surface Transportation*, began with a welcome by Rod Diridon, Executive Director of the Institute. Diridon introduced the Chief Law Enforcement Officer for Santa Clara County, Sheriff Charles "Chuck" Gillingham. Gillingham, a directly elected individual, served for many years as Deputy Sheriff and then as the Commander of the Jails. Elected to the office, he is presently in charge of the entire Santa Clara County Sheriff's Department.

Sheriff Charles Gillingham

After relating a humorous story, Gillingham addressed the necessity of an ongoing and close working relationship with other agencies, like the one presently existing with Amtrak police. He stressed the importance of all elements of law enforcement collaborating to curtail the crime rate.

After acknowledging Rod Diridon for his fine work with the Institute, Gillingham invited Diridon to introduce the first guest speaker.

Mr. Rod Diridon

Diridon spoke briefly about the Institute. He explained that the Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) at San José State University was established by Congress in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Unique among the nation's six University Transportation Institutes, IISTPS focuses on international surface transportation policy issues related to research, education, and information transfer. IISTPS receives policy

oversight from an internationally respected Board of Trustees who represent all of the major surface transportation modes.

Diridon noted that this was the second symposium presented by IISTPS. The first symposium, held on June 6, 1995, was on "Planning for Surface Transportation and Land Use." He indicated that the proceedings from it will be available for purchase shortly. He then invited the audience to purchase a copy of the symposia proceedings.

Next, Diridon introduced the symposium coordinator, Rob Vitale, an Adjunct Professor at San José State University and IISTPS' Education Director. Vitale's expertise is in marketing within private industry. Diridon explained that an effort is being made to enlist the participation of individuals from private industry whose business expertise will enhance the academic curriculum of the Institute. He then welcomed Adjunct Professor Rob Vitale as one who successfully melds the theoretical/academic approach with practical business experience.

Mr. Rob Vitale

Vitale spoke briefly about the development of a Masters of Science Program in Transportation Management. He said it is off to a good start and welcomed inquiries from interested parties. He explained that the symposia series is a part of that education program. Vitale spoke about the dedicated and proficient staff who support the program and introduced Miles Welter, Project Director for this symposium, Professor Dirk Wassenaar, Marketing Project Director, as well as other staff members.

Vitale spoke about the education program as being different from what one would expect when thinking of a Master's degree. He explained that the program is designed to break typical paradigms in the academic world. For example, the video of this symposium will be used in classrooms, and hopefully presenters from the symposia series will also speak to our students.

Vitale also said that classes will be conducted via televideo all over the world as this program is developed, a concept called distance learning. When 15 or 20 people gather at any facility, whether at the Santa Clara County Transit Agency or Caltrans, or a group in Minnesota or New York or New Jersey, SJSU plans to make available to them classes for a Master of Science degree in transportation management. Vitale stressed that this program is specialized for transportation management, and SJSU plans to "push the envelope" with this new teaching technique.

Vitale stated that the most distinctive element of this program is its goal to be contemporary, to satisfy specific needs that the transportation professionals have communicated are needed in the future careers of their employees. He explained that the program is non-traditional by design, not accident or oversight, and offered the willingness to listen to other new concepts. Vitale identified this program as a very different type of master's program and one hoped to be the model of new master's education of the next century.

Presentation Number One

Mr. Rob Vitale

Our first speaker, Thomas J. Savage is Chief Security Officer for the New York City Transit Authority. Savage is responsible for the executive direction of New York City Transit's strategic security functions–passenger and employee security and property protection. He has primary responsibility for coordinating these issues with the Mayor's Office of Criminal Justice and the Transit Bureau of the New York City Police Department.

Mr. Thomas J. Savage

It is unfortunate that transit professionals are now mandated to add Terrorism to all industry related meetings and conferences. It is only March, and this symposium is the second I and many of you have attended this year. Terrorism is a topic of grave and growing concern. As day-to-day transit operating managers, our responsibilities dramatically changed with the following incidents:

- The World Trade Center bombing–February 1993;
- Sarin Gas Attack in the Tokyo subway system–March 1995;
- Paris commuter train bombing–July 1995;
- London bus system bombing–February 1996; and
- Jerusalem bus system bombing–March 1996.

The fact is clear that we must prepare ourselves for the threat of Terrorism just as we prepare for fire or any other disaster.

This presentation will provide an overview of recent experiences in public transportation in New York. It will help you identify what impact such events have had on policies and what changes are being instituted as a result of our changing times.

System Overview

- The largest public transit system in North America–we account for about 40% of all mass transit trips nationwide–and the world's tenth largest system;

- The subway and bus system operates 24 hours every day and carries an average of 4.7 million daily passengers and 1.5 billion annual passengers;
- NYC Transit has a staff of approximately 43,000;
- An annual operating budget of $3.6 billion; and,
- Annual capital expenditures of more than $1 billion.

Department of Subways

- The subway serves 3.5 million customers on an average weekday and about 1.1 billion passengers a year. The 25 subway lines are interconnected, offering free transfers between lines permitted at more than 50 locations;
- The world's largest subway fleet, with 5,803 cars, is now entirely new or overhauled. Almost all the cars have air conditioning and–since May 1989–all are graffiti free;
- The subway fleet travels about 300 million revenue miles each year. The longest ride on the system with no change of trains is 31 miles;
- About 60 percent of the system's 468 subway stations are underground. The others are located along elevated structures or are built on embankments or in open cuts;
- Located within station facilities are: 3,180 turnstiles, 742 token booths, 60 elevators, and 161 escalators; and
- The organization is comprised of approximately 25,000 employees distributed between two primary divisions–Service Delivery and Maintenance.

Department of Buses

- The Department of Buses operates 201 local and 30 express bus routes providing about 49,000 daily revenue trips;
- The system's 3,751 buses carry about 1.2 million customers daily and 450 million annually;
- Each rush hour, more than 3,000 buses are in operation, picking up customers at more than 14,000 bus stops;
- New York City bus routes total 1,671 miles. Buses travel about 104 million miles annually. The longest local bus route is 16.5 miles and the longest express route is 27.3 miles;

- Buses are maintained and cleaned in 19 depots. The fleet is 100 percent graffiti-free, air conditioned, either new or overhauled and equipped with wheelchair lifts;
- To keep buses on the move, we use 36 million gallons of diesel fuel;
- We are working to develop a New Technology Bus that will have reduced emissions and improved fuel economy. Among the prototypes being researched:
    - Battery Powered Buses–Equipped with electric motors and rechargeable batteries;
    - Electric Hybrid Buses–Equipped with electric motors and smaller diesel engines; and
    - Compressed Natural Gas (CNG) Buses–Designed to burn cleaner fuel (32 buses are in actual use).
- As of January 1996, our fleet's average age is 8.57 years and is distributed as follows:
    - 54% are the GMC RTS-04 model;
    - 8% are the GMC RTS-06 model;
    - 27% are the TMC RTS-06 model; and
    - 11% are the BIA Orion 5 model.
- The organization is comprised of approximately 12,000 employees and includes 7,500 bus operators and 2,700 bus maintenance staff.

Lessons Learned

- On February 26, 1993, New York City experienced terrorism firsthand. The World Trade Center bombing trapped thousands of people and caused injury and death to six persons. Bus and subway service was disrupted.
- The World Trade Center bombing vividly demonstrated to New York City Transit and the New York Police Department (NYPD) that the everyday crime/security concerns were no longer the only threat to the safety of our passengers and employees. Recognizing this, Transit and the NYPD organized an interagency fact finding task force on terrorism–chaired by Deputy Inspector Francis O'Hare of the NYPD's Transit Bureau. To enhance understanding of the dangers and disruptiveness of Terrorism, task force representatives traveled to England, Italy, France and eventually Japan to study and evaluate procedures on terrorism response.

- The attached task force recommendations (see appendix) are continually being reviewed. After the Sarin gas attack in Japan, the Transit and NYPD task force reviewed security issues in an effort to prevent and/or mitigate a similar occurrence. The task force made five recommendations, of which three have been implemented. These three resulted in:
    - Information and guidance about gas attacks being given to employees;
    - The establishment of ventilation procedures for subway cars, stations and facilities; and
    - The submission of new gas attack procedures for coordination of effort between Transit and other city agencies.
- The two remaining recommendations are still under review and deal with aspects of station design:
    - The task force suggested certain changes in how stations are laid out, including the elimination of certain design features such as open or idle spaces behind token booths and concession stands which might be used for the concealment of explosive or toxic devices. Our problem with implementing is the sheer size of the system, as I have previously mentioned. The cost of correcting every potential design problem in one station alone would be enormous; to make similar corrections systemwide would be financially impossible. As stations are being rehabilitated design changes are being incorporated to enhance security.
    - A second suggestion recommended the removal of trash receptacles in subway stations. This was done in Tokyo only during the Sarin alert, and they have since been reinstalled. The removal of trash receptacles creates problems of trash buildup and track fires. The question of which creates the greatest safety concern for our passengers and employees is challenging, and careful consideration must be given of all possible results of the recommendation before it can be put into effect.

- The initial task force recommendations focused on three areas of responsibility:
  - Transit Policing Procedures;
  - Facilities Management; and
  - Bus and Subway Operations.

Transit Policing Procedures–In addition to the following procedures, interaction with NYC Transit personnel is stressed to ensure a coordinated effort:

- NYPD Transit Bureau officers inspect all parts of their post; taking the time to ensure that this inspection is done thoroughly and conscientiously;
- Bus depot and subway station inspections include items such as solar cans, sand boxes, concession booths, construction sites, or other areas where materials or devices may be concealed;
- Being alert for suspicious packages, persons, odors, or activities on or around transit facilities;
- Ensuring that homeless persons are not residing in any buses, subway cars, stations, tunnels, or other facility;
- Knowing where all emergency equipment–such as fire extinguishers, stretchers, bull horns, etc.–are kept. Ensuring that the equipment is in working order and being familiar with how these items are used;
- Reporting for appropriate attention any condition that would be dangerous in an emergency–e.g. an inoperable public address system, etc.;
- Checking the NYC Transit passes or ID's of persons entering or exiting nonpublic areas such as underwater tunnels–remembering that safety vests, uniforms, or hard hats can be obtained anywhere and are not valid proof of employment;
- Being familiar with mobilization procedures during an emergency;
- Inspecting fan shafts and emergency exits in the vicinity of the underwater tunnels;
- Equipping the Transit Bureau and NYPD command staff–Captains and above–with radios that have been programmed with other metropolitan area transit agencies' frequencies to enhance coordination during emergencies;

- Commencing high profile policing at two NYC transportation hubs–Grand Central Station and Penn Station. This policing coordinates individual command personnel with detachments from the Homeless Outreach Unit and the Vandal Unit;
- The NYPD Transit Bureau Crime Prevention Unit conducts surveys of transit facilities. The survey results are included in the planning and design stages of new and renovated construction projects; and
- Last and most important, because practice is a necessary part of any emergency response training, New York City has recently staged two drills to test emergency response to gas attacks on public transportation such as those recently suffered in Japan. While all personnel were informed at the time that the incidents to which they were responding were a drill, no advance notice had been given, and the manner in which they responded was the same as if the incidents had been genuine attacks. Appendix A is the critique of the September 23, 1995, drill.

Facilities Management–There are three administrative facilities that house bus, subway and administrative staff. Facilities managers conduct evacuation drills in coordination with the NYPD Transit Bureau and the NYC Fire Department. Additionally, the following steps have been taken to improve security:

- Contracted for a new fire command center;
- Stationary Engineers are being qualified and licensed as Assistant Fire Safety Directors;
- Increased the number of Fire Wardens;
- Headquarters' building manager's office moved to the front entrance for higher visibility and accessibility;
- Reevaluated emergency equipment, corrected deficiencies and established preventive maintenance;
- Rekeyed all mechanical and electrical closets, pump rooms, boiler rooms to single lock system under strict controls;
- Acquired 20 radios for building maintenance staff to improve communications during emergencies; and

- Reevaluated mail room procedures–see Appendix B–and purchased mail scanning equipment.

Bus and Subway Operations are initiating aggressively effective methods to address terrorist activity. Initiatives in place include:

- Implementing use of the U.S. Treasury Bureau of Alcohol, Tobacco and Firearms (AFT) Bomb Threat Checklist–see Appendix C–to guide Transit Command Center personnel on gathering pertinent information to pass on to police;
- Implementing joint Transit Police training programs with bus and subway operations to increase participation and awareness–this partnership is important when dealing with service disruptions. Courses include Track Safety for non-Transit Bureau police officers and Track Safety Recertification for Transit Bureau Homeless Outreach Unit and Vandal Squad;
- Establishing offsite command centers for communications redundancy.

Additional Bus Specific Initiatives

- Interagency Drills–the Department of Buses (DOB) is assisting the FBI and NYPD Emergency Services Unit test various apprehension tactics. Tubular assault training is being conducted on Transit DOB rolling stock. The goal is to develop tactics to maximize rescue effectiveness. Bus maintenance staff participates in developing the training by providing technical assistance in the following areas:
  - Specific bus structural design features;
  - Fuel tank system locations;
  - HVAC system specifications;
  - Onboard radio and PA communications;
  - Bullet penetration tests; and
  - General bus maintenance tips.
- Improvements To Preventive Measures At Bus Facilities–the Department of Buses and the Transit Bureau developed the following list of improvements now in use:

- New York City Transit property contiguous to bus depots should be illuminated with High Intensity Discharge (HID) lamps, and fixtures and poles should be marked in a permanent and legible manner;
- Bus depot overhead doors should be:
  - Kept in the closed position whenever operating conditions permit;
  - Plans for motorizing overhead doors should be developed and included in all new and rehabilitation construction designs; and
  - All vehicle entrances should have "openwork" ventilating gates.

- The Plant & Equipment Maintenance Unit should develop and implement a preventative maintenance program with accountable record keeping.
- Perimeter pedestrian doors should be:
  - Maintained in a state of good repair, operate smoothly and fit properly, include panic hardware, proper signage, operating door checks and appropriate handles;
  - Pedestrian doors routinely used by DOB personnel should be equipped with digital locks or electronic photo identification cards. Digital lock combinations should be checked after each job pick.
- Exterior depot doors should be:
  - Numbered inside and out with large, highly legible numbers; and
  - Lighted by High Intensity Discharge (HID) lamps with individual photo cell controls.
- Interior doors should be numbered and the space identified as to content and usage.
- Internal stairways should be equipped with energy efficient vandal resistant lighting fixtures.
- Employee parking should be:
  - Only allowed in authorized areas;
  - Include two sets of "speed bumps" inside the entrance gate area;
  - Restricted to employee vehicles that are registered for Transit DOB parking permits; and

  - Compliant with New York City Department of Motor Vehicle parking regulations.
- Perimeter fencing should be:
  - Kept in a state of good repair;
  - Upgraded to include razor ribbon; and
  - Maintained by removing all vegetation along the side and applying defoliant on a regularly scheduled basis.

Conclusion

- "Networking" is one of the most current buzzwords in today's workplace. It is of particular importance to groups such as those working in counter-terrorism.
- "Terrorism" has demanded that we exchange ideas and experiences and foster cooperative thinking. As transit professionals we must do everything possible to minimize the effect of terrorism incidents.
- Here are a few examples of supporting the "Network":
  - We must rethink design elements and equipment within our systems;
  - We must develop training to help our employees recognize and differentiate types of emergency situations and the actions they require;
  - We must become experts in a new range of chemical and biological substances;
  - We must practice and refine our emergency mobilization and rescue procedures as never before;
  - We must elevate good housekeeping and station inspections by employees to the highest priority; and
  - We must cooperate in new ways with agencies and city officials who share different aspects of the overwhelming responsibility.

In closing, I hope this presentation is helpful and thank you for the information I will learn from you during this symposium. (Further information is available in appendices.)

At the conclusion of Mr. Savage's speech, the following questions were asked and answered:

Q. I understand your dedication to housekeeping and daily inspections and cleaning up the stations and tunnels and so on. Is there any specific thing that the Transit Authority is doing for parking garages that may be close to your property or on your property? It's one thing to inspect for trash and packages, but it's another thing to look inside a van.

