DEPARTMENT OF HOMELAND SECURITY FEDERAL LAW ENFORCEMENT TRAINING CENTERS

FLETC DIRECTIVE NO: 020-02

DIRECTIVE TITLE: Energy Management

EFFECTIVE DATE: April 30, 2018

- **I. POLICY:** This Energy Management Directive establishes the Federal Law Enforcement Training Centers (FLETC) policy regarding the development of resilient, efficient, sustainable, and secure practices in energy management.
- **II. SCOPE:** This directive applies to all FLETC sites enterprise-wide, including FLETC stakeholders, partner organizations, and contractors.
- **III. REFERENCES:** This directive is governed by numerous public laws, regulations, and executive orders, including, but not limited to:
- **A.** United States Code Title 42, The Public Health and Welfare, Chapter 91 *National Energy Conservation Policy Act*, as amended.
 - **B.** Public Law 109-58, Energy Policy Act of 2005.
- C. Public Law 110-140 (42 U.S.C. 8253), Energy Independence and Security Act of 2007.
- **D.** 10 Code of Federal Regulations (CFR) Part 433, *Energy Efficiency Standards for New Federal Commercial and Multi-Family High-Rise Residential Buildings.*
- **E.** 10 CFR Part 434, Energy Code for New Federal Commercial and Multi-Family High Rise Residential Buildings.
- **F.** 10 CFR Part 435, Energy Efficiency Standards for New Federal Low-Rise Residential Buildings.
 - **G.** 10 CFR Part 436, Federal Energy Management and Planning Programs.
- **H.** Executive Order 13693, Planning for Federal Sustainability in the Next Decade, March 19, 2015.
- **I.** Department of Homeland Security Directive 020-01, *Energy and Water Management*, January 4, 2016.
 - **J.** Guiding Principles for Sustainable Federal Buildings, February 26, 2016.
- **K.** United States Department of Energy Federal Building Energy Use Benchmarking Guidance, August 2014 Update.
 - **L.** 2015 International Energy Conservation Code.
- **M.** American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Standard 55-2017 Thermal Environmental Conditions for Human Occupancy.
 - N. ASHRAE, Standard 62.1-2016 Ventilation for Acceptable Indoor Air Quality.
- **O.** ASHRAE, Standard 90.1-2016 Energy Standard for Buildings Except Low-Rise Residential Buildings.

- **P.** United States Green Building Council Leadership in Energy and Environmental Design.
 - Q. DHS Directive 025-01, Sustainable Practices, April 12, 2012.

CANCELLATIONS: This directive hereby supersedes FLETC Directive 020-02, Energy Management, dated January 5, 2016.

- IV. ADDITIONAL GUIDANCE: FLETC Manual 020-02, Energy Management.
- **V. OFFICE OF PRIMARY INTEREST:** Environmental and Safety Division, Mission and Readiness Support Directorate.

Signature on File

Thomas J. Walters Director

FLETC MANUAL 020-02 **Energy Management** Supporting Publication to FLETC Directive FLETC Directive 020-02 "Energy Management" April 2018

FLETC MANUAL 020-02

Energy Management

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I. INTRODUCTION:

- **A**. This manual sets forth the responsibilities, policies and procedures regarding the development of resiliency, efficient, sustainable, and secure practices in energy management for the Federal Law Enforcement Training Centers (FLETC). These practices are embodied in the Department of Homeland Security (DHS or the Department) concept and approach of Mission Sustainable Energy. Working together with the Department and other components, FLETC will contribute to the following activities of Mission Sustainable Energy:
- 1. Implement energy resiliency, efficiency, sustainability, and security to achieve affordable readiness;
- **2.** Strengthen energy security through use of alternative and renewable energy sources;
 - **3.** Maximize energy savings by implementing energy efficiency measures;
- **4.** Implement effective asset operation and maintenance and continuous commissioning programs;
 - 5. Position FLETC as an energy sustainability leader within DHS;
- **6**. Reduce water consumption and improve water quality by managing storm water; and,
 - 7. Protect the environment through the use of best environmental practices.
- **B**. By complying with this policy and its goals, FLETC will assist the Department and its components in reducing the overall costs associated with energy consumption, improving energy security and resilience, and achieving affordable operations readiness throughout the Department.
- C. As a DHS component, FLETC is committed to maintaining its mission capabilities while also working to increase energy resiliency, energy efficiency, conserve water, reduce petroleum consumption, reduce waste, support sustainability in the communities where we train and live, and leverage federal purchasing power to promote environmentally friendly products and technologies.
- **II. SCOPE:** This manual applies to all FLETC sites enterprise-wide, including FLETC stakeholders, partner organizations, and contractors.
- III. FORMS: None.
- **IV. DEFINITIONS:** Required and related definitions are listed in Attachment 1.

