

Plan for Facilities Maintenance and Operation  
TCAT at Memphis

Main Campus  
550 Alabama Avenue  
Memphis, Tennessee 38105

Aviation Extension Campus  
3435 Tchulahoma Road  
Memphis 38118

Revised 2019

# **PLAN FOR FACILITIES MAINTENANCE AND OPERATION**

## **TCAT at Memphis**

### **OPERATION OF PHYSICAL PLANT**

The operation of the Physical Plant is the responsibility of the Facilities Coordinator. This includes all chillers, chiller pumps, boilers, boiler pumps, hot water recirculating pumps, main electrical panels, building automation controls, DX HVAC equipment, compressed air systems, city water main lines, sewer plumbing, and security and fire alarm systems. The Physical Plant department is responsible for the upkeep and operation of all TCAT Memphis facilities, and assists in oversight of security, landscaping, and custodial services.

### **GENERAL MAINTENANCE PROCEDURES**

The Facilities Coordinator and Maintenance personnel report directly to the Coordinator of Workforce Development and Operations and the President. In general, facilities (maintenance) personnel are responsible for the safety and security of the buildings and grounds and for housekeeping and maintenance duties outlined in the following pages.

#### **General Housekeeping/Common Areas**

The general housekeeping and cleaning details for the common areas such as the main restrooms, hallways, break room, and administrative areas are conducted by a contracted cleaning service.

#### **General Housekeeping/Program Areas**

The general housekeeping and cleaning details for the shop areas are the responsibility of the instructor, with support from the Physical Plant department if needed. This is limited to nominal clean-up, sweeping, mopping, etc., of floor space within the shop and classroom area. Shops are responsible for placing trash and waste products in containers within the shop, which is periodically deposited in the public solid waste system container. Hazardous wastes are collected by an outside vendor and documented in the annual Hazardous Waste Report by the Facilities Coordinator.

#### **Grounds**

Care of the grounds surrounding the buildings is conducted by a contract service year-round. The maintenance personnel monitor the safety and appearance of the grounds daily, checking for any waste or tree or limb removal.

#### **Heating and Air Conditioning**

The routine and preventive maintenance required for heating and cooling equipment will normally be done by maintenance personnel and, if needed, outside vendors. At times HVAC students are allowed to

observe the work if the project is considered to be of training value. This work will include the routine checking of equipment, preventive maintenance, and other day-to-day maintenance requirements.

### **Preventive Maintenance**

It is the responsibility of all school personnel to insure that the equipment used by them or under their supervision is kept in proper operating condition. It is expected that all equipment be cleaned, lubricated, and otherwise cared for as prescribed in the applicable manufacturer's operation and maintenance manuals.

Maintenance personnel, under the supervision of the Coordinator of Workforce Development and Operations, are responsible for preventive maintenance of all heating, ventilating and air conditioning, and other equipment and facilities, including the building structure itself, and all equipment attached thereto.

Instructors or other personnel assigned to an office, classroom, or shop area are responsible for the routine preventive maintenance for all equipment in that shop or area. Any equipment needing maintenance that cannot be done within the shop or class is reported to the Facilities Coordinator.

### **Electrical Maintenance**

Maintenance problems of an electrical nature that cannot be handled by school maintenance personnel will be handled by an electrical contractor.

### **Painting**

Routine painting and touch-up is the responsibility of school maintenance personnel. General painting of offices and classrooms is scheduled to be done by an outside source. Touch-up and repainting of small areas within a shop may be performed by the students under the direct supervision of the instructor.

### **Maintenance and Repair by Outside Sources**

Maintenance and repair that cannot be accomplished by maintenance or other school personnel is procured, as necessary, from outside sources. All work done by outside sources is inspected by the Facilities Coordinator prior to final payment.

## **MOBILE EQUIPMENT**

School owned vehicles such as a trucks, vans, cars, and other gasoline or diesel powered equipment shall be maintained as a joint effort of the maintenance personnel, automotive shop, collision repair shop, and diesel powered equipment shop. Normally the Automotive, Diesel or Collision Repair Instructors will be responsible for the preventive maintenance on these vehicles such as fuel, check oil and battery, etc.

## **INSTRUCTIONAL EQUIPMENT**

All maintenance of instructional equipment shall be accomplished by the personnel responsible for that area. In the case of the shops and classrooms, this will be the instructor. In the case of areas that are used by more than one instructor, it shall be the responsibility of the Coordinator of Workforce Development and Operations to assign primary maintenance responsibilities.

Instructors or other personnel responsible for an area shall not permit trainees to attempt maintenance or repairs that are not well within their capabilities. Maintenance that is required outside of training and/or instructor capabilities shall be requested through the Facilities Coordinator. In the event that maintenance cannot be accomplished by other school personnel, arrangements will be made for repair to be accomplished by an outside source.

In the case of leased equipment or equipment that is still under warranty, repair shall not be attempted until the manufacturer or other responsible person is notified. An exception to this may be necessary during emergency situations, such as a heating system failure in extreme cold weather or other emergency conditions.

## **SUPPLY PROCUREMENT**

Custodial consumables and Physical Plant supplies are requisitioned by the Facilities Coordinator as needed.