A. What we've done, particularly at our bus garages, is instituted a parking permit system. Again, it's common sense, but we never had that system before. Prior to the Trade Center bombing, bus operators, bus maintenance workers and subway workers would just pull up to the entrance gate at one of the yards and, usually, because they knew the people at the gates, gain admittance. Now we have instituted a parking permit-type system where every employee who asks for a parking space on our property goes through a procedure, fills out forms, and actually gets an official Transit Authority parking permit. All of our parking procedures are reviewed with the NYPD and the Department of Motor Vehicles, and specific rules are followed. In addition, any new garage that we build, or any new facility usually has a gate that goes up and down. Speed bumps have been put in, and we have upgraded transit property protection booths. So yes, we're attempting to change the way we have done business for 90 years and institute changes such as these wherever we can. We don't have the speed bumps and gates in every location yet, but everybody uses the parking permit. There have been times where a car is found on the property with no permit; we have sent out a group of special inspectors and opened the trunk of the car. We have communicated with our employees, and their unions, and they all know that we will open the trunk of a car that's parked on the property under reasonable circumstances. That's what we've been doing.

Q. You talked quite a bit about changes in procedures and practices. Are there other new policies that you've had to implement as a result of the learning that you've gone through? If so, could you possibly summarize what some of those were?

A. In our administrative headquarters we are starting to put turnstiles into all the buildings, and we're putting in an automated fare collection system in New York. Pretty soon everybody is going to have a swipe card. That, plus having transit property protection agents at the entrances to all major facilities, is providing better control of who get sin and who gets out. The subway and bus system is so large that you really can't do anything that would impact passenger flow at the turnstile areas at stations. Unfortunately, we recently had an incident where an individual–who has just been convicted of this crime–brought in a homemade bomb. He had everything in a shopping bag, and there is no way that our transit police can stop every person going into the station.

We constantly train our plain clothes police officers and our uniformed police officers to be alert for smells that are unusual; some chemicals give out a foul odor. For the most part, we really can't create procedures that negatively impact the three million passengers going in and out of the system each day.

Q. Your transportation facilities are mainly what we call linear targets for purposes of rescue and things of that nature. Do you have teams that are trained in how to operate all the equipment on a train or a bus, and are they trained in linear take-downs?

A. Actually, this Monday we're having one of a series of practice drills with the FBI and the NYPD in New York. What the Transit Authority is doing is giving the Joint Terrorist Task Force a bus to do whatever they want. It's really to practice. In addition, four times yearly we do mock drills. Then we send maintenance technicians to teach everything there is to know about the buses.

The last drill included every major public security agency in New York–the Fire Department, Emergency Medical Services Department, the local hospitals, and the FBI. In New York every private and public entity that would be affected by a terrorist attack has been brought into the training and practice process. As an example, in our drills you

will find certain passengers who have hurt their back, or maybe they got a slight cut; we send that group to one hospital. A group that would be more seriously injured would be sent to a closer hospital. We have a few hospitals in New York City which are experts in burn recovery. That's one place where we can get helicopters, if they are required.

Q. The manpower in a facility as large as yours gets quite expensive. What role have you placed, or what importance have you placed on electronic security systems access control, CCTV, etc., to supplement or augment the manpower?

A. The budget is a real problem in New York. My department alone had to cut $2 million out of the operating budget for the calendar year. I have a very limited budget to put in sophisticated security systems in existing facilities. Where I have more flexibility is in the capital budget, where we spend about one billion dollars a year on facilities and rolling stock. Everything that we buy or build, whether it be a new subway car, a bus, or a new facility, reflects design effort from the very beginning. And that's where we put resources into CCTV's and swipe card systems. We've been looking at the hand print system, golden eye if you want to call it that; as we go forward certainly every facility that we have is being upgraded, and we are including more sophisticated equipment in the new buildings. That's not to say that if we identified a serious problem in an older facility we wouldn't do anything. We certainly would, but it's tough, and I'm sure that everybody here who has responsibility for an operating budget would know that we're running up against the same issue. But to answer your question, yes we do it as much as we possibly can. I hope that was clear for you.

Presentation Number Two

Mr. Rob Vitale

Our next speaker is Supervisory Special Agent Patrick J. Webb. Webb is not only a Special Agent Bomb Technician, but also a Supervisory Special Agent for the FBI Counter-Terrorism Squad. Webb has been involved in many notorious terrorism cases, including the Unabomb Task Force.

Special Agent Patrick J. Webb

The majority of my career has been spent in the Bay Area, and I think in terms of this particular topic with the wide range of transportation facilities in the Bay Area. It's nice to be able to talk about this. When we look at the wide range of facilities, including BART and CalTrain, they represent a wide range of targets. I happen to live in Marin, and I just noticed that the Golden Gate Bridge, Highway and Transportation Authority, the Bridge District, bought the right-of-way all the way to Willits, so at some point we are probably going to be able to take surface transportation to commute to San Francisco from Willits, if you would want to do that. That again just adds to the variety and complexity of what we're looking at.

Among the things I want to do today is perhaps just assuage your fears in some way, tell you we are here to help–in spite of being from the government–and to give you some reassurance that you're not in this thing alone. I want to talk a little bit about the background of terrorism we've seen recently, particularly as it relates domestically to the United States, the FBI's jurisdiction in those affairs, some of the current trends and initiatives underway, and the perhaps talk a little bit about what you can do and what needs to be done.

Domestically, and perhaps in the broadest sense, things aren't as bad as they seem to be. In fact, in reported terrorist attacks, the way the FBI looks at it–attacks claimed by groups

and individuals with political motives–in 1994 there were no reported attacks in the United States. I used to call 1993 the year of the asterisk, because it was the year of the World Trade Center bombing. It's like looking at baseball statistics for the years when they had strikes. There was always a big asterisk next to the batting average. That was so far '93 because in the World Trade Center tragedy, six people were killed, a thousand injured, and there was a lot of damage, $700 million damage.

And then all of the sudden 1995 came along, and it became the year of the asterisk and ampersand together because 1995 was a very unusual year. It was an unusual year–maybe almost a wake up call to America–because of the wide range and scale of domestic terrorism attacks that we saw, the type of attacks that we saw, and particularly the motives we started to see. In one way, the wake up call began with the Ohm Shin Richio attack in Japan in March of '95. But for those of you who have looked at the history of that group, as early as 1994 that cult had started a chemical attack with a test run on a small village in Japan where people were killed.

And even after the March attack, attacks continued well into July at other railroad stations and subway facilities using different types of weapons and different delivery methods. The attack in March took the world stage, but everybody just kind of zoned out on that one thing, and they did continue until July of '95.

In 1995, on April 19th, the Oklahoma City bombing occurred. 169 people were killed, and many more injured. Just last week I saw a report being prepared for the prosecution that the governor has ordered a damage survey, and they believe the cumulative damage up to this point is about a $700 million dollar hit to the Oklahoma economy, including all of the expenses and business disruption and that kind of thing.

I served nine months on the Unabomb Task Force, and it's still existent in our office, so I feel constrained to mention that in April of '95 we had a Unabomb attack which killed a victim at the California Forestry Association in Sacramento.

That has become a terrorist related case; actually it used to be on my squad–I'm the supervisor who can't solve Unabomb. Now there are about 120 agents across the country working on it. In our office alone there are three squads headed by an Assistant Agent in Charge, and Jim Freeman, the Agent in Charge, my boss, runs that case each and every day. The April Unabomb attack was coupled with the demand of the Unabomb subject to publish his manuscript. It was eventually published by the *New York Times* and *Washington Post* in a joint effort in September. The reason I mention that is the Unabomb is not only a frustrating investigation; in fact it is the longest unsolved bombing series in the United States. It even surpasses George Matesky who did bombings starting in 1938 and ending in '56 in New York City. But Unabomb continues to go on; I'm not sure that the subject will be satisfied with the publishing of his manuscript.

He also has learned to tweak the public interest. He did that in June of last year when he sent a letter to the *San Francisco Chronicle* with a small threat that said, "I've put a bomb in an airliner out of Los Angeles International which will go off within the next six days." Perhaps he didn't know, but it was right around the 4th of July holiday, the second most busy air travel holiday for California in the calendar year. Once we got that threat–and I'll tell you frankly we got that information at the office at about 4:00 and spoke to the FAA at 5:00–they put a lock down on California airports. In the six California airports that are affected there are about 280,000 people a day traveling. I ended up having to take a package overnight to DC with a letter, and spent the next day dispatching Bureau Bomb Technicians to Los Angeles to examine the air freight. At one point we had eighteen tractor trailers with air freight stacked up at LAX that had to be screened before it was released to go on airliners. So the Unabomber again picked a fairly public transportation target. When he got his manifesto manuscript published, he said it was just a big joke. By that point, however, the whole system was choked down considerably.

To go back to the terrorism issues in '95, we had the Amtrak derailment in Arizona in October; one person was killed and many others injured. We in the FBI have named that investigation Split Rail; I brought my case agent with me today, Tom Stutler, who has done most of the Split Rail investigation in this area. We were impacted a lot by that

because the Southern Pacific used to be headquartered here, and all their personnel records are here, and all the disgruntled employees are here, and it's been our mission in life to deal with each one of them. If you look back to '95, the scale and type of attacks and particularly the motives, carry again into this year as we start approaching the anniversary of the Waco takeover. The anniversary of course is April 19th, which is also the anniversary of the Oklahoma City bombing. The Ruby Ridge incident has provided a motivation for a whole group of people to hate the government.

In the years I've been in the terrorism business, we've come to recognize that terrorism is cyclical. We do have preventions; that's part of our mission–to detect and prevent terrorism attacks. We do have preventions; we'll work up a case, make arrests, issues come and go, and we've been able to deter attacks. There have been two prominent deterrences in the last couple of years, one is a case we call TERRSTOP, which came out of the World Trade Center bombing in New York City. You'll recall, a blind sheik and many of his followers were arrested and have been convicted and sentenced for planning to blow up the tunnels and transit systems, the United Nations, and in particular the FBI building–a kind of a motivation to solve that one! So we take credit, and we take pride in deterring those attacks.

Another international attack that would have had a devastating effect on transportation in general is a case we call Manila Air. Manila Air is due to go to trial at the end of April or early May in New York City. Manila Air is a conspiracy that began in the Philippines. Ramsey Yousef, who was eventually arrested as one of the World Trade Center bombing subjects, has been indicted for that case. Ramsey Yousef and a group of his compatriots had already completed one bombing attack on a 747 aircraft. It happened on a Japanese Airlines plane; they had boarded the plane and left an explosive device that went off over the Sea of China. It killed one passenger, but the plane made an emergency landing at Okinawa. Subsequently they were arrested in the Philippines. Yousef got away and was eventually re-arrested in Pakistan. But from others who were arrested, we discovered that they had plans to put six different explosive devices on 747s flying to the West Coast. Two were to come to San Francisco, two to LA, one to Honolulu, one to Seattle. Can you

imagine the impact on the American public if six 747s had come out of the air on the same day? And they had planned this with the use of a lap top computer – this is kind of the high tech terrorist. When they were arrested, the lap top computer along with all the other evidence was seized. It showed where they had figured out the flight schedules, where they could get aboard, leave the device and get off and let the plane fly on. Those are two of the deterrent actions that we were able to successfully pull off. Perhaps, as that case goes to trial, the public will finally wake up.

I might mention that in terms of jurisdiction the FBI is designated, not only by statute but also by policy, as the lead counter-terrorism agency in the United States. We've always had that jurisdiction, particularly in a terrorist incident claimed by a group. In terms of prevention we still have that; we try to react and prevent at the same time. There are some other federal agencies, particularly ATF, that may have jurisdiction in certain incidents that may not be claimed, but the Attorney General has the authority to override and give the FBI the jurisdiction in any case. As a result of a lot of the activities in 1995 the President recently signed, late last year, a classified Presidential Decision Directive #39 which expanded the FBI's jurisdiction in a lot of areas, particularly in the chemical and biological area, and put the FBI, whether we like it or not, into a lot of consequence management. Now we actually run the incident and at a pertinent time turn it over to a consequence management agency such as FEMA, the Federal Emergency Management Agency. That's a big responsibility for us, to be able to manage the incidents in all their complexity. A lot of that stemmed from situations that occurred at the Oklahoma City bombing where there were a lot of agencies in charge, and we were not only trying to manage the incident, but also convict the bad guys.

The FBI is present in the international terrorism field. While I'm going to try to stick more to the domestic side, on the international terrorism side, we have a lot of other statutes that apply to American citizens, particularly overseas where there is an overseas homicide or an overseas kidnapping. The FBI has extraterritorial jurisdiction and can actually dispatch teams and work those cases up. We've had convictions in extraterritorial cases; we bring those people back from overseas and convict them. The

Manila Air case that I mentioned is a good example of the aircraft and motor vehicle statute that we also enforce. In the area of Protection of Foreign Officials, there is a foreign government involved with those here in the United States, and those diplomats and their facilities are covered under FBI jurisdiction. And of course any conspiracy based activity, either foreign or domestic, we can look at under the terrorism guidelines.

I might mention the terrorism guidelines. It's very easy to say the FBI has expansive terrorism jurisdiction, but we actually do work under rule of law and policy. Sometimes the policy is tighter than the law. On the international terrorism side, we work under Attorney General guidelines which are promulgated by the Department of Justice. This gives me, for example, the authority as a supervisor to open a case. And then there are times lines as to how long we can investigate the case, and reporting standards, and we're quite severely looked at in the way we conduct those investigations. Domestic cases have the same types of guidelines. In fact, in some cases the domestic case guidelines are even tighter as to what creates a predicate action that allows us to investigate or to begin an investigation, and that threshold can be very hard to define.

We struggle, I won't say daily, but often with what we can open and what we cannot open, and what makes the threshold to make a case work. We are no longer in the business (when I first began in the FBI we probably did it very well) of just collecting for collecting's sake. We have to have a real reason to collect on individuals and groups. There is a strong emphasis on First Amendment rights, and we do that and deal with it in terms of the guidelines. If we get information that shows that a group or individual is about to commit, or is planning to commit, a criminal act, we have no problem at all opening a case. But just going out and collecting license numbers of people at a meeting for a group we think we may not like, we just don't do that anymore. That's a kind of result of the excesses of the '60's and '70's, but within the framework of how we do our cases now we've become very used to that. Each case stands on its own merits.

One of the things that Chief Frazier mentioned earlier, and that Tom Savage mentioned, is the concept of how the FBI investigates terrorism cases. One of the things that we've

been very successful at is the creation and operation of Joint Terrorism Task Forces. The one in New York is perhaps the model for the country. I think the New York JTTF began in '76 after the FALN bombings. The supervisor there is a good friend of mine and has a huge staff, about 48 officers and agents working now. The way we run terrorism task forces and how they exist in Chicago, Newark, Washington, DC, Atlanta, Philadelphia, Dallas, and Los Angeles is that we bring state and federal local law enforcement officers together. We actually create and write a Memorandum of Understanding. In the case of local officers, the FBI basically pays their overtime. We give them cars, beepers, phones, office space. They work right along with FBI agents. The International Terrorism Task Force in New York has Secret Service agents, INS agents, Department of State security agents, diplomatic security agents, ATF agents, and Customs agents working right alongside the FBI agents. They have the New York City PD, the Port Authority PD, the Transit Police; it is truly an extraterritorial approach to doing terrorism cases. Here in California, in Los Angeles, the LA Terrorism Task Force has both the Sheriff's Office and the Police Department working together. That's the wave of the future. The first couple years the joint terrorism task forces were run, it was a new concept; now it just becomes run of the mill in the way we do business. I think their success across the country shows that, particularly when we start talking about things like special events. That's one of the things we have to deal with like the Olympics, or the Republic or Democratic conventions this year, the World Cup, many of the other things we've done. Having those task forces even drawn together for those kinds of efforts means a great deal.

In terms of domestic terrorism initiatives, the FBI has seen this grow in the last year, and part of it came out with something that the public and even law enforcement may not have paid much attention to. That is, a supplemental appropriation was passed almost immediately after the Oklahoma City bombing by the Congress. They did that one fairly quickly, but they still can't get their act together to pass the Counter-terrorism Bill. In the supplemental appropriation that was passed after OKBomb, the Oklahoma City incident, one of the big things that it did was to establish a domestic counter-terrorism analysis center. We've always had a very similar thing on the international side, and it's

headquartered at the CIA. The FBI has participation in that, but on the domestic side they are just now starting to put it together. It will have liaison with and direct participation by about 24 federal government agencies; those of us who work in the field have been instructed to create a very vigorous liaison.