V. RESPONSIBILITIES:

- **A.** The **Assistant Director, Mission and Readiness Support Directorate** has oversight responsibility for the management and direction of actions taken to implement sustainability programs, including energy management practices and:
- 1. Serves as the FLETC's Senior Official for energy and transportation management;
- **2.** Oversees the development of systems to support plans, guidance, policy, training, and federal reporting;

- 3. Oversees fuel purchases in accordance with federal mandates; and
- **4**. Provides direction regarding the purchase of renewable energy certificates/credits.
- **B.** The **Procurement Division** ensures relevant energy requirements are incorporated into all appropriate acquisitions, and:
- **1.** Ensures proper procurement procedures are utilized for acquisition of energy and energy services; and
- **2.** Promotes sustainable acquisition and procurement [Executive Order (EO) 13693, Sec. 3 (i)].
- C. The **Environmental and Safety Division (ESD)** ensures environmental and safety laws and regulations are followed with applicable energy and sustainability requirements, and:
- 1. Oversees and coordinates storm water management requirements in new construction and major renovations. Federal agencies are required to reduce storm water runoff from federal development and redevelopment projects to protect water resources [EO 13693, Sec. 3 (f) and Energy Independence and Security Act of 2007 (EISA) Section 438]. See http://water.epa.gov/polwaste/nps/section438.cfm;
 - 2. Promotes electronic stewardship [EO 13693, Sec. 3 (1)]; and
- 3. Validates proper indoor air quality and addresses building moisture issues to minimize mold contamination and reduce health risks related to moisture. Ventilation and thermal comfort must meet American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standard 55-2017 Thermal Environmental Conditions for Human Occupancy and ASHRAE Standard 62.1-2016 Ventilation for Acceptable Indoor Air Quality.
- **D.** The **Budget Division** provides funding for utility and energy savings as required within Energy Savings Performance Contracts (ESPCs) and/or Utility Energy Services Contracts (UESCs) after they are validated by the FLETC energy manager or contracting officer's representative (COR) for
 - 1. Savings from ESPCs; and
 - **2.** Savings from UESCs.
- **E.** The **Facilities Management Division (FMD)** is responsible for FLETC's building operations and maintenance, new design and construction, and renovations. Specific FMD responsibilities include:
 - 1. Improving building efficiency, performance, and management;
- **2.** Operating, maintaining and monitoring Building Automation System, Automated Logic Controls, Inc. Web Control system;
- **3.** Commissioning buildings to include re-commissioning, retro-commissioning and continuous commissioning;
- **4.** Acquiring a Leadership in Energy and Environmental Design (LEED) rating for new buildings and major renovations. Buildings with comprehensive scope must achieve a LEED Silver certification, at a minimum;

- **5.** Achieving at least 30% reduction in energy usage compared to ASHRAE 90.1-2016 baseline building; and
- **6.** Designing buildings beginning in fiscal year (FY) 2020 such that all new construction greater than 5,000 gross square feet is designed to achieve energy net-zero [EO 13693 Sec. 3 (h)].
- **F.** The **Program Manager for Energy Management** within ESD has the responsibility for the development and management of FLETC's enterprise-wide energy management practices and:
 - 1. Promotes building energy resiliency, conservation, efficiency and management;
- **2.** Oversees site implementation of energy management programs, including compliance with data collection, performance, and reporting requirements;
- **3.** Ensures that the required amount of total building electric energy and thermal energy is comprised of a renewable electric energy and alternative energy [EO 13693 Sec. 3 (b) & (c)];
 - **4.** Provides guidance and training to meet policy requirements;
- **5.** Provides direct technical assistance and facilitates projects that lead to energy efficiency, sustainability, and security;
- **6.** Assists with sustainability initiatives, including compliance with sustainability data collection, performance, and reporting requirements;
 - 7. Represents FLETC on Department energy related committees;
- **8.** Facilitates ESPCs and UESCs enterprise-wide as required [EO 13693 Sec. 3 (k)]; and
- **9.** Exercises responsibility for benchmarking buildings and maintains current benchmarked building reporting as required.
- VI. PROCEDURES: The FLETC strives to meet or exceed the energy and water goals and targets identified for federal agencies and will develop goals and targets established by law, regulation, or executive order. The FLETC is responsible for implementing energy resiliency, and efficiency and renewable energy programs to ensure that all operations and necessary actions enhance FLETC and DHS missions, support energy security objectives, and are carried out in an environmentally and fiscally sound manner. Where economically feasible, resources are allocated to ensure that these objectives are achieved. The practices must address, at a minimum, the core program areas listed below:
- **A.** Implementing programs to ensure that all life-cycle cost-effective energy management projects are identified, prioritized, and pursued as follows:
- 1. Life-cycle cost means the total cost related to energy conservation measures of owning, operating and maintaining a building over its useful life, as determined in 10 CFR Part 436; and
- **2.** Life-cycle cost-effectiveness shall be calculated in accordance with 10 CFR Part 436.

