



**U.S. Department of Transportation**  
Federal Aviation Administration

NextGen Organization  
William J. Hughes Technical Center

**ORDER**  
**NG 4443.1C**

Effective Date  
**09/18/2018**

**SUBJ:** Technical Center Policy - Construction and Facility Modification Authorization Program

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1. **Purpose of this Order.** This order requires all construction and facility modifications to be reviewed and approved by Center Operations Division prior to construction. It provides guidance and instruction to obtain a Construction/Facility Modification (C/FM) Authorization Permit for any construction or facility modification taking place on the William J. Hughes Technical Center owned property. It is intended to function similar to procedures used in local municipalities for construction/building permits.
2. **Audience.** This order applies to all organizations and land users located at the William J. Hughes Technical Center, including permit and lease holding tenant organizations performing work that impacts Technical Center buildings, land, or utility infrastructure.
3. **Where Can I Find This Order?** You can find this order on the FAA.GOV website under the "Regulations & Policies" tab and select "Orders & Notices" or you can also find this order on the MyFAA Employee website. Use "Tools & Resources" tab and select "Orders & Notices".
4. **This Order Cancels:**

Order NG 4443.1B, Construction Authorization, dated October 04, 2013.

5. **Policy.**

This order is intended to ensure:

- a. New construction and facility modifications are designed and constructed in accordance with FAA and tenant orders, standards and procedures, current construction codes adopted by the State of New Jersey, and applicable federal, state, and local environmental, safety and health regulations,
- b. Utility systems integrity is maintained,
- c. Work is consistent with the latest version of the FAA Technical Center's Master Planning and Site Selection Order, the FAA Technical Center's Strategic Land Use Plan, and the approved master plans of tenants,
- d. Designs are prepared by licensed architects and engineers and received and approved and certified by experienced personnel with credentials,

- e. Construction work is performed by companies and individuals licensed and insured to do the work (e.g., licensed tradesmen, asbestos and other hazardous waste removal, etc.),
  - f. Work is to be performed in accordance with OSHA standards. Employee's safety, health, and welfare is protected insofar as they are affected by building construction and utility system modifications through structural strength and adequate means of egress, sanitary provisions, light, ventilation, and fire safety,
  - g. Environmental compliance is achieved,
  - h. Space is efficiently used in accordance with FAA and other government standards,
  - i. Building is energy efficient and resilient in accordance with FAA and other government standards,
  - j. Building security measures are included to comply with FAA and other government standards.
6. **Requests for Information.** Refer questions regarding the interpretation of the provisions of this order or their application to the manager of Facilities Engineering Branch at (609) 485-4808.
7. **Definitions:**
- a. **Authority Having Jurisdiction (AHJ)** An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.
  - b. **Construction** means the building, assembling, reconstruction, alteration, modification, conversion, reconfiguring, demolition or equipping of buildings and facilities, site work, structures, rooms, workstations/furniture, or utility systems.
  - c. **Construction-related activity** includes, but is not strictly limited to soil borings, excavations, site surveys, exploratory utility surveys, and equipment installations (e.g., antennas or satellite dishes, telephone lines, file servers).
  - d. **Facility Modifications** means any change to existing facilities or systems, including, but not limited to, interior or exterior elements, infrastructure, surveillance, LAN and utility systems.
  - e. **Utility systems** include natural gas distribution, fuel oil storage, water (potable water, fire-fighting water, heating and cooling water supply systems), sewerage, storm water drainage, electricity, fire detection and alarm systems, fire suppression systems, heating and ventilating, communications, and security monitoring.

- f. Project Proponent**, for the purpose of this order, means the organization that initiates work to do construction or construction-related activities on Technical Center property. The project proponent is usually the organization that sponsors the work.
  - g. Construction Official:** The person assigned to represent the Facilities Engineering Branch in the administration of this order. The Construction Official and the personnel supporting the Construction Official enforce the codes listed on the C/FM Part II - Project Requirement Checklist and act as the Authority Having Jurisdiction as defined by the National Fire Protection Association (NFPA) 101, Life Safety Code, and the Building Official as defined by the International Building Code (IBC).
  - h. Form NG 4443-1, Construction/Facility Modification (C/FM) Part I – Application:** Form to be completed by Project Proponent, which conveys general project information to the Facilities Engineering Branch.
  - i. Form NG 4443-2, Construction/Facility Modification (C/FM) Part II – Project Requirements Checklist:** Form to be completed by Construction Official along with Project Proponent to serve as a preliminary scoping document. Checklist must be completed in order to issue a C/FM Authorization.
  - j. Form NG 4443-3, Construction/Facility Modification (C/FM) Part III – Authorization Placard:** Form completed and issued by the Facilities Engineering Branch giving the authority to proceed with project. C/FM Authorization must be posted in a conspicuous place at the job site.
  - k. Equipment** for the purpose of this order means any modification that affects the Center’s infrastructure.
8. **Program Administration.** The Facilities Engineering Branch will designate a Construction Official to administer the Construction/Facility Modification Authorization program. As the details of proposed work warrant, the Construction Official will coordinate the involvement of pertinent technical employees to review proposed designs and inspect construction work in progress. Thus, all inquiries will be directly between the project proponent’s representative and the designated Construction Official.
9. **Process and Responsible Organizations.**
- a.** The Project Proponent must:

