



TRAINING BULLETIN

Los Angeles Police Department

Charlie Beck, Chief of Police

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THE METRO LIGHT RAIL SYSTEM

In July 1990, the opening of the Metro Blue Line completed the first link of the City's high-tech commuter transit system. Since then, the light rail transit system has been expanded to include the Metro Green, Gold, and Expo Lines. The City of Los Angeles now has one of the most advanced light rail systems in the world.

The Metro Blue, Green, Gold, and Expo Lines traverse numerous LAPD Areas throughout the City of Los Angeles. This Training Bulletin describes the function of the Rail Operations Control (ROC), the role of the Metro On-Scene Coordinator, station characteristics, and light rail hazards. In some circumstances, officers may be called upon to assist in emergency efforts in addition to normal Metro Rail law enforcement duties. Familiarization with this information will increase officer safety awareness, and minimize risk of personal injury.

Rail Operations Control

The ROC is responsible for controlling the entire Metro Light Rail system and coordinating emergency response to Metro Rail incidents; the facility operates 24 hours a day, 7 days a week. Rail Operations Control personnel monitor train movement, traction power conditions for the overhead catenary system, signals, switches, passenger stations, and the fire, gas, and intrusion detection system alarms. Closed circuit television cameras are mounted at passenger stations, ticket vending machines, and platforms. Rail Operations Control personnel monitor the cameras and are able to record station activity when requested.

The ROC controllers are able to communicate directly with Metro train operators and personnel equipped with Metro Rail hand-held radios. Messages can also be transmitted via the passenger station public address system. All Metro Rail radio calls, Emergency Trip Station (ETS) telephone calls, and emergency intercom communications are recorded.

On-Scene Coordinator

During an incident requiring Metro Rail support, the ROC will dispatch a Rail Transit Operations Supervisor to act as the On-Scene Coordinator (OSC). The OSC will report to the Emergency Management Panel located on the passenger station mezzanine level. The Emergency Management Panel displays the location of any subway system problem. When responding to a police incident, the OSC will locate the incident commander or first responders. On-Scene Coordinators wear white vests with the words "**ON-SCENE COORDINATOR**" on the back for easy identification. The OSC is the designated liaison between Metro Rail and outside agencies. All requests for Metro Rail assistance, resources, or station information should be directed to the OSC.

Blue Light Station/Emergency Trip Station

A Blue Light Station identifies the location of the ETS located at each end of a station platform and in Metro Light Rail tunnels. These ETS boxes have a telephone and red stop button. Depressing the stop button will de-energize the power for that specific zone. The telephone is connected directly to the ROC. Blue Light Stations at grade level (above ground) are locked.



Blue Light Station



Emergency Trip Station



Stop Button

Overhead Catenary System

Metro Light Rail trains are electrically powered by an overhead catenary system. A pantograph extends from the top of the train to an overhead contact wire. This wire supplies 750 volts of direct current electricity to move the train at speeds up to 65 miles per hour. The overhead wires, and pantograph when in contact with the overhead contact wires, should be considered energized at all times.



Emergency Door Release

Should a Metro Light Rail train become disabled, a closed rail car can be easily opened from the outside.

P-865 (Blue and Expo Lines)



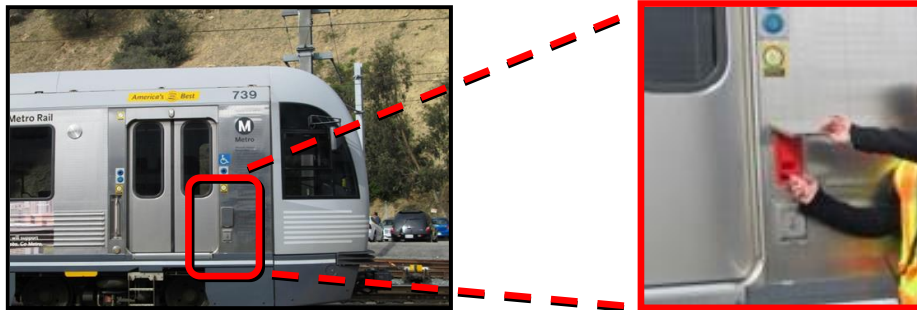
Insert pen/pencil into panel keyhole and depress. Raise panel and pull chrome handle down to release door latch. The doors can then be pulled open.