- **B.** Implementing programs to ensure effective and high quality energy-related data collection and employing benchmarking when applicable as follows:
- 1. The DHS Sustainability Performance Management (SPM) System is the mandatory system for storage and reporting of energy data for real property, mobile assets, and personal property. Data required for this system will be high-quality data that are complete and comply with the data requirements of the SPM system;
- **2.** Employ a Department of Energy (DOE)-approved benchmarking tool to assess opportunities for energy performance improvements and quantifying energy savings (EISA 2007 Sect. 432);
- **3.** Ensure advanced meters are installed and operational where appropriate (EPACT 2005 Section 103, EISA 2007 Sec. 434); and
- **4.** Implement policies and procedures for the use and installation of advanced metering systems in accordance with the National Energy Conservation Policy Act.
- **C.** Implementing programs to ensure utilization of alternative financing to implement energy conservation projects where feasible as follows:
- 1. Leverage energy alternative financing to prioritize and execute cost-effective projects, including individual projects, installation-wide, portfolio-wide, and cross-component ESPCs [EO 13693 Sec. 3 (k)]; and
- 2. The FLETC may enter into a multiyear contract under this subchapter for a period not to exceed 25 years beginning on the date of the delivery order. FLETC shall not establish policy that limits the maximum contract term to a period shorter than 25 years. Each contract will be reviewed to ensure sound engineering/business contract term limit commensurate with affordable shore facility support priorities (42 U.S.C. Sect. 8287).
- **D.** Implementing programs to ensure energy efficiency in leased, when applicable, and owned buildings as follows:
- 1. Complete, for each calendar year, a comprehensive energy and water evaluation of approximately 25 percent of the covered facilities of each agency that meet the criteria under paragraph (2)(B) of Section 432 of EISA 2007. Each evaluation will be completed in a manner that ensures that an evaluation of each such facility is completed at least once every four years and follow up with implementation (EISA 2007 Section 432);
- 2. Promote building energy conservation, efficiency, and management by reducing agency building intensity measured in British thermal units per gross square foot by "2.5 percent annually through the end of FY 2025, relative to the baseline of the agency's building energy use in FY 2015 and taking into account agency progress to date" (EO 13693);
- **3.** For new construction, ensure energy efficiency is 30 percent better than the current ASHRAE 90.1 standard, or for modernization, ensure
 - **a.** Energy use is 20 percent below the FY 2015 energy use baseline, or
 - **b.** Energy use is 30 percent below the FY 2003 energy use baseline, or
 - **c.** The building has an Energy Star TM rating of 75 or higher, or

d. For building types not in Energy Star Portfolio Manager, where adequate benchmarking data exists, the building is in the top quartile of energy performance for its building type, and

For new construction and modernization, use energy efficient products, as required by statute. (Guiding Principles for Sustainable Buildings);