## **MAINTENANCE PERSONNEL**

Included in the implementation of the maintenance plan are the services and cooperation of the maintenance staff, administration, instructors, as well as part-time instructors, students, and other staff. An online work order portal is available for all employees and students to utilize, in order to report problems that need to be addressed. They are handled in order of severity. In the event the custodian encounters maintenance problems with which they are not able to correct, it is understood that they will report these to the Facilities Coordinator.

## **PHYSICAL PLANT IMPROVEMENTS**

Physical plant improvements are requested using campus funding or thru TBR Capital Budget Request depending upon the cost and scope of the project. It is the responsibility of the Facilities Coordinator to submit data, write specifications for bids, and manage projects that are approved with campus funding. The President must give the final approval regarding funding, before work is started or contractors are hired.

## **SECURITY**

Security of building and grounds is the responsibility of the Coordinator of Workforce Development and Operations, who oversees contracted services (US Security and off-duty MPD officers). The security officers on duty shall inspect the building for security, any unauthorized personnel, fire or any other unusual situation or occurrences during their shift and at the end of the shift, evening and day.

All visitors must register at front desk and wear a visitor's badge before entering specific program areas or hallways. The security system monitors every entrance door and can only be armed or disarmed by designated personnel using their own security code. There are surveillance cameras in operation at different areas around the campus and can be monitored at stations by the Network Administrator, the Facilities Coordinator and Administration. Daily security of the Aviation Extension Campus is the responsibility of the Campus Coordinator with assistance from Physical Plant as needed. Each instructor

and staff member at both campuses is responsible for locking their respected areas when leaving for the day.

Two-way radios are issued to designees at strategic locations around the campus. Daily radio checks are performed.

Each classroom or work area has a building (or departmental) map which includes the evacuation route and closest safe area. This map is posted in an area that will be visible to faculty, staff, students and visitors.

## **ASSET MANAGEMENT**

It is the responsibility of Physical Plant to handle and document all interdepartmental property transfers. All documentation is kept in the Physical Plant office.

## **LOCKS/ KEYS**

Physical Plant is responsible for maintaining a secure lock/key system for all buildings. Keys are issued to faculty/staff upon request from their immediate supervisor. Upon termination, keys are returned to an HR representative during the exit interview. Key issuance is documented both digitally and by signed waiver. All lock system components are stored in a high security cabinet, within a high security room.

## **INFORMATION TECHNOLOGY INFRASTRUCTURE**

### **General**

The IT Coordinator and IT Department staff are responsible for campus Information Technology infrastructure. This includes, but may not be limited to, all computer equipment, servers, switches, cabinets, cabling, audio/visual equipment, telephone equipment, copiers, battery back-up systems, cyber-security systems, data back-ups, and other networking and internet related items.

### **Internet Use**

TCAT Memphis employs an Acceptable Use Policy when governing use of the Internet via devices connected to the campus network. Every employee and student who has access to Internet on campus, must have a signed Internet Acceptable Use Policy on file.

### **Data Security and Back-Up**

The data network at TCAT Memphis is protected by a firewall appliance with remote monitoring and access control. All data stored on network servers is protected by Next-gen antivirus protection and is backed up daily to a separate data backup appliance. That data is then securely stored in a cloud-based data vault for records retention compliance. The daily data back-up is an automated process.

All data network equipment is protected by a Smart UPS system with emergency contact capabilities that alert the IT department when power has been lost or disconnected for a significant amount of time. The data network at TCAT Memphis is also protected by a firewall appliance with remote monitoring and access control. All data stored on servers is protected by Next-gen antivirus protection and is backed up daily to a separate data backup appliance. That data is then securely stored in a cloud-based data vault for records retention compliance. This back-up is automated.

## **EVALUATION TECHNIQUES**

The Safety Committee conducts periodic safety and operational inspections of the entire facility. Safety hazards detected by the committee are reported to administration for compliance direction. If the facilities staff cannot correct the safety hazard, the administrative staff then addresses outside assistance to have the necessary corrections made immediately.

Drills and mock evacuations are planned by the committee and the procedures are evaluated. The President receives the information with any recommendations or problem area noted.

Major building repair is evaluated by the Facilities Coordinator and the Coordinator of Workforce Development and Operations. The President receives the analysis and makes the final decision as to how to proceed. The Board of Regents policies and guidelines are followed in regard to funding and/or acquisitions. However, minor repairs and paint touch-up jobs are often decided upon by the local administrator.

## **SAFETY PROGRAM**

Annual inspections of fire suppression systems are performed by outside vendors. Documentation of these inspections is kept in the Physical Plant Office. Physical Plant assists the Safety Committee in conducting all safety drills.

The grounds are inspected every morning at the beginning of the day for potential weather related hazards such as ice or fallen limbs. Hazardous conditions are corrected immediately.

TCAT Memphis Physical Plant and facilities adhere to all local, state, and federal laws, codes, and statutes.

OSHA, ANSI, and ADA standards are followed, including but not limited to lock-out/tag-out procedure and implementation of all necessary PPE (personal protection equipment).

All safety related issues are of highest priority and are handled immediately.

## **EVALUATION OF PLAN EFFECTIVENESS**

Evaluation of the effectiveness of the Plan for Facilities Maintenance and Operation is performed by the President and Coordinator of Workforce Development and Operations annually and on an ongoing basis.