



**BE A FORCE**

**Milwaukee Police Department**  
Police Administration Building  
749 West State Street  
Milwaukee, Wisconsin 53233  
<http://www.milwaukee.gov/police>

**Edward A. Flynn**  
Chief of Police

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June 11, 2014

The Board of the  
Fire and Police Commission  
200 East Wells Street, Room 706  
Milwaukee, WI 53202



**RE: REQUEST FOR EMERGENCY VEHICLE EQUIPMENT INSTALLER EXAMINATION**

Dear Commissioners:

The Department respectfully requests that your Honorable Commission's staff conduct a recruitment, administer an examination, and provide an eligibility list for the position of Emergency Vehicle Equipment Installer as soon as administratively possible. The function of this position is to install all of the equipment found in police vehicles, which is important for the operations of the Department.

This position was reclassified from the Electronic Technician Assistant position in 2013. The Electronic Technician Assistant eligible list expires July 26, 2014 and consists of 11 candidates, however this list was exhausted. The Emergency Vehicle Equipment Installer position has not been posted since it was studied by the Department of Employee Relations.

Attached please find a Job Evaluation Report for the position. Department representatives are available to assist Commission staff in this matter. If you have any questions regarding this matter, please contact Human Resources Administrator Valarie Williams at 935-7110.

Respectfully submitted,

**EDWARD A. FLYNN**  
CHIEF OF POLICE

C: Assistant Chief James Harpole  
Police Facilities Manager Richard Moore

EAF:va

**JOB EVALUATION REPORT**

Fire & Police Commission Meeting: January 17, 2013  
 Department: Police

Current	Request	Recommendation
Electronic Technician Assistant PR 3CN (\$35,245 - \$38,921)* 2 positions	To Be Studied	Emergency Vehicle Equipment Installer PR 7EN (\$39,643 - \$45,922) 5 positions
Electronic Technician PR 3MN (\$46,325 - \$58,682)* 3 positions		Recruitment at \$40,832 with 3 years of relevant experience. Recruitment at \$42,057 with 4 years of relevant experience. Additional 3% when designated as a lead worker.

\*ALEASP Rates 2006

**Action Required**

In the Salary Ordinance, under Pay Range 3CN, delete the title "Electronic Technician Assistant (3)" and footnote "(3)"; under Pay Range 7EN, add the title "Emergency Vehicle Equipment Installer (8) (9)" and create footnotes (8) and (9) to read as follows: "(8) Recruitment is at \$1,570.47 (\$40,832) for candidates with at least three years of related experience and at \$1,617.58 (\$42,057) for candidates with at least four years of related experience." and "(9) Employees shall receive an additional 3% when designated to act as a lead worker."

In the Positions Ordinance, under Police Department, Administration Services Decision Unit, Administration Bureau, Facilities Services Section, delete two positions of "Electronic Technician Assistant" and three positions of "Electronic Technician" and add five positions of "Emergency Vehicle Equipment Installer."

**Background**

The Police Department requested that the job classification of Electronic Technician Assistant be studied for appropriate job title and rate of pay. The stated reason for this request was that changes had taken place in the job that required a higher level of skill and responsibility, thus warranting a higher rate of compensation.

In studying this request, documentation in the form of a revised job description was reviewed in addition to job analysis questionnaires completed by employees and reviewed by their immediate supervisor. Interviews of employees were conducted at their worksite at the Police Department's "Radio Shop." During those interviews several vehicles were examined that included vehicles being set-up for use by law enforcement officers as well as the tools and equipment used by employees. The employees' immediate supervisor, James Bocek, Police Fleet Manager, was interviewed twice and discussions were jointly held with James Bocek and his supervisor, Richard Moore, Police Facilities Manager. Job descriptions and advertisements for similar positions were compiled and analyzed in addition to wage data from some employers and the Bureau of Labor Statistics.

### **Job Duties and Responsibilities**

Electronic Technician Assistants work at the Police Department's "Radio Shop" located at 4733 W Vliet Street and report to the Police Department's Fleet Manager, James Bocek, who is located downtown at the Police Administration building. Three employees currently work in this job classification and two additional positions are to be added to the work unit in 2013. The basic function of the job is to install all of the equipment found in police vehicles which typically includes a mobile radio, computer, sirens, light bars, video recording equipment, license plate readers, antennas, data connections, in-car camera systems, gun racks, seats for prisoners, steel barriers between prisoners and officers, and other equipment and fixtures as needed. Although occasional repairs are required in the field, the vast majority of work takes place at the Police Department's "Radio Shop."

