

# World War II Nerve Center: Philadelphia Could Have Been a Target

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Editor's Note: In support of the 150th anniversary of the Army Signal Corps, The Monmouth Message is publishing a series of articles commemorating the event. This is the first of occasional articles.

The Signal Corps' 150th anniversary this year provides the perfect opportunity to revisit Corps history. Philadelphia's role in Signal Corps history is one that is often overlooked. The city supported Signal and Communications-Electronics (C-E) activities over a 100-year period. It was especially involved in Signal equipment activities during World War II.



A SECTION OF THE PHILADELPHIA SIGNAL DEPOT, AUGUST 1942

Philadelphia area for contractual support during the American Civil War. Dr. Albert Myer, the first chief Signal officer, faced an urgent need for telescopes used in signal communications. He turned to a Philadelphia company, James W. Queen & Co., to satisfy the need.

The Signal Corps began recording weather observations in the 1870s. The Signal Corps first established a weather station in downtown Philadelphia on Chestnut Street. The station moved to the Chamber of Commerce Building on Second Street in 1872. The weather observation stations transferred to the National Weather Service in the 1890s.

Philadelphia was the point of origin for one of the first Telegraph Battalions that would report to Camp Little Silver (now Fort Monmouth) upon its opening in 1917. The battalion, the 1st

In fact, an Army Center for Military History report emphasized the importance of those wartime operations, saying, "If enemy bombs had been aimed at the heart of Signal Corps supply, Philadelphia would have been the target."

Before World War II

The newly established Signal Corps first turned to the

Telegraph Battalion, consisted of companies from Philadelphia and Pittsburgh. Also during World War I, one of four early recruiting stations for the Signal Corps was located in Philadelphia.



There are indications that Signal-  
logistics functions were also  
located in Philadelphia in the  
1930s. Information on the  
operations is scarce, however.

#### World War II

During World War II, Philadelphia  
was the home of one of the largest  
Signal depots. Depot facilities  
offered abundant space for the  
placement of procurement,

contracting, and inspection agencies in the area. Then, as the numbers of civilian employees increased, so did the need for labor-related offices.

The Philadelphia Signal Depot operation had been located in Brooklyn, N.Y., until it relocated to the Atwater-Kent Building in Philadelphia. At the time, Sears, Roebuck, & Co. owned and occupied the building. The government acquired it by condemnation at a cost of \$2 million. It provided 1.5 million square-feet of floor space, acreage for outside storage, easy access, rail sidings and a power plant.

The size of the depot provided for the growth of Signal activities in the area. The facilities, however, were cold and drafty. The roofs leaked. Only makeshift food services were available. Personnel transferred from the Brooklyn Depot viewed the Philadelphia site with disdain. They quit in large numbers and were replaced by local workers.

Many workers were also lost to the military. Because of that, the depot increased the numbers of women filling positions traditionally held by men. Those included chauffeurs, welders, assemblers, laborers, forklift operators, tractor drivers, machinists, crystal grinders and checkers. The Signal depots were the repositories for Signal stock items. Each had a specific supply mission and also could be a “key” depot. Key depots stocked certain items and were a distribution point for a specific zone. Philadelphia was the key depot for pigeon equipment. Depots could also handle specific repair, assembly, and procurement duties or specialties. Some depots, including the Philadelphia depot, also used German prisoners of war for routine tasks.

The Philadelphia Depot was responsible for at least 100,000 stock items and employed as many as 1,100 people. Commodities handled included ground radio and radar equipment, as well as associated items.

The Philadelphia Signal Depot also included a Supply Training School that trained 851 officers in Field Supply. The depot continued operation until the late 1940s.

The Philadelphia Depot Repair Shop was the repair point for equipment returned to stock. Separated operationally from the depot, a repair shop was a small factory capable of the repair or fabrication of most Signal items.

As the war progressed and material shortages grew, repair became more important and more efficient and the repair shops grew in importance. The Signal Corps Inspection Agency, Philadelphia Zone, a component of the Signal Procurement and Distribution Service, was responsible for the inspection of various commodities.

Included were simple mechanical inspections of wiring, soldering, and fastenings, and more complex inspections of vehicles and radios. During the war, employees would largely include women, who proved to be very capable inspectors.

The Philadelphia Zone, located in the Atwater Kent Building, was responsible for inspections of goods originating from plants in parts of New Jersey and Pennsylvania, Delaware, Washington D.C., North and South Carolina, Maryland, and Virginia.

The Cost Analysis Agency operated as a part of the Office of the Chief Signal Officer. While speed in satisfying procurement needs was vital, contract costs were also considered important. The agency was responsible for the analyses of signal contracts to determine if prices were fair and reasonable and were in the best interests of the government.

The Philadelphia Price Adjustment Field Office, the most active of the two field offices, worked closely with the cost analysis office to ensure there were no excess profits that would cause a need to renegotiate contracts. Excess profits resulted when actual materials cost could not accurately be determined prior to production and actual costs during production were lower than estimated.