At the conclusion of Webb's speech, the following questions were asked and answered:

Q. What is the standard definition of terrorism?

A. I didn't bring my standard definition because there are four definitions and unfortunately we use the one which is, "intimidation by the threat of force and violence to achieve political aims or goals." The State Department uses another one, the Agency uses another one, anyone trying to finish his Ph.D. or graduate studies uses a different one. I think most include "the use of violence for political ends" as a central component.

Q. You talk about cooperation and sharing of information as key to finding a solution to this problem. In Italy we have learned that this is particularly important. I'm sure you are aware of the terrible decade of the 80's in Italy, but actually a certain kind of technology helped a lot in solving the problem. It was a technology that came from the U.S.; it was signal intelligence. It helped crack down a very large part of the Red Brigades. There is an aspect of this technology that comes from intelligence agencies which traditionally is not easily shared. Today, however, terrorism is more than ever an international phenomenon. Where do you see these interest shifts in terms of sharing information and technology across the border in attempting to solve these problems?

A. I think internationally they already occur across the border. The Trevy Group and other working groups deal with international terrorism issues on that type of scale. I think the problem arises, and we face it. I see it also on the joint terrorism task forces. Part of the problem comes in not only the sharing of the information–

because the information may be able to stand by itself–but from what collection technique was used to derive it. Collection techniques are going to continue to be a problem, but they are also becoming better and more sophisticated. That's going to continue to be problematic, because we're not going to sacrifice the technique over the long run for that one little bit of information now.

I'll tell you how we deal with it on the terrorism task force. Everybody who works on a joint terrorism task force is cleared for anything priority to the FBI.

We do a full background investigation on them, they don't report to their Chief, they become a fully compatible part of the terrorism task force. We've done that in this area for the World Cup here at Stanford. For that we brought in officers and gave them a clearance. We cleared them for the information, and we won't sacrifice public safety because we didn't tell somebody something. We're going to have to get that information out, and the way we do it is to clear the agency or the officer so that we can give them the information, and then at the end of the event, the clearance expires.

Q. There is a lot of "espionage" going on between "friendlies." I recently went to a seminar where it looked like the U.S., among other countries, is a target for people who are seeking to gain more technological information so they can control a lot of our computer systems which deal with the exchange and collation of information. In international terrorist incidents, are we going to share some of our technological breakthroughs with those other groups?

A. I think we will. If you look at what the President outlined yesterday in relation to sharing with Israel, one half of the one hundred million dollars worth of aid and equipment is going to be technology. And that's technology that was developed in the United States. In the bomb business, we see a lot of stuff that originated in Britain and other countries, and we get to use it, fine craft it, and take it out of metric and put it into our own dimensions. So I think that's going to continue. Our

office is now founding a squad that actually specializes in international computer crime. We have one here in the South Bay already that does chip thefts and that kind of thing.

We are actually putting a squad together that's going to look at international computer crime. It's called the Protection of the National Information Infrastructure. We're going to do that a lot, and one of the things that will also help us is a thing called the National Trade Secrets Act in Congress. If Congress passes that, it will give us more jurisdiction and authority to look at stealing, even corporate stealing and that kind of thing. Nowadays somebody can go to a company here in the Valley and take $100 million dollars worth of R&D product, put it in their pocket and get on a plane and fly out of SFO, non-stop to a competing foreign country. If we arrest them the only thing they can be charged with is holding that $2.50 diskette in their pocket. Propriety information, R&D information, things of that nature, are not yet against the law to steal. It becomes more of a civil battle; that's what the National Trade Secrets Act would overcome.

Presentation Number Three

Mr. Rob Vitale

Our next speaker, Ernest R. Frazier, Chief of Police for Amtrak, also known as the National Railroad Passenger Corporation, comes to us from their headquarters in Philadelphia. He's been with Amtrak for 15 years; before that he was with law enforcement in Maryland and in the U.S. Army. He has a BS and is a candidate for a JD at Rutgers. He's on the executive committee of the American Association of Railroads, as well as the Transit Police and is a nominee for an appointment to the terrorist committee of the IACP.

Chief Ernest R. Frazier

Good Morning, ladies and gentlemen!

My name is Ernest R. Frazier, and I am the Chief of Police of America's National Railroad Passenger Corporation (AMTRAK).

Today, I would like to discuss an issue that, in the narrowest sense, is extremely important to Amtrak in its operation of a national rail passenger service. This same issue, in the broadest sense, is extremely important to every citizen in the United States whose fundamental right to travel throughout this country, conceptually, has been constrained.

As indicated in the Institute's Transportation Symposium Brochure, I am here to discuss the intentional, premeditated derailment of Amtrak's Sunset Limited in Hyder, Arizona on October 9, 1995, an act described by Amtrak President, Tom Downs, as an act of "cowardice."

However, before discussing the specific facts surrounding the derailment, I would like to provide you with some preliminary information about Amtrak, the rail industry in general, and the role of government agencies, who work collectively to ensure that the passengers and railroads of America remain safe and secure.

Railroad transportation as a mode of travel has been a fixture in this country for centuries. Rail has many advantages over air and highway travel, including: lower costs, reduced pollution and dependence on foreign oil, and overall safety.

In 1970, to promote and consolidate passenger travel throughout the United States, Congress created AMTRAK, known also as the National Railroad Passenger Corporation (NRPC).

Today, Amtrak operates approximately 220 intercity trains over 24,000 miles of track, directly serving America's communities in 45 states. Amtrak also provides contractual commuter rail service, like here in San Jose.

Amtrak has established corporate values and goals to ensure the quality of the transportation service it is providing. These values and goals relate to customers, employees, excellence, and integrity. Our customers come first, and our employees strive to deliver a service that exceeds customer expectations. This responsibility includes providing for the safety and security of our passengers. This is a threshold issue for the corporation. In fact, nothing is considered more important than our commitment to the safety and security of our passengers.

Statistically, according to the Federal Railroad Administration, there were five passenger deaths attributed to passenger service in 1994. In 1995, there were no reported passenger fatalities. Unfortunately, the number of passenger fatalities thus far in 1996 has already surpassed the combined total number recorded for the previous two years, due to the recent accident involving an Amtrak train and a Maryland Rail Commuter (MARC) train. The MARC accident occurred during the late afternoon hours on Friday, February 16,

1996. Eleven MARC commuter passengers lost their lives when the train collided with the Chicago-bound Amtrak Capitol Limited, as it was switching tracks in the vicinity of Silver Spring, Maryland.

Non-fatal injuries to passengers are also a primary concern of Amtrak and other rail transit and commuter agencies. Statistics show that most of the injuries sustained by passengers involved in train accident consist of minor bruises and sprains. Less common injuries include lacerations, fractures, and burns.

To correctly analyze the prevention of harm to passengers, it is appropriate to distinguish Amtrak's "duty of care"–to ensure the safety of its passengers, from Amtrak's "duty of care"–to ensure the security of its passengers. Safety involves the prevention of accidental harm caused by unforeseen or foreseeable hazardous conditions, or inherently dangerous activities. Security, on the other hand, involves the prevention of intentional acts of harm involving criminal or illegal conduct. Security seeks to recognize and deter those persons in society who would intentionally hurt people or destroy property.

Nonetheless, although the two areas are distinct, there is a substantial overlap between the two responsibilities. Usually, police and security forces are the first responders to accidents, often counted upon to reduce the consequences of unintentional harm. Likewise, passenger safety includes the recognition of suspicious activities and the deterrence of perpetrators from committing crimes. In face, in many states, onboard train conductors have limited authority to take police action by statue.

Distinguishing safety from security is important because of the ramifications associated with prevention. For example, as will be related shortly, an accidental derailment in Hyder, Arizona, would not have occurred, because the railroad's signal system would have alerted the engineer, in advance, that the track was unsafe. In contrast, by intentionally wiring a shunt to the rail, the perpetrator(s) duplicated a "safe rail condition," causing the locomotive engineer to proceed as if nothing was wrong.

Prevention of intentional acts, the security dilemma, discloses that a significant key to minimization is the security consciousness of the men and women who work in the rail industry. Security, along with safety, must be everyone's responsibility, and rail workers who are out and about working on the rails must examine rail conditions for acts of sabotage or vandalism. Rail workers must be trained to critically assess the difference between normal wear and tear, such as angle bar bolts backing off because of vibration, and angle bar bolts intentionally loosened to cause a derailment. In all cases where observation suggests suspicious activity, railroad police must be notified to conduct an investigation.

Along with rail workers and rail police, the nation's federal transportation agencies are also dedicated to the prevention of harm to the traveling public. The mission and goals of the Department of Transportation, Federal Transit Administration, Federal Railroad Administration, and the National Transportation Safety Board all include statements, such as: to ensure the safety of all forms of transportation; to maximize security and safety of transit systems for service users; to determine the probable cause of transportation accidents; and to formulate safety recommendations to improve transportation safety. More specific comments about federal activities in this regard will be made later in the body of the report.

When Congress created Amtrak, it recognized the need for a dedicated police force to protect the passengers and assets of the railroad. Statutory authority for the Amtrak Police Department resulted under Section 104.305.45, United States Code 545J. Under this authority, Amtrak expends in excess of 24.5 million dollars a year to ensure the security of its passengers. Approximately 18 million dollars of this money is allocated to Amtrak's uniformed police division and 2 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 majority, over 82%, are assigned to locations in the Boston, MA to

Washington, DC area. This territory, known as the Northeast Corridor, consists of 621 miles of railroad which Amtrak owns and operates.

Outside the corridor, on the remaining 23,000 plus miles of its routes, Amtrak depends on America's independently owned freight railroads to maintain the tracks and provide for national passenger service. This is accomplished through contractual operating agreements between Amtrak and freight lines which must provide upgraded rail conditions to facilitate Amtrak's higher speeds. Amtrak also contracts with freight carriers for security through operating agreements. For example, in the State of Arizona, Amtrak maintains an operating agreement with the Southern Pacific Railway to operate over its railroad. A total of eight Southern Pacific Railway police officers assigned throughout the State of Arizona provide police service as required.

As information, there are approximately 2,000 railroad special agents and police officers throughout the United States. Also, the 24,000 passenger miles of track mentioned represent about 21% of the total 110,425 of railroad track traveled by freight traffic. What this makes clear is that there is a tremendous dependence on federal, state, county, municipal, or other law enforcement agencies to protect this country's rail infrastructure.

Now that the background information has been provided, I will discuss the crime: On Monday, October 9, 1995, at 2:13 AM (Mountain Time), Amtrak Train #1, The Sunset Limited derailed approximately 59 miles southwest of Phoenix, Arizona on the Southern Pacific's Gila Sub Division, Phoenix Line.

The passenger train was the first to pass this location since a Southern Pacific freight train traveled through 18 hours previously.

The Sunset Limited, en route from New Orleans to Los Angeles, was traveling at approximately 50 miles per hour when two engines and eight cars derailed. Two sleeping cars and the diner car fell 30 feet from a trestle into a dry river bed.

The Sunset Limited carried 248 passengers and 20 Amtrak crew members. As a result of the derailment, 65 were injured and one Amtrak on board service employee, Mitchell Bates, age 58, was killed. Property damage to the Amtrak cars and engines was estimated as exceeding $2,979,000.

The subsequent investigation into the crime determined that the train was intentionally derailed. Notes found at the scene identified a previously unknown anti-U.S. government terrorist group, the "Sons of Gestapo," as responsible for this act. References to both "Ruby Ridge" and "Waco" were contained in the notes.

The perpetrators of the derailment committed the crime by removing a total of 29 spikes from the rails. Nuts and bolts were also removed from the rail joints which hold the sections of rails together, and the rail joints themselves were removed from the rails. A wire was spliced to the bond wire of the signal system so that the signal, observed by the engineer, would display a "green" signal to proceed at maximum authorized speed. After the wire had been spliced, the loosened 39 foot section of rail was moved inward, causing the rail to be "out of gauge." The rail was then spiked in its precarious position so that it could not go back "in gauge." The placement of the "out of gauge" rail, atop a 30 foot bridge, caused a number of the train cars to tumble over sideways into the dry wash. Both lead locomotives and the first car in the consist were propelled forward, running aground, but not tipping over.

Immediately following the derailment, police and rescue workers were dispatched to the scene. The derailment site was in the remotest of desert-like locations, approximately 18 miles from the nearest paved road. The Maricopa County Sheriff's Department was the first law enforcement agency on the scene. In all, over 50 deputies and volunteers assisted. Thirty-five ambulances responded from Maricopa County and numerous communities. Helicopters from Maricopa County, the Arizona Department of Public Safety, the National Guard, and Air Evac transported the injured.

A total of sixteen railroad police officers, consisting of eight members of the Southern Pacific Railway and eight Detectives from the Amtrak Police Department, responded. And, in addition, over 150 agents from the Federal Bureau of Investigation (FBI) were brought in as the lead agency to conduct the investigation.

Early on, the derailment site was determined to be a crime scene. The site was sealed, with Southern Pacific Railway Police establishing a security ring in the immediate area, and the Maricopa Sheriff's Department establishing a nine mile perimeter. Everyone located within the perimeter was interviewed by the FBI or local authorities. By 9:30 AM, FBI evidence collection teams began searching the area and collecting evidence, which lasted throughout the following day.

In addition to the law enforcement response, the Federal Railroad Administration (FRA) sent inspectors to the area, and the National Transportation Safety Board sent in a team, as per federal guidelines, to examine the derailment site for cause and to ensure that the railroad was operating within federal regulations.

Both the Amtrak Police Department (APD) and the FBI established 1-800 numbers for anyone wanting to call with information regarding the derailment. Also, a reward fund of $100,000 was established for any information leading to the arrest and conviction of the perpetrator(s). This reward will be offered again during the airing of an upcoming "Unsolved Mysteries" episode regarding the derailment.

The derailment remains under active investigation, with a command center operating in the FBI Office in Phoenix, Arizona. The command center is manned by agents of the FBI, together with a member from the Amtrak Police Department, the Southern Pacific Railway Police Department, and the Maricopa County Sheriff's Department.

At this time, it is appropriate to address the various state and federal statutes that apply to the derailment incident:

Title 18 United States Code, Section 1992, known informally as the Train Wreck Statute states in pertinent part that:

> Whoever willfully derails, disables, or wrecks any train…operated, or employed in interstate…commerce by any railroad; or (who) makes…any tunnel, bridge, viaduct, trestle, track, signal, or any other way, structure, property…unworkable or hazardous…with the intent to derail, disable, or wreck a train…shall be fined not more than $10,000 or imprisoned not more than twenty years, or both. Whoever is convicted of any such crime, which has resulted in the death of any person, shall be subject also to the death penalty or to imprisonment for life…

Federal law also applies to the destruction of property moving in interstate commerce. Title 18 United States Code, Section 1281, states that:

> "(a) It shall be unlawful for any person willfully to destroy or injure any property moving in interstate or foreign commerce in the possession of a common or contract carrier by railroad, motor vehicle, or aircraft, or willfully to attempt to destroy or injure any such property."

The penalty for violation of this statute is a fine not more than $5,000 or imprisonment of more than ten years, or both.

Perpetrator(s) of the derailment are also subject to prosecution under Arizona State law. The crimes include first degree murder, aggravated assault, reckless endangerment, as well as criminal damage to property.

If, in fact, this crime when solved is determined to be an act of terrorism, the federal conspiracy code would apply. Title 1 8 United States Code, 371, states that:

> "If two or more persons conspire either to commit any offense against the United States…or any agency thereof in any manner or for any purpose, and one or more

> of such persons do any act to effect the object of the conspiracy, each shall be fined under this title or imprisoned not more than five years, or both."

Additional legislation was introduced on February 1, 1996, by Representative Susan Molinari (R-NY), in part, because of the Hyder, Arizona, derailment. H.R. 2949, titled the "Railroad and Transit Sabotage Prevention Act of 1995," is designed to strengthen federal law with respect to the prohibitions against and penalties for acts which sabotage or otherwise threaten the safety of rail transportation and mass transit.

The proposed legislation, submitted jointly to the House Committees on Transportation & Infrastructure and Judiciary, would make the intentional interference with a rail signal system a federal violation punishable by fine, imprisonment or both, for up to 20 years. The Bill would also permit judges to sentence to death individuals who will fully cause hazardous materials to be released from trains, if the emitted hazmat kills someone.

I have taken the liberty of providing copies of the proposed legislation, and strongly encourage your support for its passage through your respective Congressional representatives.