- **4.** Include design requirements for new facilities and major renovations requiring that fossil fuel consumption, relative to a similar facility's consumption in 2003, be reduced by: 65% in 2015, 80% in 2020, 90% in 2025, and 100% in 2030 (EISA 2007 Sect. 433);
- **5.** Include, with certain exceptions specified by statute, a requirement in lease actions that the facility have received the Energy Star Building TM label within the 12-month period prior to entering into a lease (EISA 2007 Sect. 435); and
- **6.** Ensure that, at a minimum, building electric energy and thermal energy shall be clean energy, accounted for by renewable electric energy and alternative energy [EO 13693 Sec. 3 (b)]:
 - a. Not less than 10 percent, FY 2016 and FY 2017.
 - **b.** Not less than 13 percent, FY 2018 and FY 2019.
 - c. Not less than 16 percent, FY 2020 and FY 2021.
 - **d.** Not less than 20 percent, FY 2022 and FY 2023.
 - e. Not less than 25 percent, FY 2025 and each year thereafter.
- **E.** Using solar hot water, "if lifecycle cost-effective, as compared to other reasonable available technologies, not less than 30 percent of the hot water demand for each new federal building or federal building undergoing a major renovation be met through the installation and use of solar hot water heaters." (EISA 2007- Section 523).
 - **F.** Improving FLETC fleet and vehicle efficiency by:
- 1. Optimizing fleet inventory with emphasis placed on eliminating unnecessary or non-essential vehicles from the agency's fleet inventory [EO 13693 Sec.3 (g) (i)];
- **2.** Taking actions that reduce fleet-wide per mile greenhouse gas (GHG) emissions for agency fleet vehicles, relative to a baseline of emissions in FY 2014, to achieve the following percentage reductions [EO 13693 Sec.3 (g) (ii)];
 - **a.** Not less than four percent by the end of FY 2017.
 - **b.** Not less than 15 percent by the end of FY 2021.
 - c. Not less than 30 percent by the end of FY 2025.
- **3.** Planning for agency fleet composition such that by December 31, 2020, zero emissions vehicles or plug-in hybrid account for 20 percent of all new agency passenger vehicle acquisitions and by December 31, 2025, zero emissions vehicles or plug-in hybrid account for 50 percent of all new agency passenger vehicles and including, where practicable, acquisition of such vehicle classes and counting double credit towards the targets in this section for such acquisitions [EO 13693 Sec.3 (g) (v)]; and

- **4.** Planning for appropriate charging or refueling infrastructure or other power storage technologies for zero emission vehicles or plug-in hybrid vehicles [EO 13693 Sec. 3 (g) (vi)].
- **G.** Implementing programs to improve water use efficiency and management, including storm water management by:
- **1.** Reducing potable water consumption intensity 2% annually through FY 2025, or 36% by the end of FY 2025, relative to a FY 2007 baseline [EO 13693 Sec.3 (f) (i)];
- **2.** Installing water meters and collecting building and facility water balance data to improve water conservation and management [EO 13693 Sec.3 (f) (ii)] and;
- **3.** Reducing agency industrial, landscaping, and agricultural (ILA) water consumption measured in gallons by 2% annually, or 30% by the end of FY 2025, relative to a FY 2010 baseline [EO 13693 Sec. 3 (f) (iii)].

VII. ATTACHMENTS:

- **A**. Attachment 1, Definitions.
- **B**. Attachment 2, Environmental Management of Building Spaces Temperature Guidance.
 - **C**. Attachment 3, Temperature Settings.

DEFINITIONS (Required and related definitions used in this manual):

- 1. **Benchmarking** is the practice of accounting for and comparing a metered building's current energy performance with its energy baseline or historical performance, or comparing a metered building's energy performance with the energy performance of similar types of buildings. (DOE Federal Building Energy Use Benchmarking Guidance, August 2014 Update)
- **2. Benchmarked Building** is a building in which complete building square footage and energy consumption and water data has been entered in Energy Star Portfolio Manager for at least 12 consecutive months. (DOE Federal Building Energy Use Benchmarking Guidance, August 2014 Update)
- **3. Commissioning,** with respect to a facility, means a systematic process ensuring, using appropriate verification and documentation, during the period beginning on the initial day of the design phase of the facility and ending not earlier than one year after the date of completion of construction of the facility, that all facility systems perform interactively in accordance with
 - a. the design documentation and intent of the facility; and
 - b. the operational needs of the owner of the facility, including preparation of operation personnel.