The Storage and Issue (S&I) Agency operated as a part of the Material Branch. Originally established as a Branch of the Office of the Chief Signal Officer, it changed to the S&I Agency when it moved to Philadelphia in 1942.

There were also S&I operations in other areas with a high density of signal-related activities such as Dayton, Ohio. Dayton's operations grew out of the transfer of meteorological equipment-associated operations out of Philadelphia to the Dayton Signal Depot to support Signal needs for the Army Air Force.

Located in the Philadelphia Signal Depot, the S&I Agency was the central point for stock and stock movements. Interestingly, the transfer to Philadelphia took place in one night, because there had been a forward operation established in Philadelphia. The forward operation was put in place because it was anticipated that approximately 30 percent of the staff would not make the move and continuing the mission was vital.

At one point, the agency handled 16,517 requisitions and employed 1,525 civilians, with a backlog of 6,000 unprocessed requisitions. Ultimately, the backlog was rectified with a seven-

day workweek and as much as 68 hours of overtime per employee and by hiring high school students to do clerical work.

In December 1942, a group from the Signal equipment Nomenclature Section relocated to Philadelphia to form a new field agency, the Stock Numbering Agency (SNA).

SNA was formally activated the following month, and was responsible for providing the means of identification for Signal items. Its experts also studied parts to determine interchangeability with parts produced by other manufacturers. They also cross-referenced duplicate, superseded stock numbers, and developed a manual of standard descriptions of signal items. Headquartered in Philadelphia, there were three field branch offices (Philadelphia, Dayton, and Chicago).

The Supply Survey Agency also was located in Philadelphia. It was responsible for gathering data to control estimates of supply needs. Interestingly, in 1943, the agency sent specially trained officers familiar with all aspects of Signal supply into the war theater. Their mission was to “compile accurate data and complete reports on signal replacement factors.”

Another Philadelphia operation, the Signal Corps Ground Signal Maintenance Agency, was formed to alleviate spare parts problems at the laboratories at Fort Monmouth and Camp Evans. It also developed maintenance procedures for ground signal equipment and trained personnel to service and repair equipment.

In addition to supply-related activities during the war, Philadelphia was also home to the Plant Engineering Agency (PEA), Philadelphia Regional Labor Office and a Legal Division field office.

The PEA was a major field installation. It represented the epitome of the Signal operations. Its engineers would deploy to where no systems existed and would pioneer new systems. Philadelphia was selected for its location due to the large Philadelphia Signal Depot and its close proximity to eastern manufacturing sources, to ease coordination in filling requisitions.

The PEA furnished material, equipment, engineering, and installation service for Army fixed communication locations and for Army Air Force communications.

The Philadelphia Regional Labor Office was one of a number of Signal Corps labor offices located in the United States. It was located at the Philadelphia Signal Depot. Labor offices came about to handle the growing number of labor issues because of the concern that anything affecting the production of Signal equipment was a Signal Corps problem that needed to be handled internally.

The Labor Office and an associated Labor Liaison Office handled labor supply, labor relations, draft deferment and morale-building programs. The Legal Division initially was a part of the Materiel Division. It ultimately would report to the Chief Signal Officer. The Philadelphia Legal Division formed in December 1942, to provide legal assistance on contractual and supply matters in the Philadelphia region.

Similar offices also existed in various cities where larger Signal operations were also located

After the war

While related activities continued after the war, they did so at a slower pace. Included were logistics-related functions such as the Signal Supply Agency, activities related to inventory control and stock level control, and the Logistics Evaluation Committee.

Originally called the Signal Supply Agency, the Army Electronic Material Agency was located at 225 South 18th Street. It began as part of the Signal Laboratory's "technical services" in the 1950s.

It continued operation in Philadelphia as part of the Army's Electronics Command into the mid-1970s, when it relocated to the then CECOM Office Building in Tinton Falls.

It was responsible for oversight of contractor bids. It also evaluated conflicts involving bidders (those supplying equipment or parts), reported on contract performance and developed contract specification modifications for devices supplied to the Army.

During the Korean Conflict, the Army Corps of Engineers remodeled an area of an existing building to convert it into a modern office space for operations related to inventory control and stock level control.

The office supported activities in Korea by providing the numerous parts needed to service electronic gear in use in Korea. The location was the Pennsylvania Athletic Club located in Rittenhouse Square in central Philadelphia.

Philadelphia has been an important source of support to Signal and Communications-Electronics activities. This has included supplies, such as telescopes, and Soldiers, to include the first Signal regiment at the new Signal Camp in New Jersey.

Large-scale logistics support provided during World War II was vital to the United States' victory in the war.

Interestingly, the World War II Signal Corps and its Signal Laboratories faced issues not unlike those faced today by Army Team Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance with relocations, vacancies and forward operations.