To restate the issue, the question presented is whether the Arizona derailment could have been predetermined. To answer this question requires, in part, a brief discussion of the current state of signal technology and other preventive systems in use.

Today, the movement of most trains is governed by signal systems, among which is the Automatic Block Signal System (ABS). ABS is a system in which the train's use of each block, or section of railroad, is governed by an automatic block signal, cab signal, or both. An automatic block signal is electronically activated either by track circuit, or in conjunction with interlocking or controlled point circuits. This block signal automatically indicates to the train engineer the track condition and block occupancy of that section of railroad. A cab signal is a signal system located in the operating cab of the locomotive

which also indicates track occupancy or condition. Cab signals are used in conjunction with interlocking signals and with block signals.

The Arizona derailment occurred along a single main track territory, equipped with an Automatic Block Signal (ABS) system, arranged for movements in both directions. Additionally, the movement of trains was governed by a train dispatcher through Direct Traffic Control (DTC), which was supplemented by the signal indications of the ABS system. This was not CAB signal territory on the Phoenix Line.

If a train is occupying a section of track within a block, or a section of rail within that block becomes separated or obstructed, a wayside signal will display a red stop indication. The train's engineer is required to bring the train to a stop and notify the dispatcher for further instructions.

On October 12, 1995, shunt tests were conducted for the signals at the Arizona derailment site. With the rails separated at this location, the tests showed that the signal aspects indicated that the signals were functioning correctly.

In other areas of the country, Centralized Traffic Control (or CTC), is the predominant system in use. For example, on Amtrak's Northeast Corridor, the movement of trains between Washington, DC and Trenton, NJ and between New Haven, CT and Boston, MA is governed by a system of Centralized Traffic and Electrification Control (or CTEC).

The underlying functions of today's signal system consists of the use of a low voltage electric current which, when compromised or broken, transmits a warning that there is a problem with the track ahead.

Signal technology and all other safety related aspects of railroad operations are governed by federal regulations and railroad operating rules. These rules cover such elements as speed limits, movement of trains, and the inspection of equipment. In developing, revising, and enforcing these rules, federal regulators and the railroads constantly

examine, analyze, and test their application against actual conditions. In fact, railroad operations are among the most heavily regulated and inspected activities in the United States.

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

With regard to the Arizona derailment, inspections were conducted in accordance with regulation by the Southern Pacific track inspectors who utilize track geometry measuring cars to identify track structure defects. These cars mechanically inspect trackage for exceptions in alignment, in profile, in gauge, in cross level, and in warp.

Along with signal control and track inspection, railroads depend on "trip reports" which a locomotive engineer completes and submits to identify potentially hazardous conditions.

What should be readily apparent from this review, is that with the exception of the signal system, there is no other real time method of detecting a hazardous rail condition. This is not to say that improvements to the current systems in use today are not being considered. The Department of Transportation has recently conducted research in advanced signals processing technology. The work consists of an adaptation of intelligence community technology to improve both rail safety and security. Conceptually, the technology will identify not only intentional rail separations, but normal wear and tear in rail as well. The Federal Railroad Administration anticipates continuing research into the technology over the next four months at facilities in Pueblo, Colorado.

Also, to improve the locational ability of rail carriers, Global Positioning System (GPS) is being evaluated. GPS is a technology pioneered by the United States Army, currently in use in some foreign countries and, in this country, by some trucking companies. GPS tracks ships, trucks, trains, and other modes of transportation by satellite to within

approximately ten feet of their actual position. The Federal Railroad Administration is currently conducting tests of this system between Portland and Seattle.

In summary, what is important to recognize is that currently technology is designed for the prevention of accidental harm and not as security against intentional acts. As is quickly observable in the Arizona derailment, the safety systems of railroads can be thwarted by those intent on causing harm. This is the nature of the safety versus security dilemma mentioned previously.

At this point, what remains is to evaluate the capacity of police or security forces to have predicted the intentional derailment. This evaluation should start with a short history of intentional acts of derailment:

Fifty-seven years ago, in 1939, the worst case of railroad vandalism in history took place when the Southern Pacific Railroad's streamliner, The City of San Francisco, was derailed near Harney, Nevada. In remarkable similarity to the Arizona derailment, spikes had been removed from the tracks and the wiring that would have warned the engineer that something was wrong was bypassed. As the train rounded a curve, it jumped the tracks and plunged downward, killing 24 people and injuring more than 110 others. Newspapers demanded a nationwide investigation in search of the saboteurs, and despite an offer of $10,000 reward, no one was ever arrested.

On August 12, 1992, two U.S. Coast Guardsmen intentionally derailed the Amtrak Colonial in Newport News, Virginia. In that derailment, a switch padlock was cut and the alignment of the tracks was changed. The Colonial, traveling at 79 miles per hour entered a siding, and the force of the sudden change in direction threw the train from the tracks. Fortunately, no one was killed. Ensuing investigation led to the arrest of the criminals, both of whom pled guilty to violating the Federal Train Wreck Statute. They received sentences of 17-1/2 years and 16-1/2 years in federal prison.

In a third incident, occurring in the last two months, sabotage was suspected in the wreck of a runaway Burlington Northern Santa Fe freight train. On February 1, 1996, in St. Paul, Minnesota, the train hauling lumber, grain, and other cargo descended a hill into a Canadian Pacific Railroad Yard. Traveling at 50 miles per hour, the train derailed in the yard after striking several parked locomotives. The crash resulted in the derailment of 44 cars and 6 locomotives. A one-story office building was also destroyed. Fortunately, again no one was killed. In this particular incident, the brakes did not have sufficient air pressure to stop the train, and the investigation is focusing on the brakes and whether they were intentionally disabled.

In retrospect, how society prevents intentional acts is a mixture of policy, criminal justice, and morality. We seek to deter people from criminal conduct through law and social control. Police and the courts attempt to identify and then punish those who are motivated to go outside the law.

Police in particular, through proper training, gathering of intelligence, and deployment of sophisticated equipment and techniques work to prevent crime as well as capture the criminal. And yet, as shown by the examples of the wrecks of the City of San Francisco, the Colonial, and the Sunset Limited, the police are not always successful.

I would like to stop here in the analysis of this issue; however, Hyder, Arizona, brings a new element into the crime prevention aspect as it relates to surface transportation, and that element is terrorism. The Hyder derailment represents the first known purported attack against surface transportation on U.S. soil that allegedly was motivated by terrorism.

In truth, whether the Sunset Limited was derailed intentionally by the "Sons of Gestapo" in retaliation for government action at "Ruby Ridge" and "Waco" is in dispute. Notes at the derailment scene indicated this; however, it is also possible that these notes were left by the perpetrators to increase difficulty for law enforcement in identifying the true motive.

Nonetheless, as evidence by the bombing of the World Trade Center in New York on February 26, 1993, and the federal building in Oklahoma City on April 19, 1995, the United States is no longer immune to terroristic acts of violence against its citizens.

Terrorism is defined as, "the unlawful use of force or violence committed by a group, or two or more individuals, against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."

At a recent conference, February 26-28, 1996, in Atlanta, Georgia, the Federal Department of Transportation (DOT), the Federal Transit Administration (FTA), and the Volpe National Transportation Systems Center sponsored a seminar to specifically address terrorism and its impact on surface transportation in the United States. Secretary Fredrico Peña of DOT discussed recent intelligence estimates, which indicated that in today's global environment, there is a four times greater potential of being a victim of terrorism on surface transportation.

Since 1991, twenty percent of all terrorist attacks, worldwide, have involved transportation. In 1995 alone, there were 170 violent attacks. Just as alarming, from the rail perspective, terrorism is shifting its targeting from airlines and airports, towards trains, buses, and subways. Rail transportation, particularly Amtrak, because of its nationwide venue, represents a highly visible symbol of government to terrorists. Probably most American citizens have seen a red, white, and blue Amtrak train cross the horizon. In addition, the rail transportation's sheer quantity of exposure points, which include stations, train cars, bridges, signals, tunnels, and track make it a decidedly vulnerable target. And, finally, rail transportation is an attractive target for terrorism because of the concentrations of large numbers of people, and the randomness of attacking innocent people, which heightens fear levels.

In the summer of 1995, a national intelligence estimate singled out transportation nodes and hubs and recommended precaution be taken to reduce the potential threat. Since August 1995, the DOT, in conjunction with the FRA and FTA, has issued a total of three transportation-related terrorism advisories to the rail industry.

In regard to this nation's policy concerning terrorism, the President of the United States on June 21, 1995, issued Presidential Decision Directive 39 (PDD-39), which states: "America…(will) use all appropriate means to deter, defeat, and respond to all terrorist attacks on our territory and resources, both people and facilities, wherever they occur." PDD-39 directs that special efforts be conducted to ensure American security against terrorist acts in two areas that impact on the rail industry: first, the review of government facilities and critical national infrastructure; and, second, reduction of vulnerabilities affecting U.S. airports, aircraft passengers and shipping, and the provision of appropriate security measures for other modes of transportation. United States' policy on terrorism is: 1) to employ efforts to deter, apprehend, and prosecute terrorists; 2) to work closely with other governments to carry out counter-terrorism policy and combat terrorist threats against them; 3) to identify sponsors of terrorists, isolate them, and ensure they pay for their actions; and 4) to make no concessions to terrorists.

To better frame today's current potential for terrorism directed at surface transportations requires a brief examination of the types of incidents occurring throughout the world. In this regard, it is appropriate to note the lesson of the Sunset Limited derailment, namely that the United States in concededly a part of, and not an observer to, terrorism directed at surface transportation.

Great Britain: On February 18, 1996, a bomb destroyed a double-decker bus in London near Trafalgar Square. The explosion blew off the front of the bus and tore the top off, spraying the area with shards of metal and glass. Eight passengers on the bus were seriously injured. London's vast public transportation system, just like that of the United States, is particularly vulnerable to attack because of the hundreds of thousands of passengers moving on and off its buses, subways, and rail lines almost around the clock.

France: On July 25, 1995, at 5:30 PM (rush hour), a violent explosion occurred at the front of the sixth car of Train PSIT 30 as it was nearing its normal stopping position in the Saint-Michel Notre Dame Station in Paris. The explosion resulted in a fireball with a measured temperature of over 3,000°C at its epicenter. Fortunately, the fireproof materials utilized in the car's construction resisted the fireball and the vehicle did not catch fire. Nonetheless, the number of victims was high: 7 dead and 80 injured, 14 of whom were serious.

Japan: On March 20, 1995, at 8:00 AM (rush hour), the Kasumigaseki Subway Station in the heart of Tokyo was the prime target for the release of the deadly chemical nerve gas, Sarin. Commuters at the station, as well as at sixteen other stations all over central Tokyo on three subway lines were struck down by severe fits of coughing, choking and vomiting. Subway collapsed, one after another, as they tried to remove punctured nylon polyethylene bags wrapped in newspaper, from which the deadly poison gas was coming. In all, twelve people died and 5,500 were injured as terror struck at the heart of the Japanese nation. Japan, like the United States, had long been considered a safe nation, but this image was shattered by the terrorist attack on the Tokyo Subway Station.

Israel: Between February 25 and March 4, 1996, Israel suffered from its worst week of terrorism in history. A total of four bombings occurred in nine days, resulting in the death of 61 people with scores of others injured. Two of the bombings targeted buses, representing the seventh and eighth attack directed at surface transportation in Israel since April 1994. All but one of the explosions involved a suicide bomb.

Returning to America's rail transportation system, in 1994, the railroad police section of the Association of American Railroads (AAR) compiled statistics that disclosed that a total of 12,280 incidents of vandalism had occurred nationwide. The annual cost attributed to these acts was approximately 5.2 million dollars. The AAR statistics, however, are underinclusive, accounting for approximately 61% of total U.S. rail miles. Unfortunately, many of the nation's smaller railroads do not capture or centrally report

crime information. Also, the FBI, through the National Crime Information Center (NCIC), does not separate crime against railroads in its current classification system.

Signal vandalism accounted for approximately 3,000 of the offenses, while 154 were reported in the category "vandalism resulting in derailment." It is important to mention that none of the vandalism derailment involved passenger trains. However, as addressed by Representative Molinari in H.R. 2949, there is, and should be, a tremendous concern about the potential for the willful, deliberate derailment of a freight train carrying hazardous materials.

Law enforcement's response to terrorism directed at surface transportation is obviously of critical importance to the nation. A stated by the Secretary of Transportation at the February 1996 Conference in Atlanta, federal, state, and local authorities in coordination with rail carriers must act to reduce the potential for violence to the transportation industry's passengers, employees, and infrastructure. To assist, the DOT has created the Office of Intelligence & Security (OIS) which reports directly to the Office of the Secretary. OIS collects, analyzes, and disseminates information about potential threats to the transportation industry, both through advisories, and through circulars and information products. Currently, an OIS/AAR project is underway in which secured government communications will be installed in the offices of the railroad police authorities to facilitate the real time dissemination of threat information from the federal agencies. OIS maintains a 24 hour telephone number (1-800-424-8802).

As mentioned, the DOT's response is supported by the activities of a host of other federal agencies through the federal response plan. These include: the Department of Defense (DOD); the Federal Emergency Management Agency (FEMA); the Public Health Service (PHS); the Environmental Protection Agency (EPA); and the Department of Justice (DOJ), principally through the Federal Bureau of Investigation (FBI) and the Bureau of Alcohol, Tobacco, and Firearms (ATF). As mentioned previously, the response to the Hyder, Arizona, derailment included mobilization of a number of these federal agencies.

State and local law enforcement agencies also have a major role in deterring terrorism, particularly acts of domestic terrorism such as the bombing in Oklahoma City, which allegedly involved fringe elements of militia groups, or the derailment of the Sunset Limited purportedly by the "Sons of Gestapo" in retaliation for "Waco" and "Ruby Ridge."

Most important for us to recognize is that at the center of prevention is awareness. While not all incidents can be prevented, steps can be taken to harden rail systems. Foremost, this includes education and training to prepare rail employees to be cognizant of potential threats and to regularly monitor vital and vulnerable targets for tampering or suspicious devices. Such a program requires coordination between police and employees, and must be linked to an effective intelligence gathering component that analyzes threats and supports informed decision making. Detailed contingency planning must be performed, along with field exercises, to evaluate the effectiveness of the response. And finally the use of standardized formats, such as the Incident Command System (ICS) or California's Standardized Emergency Management System (SEMS), is mandatory. The strength of such systems is in their ability to assist in the capture and organization of situational information.

As mentioned, there are over 110,000 miles of railroad tracks in the United States, traveled by both passengers and freight traffic. Securing such a vast jurisdiction is a daunting responsibility, primarily performed by the men and women of the various railroad police agencies of the United States. These officers are assisted in a major way by the 270,000 employees of America's railroads and the thousands of employees of the nation's inner-city transit systems who take their duty to maintain the safety of this nation's passengers very seriously.

Could Hyder have been predicted? Probably not anymore than any other random act of intentional violence committed by an individual or individuals who act with indifference towards the sanctity of human life and well being. However, we in the transportation

industry and in the community at large can take steps to reduce the likelihood of a recurrence.

One example of such cooperation, appropriate to highlight because it occurred in Arizona, happened on February 9, 1996. In Goodyear, Arizona, seven miles west of Phoenix, the Goodyear Police Department arrested an individual adjacent to the railroad for a traffic violation. A routine search of the vehicle resulted in the discovery of what appeared to be explosives. Goodyear Police contacted the Southern Pacific Railway Police who dispatched track patrols from two directions, checking approximately 100 miles of track. Amtrak Train #1, the Sunset Limited, was delayed about one and a half hours to facilitate the track inspection. As it turned out, the tracks were clear, and the explosives were found to be inert. However, this does not detract from the significance of the work performed by those involved. Security consciousness demands that such incidents be taken quite seriously.

I would like to thank the distinguished members of the International Institute for Surface Transportation Policy Studies, my colleagues in the railroad industry, and my fellow law enforcement officers, both in this nation and abroad, for their recognition of the tragedy of Hyder, Arizona, and their commitment to maintaining our rail infrastructure as this country's safest mode of public transportation.

And as a postscript, I would like to read a short excerpt from the *Washington Times* newspaper, entitled "Railroad Blues," The editorial was written two days after the Arizona derailment.