P-2000 (Blue, Expo, and Green Lines)



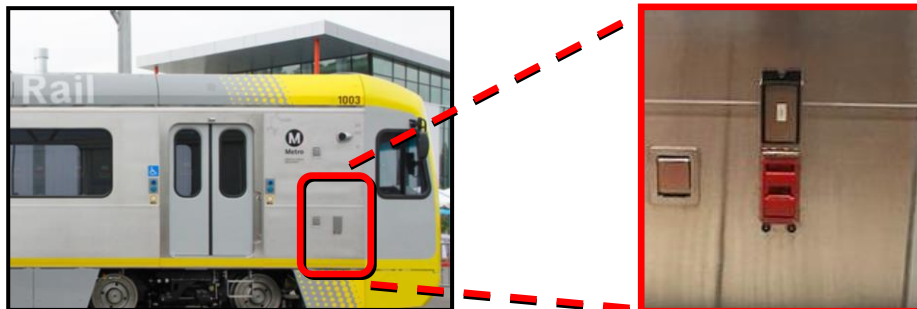
Open emergency door cover plate and pull red handle latch. The doors can then be pulled open.

P-2550 (Gold Line)



Lift emergency door cover plate and lift red handle. The doors can then be pulled open.

P-3010 (Blue, Expo, and Gold Lines)

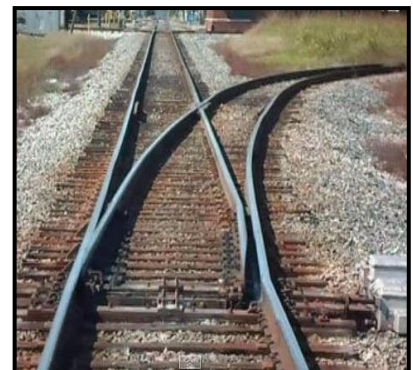


Lift emergency door cover plate and pull red handle. The doors can then be pulled open.

Track Switches

Train routes can be automatically controlled from the ROC or switched manually in the field. Track switches change the train from one track to another and cause portions of the track to open or close with a scissor-like motion. These switches are not powered by the same electrical source that energizes the overhead catenary system.

The track switches open and close quickly, with a force of 500 pounds per square inch. This amount of force can easily crush a person's hand or foot. Track switches should be avoided at all times and officers should not step, stand, sit, or walk on any part of the tracks. If necessary, contact the ROC to terminate track switch movement.



Crossing Gates

Along Metro Light Rail routes, there are many railroad (grade) crossings protected by crossing arms, lights, and bells. These warning devices are activated automatically as the trains approach. There are only 20 seconds from the time a crossing gate is activated to the time a train crosses through an intersection. Officers should not drive around the crossing gates; at 65 miles per hour a train cannot stop in time to avoid a collision.



Station Platforms

Officers should be constantly aware of approaching and departing trains. To ensure safety, officers performing any duty on a station platform should stay behind the yellow edge of the platform. This is a safety zone designed to protect passengers from the effects of a passing train.



There is a **refuge area** underneath the edges of station platforms. If a patron falls off the edge of the platform, and a train is approaching, direct the person to position themselves in the refuge area. Signal the train to stop with the proper hand signal by swinging arm horizontally facing the train operator.



Metro Rail Tunnels

The Metro Blue and Expo Lines extend underground for nearly a mile from 7th Street/ Metro Center to the portal at 12th Street and Flower Street, and the Metro Expo Line has a tunnel section near the Expo Park/USC Station. The Metro Gold Line tunnel section extends from Mariachi Plaza Station to First Street and Lorena Street.