The major areas of the job, and related duties, are as follows:

- Installing electronic and other equipment including two-way radios, computers, cameras and recording equipment, light bars and other exterior lights, license plate readers, prisoner partitions, new rear seats, and shotgun racks; and inspecting all equipment installed.
- Modifying vehicles through installing electrical wiring, connecting electrical fittings, drilling holes, and performing other physical tasks.
- Creating cable assemblies and sub-assemblies for specific vehicles; physically assembling cables; preparing estimates of the quantity and type of wire and connectors required; ensuring that a sufficient number of cable assemblies are on hand; and shipping, receiving, and inventorying cable assemblies.
- Troubleshooting by investigating and identifying problems with all mobile equipment
- Performing administrative functions to include:
  - Document information related to installations and repairs.
  - Work with equipment vendors to obtain equipment updates and correct problems.
  - Maintain manufacturers' certifications for emergency light bars, mobile video recording systems, and license plate reader equipment.
  - Maintain sufficient stock levels of installation hardware, digital video recorders, and other related equipment.
  - Pick up and deliver vehicles, supplies and equipment with a City vehicle.

The minimum requirements for the job include one year of full-time experience servicing two-way radios and other equipment associated with emergency response vehicles or performing tasks closely related to the essential functions of the job or completion of 30 college credits toward an Associate's Degree in Electronic Technology from a community college or a trade or technical college. An employee must have a valid driver's license at time of appointment and throughout employment. Desirable qualifications include a Class B Commercial Driver's License without an air brake restriction.

The knowledge, skills, and abilities are as follows:

- Mechanical assembly skills

- Ability to install emergency response equipment on/in city vehicles
- Ability to troubleshoot and diagnose problems with all mobile equipment in emergency vehicles
- Ability to modify the interior of city vehicles without damaging vehicle or equipment
- Ability to use all hand and power tools related to the job
- Knowledge and understanding of electronics communication theory
- Ability to use technical equipment used in the diagnosis and resolution of electrical equipment failure
- Soldering skills
- Ability to read schematics, blueprints, wiring diagrams and other job-related documentation
- Ability to work with automotive electrical wiring and cabling
- Computer skills
- Analytical skills
- Organizational skills
- Interpersonal skills
- Ability to recognize the specific colors and color codes associated with electrical wiring
- Ability to work on ladders and in confined spaces
- Ability to lift objects weighing up to 60 lbs.
- Ability to work around and inside of vehicles

### **Analysis**

The employees in this job classification install all of the electronic equipment and other equipment required for 70 to 90 police vehicles annually. When a new vehicle arrives in the Police Department, a considerable amount of work, involving some 100 hours of labor, is required before the vehicle can be used by officers. Light bars, sirens, wide band radios, speakers and microphones integrated into the siren, license plate readers, video recording equipment, and a laptop computer must be installed, all of which requires a good deal of wiring. The back seat of the vehicle is removed and replaced with a hard plastic bench. Handles are removed from the doors of the back seat and a metal "cage" between the front and back seat is installed. Brackets for gun racks and video recording equipment are installed. At the end of the process, everything that has been installed is inspected and tested to ensure that the proper equipment has been installed according to the use of the particular vehicle and preferences of commanders; all equipment works properly; and all brackets, fittings, and equipment are stable and secure.

The job classification of Electronic Technician Assistant was created in 2004. As stated in the job description from May of that year, the duties and responsibilities of the job were planned to be as follows:

- Installing data and communications equipment and specialized equipment used in Police vehicles, in addition to vehicles used by the Fire Department and Department of Public Works
- Assisting Electronic Technicians located in the shop in repairing radio systems.
- Repairing radio and computer equipment by performing such duties as soldering connections, crimping fitting, replacing components under the guidance of an Electronic Technician, and testing equipment to locate the causes of electrical short circuits, opens, and grounds.

- Assembling cables, wire wrapping connections, and testing completed wiring systems; and creating brackets, mounts, attaching points, and related fixtures.
- Programming computers using applications that have been developed; labeling and scribing equipment; and identifying, boxing, and inventorying equipment.
- Delivering vehicles, picking up parts, taking equipment to local repair depots, and transporting repaired equipment to users.

As illustrated in this description, it was intended that Electronic Technician Assistants spend at least one-half of their time working with higher level Electronic Technicians, performing what could be considered more routine work associated with radio repair. In this respect, the job was intended to provide an entry point for promotion to the higher skilled and higher paying job of Electronic Technician. Electronic Technicians install and repair mobile radio and related communications equipment, such as electronic sirens, navigation radar, and fixed-site equipment such as microwave relay systems, dispatch consoles, and paging terminals. By way of comparison, the minimum requirements for Electronic Technician is three years of experience installing and repairing two-way radio communications or an Associate's Degree in Electronic Technology and two years of job-related experience. Once hired, employees must obtain a Federal Communications Commission (FCC) First Class, Second Class or General Class Radio Telephone Operator's license or industry equivalent prior to completing their probationary period.

The other part of the Electronic Technician Assistant job was to be devoted to installing all the equipment used in Police vehicles such as radios; computers; light bars and controllers; battery chargers; seats, restraints, and equipment used to transport prisoners; and brackets to house weapons.

As documented in the revised job description and confirmed by interviews with employees and managers, the intended duties and responsibilities associated with assisting Electronic Technicians never materialized. When employees were hired into the job they spent nearly all of their time installing equipment, including electronic data and communications equipment, into police vehicles and to some extent vehicles used by the Fire Department. In 2011 these positions were transferred from the Technical Communications Division to the Facilities Services Division and placed under the direction of the Police Department's Fleet Manager. The rationale for this change was that the work of setting up new police vehicles was more logically related to the responsibility of fleet management than radio communications.