The primary goal of commissioning is to ensure fully functional systems that can be properly operated and maintained during the useful life of the facility. (Energy Independence and Security Act (EISA) Section 432 Subsection (f))

- 4. Continuous Commissioning is a comprehensive ongoing commissioning process to resolve operating problems, improve comfort, optimize energy use and identify retrofits for existing buildings and central plan facilities. This process focuses on improving overall system control and operations for the building as it is currently used and meeting existing facility needs. It goes beyond an operations and maintenance program, including a comprehensive engineering evaluation that develops operational parameters and schedules to meet occupant needs. (DOE Office of Energy Efficiency & Renewable Energy)
- 5. Covered Facilities or Covered Buildings means at a minimum, federal facilities, including central utility plants and distribution systems and other energy intensive operations that constitute at least 75 percent of facility energy use at each agency. (EISA Section 432 Subsection (f))
- **6. Energy Baseline** is an initial 12-month period of metered energy consumption used as a point of reference for comparison purposes. (DOE Federal Building Energy Use Benchmarking Guidance, August 2014 Update)
- **7. Energy Manager**, with respect to a facility, means the individual who is responsible for ensuring compliance by the facility and reducing energy use at the facility. (EISA Section 432 Subsection (f))

- 8. Energy Savings Performance Contract (ESPC) is a partnership between a federal agency and energy service company (ESCO). The ESCO conducts a comprehensive energy audit of federal facilities and identifies improvements to save energy. In consultation with the federal agency, the ESCO designs and constructs a project that meets the agency's needs and arranges the necessary funding. The ESCO guarantees that the improvements will generate energy cost savings to pay for the project over the term of the contract (up to 25 years). After the contract ends, all additional cost savings accrue to the agency. (DOE Office of Energy Efficiency & Renewable Energy)
- **9. Energy Star Portfolio Manager** is the building energy use benchmarking system that DOE has selected to use for metered buildings that are, or are part of, covered facilities. (EISA Section 432 Subsection (f))
- 10. Greenhouse Gases (GHGs) mean carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen triflouride, and sulfur hexafluoride (Executive Order (EO) 13693 Sec. 19 (m))
- 11. Indoor Air Quality is the nature or air inside the space that affects the health and well-being of building occupants. (U.S. Green Building Council)
- 12. Life Cycle Cost-Effective means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product) (EO 13693 Sec. 19 (n))
- 13. Leadership in Energy and Environmental Design is a voluntary, consensus based market-driven program, developed by the United States Green Building Council, that provides third party verification of green buildings.
- **14. Net-Zero Building** means a building that is designed, constructed, or renovated and operated such that that actual source energy consumption is balanced by on-site renewable energy. (EO 13693 Sec. 19 (o))
- 15. Operations and Maintenance refers to all scheduled and unscheduled actions for preventing equipment failure or decline with the goal of increasing efficiency, reliability, and safety.
- **16. Recommissioning** means a process of commissioning a facility or system beyond the project development and warranty phases of the facility or system; and the primary goal of which is to ensure optimum performance of a facility, in accordance with the design or current operating needs, over the useful life of the facility, while meeting building occupancy requirements. (EISA Section 432 Subsection (f))
- 17. Renewable Electric Energy means energy produced by solar, wind, biomass, landfill, gas, ocean (including tidal, wave, current, and thermal), geothermal, geothermal heat pumps, micro turbines, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project. (EO 13693 Sec. 19 (v))

- 18. Renewable Energy Certificates or Credits means the technology and environmental (non-energy) attributes represent proof that one megawatt-hour of electricity was generated from an eligible renewable energy resource, that can be sold separately from the underlying generic electricity with which they are associated, and was produced by sources of renewable energy placed into service within 10 years prior to the start of the fiscal year. (EO 13693 Sec. 19 (u))
- **19. Resilience** means the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions (EO 13693 Sec. 19 (w))
- **20. Retro-commissioning** means a process of commissioning a facility or system that was not commissioned at the time of construction of the facility or system. (EISA Section 432 Subsection (f))
 - 21. Scorecard Metrics are quarterly reported energy and sustainability related metrics.
- **22. Storm water Runoff** refers to water volumes that are created during precipitation events and that flow over surfaces into sewer systems or receiving water. All precipitation waters that leave project site boundaries on the surface are considered to be storm water runoff volumes. (U.S. Green Building Council)
- 23. Sustainability is the concept of living within limits and understanding the interconnections among economy, society and the environment. Sustainability is important to making sure that we have and will continue to have, the water, materials, and resources to protect human health and our environment.