"An Amtrak Police officer pulled up alongside the heavily traveled railroad tracks that run parallel to New York Avenue NE just after 8:30 a.m. yesterday. He climbed out of his marked cruiser–'Amtrak Police–Protecting a Nation In Transit'–adjusted his holster and carefully stepped over three sets of worn rails.

The policeman walked north, on a dirty bed of broken glass reflecting fresh graffiti, in the direction of the Anacostia River and a trestle that supports speeding Amtrak trains– several dozen a day en route from Washington, New York and points beyond, all the way to the sands of Arizona. At every switch box the officer would stop to study the tracks, and then the signal lights overhead. Satisfied both were in sync, he moved on, until he disappeared out of sight.

For this railroad cop, and hundreds like him patrolling the thousands of miles of rails that crisscross the country in the wake of Monday's train derailment in Arizona, it was his first day walking a terrifying new beat."

Thank You.
(further information available in appendices)

Presentation Number Four

Mr. Rob Vitale

The next speaker is Denis Jackson who is the Vice President for Technical Operations with American Medical Response (AMR) West. He is responsible for a territory that includes Oregon, Washington, California, and Hawaii. Mr. Jackson has extensive experience and broad expertise in Medical Incident Command and is responsible for communications dispatch and its association in response to mass casualty disasters. A former fire fighter and paramedic, Denis is here to address the emergency response to terrorist attack.

Mr. Denis Jackson

At 9:02 on the morning of April 19, 1995, a tremendous explosion ripped through the Alfred P. Murrah federal building in downtown Oklahoma City. 168 people, including 19 children, were killed. The count of fatalities was originally 169, but that has been dropped down by one as body parts were more closely identified.

Within 90 seconds of the explosion, Oklahoma's Emergency Medical Services Authority (EMSA), staffed with American Medical Response paramedics and Emergency Medical Technicians had 24 medical personnel in 7 ambulances enroute to the site.

Within 3 minutes, EMSA/American Medical Response paramedics were on the scene and starting to triage and treat the injured.

Within 6 minutes, AMR personnel had set up the incident command structure that would allow the organized treatment and transport of the injured patients.

EMSA/AMR was responsible for the transport of 215 patients, with 210 patients transported within the first hour.

EMSA/AMR had 127 of its 131 medical personnel involved in the disaster response.

Good Afternoon. My name is Denis Jackson. I am Vice President of Technical Operations for American Medical Response West.

AMR West provides the California Bay Area and Central Valley with emergency and non-emergency paramedic ambulance services-contracting for 911 primary response. In California alone, we answer the request for medical aid over one thousand times a day.

We are part of the American Medical Response Inc. family, the leading ambulance company, operating in 27 states and 24 California counties. Nationally we serve a population base of more than 14 million.

Yes, our company is the largest of its kind in the nation, both in area services and annual call volume.

But our local AMR staff of 2,314 is part of the fabric of the region we all live in.

We are your neighbors.

Our kids go to school with your kids.

We attend the same churches, synagogues and temples.

We go to the same stores and restaurants.

Our paramedics and other medical response team members are on the front lines of emergency health care in the Bay Area and Central Valley every hour of every day.

Our crews have provided more advanced life support and paramedic care–from helping kids who have fallen off their bikes to the Oklahoma City bombing–than any other single organization in America.

We feel it is our responsibility to share the knowledge and experience we've gained first hand, so emergency response can be improved and lives can be saved.

That's why we have recently recommended to Congress and to the Federal Emergency Management Agency (FEMA) a number of major emergency response reforms, including the creation of national training and performance standards for organizations that can potentially respond to disasters. The paramedics involved in the rescue efforts on April 19 also suggested to Congress "Readiness Ratings" for emergency rescue organizations, stating their better communication structures should be created to acquaint local organizations with federal services available during an emergency.

We feel that, given the awful increase in man-made and natural catastrophes across America in recent years, it is critical that our nation enhance its ability to respond to disasters by developing and encouraging performance standards for responding agencies.

We all hope that a tragedy like Oklahoma City is never repeated, but incidents such as the bombing of the Murrah Federal Building and the World Trade Center and the Arizona Amtrak derailment demonstrate that America is no longer safe from large-scale terrorist activities.

It seems major earthquakes have become a yearly occurrence in California.

Floods, fires and airplane crashes are unfortunate facts of American life.

And, of course, train derailments, air crashes, such as Sioux City, Iowa, and the Oklahoma City bombing demonstrate that no part of the United States, no matter how remote, is immune from large-scale disaster.

Our paramedics and emergency medical technicians have been among those who have seen those tragedies up-close and personally.

Frequently, we are among the first rescue workers on scene.

In major incidents, we send crews from around the country to assist.

We dispatched assistance from California and Connecticut to Oklahoma City after the bombing.

Most rescue workers in such disasters are dedicated, well-trained and committed to their duties while facing incredible pressures.

Long hours, physical peril and emotional stress take a heavy toll on all rescue personnel.

Yet there always continues to be room for improvement.

Congressman Frank Lucas of Oklahoma stated, "The medical emergency professionals of EMSA/[AMR] were on the scene of the Murrah bombing literally seconds after the blast, treating innocent victims of an unthinkable crime. I'm certain their front line experience in responding to a disaster of this magnitude will provide a valuable case study in the event of a future catastrophe, be it a natural disaster or, God forbid, another terrorist action."

Our experience has taught us in very personal terms that there are a number of areas in which reforms could lead to significant improvements.

This summer, as I mentioned, an American Medical Response team was invited to brief Congress, making six recommendations to Congress and FEMA for reform of our

emergency response systems–hoping to promote the feasibility of federal legislation or regulations.

These recommendations were part of the first formal evaluation and report stemming from the Oklahoma City tragedy. These recommendations have also been presented to the American Ambulance Association and to the International Association of Fire Chiefs.

Let me tell you about those six proposals:

1. All on-scene command structure personnel–the operations managers, chiefs, supervisors–should meet minimum requirements through attending disaster management courses, such as incident command and local disaster planning and education.

We were fortunate that the Emergency Medical Services Agency/American Medical Response team–our Oklahoma organization–had recently participated with other Oklahoma agencies in disaster training.

We are convinced that this specialized training saved lives, of both those injured in the initial blast, and of the responding public safety personnel.

2. Each agency should be required to put in a minimum number of training hours per employee concentrating on disaster management. Each agency and the agency's personnel–all of them–should participate in a minimum number of exercises with other disaster response organizations.

In Oklahoma City, EMSA/AMR employees receive approximately 10 hours per year of disaster management training and participate in two practice exercises and one field drill a year with other agencies.

As a result, the first crews on scene in Oklahoma City knew how to set up an incident command structure quickly. Other responding personnel knew how their job and responsibilities fit into the structure, another life-saving advantage.

When I mention all of the personnel, I am making reference to every person within the organization, from the persons who answer the business telephone, the supply clerks, the mechanics and facilities managers, to the actual responses. All members of the team play a vital role in support of the patient and those in need.

While we are sometimes our own best critics, the utilization of "evaluators" from outside your organization, outside your specialty (but within public safety) can provide a fresh look, a new perspective, an unbiased opinion. Remember the purpose of these exercises or drills is not to look good, but rather to learn, to identify those areas of weakness, to see where we can improve.

3. Command team members should be fully educated on available state and federal disaster response services and how to request those services.

Again, as a result of the emergency response course shortly before the incident, EMSA/AMR and other Oklahoma disaster management agencies were able to quickly enlist the assistance of state and federal support agencies such as FEMA, the National Guard and state and local emergency management agencies.

4. Emergency response organizations should be rated on their state of readiness measured by national standards for equipment availability and amount of disaster planning and training.

Although EMSA/AMR was prepared with plenty of disaster response medical supplies, there is no national standard regarding the types and quantities of supplies needed for large casualty incidents. Few agencies have accurate "up to date" information readily on

hand. If you do, my congratulations to you and your organization–you are ahead of the curve.

In theory, the call for potential assistance should occur before you hear of the event on the news.

5. A national Critical Incident Stress Debriefing (CISD) program should be developed to offer services to rescue workers emotionally shaken by their work in saving lives and recovering the dead. While CISD is a term used with local chapters, there is no nationwide coordination of resources during a disaster. Local CISD chapters must be supported and augmented with experienced team members from across the nation.

American Medical Response pioneered a model of such a program, which we provided for rescue workers in Oklahoma City.

The stress debriefing program was not fully operational in Oklahoma, so we had to bring in personnel from other AMR operations around the country. This is an area that has been given little attention in the past but which is very important for helping crews cope with the trauma of disaster response.

Let us not just focus on those who responded to the incident, but to those who were (or were not) on duty, those who did not respond because they were holding up the "rest of the system." Let us not forget all of the support personnel, those behind the scenes.

6. A common-frequency radio communications system should be set up in each local community so that emergency response organizations can coordinate their activities and share information.

Communication remains one of the largest problems in any major disaster in our country.

As more rescue and support organizations arrived on scene in Oklahoma City, communications became difficult because various agencies were using different frequencies.

Valuable time was lost because runners had to be sent to different command posts to share information. While many communities and states attempt to utilize a common frequency, no nationwide network is in place to accommodate this critical communication need.

All in all, the level of commitment and professionalism of disaster workers around this country is extremely high, but more can be done to ensure higher training standards, better resources and coordination of those resources.

National performance standards will ensure that those workers are uniformly well-trained and prepared in a high-casualty disaster.

American Medical Response has also been a pioneer in forming service alliances with fire departments providing paramedic and transport services for emergencies. Our paramedics staff the ambulances which respond to emergency calls. We believe it provides a national model for ambulance, out of hospital health-care and paramedic services of the future.

In Santa Clara County, for example, American Medical Response, in conjunction with the County and the City of San Jose, is helping to fund (to the tune of 1.2 million dollars) paramedic trained fire fighters in order to reduce the time it takes a paramedic to be beside the patient by up to two minutes.

We have done similar partnerships in Colorado and in Sacramento, with fire fighters and AMR ambulance crews now working side-by-side. In Sacramento, AMR will provide about 180 thousand dollars to the American River Fire District each year, which will train fire department paramedics at no cost to taxpayers.

At the bottom line–more paramedics will be available in an emergency.

They get there faster.

And these public/private partnerships save taxpayers money.

Sounds almost too good…but it's true.

And we won't stop here. We hope to build more private/ public partnerships such as this in the months and years to come.

This is American Medical Response's commitment to public safety, our commitment to responsible partnerships with government and our commitment to our friends and neighbors, the people of the Bay Area, California and the Nation.

It is 1830 hours (6:30 PM) on a Friday evening. Suddenly all of your telephone lines and radio networks are dark… they don't work. Unbeknownst to you, "bad guys" have cut all telephone lines (7,400 of them) with an ax at a central point, in an attempt to knock out burglar alarm systems for a micro chip processor plant. All communication with the outside world is non-existent.

This is not a drill.

This actually happened.

Here is the evidence.

What would you do?

Thank you for your attention and interest today. I'd be happy to answer any questions you might have.

Q. Did I understand that you're advocating a single radio channel?

A. I am advocating a coordination of radio frequencies. We are advocating for a select group in the California to have the white channel for the fire and EMS side where an agency can go anywhere else and be able to communicate. In Oklahoma there were problems when we brought different agencies from outside of the immediate are and tried to allow them to talk to one another.

Q. Okay, so you have a channel so you can communicate with each other? But the individual mission groups are operating on their own channels?

A. Some of the mission groups can't communicate with other command structures.

Q. Okay.

A. We're talking across the nation, not in this locale specifically. In this area we're doing the job well.

Q. Was there a command post set up? Isn't that part of the reason for the ICS–to have the command post where an individual representative on their net would be controlling this flow of information?

A. Yes.

PANEL DISCUSSION

Rod Diridon, Executive Director of IISTPS, moderated a panel discussion following the presentations. He suggested that the panel discussion is a productive part of the session and encouraged all to avail themselves of the opportunity to ask questions. He began this section of the symposium by thanking the speakers, who had now become panelists. Diridon expressed common sentiments that they were truly outstanding and thanked them not only for their participation, but also for the time they had contributed to be a part of the proceedings.

Diridon opened the questions by requesting that participants stay with the topic of the symposium, the preparation to thwart and the response to terrorism in the surface transportation system.

Q. I'm Dale Tenbrock with the California Department of Transportation. The Highway Patrol is the lead agency for highway events such as terrorism, bombs, and so forth. As we frequently receive bomb threats for bridges and structures and freeway operations, we're always struggling with how best to respond. Do we shut the system down or not? Often we don't shut the systems down; we do a quick search, sometimes run traffic blocks and so on. Our thoughts are that the threats are designed to get publicity, and if they shut a system down, the terrorist us getting satisfaction. I'd be interested in your comments on whether we should or should not shut the systems down and how we might evaluate the threat and the significance of the threat?

Diridon: Why don't we begin with Special Agent Webb and then move to others who would like to respond.

A. by Agent Webb: Just so you know, CHP dispatch sends us those calls, too. There is a whole school of thought about bomb threat evaluations. And without giving a lot of things away, we look at them; we look at the time factor. How close is it going to be?

And we look at what kind of detail is given in the text of the call. If somebody just calls and says there's a bomb on the Benicia Bridge and hangs up, how are you going to scale that? In years past, particularly overseas, some groups have put in code words; that's been important also.

I don't think there is any set answer. It's really scenario dependent upon what they tell you. And you know some agencies will not evacuate. They will not close down. I'm sure they do that at some risk, but it's like that old thing of the bomb threat at 2:30 in the afternoon at a high school, on a Friday afternoon. You can kind of see through that one. You really have to look at the text, at where it's coming from.

Funny you should mention that because somebody came up to me at the break and asked about bridges and toll booths, and I said to talk to CHP because they do it. California, by the way, is advanced in a lot of ways, particularly in medical services and consequence management. A lot of it comes from the Incident Command System. Everybody is used to it, knows how to deal with it, and is reading the same sheet of music. I'm not sure other states are as fortunate or as lucky.

Diridon: Other panelists like to comment?

A. by Mr. Savage: I, too, think every incident is looked at individually. In New York we would take a look at all the facts presented to us. There's usually some lead time, and what happens to us in New York is that the threat usually occurs around the rush hour. If the threat is that a bomb will go off in an hour, we would attempt to transfer trains among our different lines. If we get into a situation where we can't back a train out of that particular line, we'll certainly bypass a station up to a certain point in time through the scenario. In the example I gave you, where let's say we had an hour, within a half hour we would have had the station cleared out and we would have had enough time to divert service to a number of other lines. If a train still remained on the line with a half hour, we would certainly bypass that station.

A. by Chief Frazier: I think also the preparation for these things is very important. There is a bomb threat check list, and I'm sure you all use that when the call comes in. You get the information about the nature of the call as specifically as possible; try to keep that person on the phone, those sorts of things. Amtrak experiences a number of bomb threats throughout the system during any given year. What we've done is made sure that we have instant recording devices at all of our reservation centers where they normally come in. That allows us to capture the call and then transmit it to the police department. ATF publishes a very good bomb guide dealing with these issues.

Q. I'm John Skinner with Amtrack in Los Angeles. Your critical incidents report for stress is very close to me as well. And I have a question for Mr. Jackson. When you're doing debriefings for response personnel, are you using a multi-tiered debriefing like professional debriefers along with psychologists and so on?

A. by Mr. Jackson: We provide the spectrum depending on the incident. In the Oklahoma tragedy, all that was done. But we also use our CISD plan. It's up to the lead person doing the CASD to call in the resources they deem appropriate. But that is part of the whole package and needs to be.

Q. What percentage of your people in the Oklahoma bombing required some level of critical incidents debriefing?

A. by Mr. Jackson: 100% of them received it.

Q. I can understand that.

Q. Dirk Wassenaar, Professor of Marketing, San José State University. Question for Chief Frazier, please. How do you handle working with the many local agencies in the various jurisdictions that you do business in?

A. by Chief Frazier: I had not met the Sheriff of Santa Clara County prior to today, but the first thing he said to me was that he had adopted our captain out here in San Jose. And that's how we work. We work very well with state and local officials. We spend an inordinate amount of time communicating and hopefully getting information out through the associations of law enforcement professionals, the Sheriffs' Association, the International Association of Chiefs of Police, etc. We know each other on a face to face basis. That's very important in these situations. And beyond that I think I'd simply say that people understand railroading. State and local officials understand a lot about it and over time things tend to repeat in some areas so we have the benefits of education from that standpoint. As the Sheriff said here today, Captain Tom Mahr works for him. I didn't know that, but that's the way we go about doing it.