    - (1) Contact the Trouble Desk to initiate a work request to obtain Construction/Facility Modification Program Support. Request must include C/FM Part I Application Form, containing: a conceptual project schedule, a declaration of whether the design and construction work will be completed outside the Facilities Engineering Branch, and, whether or not FAA maintenance will be required at the completion of the work.

- (2) Be responsible for complying with all federal, state and local environmental laws, regulations and requirements, permits, studies relating to the planned work as outlined by the Construction Official. Copies of all required environmental documentation will be provided to the Construction Official prior to any construction. Some pertinent guidance documents for work at the Technical Center are provided in Section 11 of this document.
- (3) Be responsible for complying with all health and safety regulations and requirements including OSHA standards. The Project Proponent must provide the Construction Official with a Safety Plan for the project prior to the start of any construction.
- (4) Ensure all new equipment as defined by this order is numbered using the convention provided by the Construction Official. Equipment numbering scheme should be provided during project design to ensure required plans are properly numbered. All equipment being added, removed, or replaced must be identified on the document provided by the Project Proponent to the Construction Official. At the completion of construction, a revised equipment listing (including equipment, which has been removed or replaced) along with an estimate of proposed Operations and Maintenance cost changes for the proposed work must be reviewed and validated by the Project Proponent and the Construction Official.
- (5) For Design-Build (DB) type procurements, the Project Proponent must provide the Construction Official with notice of their intent to proceed with a DB effort. The Project Proponent must provide the Construction Official the completed Statement of Work for review and comment before proceeding to procure the desired work. All Design Submittals as a part of the proposed DB process must also be forwarded to the Construction Official for review and comment in accordance with the agreed upon review schedule.
- (6) Submit detailed design drawings, supporting calculations, specifications, completed application for correction to the WJHTC distribution system (see TC-RD-6950-0130, Electrical Distribution Regulatory Responsibility), and work plans for the proposed work to the Construction Official in accordance with the agreed upon submittal schedule. Designs must adhere to all applicable state, federal and FAA-specific orders, standards and documents as well as industry standard publications. Contact the Construction Official for the criteria for design and construction. Final designs must also be signed and sealed by a licensed/registered architect or professional engineer registered by the State of New Jersey. The Project Proponent is encouraged to submit all documentation for periodic review during the design process to avoid schedule delays during final design. Any review by the Facilities Engineering Branch will not relieve the Project Proponent from liability for any design and/or construction defects or deficiencies. Environmental compliance activities may occur concurrently at the Project Proponent's risk.

- (7) The Project Proponent must be responsible for complying with the existing security policies of the Technical Center, including all escorting requirements. Coordinate review of design package (drawings, scope, specifications, etc.) with the Office of Security and Investigations, the Serving Security Element, to ensure they incorporate the protective security requirements of FAA Order 1600.69C, Chapter 4.
- (8) Project Proponent must incorporate revisions requested, or provide written rationale and supportive data to address issues and concerns. All changes must be documented and submitted with updated detailed design data, drawings and specifications to the Construction Official.
- (9) Rejected design work must be resubmitted and approved prior to any construction.
- (10) The Project Proponent must provide procurement, award, and construction scheduling information to the Construction Official. The Construction Official must be provided copies of any solicitation and notified not less than seven calendar days in advance of proposed site visits and preconstruction conference.
- (11) Submit a construction schedule and a list of points of contact for the proposed construction prior to any construction.
- (12) Inform the Facilities Engineering Branch of any deviations to the contract documents, which occur during the procurement or construction processes, particularly in terms of changes affecting the actions of regulatory agencies or the interconnection with existing Technical Center utility systems.
- (13) Be responsible for having the work site scanned/beeped out to confirm the existence and specific location of underground utilities that could be impacted by the planned work. Such subsurface utilities must be clearly marked. Any disturbance or interruption of utilities caused by activities relating to the project must be immediately reported to the Construction Official. The cost of repairs to disturbed or disrupted utilities will be solely borne by the Project Proponent. NOTE: The Superfund Program MUST be notified and provide mark out of underground Superfund infrastructure.
- (14) Post the C/FM Part III - Authorization Placard in a prominent place at the work site prior to construction.
- (15) Promptly upon completion and acceptance of the work, submit to the Construction Official all applicable facility related documents including any changes to the equipment listing.