24. Scope 1, 2 and 3 means

- a. Scope 1 are direct greenhouse gas emissions from sources that are owned or controlled by the agency. (EO 13693 Sec. 19 (x) (i))
- b. Scope 2 are direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by the agency. (EO 13693 Sec. 19 (x) (ii))
- c. Scope 3 are greenhouse emissions from sources not owned or directly controlled by an agency but related to agency activities such as vendor supply chains, delivery and transportation services, and employee travel and commuting. (EO 13693 Sec. 19 (x) (iii))
- **25. Plug-in hybrid** is a hybrid electric vehicle which utilizes rechargeable batteries, or another energy storage device, that can be restored to full charge by connecting a plug to an electric power source.
- **26. Potable Water** is water suitable for drinking and supplied from wells or municipal water system. (U.S. Green Building Council)
- **27. Metered Building** is a building with one or more meters (advanced or standard) installed to measure energy consumption within that building. Metered energy includes electricity, natural gas, and steam. Other utilities may be metered as an energy or water management practice. (EISA Section 432 Subsection (f))

Attachment 1

- **28. Utility Energy Services Contract** is a limited-source contract between a federal agency and serving utility for energy management services including energy and water efficiency improvements and demand-reduction services.
- **29.** Water Balance means a comparison of water supplied to a defined system to the water consumed by the system in order to identify the proportion of water consumed for specific end uses and ensure potential water leaks in the system are addressed. (EO 13693 Sec. 19 (z))
- **30. Zero Emission Vehicle** means a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operation modes or conditions. (EO 13693 Sec. 19 (aa))

DEPARTMENT OF HOMELAND SECURITY FEDERAL LAW ENFORCEMENT TRAINING CENTERS (FLETC)

Environmental Management of Building Spaces – Temperature Guidance

I. GUIDANCE:

- A. Portable space heaters are high-energy consumers and a fire safety concern and are prohibited from use. Portable space heaters also interfere with the efficiency and effectiveness of Building Automation System (BAS) automatic temperature controls.
- B. Temperatures shall conform to the indicated temperature levels and operating practices in order to maximize energy efficiency while not sacrificing staff/student comfort and productivity. These temperatures shall be maintained throughout the FLETC, regardless of outside temperatures, during the hours of operation specified.
- C. Thermostats not connected to FLETC's BAS system shall be secured from unrestricted manual operation. In these cases, Facilities Management Division (FMD) Operations Branch will either install thermostats that limit an occupant's temperature adjustment or secured boxes. Where secured boxes are installed, a key shall be maintained by each site's facilities office.
- D. Simultaneous heating and cooling is not permitted except for humidity control. A dead band, defined as a temperature range in which neither heating nor cooling is turned on, shall be established between heating and cooling zones. The target for a dead band is 5° or as close to this target as possible.
- E. Areas having excessive heat gain or heat loss, or affected by solar radiation at different times of the day, can be independently controlled. Any building parameters requiring settings different from those prescribed in this document shall require approval and documentation by the FLETC Energy Manager or Environmental and Safety (ESD) Division Chief (or designee).
- F. Areas that cannot be categorized into one of the areas described in Attachment #3 shall be controlled independently. Any building parameters differing from those indicated shall be approved and signed off by the FLETC Energy Manager or ESD Division Chief (or designee).
- G. Temperature set point ranges for all buildings controlled by FLETC's BAS system will be checked at least quarterly by the FLETC Energy Manager to validate that the systems are set and operating at the prescribed temperatures.
- H. Special Zone Control. Areas which routinely have extended hours of operation shall be environmentally controlled through dedicated heating and air conditioning equipment. Special purpose areas (such as photocopy centers, large conference rooms, computer rooms, etc.)

with an internal cooling load in excess of five tons shall be independently controlled. Concealed package air conditioning equipment shall be provided to meet localized spot cooling of tenant special equipment. See the FLETC Energy Manager or ESD Division Chief (or designee) for a listing of these special zone control areas.