Q. My name is Guy Newgrin. Chief Frazier, in your presentation you mentioned signal technology. I noticed that one of the responsibilities that IISTPS has taken on is technology transfer, and you spoke about the change in voltage when somebody alters the signal wires. Similar technology has been used for many years in fire and burglar alarm systems, and I commend you for that. Do you have a plan in place for replacement or modification of all those signals?

Something else crossed my mind when you said that. A few years ago I would have been hesitant to ask this, I would have thought it too bizarre, too impossible and impractical. But now the way technology is I guess I'm not afraid to ask anything about what can be done. Has anybody ever thought about or looked into actually wiring–either hard wire or some other technology–the tracks themselves for tamper detection so that if the spikes were removed or the rail realigned it would actually be detectable?

A. by Chief Frazier: I think that I'm probably not very good at answering that question because my forte is on the law enforcement side versus the signal side. I know the American Association of Railroads and the FRA and the DOT spend considerable time and effort at examining rail conditions and ways to go about making improvements to rail systems. As I mentioned somewhat in my talk, there is a current project underway out of

the Office of Intelligence and Security of DOT in which they are taking a look at using intelligence community kinds of technology and transferring that to the rails of the United States. That's going on, or will be going on shortly, in Pueblo.

Our trains are traveling all over the United States, and we depend on freight railroads; we also depend on dispatch services in terms of locating those trains. There is a global positioning system that is being evaluated right now. It's used by a trucking agency, and I know it's in use with buses in Israel. A recent presentation in Atlanta talked extensively about that in terms of locating exactly where a vehicle is at any given time. That's about the extent of what I know with respect to signal technology.

A. by Mr. Savage: In New York we have a special engineering-type of train that runs on all the track of our system and does very specific, highly sensitive engineering readings that measure the width of the track. It detects spikes and different ballasts that start to wear down; it's a highly technical engineering machine.

A. by Agent Webb: If I could just follow up on what the Chief said, the need for information exists. I never knew how a railroad signal operated, but two weeks after, "Split-Rail" (Code Name for Arizona Derailment) occurred, both *Time* and *Newsweek* magazines had close-ups of how the shunt was constructed. The same thing happened after Oklahoma City, instructions almost, "To build your own bomb, use this percentage of ammonium nitrate." That's what creates the demand to keep the information out of the public eye, but the information is still out there. I would say that we're almost too generous with our information.

Q. Jim Grayburn. You provided a beautiful segue for my question about the information that's given out. I notice that the Amtrak derailment and the New York City token booth incidents followed fiction. I'm wondering if there is something that goes on in these instances?

A. by Mr. Savage: My own personal opinion is that "The Money Train" did cause that token booth fire bombing. Some people won't agree with me for a whole host of reasons, but I saw the movie the first week it came out. I went to one of the premiers. The incident you're probably referring to–where the token booth agent was killed–in my mind was a copy-cat. It's difficult to tell how much we educate the people who do things like that by the information we give out.

Q. Jim Grayburn. Tom, as a follow-up, would you recommend anything be done in regard to the kinds of movies that show that kind of violence?

A. by Mr. Savage: About two months ago one of the TV shows, "Law & Order," had a segment about a fire bombing in the subway system. The producers wanted part of it filmed directly on one of our station platforms. We said no. In the end, city streets were used as a staging area; everything was done after the fact. Their original intent was to actually do the scene right on the station platform. I was accused of being a censor, but we dug our heels in, and we took advantage of the fact that the request came shortly after "The Money Train" came out.

A. by Chief Frazier: The issue here has been addressed in terms of the media and law enforcement. That's what we've been talking about. But we started with publication material and mentioned the Internet. In Atlanta, an individual came from CNN and was involved with the police in the presentation; she was a panelist. Of course, there is always a conflict between police operations and the press about what's known and such. I can't say that the Arizona derailment was caused in any way by the provision of any information through the media; I don't have any indication of that. Factually, the 1939 crash of the City of San Francisco was quite similar.

There are a lot of people in this country who understand a number of things about railroads. Now, I don't know if they really had anything to do specifically with that particular derailment, but I guess I hedge in the same way about information

dissemination. You certainly don't want to put out information that is going to facilitate the commission of any kind of crime at all.

A. by Agent Webb: I might mention that we've spoken to the author of that work. He wrote it as a historical railroad buff, and now everybody says he planted the seed. I would honestly say that he's heartsick over the linkage created.

Q. Barry Colin, Institute for Security and Intelligence. One of the elements that makes terrorism effective is the terror element. I wonder if any of the people on the panel have recommendations for those of us in the front lines as to educating the public so that they understand that while there is a threat, we can go ahead and function every day and use the rail, use buses, use land transportation without wondering and having great concern. How do we educate the public?

A. by Mr. Savage: Again, let me use an example. In New York we've become very aggressive about getting our systems back in place as fast as we possibly can. The 14th Street incident that I referred to this morning involved a motorman, whom we believe was under the influence, and very nearly wiped out one section of the line. We had over 1,000 people working 24 hours a day to get that particular branch of the subway system back in running order; we were out for only a few days. When we allowed the news media down into the tunnel area, we did it in a pool-type of situation; we allowed one camera per person and only one photographer. We did that for safety reasons; we were unsure at the time about how much damage was actually done. A lot of people thought we would never be able to get service back as fast as we did, but it was important to us to get it back fast.

And, we wanted the press involved to get the message out that everything was safe. I think that is the key–you want to work with the press, let them know what the real situation is and give them plenty of valid and accurate information. You also probably want to set some stretch goals for yourself about bringing the system back as fast as you

possibly can. And then the public starts using the line again; once you get past that first days, it's business as usual.

We have the same type of problem in New York when a water main breaks. We're finding that a lot of our water mains are 100 years old and when they go they cause a lot of disruption to our subway system. It really takes a team effort. The Department of Public Works, the Mayor's office, everybody focuses on getting that piece of the infrastructure back on line. And we find that if you do that often enough the riding public, your customers basically, develop an attitude of, "We'll be okay, it'll be fixed by Monday." You hit a couple of home runs, so to speak, by bringing the lines back on quickly and safely, and it helps.

Q. Jerry Maldonado with the Alameda County Sheriff's Department. The question is directed to Mr. Savage. How effective have you found video recording equipment to be in reducing criminal activity aboard buses?

A. by Mr. Savage: We really haven't used video equipment on Transit Authority buses. We rarely would use it unless we had some intelligence indicating a specific crime pattern being formed. We have the expertise to pick the right type of camera, the right type of audio equipment, install it in a way that it can't be noticed, but we really haven't had need to use it that much on city buses.

Q. Tom Marr with the Amtrak Police Department. This question is directed to Tom Savage, and it has to do with graffiti, a costly problem that occurs in every city across the nation. What is it exactly that you're doing to keep the trains graffiti-free? Does that graffiti-free policy extend to your facilities?

A. by Mr. Savage: A few years ago we used our operating budget to hire about 700 cleaners. What we did was to put those cleaners at the end of each of the subway lines we have. When a subway train came in with a graffiti hit, we would immediately take it out of service. Then the cleaners at the end of the line would attack it immediately and

eliminate the graffiti. Our idea was to eliminate the graffiti quickly, then the "artist" would not see his work.

That's how we handled it on a train that was in service. To protect trains that were out of service and at our facilities, we used our capital budget. We made investments in better chain link fences and in barbed wire. At one point we even piloted using dogs at some of the locations. It was an increase in human resources that really did the trick. We got word out that graffiti was unacceptable in the City of New York, especially on our subway system. And the Transit Police became very aggressive. They made a number of really high profile collars.

What we found was that the public did have an opinion about graffiti. Contrary to some of the statements that were being made, things like, "It's just kids. Leave them alone, they're not harming anybody," the reality was that it set a tone that the system that was out of control. That's what we did, and we pretty much eliminated graffiti.

When we felt we had good control of that particular problem, we were able to cut back on the number of cleaners. We did it through attrition; a cleaner was an entry level position with the Transit Authority.

The problem we now have is with kids scratching the glass. We call it scratchfitti. And it's tougher than graffiti to catch because the kids are smart. They tend to travel in groups and create a diversion. Once that's accomplished, it's not very difficult to scratch a quick line across the glass. That's the latest. And, by the way, it's a very expensive problem throughout the transportation industry. We would like someone to come up with a solution. Although it doesn't relate to life and death like some of the other issues we're talking about today, it certainly does relate to the national transportation budget.

A. by Chief Frazier: We're trying a few pilots on that. One is using mylar, but it is extremely expensive. Then, too, when a piece of glass gets damaged to the point where you cannot see into the car, it becomes a clear security issue.

Q. Detective Carter, Contra Costa County Sheriff's Department, attached to the AC Transit Unit. What types of training classes, exercises or media material do you have for law enforcement to respond to a tactical situation involving rail or bus lines?

A. by Chief Frazier: There is a program that is getting underway called Operation Respond. This program is based in Washington, DC and it grew out of some work in Texas. It provides the first responders to incidents (both passenger train and freight train for hazardous materials) with information about what they are going to confront. It tells about the nature of the car, the access points, and the emergency procedures related to those sorts of things. This program is available right now and has a training center at Texas A& M University. If you would like further information, I can get that for you. Right now two Amtrak locomotives and some cars are there. The locomotive, for instance, has been burned so that you can visualize and actually feel what you may confront. I know that course is quite well received, particularly on the fire side. Often fire personnel are the first to board these trains and deal with the issues. I would certainly recommend the program.

A. by Agent Webb: I would mention, as I did in my own talk, we put together a rail transit security group meeting last November or December. I'm active in the local bomb association. Carolyn Slezak from Amtrak Police came and gave us a slide presentation about the things a bomb technician would do in a bomb sweep. Railroads are different; there are different voltages and different boxes that you don't want to open when you don't know what you're opening and that kind of thing. It would be helpful to get that slide series and make it available to us. Then, there would be a whole range of things. We can talk at the end of this symposium, and I can tell you when we will have a meeting of that group. It will help orient you and let you know what's available in your own area.

A. by Mr. Savage: With respect to training, we have an intense track safety course that all police officers in New York City are currently going through. Again this is after the merge that occurred last year; so far we've trained 12,000 police officers in the basics of

walking on the tracks. It's very interesting when you attend one of these. When we teach the young police officers the safety basics, they're almost in shock to find out how dangerous it is down in the subway. It gives them a better sense of how to handle a situation once they are brought into it. In addition to that, we have a separate class for captains and above. This is sort of a critical incident training class, so that when a captain or above responds to a particular situation that person basically takes charge. We have a third set of classes that are for the homeless outreach and vandal unit. That again deals with a different issue on how to handle the homeless.

Comment by Moderator Rod Diridon: Before we go to the next question, I would like to complement your system. One of the reasons you were asked to come here to speak is because of the very progressive actions your public transportation system has taken toward not only the problems of terrorism, but also the problems of vandalism. A credit to you and your recently retired president, Alan Kiepper, who was such a model and aggressive person in terms of taking care of that problem when he was first hired.

A. by Mr. Savage: Alan Kiepper's an example of a Transit Authority President who really incorporated the Transit Police into the management structure of a large transit authority. As I said this morning, prior to the merge, the Chief of the Transit Police also carried the designation as a Senior Vice President. Alan Kiepper was intense about having this Senior VP and Chief of Police as part of the decision making process on everything he did. And to Alan Kiepper's credit, we reduced crime 50%, or close to 60%, during his tenure. That includes serious felony crime also.

Q. Rob Vitale. I have a quick question regarding the area of training. Here at the University all staff and faculty have been asked to read documents about how to identify packages that may be dangerous. In fact, we recently self-tested this when we had a strange package; fortunately, it wasn't anything dangerous. What type of training, education, or awareness can you provide to users of transit systems? What should we be looking for? What can the lay person develop as far as an attitude or awareness of what's

going on so that users can be part of the eyes and ears of the system? Or would you not want to do that type of thing?

A. by Chief Frazier: Most definitely we want users to be our eyes and ears. No question about it. Mostly what you're looking for is what's unusual. At airports, they're getting identification at the beginning and then again right before you get on the flight. They are asking you if anyone else packed your bag, or did anything with it, and those sorts of things. As you know, transportation facilities are basically wide open; the public comes into them, and they bring luggage. So when luggage is abandoned, or when no one can figure out whose it is, or something like that, that's very important. At Amtrak, we strive to impress upon our employees and vendors and others who work in the facilities to report it to the police immediately when they see that sort of thing.

That's number one. I guess other than that this is a housekeeping issue like what Tom has been talking about. If your housekeeping is good, then when something looks unusual you will quickly identify it. Interestingly it's not usually law enforcement that spots it. Most of the time it's the employees who work in a particular area who tell you when there's something unusual–a suspicious package or something like that. You know you need to involve them, and stress that they shouldn't hesitate to say, "Excuse me, officer, but something seems unusual about this." In America people are willing to accept that approach and we should look at it that way; you just need to check things.

A. by Agent Webb: Surprisingly enough, we're not the leaders in this if you look at what they do in Great Britain and Israel in terms of alerting the public. The Metropolitan Police at Scotland Yard have posters immediately available. If they have a campaign on, they can hang the posters in prominent places and people get used to seeing them. They're kind of like a marketing person's point of sale. The public gets used to seeing the posters when they enter the stations or stops or whatever. I think there are some very well developed systems around the world, and it's just a matter of bringing them into the United States, not reinventing the wheel. We just need to share the information so that everyone gets used to the level of threat, what belongs and what doesn't belong. In

Britain they change them frequently, even the style of them so they just don't become "that old campaign poster that was hung up there in 1983." They make it pertinent to what the issue is that day.

A. by Mr. Savage: We went out and purchased X-ray equipment for our mail rooms, and everybody at headquarters, our two central administrative buildings, became used to seeing a stamp coming across our envelope that said it was passed through the X-ray machine. We've been doing that for about four or five years now. It's become a fact of life. I don't want to say it slows the mail down once it gets into the Transit Authority, but we do it as a cost of doing business.

Q. Detective Jones with the Contra Costa Sheriff's Department. Chief Savage, you mentioned that you donated a bus as an experimental vehicle. Could you expand on that and let us know when the information derived from it will be passed out?

A. by Mr. Savage: Actually, that's happening this Monday. The FBI is involved, as is our New York City Police Department Emergency Rescue Unit and the Transit Authority. It's another example of a joint effort we make in testing and training. I can't tell you exactly when the results are going to be available, but I certainly will try to get some additional information to you on them. We're basically taking one of our excess buses, a spare factor in the fleet, and one that reflects the type of bus that we use quite a bit. It's probably a GMC, and they are just going to test the heck out of it.

Q. Steve Block, writer. Mr. Jackson, your people are often the first on the scene–like in Oklahoma City. Does their training include specialized techniques for preserving the crime scene or for protecting evidence? And in conjunction with that, what happens if you need to give first aid or rescue someone from an area that the FBI or the local authority says is critical for evidence protection.

A. by Mr. Jackson: Probably one of the most problematic areas that we deal with is that there are different agencies each looking out for their best interest with regard to

their responsibilities. The police agencies don't intend to take anything away from the patient, but they are trying to recreate the scene. To answer your question specifically, we do training with all of our field personnel with regard to evidence preservation. They do have the ultimate responsibility of doing what is necessary for the patient while hopefully not broaching over to that type of problem. But they do sometimes.

A. by Agent Webb: Steve, I'd say maybe Denis used the wrong term; it's not problematic. It hasn't been a problem for us. You know the paramedics are going to do what they are going to have to do, and we'll have to play catch up and that's fine. Because you know you're not going to fiddle around with human life to save a scrap of paper or something like that. I did a presentation to 300 medics of the San Francisco Paramedic Association after Oklahoma City. I was surprised at how little a problem it was. It really didn't come up there. Everybody just knew they had a job to do, and we'd get the evidence one way or the other somewhere after the fact. I think it's just good common sense, and we don't have to be stepping over each other to get to the point.

A. by Mr. Jackson: That was a bad choice of words. That training does encompass how to preserve the evidence to the best of your ability. When I say problematic, I mean that we may create problems for the investigation because of treating the patient. It is not problematic between the agencies.