During an emergency, officers may have to enter a tunnel. Department radio channel 48 will transmit to or receive messages from Communications Division while inside tunnels. This frequency also provides communication with other officers at street level. Officers should advise Communications Division they are entering the subway system, and broadcast their specific location (i.e., Area, station name, platform, level, etc.) in order to direct appropriate resources without delay. **The ROC also must be notified.**

The telephones located at Blue Light Stations are easily identified with a conspicuous blue light and provide a direct link to the ROC.

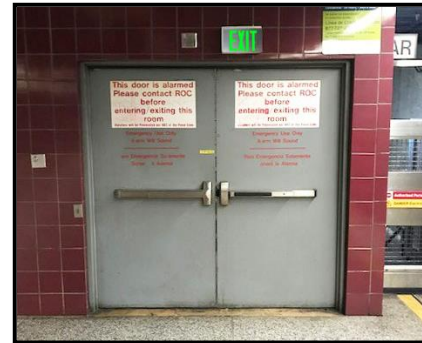
Emergency Walkways

Emergency walkways are located inside the tunnel between passenger stations. The walkways are 30 inches wide and have hand rails. These walkways are designed to evacuate passengers during an emergency when the train is stopped. Walking on an emergency walkway when a train approaches is extremely dangerous.

Emergency Exits

There are numerous emergency exits designated by signs located throughout the Metro Light Rail tunnels.

Green Exit Signs identify emergency exits that lead to street level. Exit doors are located throughout the station and at each end of a passenger platform. These exits lead to emergency exit hatches at street level that are built flush to the ground. When emergency exit hatches are opened they activate an alarm at the ROC. A hatch wrench, which is carried by a Metro Rail Transit Operations Supervisor, is required to open these hatches.



Red Exit Signs identify interior emergency exit doors and the cross passages leading from one track to another. Cross passages are located approximately every 750 feet between stations. Red exit signs do not lead to street level access.

Metro Rail Incidents

Incidents involving Metro trains must be given a thorough but expeditious investigation. The Department's objective is to work with any emergency services agency to resolve incidents quickly and effectively. Rail-related emergency and non-emergency calls for service will be handled by Transit Services Division (TSD) personnel, with response from the patrol division within the Area of occurrence for emergency calls.

Criminal investigations resulting from rail-related incidents are conducted by Area/divisional detectives or specialized units. Transit Investigative Section, TSD, will assist Area and specialized investigative teams, provide transit-related expertise, and facilitate the collection of evidence. Officers responding to transit-related incidents will broadcast their specific location (i.e., Area, station name, platform, level, etc.) in order to direct appropriate resources without delay. Requests for **Bomb Detection Canine** to screen unattended articles will be the responsibility of the Los Angeles County Sheriff's Department K-9 Unit.

The California Penal Code, Vehicle Code, and the Los Angeles Municipal Code contain many laws which were designed specifically for rail transit safety. These railroad laws also govern vehicle and pedestrian traffic along the Metro Light Rail tracks and right-of-ways. Metro Light Rail tracks are built into the center of streets and trains pass through large and busy intersections throughout the City of Los Angeles. Therefore, traffic enforcement is important on Metro Light Rail tracks along major City streets and at all railroad (grade) crossings.

In circumstances involving accidents or violations in which an operator of a train is detained by police, the train operator shall not be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of any train operator of the train (California Vehicle Code Section 12953.)

CONCLUSION

The Metro Light Rail system provides a vital transportation service within the City of Los Angeles. It is important that officers are familiar with the various features and hazards of the light rail system. Knowledge of train movement, unique safety features, and electrical hazards within the Metro Light Rail system, along with planned tactics, are the best precautions officers have to avoid situations that may cause serious injury or death.

Rail Operations Control
2000 East Imperial Highway
Blue Line Control (323) 563-5015
Gold Line Control (323) 563-5055
Green Line Control (323) 563-5298
Expo Line Control (323) 563-5095

Transit Services Division
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Field Training Services Unit
Police Training and Education

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