- I. At each site, many thermostats in offices, classrooms and training areas are centrally controlled via BAS Direct Digital Control system for efficient and accurate temperature settings. (See Attachment #3 for temperature settings). In some instances, you may make slight manual adjustments to these controls if your workspace is too warm or cool. Likewise, "occupied" times may be adjusted to accommodate extended training and/or variations to typical training/working schedules.
- 1. To override the "unoccupied" setting, press the button on the thermostat. Pressing the button once will switch the system to "occupied" mode for 30 minutes. The button can be pressed a maximum of 3 times for a total of 90 minutes.
- 2. To increase or decrease the settings by about 2 Degrees Fahrenheit (°F): Move the slider bar to the top of the thermostat to increase the heating and cooling set points by 2°F. Move the slider bar to the bottom of the thermostat to decrease the set points by 2°F.
- J. Spaces without controls are considered "occupied" from 6:00 a.m. 6:00 p.m. Monday through Friday. The occupied target temperature is 68 °F to 70 °F for heating and 73 °F to 75 °F for cooling. The "unoccupied setback" temperature is 60 °F for heating and 84 °F for cooling. Physical training, practical exercise and cafeteria spaces will have customized "occupied" times due to their specialized functions.
- K. For the design of new buildings and operation/maintenance of existing buildings, the relative humidity target for all controlled spaces is 60 % or less.
- L. For firing ranges, air handling units (AHUs) are turned off during "unoccupied" hours, but humidity levels are monitored. The firing ranges' AHUs will come off unoccupied setback if the humidity set points are reached and will continue to operate until the building humidity is within the required parameter. The AHUs will come on for two hours when firing ranges enter "occupied" mode outside of regular "occupied" hours. The office spaces within the firing range buildings will operate per the prescribed "Office/Administrative Spaces" parameters.

FLETC - Facility Energy Conservation Program Environmental Management of Building Spaces-Temperature Settings (In Degrees Fahrenheit (°F))

6 a.m. – 6 p.m. Weekdays	Keeps temperature above 70°F	Keeps temperature below 74°F
6 p.m. – 6 a.m. 7 Days a Week	Keeps temperature above 60°F	Keeps temperature below 84°F
6 a.m. – 6 p.m. Weekdays	Keeps temperature above 70°F	Keeps temperature below 74°F
6 p.m. – 6 a.m. 7 Days a Week	Keeps temperature above 60°F	Keeps temperature below 84°F
6:00 a.m. – 10:00 p.m. Weekdays	Keeps temperature above 68°F	Keeps temperature below 74°F
	Keeps temperature above 60°F	Voors torresponding holony 949E
10:00 p.m. – 6:00 a.m. 7 Days a Week		Keeps temperature below 84°F
		Keeps temperature below 64 F
		Keeps temperature below 84 F
	Keeps temperature above 68°F	Keeps temperature below 84 F Keeps temperature below 74°F

Cafeteria Space –	Use Building Specific Data for These T	ime Settings
Setting		
Occupied 5:00 a.m. – 9:00 p.m. Weekdays/Training Days Weekends/Holidays	Keeps temperature above 70°F	Keeps temperature below 74°F
Unoccupied Setback 9:00 p.m. – 5:00 a.m. 7 Days a Week	Keeps temperature above 60°F	Keeps temperature below 84°F
Auditorium Space	es	
Setting		
Occupied 6:00 a.m.–6:00 p.m. Weekdays	Keeps temperature above 70°F	Keeps temperature below 74°F
Unoccupied Setback 6:00 p.m.–6:00 a.m. 7 Days a Week	Keeps temperature above 60°F	Keeps temperature below 84°F
Firing Ranges - APA	PLIES TO RANGE AREAS & NOT O	FFICE SPACE IN THE RANGE BUILDINGS
Setting		
Occupied 6:00 a.m.–6:00 p.m. Weekdays	Keeps temperature above 65°F	Keeps temperature below 74°F
Unoccupied Setback 6:00 p.m.–6:00 a.m. 7 Days a Week	See Paragraph L.	See Paragraph L.
Dormitories		
Setting		
Occupied Setbacks to be managed by room occupancy sensors	Keeps temperature above 70°F	Keeps temperature below 74°F
Unoccupied Setback Setbacks to be managed by room occupancy Sensors	Keeps temperature above 65°F	Keeps temperature below 79°F

Attachment 3

Miscellaneous Spaces						
Setting						
Occupied 6:00 a.m.–6:00 p.m. Weekdays	Keeps temperature above 70°F	Keeps temperature below 74°F				
Unoccupied Setback 6:00 p.m.–6:00 a.m. Weekdays	Keeps temperature above 60°F	Keeps temperature below 84°F				
6:00 p.m.–6:00 a.m. 6:00 a.m.–6:00 p.m. Weekends/Holidays						