Q. Guy Newgrin, San Jose Fire Department. Two questions, really. I was glad that you mentioned the ICS System during the presentation, because one of the objectives of the seminar here is to address ways we can immediately respond to terrorist activities, and the ICS System is very important in that. Typically in a large disaster like Oklahoma City, the EMS, the Emergency Medical Services Group, would be broken down to probably three groups. The triage, treatment and transportation groups who would report to an EMS Branch Director or the Operations Officer, usually run by the Fire Department. They would in turn report to the incident commander who would usually be the Fire Department or law enforcement if it was on a highway. In the case of a crime scene like Oklahoma City, it would be a unified command between police and fire. You

mentioned that one of your ambulance personnel set up the Incident Command System. Can you describe to us how it evolved from that point?

A. by Mr. Jackson: The Incident Command System was specific to the medical component to it. Clearly, fire and law enforcement were there in timely conjunction. The EMS component of those three branches, plus the one that dealt probably equally with all of the treatment and transport section, the morgue, were all set up within that EMS structure, not the full IC System. When the full ICS was in place, the EMS component blended neatly into that. Does that answer your question?

Q. Guy Newgrin. Yes, but can you also explain how that system grew and developed?

A. by Mr. Jackson: I can not provide that for you; I was not there.

Comment by Moderator Rod Diridon: We have just a few minutes left, and while you are thinking of any other questions, let me ask one, if I may. We're responsible in the Institute (and the reason why this panel was chosen as such) for the area of surface transportation in the United States. We're looking to improve that based on international surface transportation policy. And we want to make sure we don't leave the impression from this discussion that mass transportation is in any way not safe or less safe than, let's say, highways. I'd like to first note that research indicates a little over 46,000 people were killed on our nation's highways last year with several hundred thousand people injured. Can you give me a relative comment in terms of the safety of the mass transportation systems that you are aware of, gentlemen? My guess is that far fewer than 1,000 were probably killed, and the injuries would be no more than several thousand.

A. by Chief Frazier: In terms of passenger rail throughout the country–which would, of course, exclude other modes of transit because I don't have those figures–in the last three years, there have been a total of 16 fatalities as compared with the 46,000 you mentioned.

A. by Mr. Savage: Unfortunately, I just don't know the exact statistics. I do know that our problem is that when you have one or two of these isolated incidents, it takes a while for the agency to bounce back. We all know that mass transit, especially in New York, is much safer than private vehicle. But that's the fact of life; there are probably hundreds of car crashes and fatalities every day on the streets of the metropolitan area. We're in the limelight somewhat when an unusual occurrence like the 14th Street crash, or the fire bombing, occurs. I know we're definitely safer than normal motor vehicle use.

Q. Good afternoon, gentlemen. My name is Willie Jackson, and I'm with AC Transit. In light of the comments just made, would you say that most people traveling on mass transit are considered a captive audience and as such are not quite aware of how safe the actual systems are? Chief and other distinguished gentlemen, how do you market the safe travel ability of the various systems you are responsible for?

A. by Mr. Savage: I guess the key word "market" is right. In our case, it's how fast we bounce back; how fast we evacuate our passengers in a crisis type of environment; how professionally we're able to do it. I think we do it very well in New York. Again, it's because of that theory I mentioned this morning–practice, practice, practice. We're not called the media capital of the world for no reason–New York is. There are three major television stations, plus Fox 5, there now. And we have many daily newspapers, and we're frequently in the press. I can say that's probably a strength of ours. When something unusual happens, we usually are able–99% of the time–to respond without much criticism from the press. That fact eventually goes to the riding public. Again, because we're such a large area, we get one or two incidents that on the first blush sound horrific, and some of the damage that is done is horrific, but by and large, because we practice so much and we train so much, we're able to evacuate and get our customers to hospitals rather quickly if, in fact, it is a major incident.

A. by Chief Frazier: Of course, when something happens to an Amtrak Train in the United States, it is big news–for example, when a train derails, or when the New Jersey Transit had a collision, and within a week, the Marc and Amtrak collided in Silver

Spring. I think that the way you best deal with these issues is important. First of all, the media truthfully reports that there have not been any incidents in X amount of time, or something like that. Then the agency itself responds with the truth. Then the federal government responds with the truth of what's going on; they say that it is safe. There are these numerous agencies involved as railroad transportation is highly regulated, and safety is at the forefront of the operating rules. There are associations like the AAR that promote safety and the National Transportation Safety Board. When they come out, their distinct objective is to identify what happened and to report that. That helps to insure that there is no recurrence wherever a recurrence can be prevented. I think in terms of the "captive audience" in the market, you simply make sure that you do everything in your power to communicate well; you tell the truth about what has happened, and you talk about the precautions that are in place. I think that the federal agencies and the carriers themselves do a pretty responsible job of that.

Q. Good afternoon, gentlemen. My name is Ovid Holmes, and I'm with the Contra Costa County Sheriff's Department. I've had a quite a bit of experience in training for emergency preparedness in tactical operations, and I did attend the same seminar as Agent Webb in San Francisco which the EMS people did; I found that quite interesting. Even more interesting is that we had done a multi-casualty, multi-agency, multi-discipline emergency response about a week before. I find that this is not a common thing. It would be of interest to me for agencies to get together and work out, through the Incident Command System, multi-casualty, multi-agency, multi-discipline command exercises which would include involving the fire departments, police departments, and hospitals. I think Mr. Jackson mentioned the various tiers of treatment; that's been done in an exercise. I think it's time for, or past due, to start with these kinds of training scenarios. It is out there, it does exist, and there are examples. I would hope that you are thinking about it, or you've already done it, or you're going to do it.

Q: Request for clarification: Are you talking now about a national level response or a regional?

A. Well, most responses are regional because most incidents are regional. But again we talked about a national standard. We've used the Incident Command System out here with great success for some time, and look at each of the incidents that have occurred with Amtrak or other transit agencies like the recent bus incident in Florida. These are regional incidents, but they oftentimes involve national entities. For example, Amtrak is working with the FBI and the first responders, which would be local sheriff or police and emergency response personnel, the medical and fire field.

A. by Agent Webb: We do a lot of training with local law enforcement on various scenarios. The thing about the scenarios is that they take a lot of time and money to set up; I don't think any of us would be opposed to it as long as we can look far enough in advance to schedule it. Interestingly enough, we are mandated to do an annual airport exercise, and the FAA and FBI cooperate. We do that with them because federal law demands it; we do it at San Jose and some of the other airports. It has not come down from the bureaucracy, either the Federal Railway Administration or the Department of Transportation, to do these same kinds of exercises on surface transportation vehicles. In that sense, the airline industry, the airports, and the FAA are far ahead, and we find those very valuable. One year we canceled it because we had a real earthquake, and we didn't have to worry about it. The FAA demands it on the airport side, and perhaps as a national policy issue it may be something whose time is due.

A. by Mr. Jackson: I would like to editorialize on that because it was one of the recommendations that came out. I think the expression that a rising tide raises all ships and boats says that we need to not wait for a mandate to come down to us, but rather we need to start at our local level encompassing the interaction of those agencies. And we need to articulate what those standards are to those people who will listen to us.

A. by Mr. Savage: I think what happens as your area gets more involved in these type of exercises is that you learn as you go along. It's been our experience that events happen that constantly keep us training and on our toes. Pat Webb was talking about all of the effort that goes into one of these events–long hours and the rotten food. In New York last

October, we had two events that kept us constantly going, one was the Pope's visit and the other as the 50th anniversary of the United Nations. It felt like we were working from July right through October constantly meeting with the FBI and all of the agencies–the usual suspects if you want to call it that. We were meeting, and we were looking at every nook and cranny on the East side of Manhattan. I think what saved us was that the Pope traveled in the President's helicopter when he celebrated some of his Masses. We had a hectic season. Thank God nothing happened, but we did a lot of work that in a sense was practice. We constantly did a lot of investigation and a lot of follow-up work on different leads–you know, the ordinary because of the un-ordinary. The more you do this, the more events that come into your metropolitan area, the more you realize that this is, in a sense, a practice drill.

Moderator Rod Diridon: Let's end the questions there and give each one of our panelists who have come a long way a chance for a brief wrap-up on their comments, which will then be the post script to the session in the proceedings. We'll begin with a thank you to each one of them. First thanks to Vice President for Technical Operations, Denis Jackson, American Medical Response. Denis, do you want to take the two microphones and give us about a minute wrap-up on your comments and on the session today.

Comment by Denis Jackson: I think the lessons that we learned are to communicate, communicate, and communicate with each other to help to instill structures that will be positive for the future. Continuous improvement is something that we need to hold close to our chests. We need to practice and improve on systems as we work with different agencies. Those agencies in turn work with each other toward establishing systems, setting standards and setting goals.

Moderator Rod Diridon: Thank you, Denis. And thank you, Chief Security Officer for the New York City Transit Authority, Tom Savage.

Comment by Tom Savage: I've said it a few times, and I think it's important to say it again–practice, practice, practice. That's really the bottom line here. Do a lot of training with all of your employees, a lot of communicating; let them know that we're in a different era. And do a lot of inter-agency type of practice drills. The more you practice, the more you'll be prepared. Thank you.

Moderator Rod Diridon: Thank you, Tom. Counter-terrorism Squad Supervisory Special Agent, Patrick Webb, Federal Bureau of Investigation. Thank you.

Comment by Patrick Webb: Thanks, Rod. As I look at the crowd out here I continue to be amazed by the fascination of terrorism as a topic with the public and law enforcement. If we were talking about the theft of air bags from new cars I don't think we'd have this many people here. But be that as it may, to echo everyone else, cooperation, liaisoning and creating that interface with all these agencies is what's really important out here. At the same time, we need to avoid frightening the public while being prepared for whatever occurs.

Moderator Rod Diridon: Thank you, Pat. Chief of Police Ernest Frazier from the National Railroad Passenger Association, Amtrak.

Comment by Ernest Frazier: Well, I've been in night school for the last eight years, so the first thing I would like to do is encourage your students, particularly, to become involved in transportation. My final comment is that what the Institute has done here today is what we need to do in all of America's communities. We need to face the very difficult issues that are before us today, specially terrorism. So I thank you for your effort, and I think those of you who have come here to be with us. I appreciate your acknowledgment.

Closing comments by Moderator Rod Diridon: Thank you very much, Chief. It's interesting that your emphasis on education is the same emphasis that the president of Amtrak gave us at our last Trustees' meeting. Tom Downs was very emphatic about our

education programs. I think he said something about several hundred members of Amtrak retiring in next several years and not seeing a source of new managers moving into the industry. That's one of the reasons why we have those master's candidates out there learning the industry.

Thank you all for being here. I know many of you have already ordered copies of today's transcripts. Should others like to do so later, you may either order through our World Wide Web page or by sending us a letter asking for copies. Thanks again for being here. I assume you're all taking transit on the way home, but if you are not, drive carefully.

APPENDIX A:
Report on Interagency Preparedness Exercise 95-3

New York City Transit

Appendix A

OFFICE OF SYSTEM SAFETY
370 JAY STREET, ROOM 809
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REPORT ON INTERAGENCY EMERGENCY PREPAREDNESS EXERCISE 95-3
DELIBERATE CHEMICAL RELEASE SIMULATION
57 STREET/6 AVENUE STATION
September 23, 1995

APPROVED BY:

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NYCT EMERGENCY PREPAREDNESS EXERCISE 95-3

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1.0 BACKGROUND

The Office of System Safety within the Metropolitan Transportation Authority–New York City Transit conducts four Interagency Emergency Preparedness Drills per year as part of a continuous effort to promote emergency responder familiarity with the unique transit environment as well as to foster interagency coordination during real emergencies on NYCT property. Outside agencies such as the New York City Fire Department (FDNY), New York City Police Department (NYPD) and Emergency Medical Services (EMS) are the primary participants, with key support functions provided by the New York City Department of Environmental Protection (DEP), New York City Department of Traffic (DOT), Mayor's Office of Emergency Management (OEM), Salvation Army of Greater New York, and American Red Cross.

Representatives from agencies such as New York State Public Transportation Safety Board (PTSB), National Transportation Safety Board (NTSB), MTA Inspector General Office, Transport Workers Union (TWU), MTA-Long Island Railroad (LIRR), MTA-MetroNorth Commuter Railroad (MCNR), AMTRAK, New Jersey Transit (NJT), and the Port Authority Trans-Hudson Corporation (PATH) frequently serve as observers during the drills.

Drill 95-3 was held on September 23, 1995 at the 57th Street/ 6th Avenue Station (B/Q routes) in Manhattan and simulated a "deliberate gas release". Emergency response personnel were required to make a determination on the presence of a "nerve agent" chemical based only on the medical symptoms (written on paper and placed on the "victim's" person) exhibited by the victims and the results of air monitoring and material sampling. Drill coordinators supplied the appropriate instrumentation readings to

emergency personnel depending on the exact manner in which the air monitoring and/or material sampling was conducted. The instrumentation readings that were provided to emergency personnel, coupled with the victims' medical symptoms were consistent with the properties of a nerve agent. Additional references on the planning and progression of the exercise can be found on the following attachments:

Attachment 1: Drill scenario and staging scripts
Attachment 2: Chronological narrative of events
Attachment 3: FDNY Dispatcher Report
Attachment 4: NYPD–Transit Bureau Dispatcher Report
Attachment 5: EMS Dispatcher Report
Attachment 6: NYCT–Rapid Transit Operations Train Incident Report

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2.0 SUMMARY OF COMMENTS AND SUGGESTED IMPROVEMENTS

On October 30, 1995 a formal critique was held in two sessions. The morning session was attended by each agency's designated evaluator(s) who was present during the exercise. The afternoon session included the incident commanders who participated in the exercise. As a result of the critique, the following comments/recommendations were derived by consensus of the meeting attendees:

Comment 3-95-1: Only one or two stairway were used for station ingress and egress. This created some confusion at the stairway locations and impeded access to the station.

Recommendation: To expedite the simultaneous opposing flow of emergency response personnel entering the station with passengers being evacuated from the station, multiple stairways should immediately be designated by the first responding units as either station entry or exit stairs.

Comment 3-95-2: There were instances whereby interagency communication between tactical functions and the incident commander was lacking. This lack of communication manifested itself through the following observations:

- EMS units were obstructed from the scene by parked FDNY and NYPD vehicles and subsequently had to park two blocks from the scene.
- dual decontamination areas established by FDNY and NYPD that may have resulted in confusion due to their location.
- staging areas for each agency were not reported to incident commander.

- completion of tasks assigned by incident commander were not relayed back upon completion of the task.

Recommendation: All decisions relating to the establishment of staging and decontamination areas and hot/control/cold zones should be made by the overall incident commander to prevent confusion over multiple decontamination areas as well as to avert unnecessary street blockages that could delay incoming emergency response units. In addition, completed tasks must be reported back to the incident commander.

Comment 3-95-3: FDNY Rescue 1 and NYPD Emergency Services Unit personnel did not follow proper air monitoring protocol. A more general air monitoring approach with multiple instrumentation should have been used for an "unknown" chemical.

Recommendation: These units should be re-trained in proper air monitoring protocol for incidents of this type.

Comment 3-95-4: Patient and equipment terminology between agencies was inconsistent. For example, the terms "victim"/"patient" and "stretcher"/"stokes basket" each conveys different connotations for FDNY and EMS. This could have delayed medical treatment and/or deployment of equipment as a result of misinterpretation.

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Recommendation: Interagency communication should avoid the use of "jargon" whenever possible.

Comment 3-95-5: It was difficult to keep track of emergency personnel on the platform due to different colored protective clothing (FDNY Rescue 1-yellow; FDNY HazMat-grey; NYPD ESU-yellow; EMS-blue).

Recommendation: Protective suits should be standardized and labeled with an appropriate agency identification.

Comment 3-95-6: There was a delay in getting emergency vehicles moved when needed.

Recommendation: When requesting that an emergency vehicle be moved, the vehicle number and the agency that the vehicle belongs to should be conveyed with the request to the command post.

Comment 3-95-7: There was no containment of the decontamination areas in the station mezzanine level and street level.

Recommendation: Ensure that proper containment is established and coordinated through the incident commander.

Comment 3-95-8 "Victims" were not held after decontamination for law enforcement investigation issues.

Recommendation: Upon decontamination of victims, they should be held for law enforcement agencies for investigation purposes, witness statements, etc.

Comment 3-95-9 NYPD did not actively search for "witnesses" (train crew, passengers, etc.) during the incident.