The job analysis indicates that changes have taken place to the duties and responsibilities originally envisioned for the positions when they were created in 2004. Employees install light bars, video recording equipment, license plate readers, and light flashers in addition to radios, computers, and items related to prisoner transport. Employees have obtained related training as some equipment manufacturers require training and certification for those who install and maintain their equipment for a warranty to be in force. In addition, the employees in these positions also troubleshoot problems with equipment, which was not previously performed. It appears, then, that the knowledge and skill required to perform these jobs has increased over time. The question is, where should the jobs be appropriately placed *vis-à-vis* other related jobs and the relevant labor market?

The following chart shows relative rates of pay for selected technician and maintenance jobs in City government in comparison with the job under study.

**City of Milwaukee Annual Rates of Pay  
For Selected Technicians and Maintenance Job Classifications**

	Pay Range	Min	Max	Special Attainment Rates
Electronic Technician*	3MN	\$46,325	\$58,682	
Automotive Machinist	7IN	\$47,426	\$54,974	
Maintenance Technician III	3HN	\$43,368	\$49,406	
Automotive Electrician	7FN	\$41,828	\$47,663	\$49,625
Vehicle Service Technician-Heavy	7FN	\$41,828	\$47,663	\$49,625
Heating and Ventilating Mechanic III	7FN	\$42,336	\$47,663	
Maintenance Technician II	3GN	\$41,491	\$47,065	
Maintenance Technician I	3FN	\$40,676	\$46,013	
Vehicle Services Technician	7EN	\$39,643	\$45,922	\$48,427
Heating and Ventilating Mechanic II	7DN	\$40,676	\$45,425	
Water Meter Technician	7DN	\$38,258	\$45,425	
Heating and Ventilating Mechanic I	7CN	\$39,642	\$44,277	
Building Maintenance Mechanic I	7BN	\$37,409	\$41,791	
Electronic Technician Assistant*	3CN	\$35,245	\$38,921	
Fire Mechanic Helper	7BN	\$34,508	\$39,989	

\*ALEASP Rates 2006

When initially classified in 2004, the job under consideration was equated with the beginning level of Building Maintenance Mechanic. Building Maintenance Mechanics I in the Housing Authority perform a variety of routine and preventative maintenance and repair on plumbing, electrical, and heating, ventilation and air conditioning (HVAC) systems, building interiors and exteriors, and appliances. The minimum requirement for that job is 12 months of experience performing custodial work or building and grounds maintenance work and a valid driver's license. It should be noted that these are minimum requirements and that well qualified applicants would be expected to possess more experience or training.

When now considering an appropriate pay level for the job under study, considerable weight must be given to the fact that these positions install electronic equipment and diagnose problems when malfunctions occur. The ability to install and especially repair electronic equipment is usually considered to require a higher level of intellectual acumen than general housing repair work or perhaps work associated with beginning-level heating and ventilating installation and repair. Some weight should also be given to the fact that police officers depend upon electronic equipment, especially computers, video recording equipment, and license plate readers, to perform their work.

Considering the changes in duties that have occurred in these positions, it appears that the level of knowledge and skill required to perform the job has increased. In our judgment, these positions could be equated with that of Vehicle Service Technicians in Pay Range 7EN.

It is therefore recommended that two positions of Electronic Technician Assistant in Pay Range 3CN and three positions of Electronic Technician in Pay Range 3MN be reclassified to Emergency Vehicle Equipment Installer in Pay Range 7EN (\$39,643 to \$45,922). To assist the Police Department with recruitment, we also recommend the ability to recruit at \$40,832 for

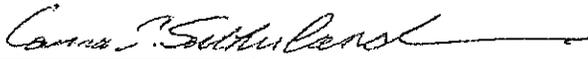
candidates with at least three years of related experience and at \$42,057 for candidates with at least four years of related experience.

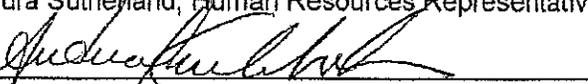
**Lead Worker Responsibilities**

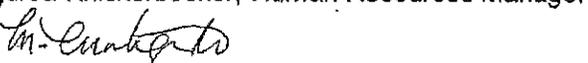
The job analysis indicated that one Electronic Technician Assistant functions as a lead worker, creating work processes, planning work, training and coaching employees, answering questions from internal customers and employees, setting work priorities, and providing recommendations to the Fleet Manager.

The immediate supervisor of this group is located at the downtown administration building and has responsibility for managing all aspects of the Department's fleet. Creating a lead worker designation via a footnote would be advantageous for the Department, especially at this time when new employees are being hired, and would improve accountability, communications, and the training and coaching of employees.

For that reason, it is also recommended that a footnote be added to allow an employee in the position of Emergency Vehicle Equipment Installer in Pay Range 7EN to receive an additional 3% in pay whenever they are designated to act as a lead worker.

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