- (16) Coordinate with Construction Official all construction activities, which may impact Technical Center operations.
  - (17) Schedule familiarization inspection for Facilities Operations Branch personnel via the Construction Official, ensuring Service Contractor representative(s) will also attend.
  - (18) Notify the Construction Official of differing site conditions found during construction within five (5) business days. Immediate notification is required for any circumstance that compromises utility systems or infrastructure.
- b. The Facilities Engineering Branch is the Authority Having Jurisdiction and Building Official and must:**
- (1) Contact the Project Proponent regarding the requirements of this Order within five (5) business days of receiving a work request to meet and discuss the project and schedule milestones. At the conclusion of the meeting, both the Project Proponent and the Facilities Engineering representative will approve the project schedule.
  - (2) The Facilities Engineering Branch assigns a competent person as the Construction Official to each proposed project. The Construction Official will provide the Project Proponent a C/FM Part I – Application. Upon approval of the completed C/FM Part I - Application, the Construction Official must complete the C/FM Part II - Project Requirements Checklist with the Project Proponent. Both the Construction Official and the Project Proponent will sign the Checklist indicating that the requirements and expectations have been clearly presented and understood. The Construction Official will assist the Project Proponent to organize documentation and assure all required reviews and approvals are conducted in accordance with the agreed upon schedule. Upon acceptance of the proposed design, the Construction Official will issue a Construction/Facility Modification Authorization to the Project Proponent. The Authorization will remain valid for 12 months from the date of issuance.
  - (3) Periodically review approved Authorizations and contact Project Proponent prior to expiration. Extensions may be granted on a case-by-case basis.
  - (4) Perform review of submitted project design and provide commentary to Project Proponent, in accordance with the agreed upon schedule. On an as-needed basis, meet with project proponent to explain commentary in detail.
  - (5) Review documentation for completeness and accuracy with respect to infrastructure integrity, environmental compliance, security, health and safety issues and compliance with applicable codes.

- (6) In coordination with the Project Proponent perform site inspections, conduct tests, and audit jobsite documentation to assure compliance. Consequences of non-compliance are covered in Section 10.
- (7) Upon completion of work, obtain applicable facility related documentation, including, but not limited to, as-builts, spare parts, operation and maintenance manuals, and warranty information. Final acceptance is documented on the C/FM Part III – Authorization Placard, indicating that the work is accepted as complete and the work area and equipment are available for occupancy and use.
- (8) Attend familiarization inspection and attend training, if provided by the Project Proponent, with Facilities Operations Branch personnel, Project Proponent, and Contractor personnel.

#### 10. Failure to Comply:

- a. Any unauthorized construction found being conducted on the Technical Center will be issued a “Construction Stop Work” notice immediately. The responsible contractor will be removed from the property until the Facilities Engineering Branch reviews and approves the design and planned methods of construction as provided by the responsible organization. Any expenses or project delays will be borne by the responsible organization.
- b. Any authorized construction not meeting the requirements outlined by the Order will be issued a “Construction Stop Work” notice immediately. No further work will be permitted until the Project Proponent and their contractor meet with Facilities Engineering Branch personnel and demonstrate the ability to take corrective action. If the ability to take corrective action cannot be demonstrated, the Facilities Engineering Branch reserves the right to make corrections at the Project Proponent’s expense.
- c. Upon discovery of any unauthorized, completed construction work, a notice of violation will be issued and the construction area will be evacuated and secured until a full inspection is completed by the Facilities Engineering Branch for code compliance and impact with other system components. A further delay may be incurred if the unauthorized work concerns modifications in land use, which would require Master Planning and Siting Board approval as per Order NG 5310.1. Inspections may take up to ten (10) working days to complete. If work is found to be deficient or if the work poses potential harm to existing system(s), the Facilities Engineering Branch will secure the immediate area around the work in question and place all utility connections relating to the unauthorized work in the “off” position. All costs incurred with remedial activities associated with such an occurrence will be borne by the initiator of the work.
- d. Unauthorized deviations from submitted and approved documents, particularly in the area of interconnection with Technical Center utility systems will be dealt with in a manner similar to that noted in paragraph c above. Unauthorized deviations must be brought to the attention of the Project Proponent upon discovery. A rationale for the unauthorized

deviation will be requested. Upon review of the rationale, continuation of work, or the issuance of a “Stop Work” notice will be at the discretion of the Facilities Engineering Branch.

11. **Related Publications.** The latest version of all applicable design criteria, FAA Standards, and FAA Orders are to be provided by the Construction Official.
12. **Where Can I Find These Forms?** You can find the Construction/Facility Modification (C/FM) forms NG 4443-1, NG 4443-2, NG 4443-3 attached to the end of this Order, and they can also be provided by the Construction Official.
13. **Distribution.** This order is distributed electronically to all William J. Hughes Technical Center federal, tenant, and contractor employees.



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Director, William J. Hughes Technical Center