Recommendation: Re-emphasize the need for proper investigative procedures for incidents of this nature.

Comment 3-95-10: "DOA" (deceased) victims were not decontaminated.

Recommendation: Protocol for decontaminating "DOA's" should be followed.

Comment 3-95-11: Baseline vitals for chemical emergency responders were not available to EMS.

Recommendation: Baseline vitals should be taken at the beginning of each tour and carried on the vehicle to ensure that they are available for EMS personnel.

Comment 3-95-12: Safety Officers for each agency could not be readily identified.

Recommendation: An arm band or other visible marking should be worn by each agency's Safety Officer at the scene.

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Comment 3-95-13 No NYCT liaison was present at the Interagency Command Post.

Recommendation: Ensure that the authorized NYCT liaison reports to the Interagency Command Post upon arrival at the scene.

Comment 3-95-14 NYCT Division of Stations personnel did not make an announcement in a timely manner to evacuate the station and did not unlock all emergency gates and entrances.

Recommendation: Reinstruct Stations personnel in the correct procedures for evacuating stations.

Comment 3-95-15: The NYPD Transit Police Bureau Supervisor who was placed in charge at the scene by NYPD Precinct Supervisor was not adequately prepared.

Recommendation: Reinstruct all NYPD Transit Bureau Supervisors in the proper procedures relating to incidents of this type.

Although not related to the performance of the emergency responders at the scene, the following comments were elicited by the meeting attendees in the interest of improving the conduct of future drills:

- All video tapes should incorporate time/date coding on the film to allow better tracking of the events shown on the video to facilitate editing.

- A sufficient number of evaluators should be provided by each agency who are knowledgeable in the area that they are assigned to evaulate.

- All major agencies participating in the drill need to be present at all pre-drill meetings as well as the formal critique.

- Business owners in the area where the drill will take place need to be notified in advance that a drill will take place.

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3.0 CONCLUSION

The general consensus of the evaluators and participating personnel from each agency indicated that the drill went well and was a valuable learning experience for dealing with a real incident of this type should it ever occur on NYCT property. As with previous NYCT Emergency Preparedness Drills, the majority of the comments were focused primarily on the need for greater interagency teamwork. This drill was unique in that it underscored the potential for a large number of casualties resulting from an incident of this type. A greater effort must be placed in the development of interagency coordination in the interest of controlling an incident with minimal injuries to the public and emergency response personnel.

The NYCT is continuously seeking new ideas and new ways to conduct Emergency Preparedness Drills such as these and appreciates your continued support. Thank you for you participation in this drill and we look forward to seeing you at the next one.

Appendix B

New York City Transit

INTERAGENCY EMERGENCY PREPAREDNESS EXERCISE 95-3

SATURDAY SEPTEMBER 23, 1995

ATTACHMENT 1

NYCT INTERAGENCY EMERGENCY PREPAREDNESS EXERCISE 95-3

OVERVIEW

The MTA New York City Transit (NYCT) is conducting an Interagency Emergency Preparedness Exercise on Saturday, September 23, 1995. As a result of the Sarin Gas attacks occurring in Japan earlier this year the NYCT will be conducting an exercise involving a deliberate chemical release on a train operating within the subway system. The goal of the exercise is to enable the NYCT and emergency response agencies to evaluate existing plans for handling an incident of this type under a controlled environment. The key to success in this type of an incident is the quick identification of the cause of the incident, i.e. that is a hazardous gas release. This information can then be passed on to the emergency response agencies and responding NYCT employees to prevent them from entering a hazardous environment without the proper protective gear. In addition, this exercise will provide an opportunity for emergency response agencies to work with each other and the NYCT to develop their communication & coordination skills. From the experience and knowledge gained through conducting this exercise, operating policies and procedures will be modified to better ensure the safety of our customers, employees and emergency responders.

Exercise 95-3 will start approximately 9:45 am and will take place in Manhattan at the 57th Street station on the 6th Avenue Line (B &Q). The scenario will involve a deliberate chemical release on a Queens bound Q train entering the 57th Street station. Somewhere between the Rockefeller Center Station and 57th Street Station a package containing the hazardous substance will begin to leak exposing the occupants of the car to the chemical. When the train pulls into the subway station and opens its doors, the passengers in the car containing the hazardous chemical will stumble out of the car onto the platform complaining of difficulty breathing, burning eyes and vomiting. One of the victims will collapse in the doorway of the train preventing the train from leaving the station. Seeing this the conductor will go to investigate and will begin to experience

similar symptoms. The train operator upon noticing this will radio the RTO Command Center with what he has observed. In the mean time a passenger on the platform, upon seeing the passengers having difficulties, will run to the Token Booth and inform the clerk of the passengers symptoms. The clerk will notify the Stations Command Center via the Emergency Booth Communications System.

When the RTO Command Center receives this information it will immediately contact the Fire Department and the New York City Police Transit Bureau requesting assistance. It will then notify all of the operating departments, via the six wire, of the incident and will inform all employees to not enter the station until they have first contacted their Office, to prevent people without protective clothing from entering the hazardous environment.

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Emergency Response personnel from the Fire Department, City of New York (FDNY), New York City Emergency Medical Services (EMS), New York City Police Department (NYPD), New York City Police Transit Bureau, Office of Emergency Management (OEM), Mayors Office of Operations, Salvation Army of Greater New York, American Red Cross, New York City Department of Transportation, New York City Department of Environmental Protection (DEP) and various departments from within the NYCT will take part in this exercise.

REAL EMERGENCY

In the event an actual emergency should arise during the exercise, the term **"CODE RED"** will be used to preface all emergency radio transmissions. Upon hearing **"CODE RED"** the exercise will temporarily halt until the actual emergency can be handled. If the nature of the emergency is serious enough the exercise will be stopped.

OBSERVERS

All observers upon arriving at the exercise site should sign-in with a representative from the NYCT, Office of System Safety. They will be provided with and should display an observer tag. The Observers will have an opportunity to view the exercise from the street level or on the platform. Please do not leave the designated areas for Observers without first advising the representative from the Office of System Safety. **Under no circumstances should an observer take part in any way in the operation of the exercise unless requested to do so by one of the exercise coordinators.** This is for the safety of all observers as well as exercise participants.

CRITIQUE

A formal critique will be held in the weeks following the exercise.

Anyone who would like to send comments regarding the exercise, please send or fax them to the address listed below, attention of Salvatore Gilardi Jr.

MTA New York City Transit
Office of System Safety, Fire Safety
Salvatore Gilardi Jr., Manager
370 Jay Street, Room 607
Brooklyn, NY 11201
Fax–(718) 243-3664

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SPECIAL THANKS

The New York City Transit would like to give special thanks to the following organizations for their participation in this exercise:

Fire Department, City of New York
New York City Emergency Medical Services
New York City Police Department
New York City Police, Transit Bureau
New York City Police Department Recruits
New York City Department of Transportation
New York City Department o Environmental Protection
New York City Office of Emergency Management
Mayors Office of Operations
NYCT Department of Subways
The Salvation Army of Greater New York
American Red Cross
NYCT Office of System Safety
All exercise participants

We would like to give special thanks to Chief Thomas Haring & Phil McArdle from the Fire Department, City of New York, for their help and cooperation in setting up the exercise.

The passenger will exit the train (upon first seeing the conductor walk down the platform toward him) coughing and holding his neck as if he/she was choking and proceed to the token booth on the mezzanine. He/she will run past the conductor without saying anything.

The victim should then proceed to communicate to the token booth clerk that he/she was on the train and saw a liquid on the floor of the last car and two people passed out on the platform, possibly from the fumes of the liquid.

The token booth clerk should then contact the Station Control Center and advise them:

> **"THIS IS A DRILL, a passenger, gasping for air and choking, advised me that two people require medical assistance, possibly from some type of liquid in the last car of the northbound train in the station, I repeat, two passengers need medical assistance, from some type of liquid in the last car of the Southbound train. THIS IS A DRILL."**

Station Control Center should proceed with their normal notifications preceeding all transmissions with "THIS IS A DRILL. NYCT INTERAGENCY EMERGENCY PREPAREDNESS DRILL 95-3."

APPENDIX C: BOMB THREAT CHECKLIST

Lessons Learned by
New York City Transit
from Recent Terrorist Attacks

MAIL BOMB SECURITY

Mail bombs have been employed against individuals and organizations for purposes of revenge, extortion and terrorism.

The physical appearance of a mail bomb is limited only by the imagination of the bomb maker. However, mail bombs have exhibited unique characteristics which should be helpful in identifying a suspect item. Compare the type of mail normally received with the following in mind:

- Mail bombs have been contained in letters, books, and parcels of varying size, shapes and colors.
- Letters feel rigid, appear uneven, lopsided or are bulkier than normal.
- Oil stains may be present on the wrappers.
- Use of excessive amount of postage stamps.
- Sender is not identified.
- No return address.
- Unusual restricted endorsements such as "Personal" or "Private".
- Addressee normally does not receive mail at the office.
- Name and title of addressee is not accurate.
- Address is prepared to ensure anonymity of sender (i.e., homemade labels, cut and paste lettering).
- Mailing emits a peculiar odor.
- Mail appears to be disassembled or reglued.
- Handwriting appears to be distorted or foreign.
- Probing wires, foil, or string are present.
- Pressure or resistance is noted when removing the contents.
- Outer container is irregular or asymmetric, has soft spots, or bulges.
- Wrapping exhibits previous use such as traces of glue, mailing labels, return addresses or tape.
- Several combinations of tape are used to secure the parcel.
- Unprofessionally wrapped parcel is endorsed "Fragile - Handle With Care" or "Rush - Do Not Delay"
- Package makes a buzzing or ticking noise.
- Contents of parcel make a sloshing sound.

MTA New York City Transit

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Lessons Learned by
New York City Transit
from Recent Terrorist Attacks

IF A MAILING IS BELIEVED TO BE A SUSPECTED BOMB DEVICE

- Do not open the article.
- Isolate the item and secure the immediate area.
- Do not put the item in water nor in a confined space such as a desk drawer or filing cabinet and do not cover with anything.
- If possible, open windows in the immediate area to assist in venting potential explosive gases.
- Contact the police department at 911 for assistance.

Lessons Learned by New York City Transit from Recent Terrorist Attacks

ATF BOMB THREAT CHECKLIST

Exact time of call _____

Exact words of caller _____

_____

_____

QUESTIONS TO ASK

1. When is bomb going to explode? _____
2. Where is the bomb? _____
3. What does it look like? _____
4. What kind of bomb is it? _____
5. What will cause it to explode? _____
6. Did you place the bomb? _____
7. Why? _____
8. Where are you calling from? _____
9. What is your address? _____
10. What is your name? _____

CALLER'S VOICE (circle)

Calm	Disguised	Nasal	Angry	Broken
Stutter	Slow	Sincere	Lisp	Rapid
Giggling	Deep	Crying	Squeaky	Excited
Stressed	Accent	Loud	Slurred	Normal

If voice is familiar, whom did it sound like? _____

Were there any background noises? _____

Remarks: _____

_____

Person receiving call: _____

Telephone number call received at: _____

Date: _____

Report call immediately to: _____
(Refer to bomb incident plan)

Appendix C

New York City Transit

APPENDIX D: H.R.2949

I

APPENDIX D

104TH CONGRESS
2D SESSION

H. R. 2949

To strengthen Federal law with respect to the prohibitions against and penalties for acts which sabotage or otherwise threaten the safety of rail transportation and mass transit.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 1, 1996

Ms. MOLINARI introduced the following bill; which was referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on the Judiciary, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To strengthen Federal law with respect to the prohibitions against and penalties for acts which sabotage or otherwise threaten the safety of rail transportation and mass transit.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Railroad and Transit Sabotage Prevention Act of 1995".

SEC. 2. INTERFERENCE WITH RAILROAD SIGNAL SYSTEMS.

(a) PROHIBITION.—(1) Chapter 205 of title 49, United States Code, is amended by adding at the end the following new section:

"§ 20506. Interference with signal systems

"It shall be unlawful for a person—

"(1) with intent to interfere with railroad transportation in the United States, to cause to be displayed a signal or light at a place for in a manner likely to be mistaken for a true light or signal used in railroad transportation; or

"(2) to knowingly interfere with the operation of a true light or signal used in railroad transportation.".

(2) The table of sections of chapter 205 of title 49, United States Code, is amended by adding at the end the following item:

"20506. Interference with signal systems.".

(b) PENALTIES.—(1) Subchapter II of chapter 213 of title 49, United States Code, is amended by adding at the end the following new section:

"§ 21312. Penalties for interference with signal systems

"The person who violates 20506 shall be fined under title 18, imprisoned for not more than 20 years, or both.".

(2) The table of sections of subchapter II of chapter 213 of title 49, United States Code, is amended by adding at the end the following item:

"21312. Penalties for interference with signal systems.".

SEC. 3. RAILROAD AND TRANSIT SABOTAGE.

Section 1992 of title 18, United States Code, is amended—

(1) by inserting "or any mass transit operation" after "commerce by any railroad" in the first paragraph;

(2) by inserting "or any mass transit operation" after "interstate or foreign commerce" both places it appears in the second paragraph; and

(3) by striking "fined under this title" and all that follows through "shall be subject also" and inserting in lieu thereof "subject".

SEC. 4. HAZARDOUS MATERIALS TRANSPORTATION SABOTAGE.

(a) AMENDMENT.—Chapter 51 of title 49, United States Code, is amended by adding at the end the following new section:

"§ 5128. Transportation sabotage

"A person shall be fined under title 18, imprisoned for not more than 20 years, or both, if the person willfully causes to be released a hazardous material while such material is in transportation. If the release of the hazardous

material has resulted in the death of any person, whoever is convicted of a violation under this section shall also be subject to the death penalty or to imprisonment for life, if the jury or the court, whichever is responsible for sentencing, so directs or orders.".

(b) TABLE OF SECTIONS AMENDMENT.—The table of sections of chapter 51 of title 49, United States Code, is amended by adding at the end the following item:

"5128. Transportation sabotage.".

SEC. 5. EXPLOSIVES OR DANGEROUS WEAPONS ABOARD PASSENGER TRAINS.

(a) AMENDMENT.—Chapter 241 of title 49, United States Code, is amended by adding at the end the following new section:

"§ 24105. Explosives or dangerous weapons

"(a) PROHIBITION.—Whoever brings, carries, or possesses any firearm, or any dynamite or other explosive, on board any passenger train or in any rail passenger terminal facility, without previously obtaining the permission of the owner of such train or facility, shall be fined under title 18, or imprisoned not more than 20 years, or both.

"(b) EXCEPTIONS.—Subsection (a) shall not apply to—

"(1) personnel of the armed forces of the United States;

"(2) officers of the United States, or a State or political subdivision thereof, while acting in the performance of their duties; and

"(3) persons who are specifically authorized by law to bring, carry, or possess such firearm or explosive.".

(b) TABLE OF SECTIONS AMENDMENT.—The table of sections of chapter 241 of title 49, United States Code, is amended by adding at the end the following item:

"24105. Explosives or dangerous weapons.".

O

Acronyms

AAR	Association of American Railroads
ABS	Automatic Block System
AC Transit	Alameda/ Contra Costa County Transit District
ATF	Bureau of Alcohol, Tobacco and Firearms (US Treasury)
AMR	American Medical Response
Amtrak	America's National Railroad Passenger Corporation
APD	Amtrak Police Department
Caltrans	California Department of Transportation
CCTV	Closed Circuit Television
CHP	California Highway Patrol
CISD	Critical Incident Stress Debriefing
CTC	Centralized Traffic Control
CTEC	Centralized Traffic and Electrification Control
DOB	Department of Buses
DOJ	Department of Justice
DOT	U.S. Department of Transportation
DTC	Direct Traffic Control
EMS	Emergency Medical Service
EMRA	Emergency Medical Response Authority
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GMC	General Motors Corporation
GPS	Global Positioning System
ICS	Incident Command System
IISTPS	Norman Y. Mineta International Institute For Surface Transportation Policy Studies
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
MARC	Maryland Rail Commuter System
NCAA	National Collegiate Athletic Association
NCIC	National Crime Information Center
NYCTA	New York City Transit Authority
NYPD	New York Police Department

OIS	Office of Intelligence and Security
PDD-39	Presidential Decision Directive 39
SEMS	Standardized Emergency Management System
SFO	San Francisco Airport
SJSU	San Jose State University