



ARINC has worked with both the Maryland Transit Administration and Washington Metropolitan Area Transit Authority to modernize control systems, networks, customer information and security systems. The (AIM)® rail control and SCADA systems are critical to the operation of the WMATA subways and Baltimore light rail and subway systems. These systems dispatch over 500 trains per day, moving 1.5-million people. The firm designed and built the fiber optic network that is supporting the train control and SCADA systems at WMATA. They are

also upgrading the field RTUs with new IP-enabled devices to facilitate implementation of a back-up control center that will ensure operational continuity in the event of a major incident in the city. The company also completed work on the audio quality upgrade of the passenger station intercom system. As a subcontractor to Motorola, ARINC provided the voice recording and designed the above-ground sites for the trunked radio system. In Baltimore, the firm is working on a major upgrade to the SCADA and fire, life safety and emergency management

systems for the subway stations. ARINC is also providing its latest AIM® software to allow the MTA to efficiently manage their rail operations. Working with the MTA police, ARINC is designing and building a video surveillance system to ensure the security of passengers on the light rail and subways systems under a Home Land Security grant. In the Philadelphia area, ARINC served as the prime contractor for the new SEPTA control center. The project consolidated six regional rail line control towers into a single centralized control center at the headquarters

building. The center supports SEPTA's regional commuter rail system's thirteen branches over 150 active stations. The company performed all design, engineering, procurement, software implementation, testing, and training for the project. ARINC worked with the SEPTA communications and signals staff to upgrade the communications architecture to support the implementation of a back-up control center as well. The project deployed a fiber optic-based SONET network to extend the control center LAN to the field. The IP-based approach allows

failover from the primary center to the back up to occur in seconds, thereby maintaining a high availability for this mission critical system

Top left: SEPTA Overbrook station.

Above far left: Baltimore Light Rail in yard.

Above left: Washington, D.C., Metro train at night.

Above: Washington, D.C., Metro train at Dupont Station.

Opposite middle left and right: SEPTA trains.

Opposite bottom left and right: Metro trains.

Photography: WMATA; Larry Levine; Robert Williams Maryland MTA; SEPTA; ARINC.

