DEPARTMENT OF THE NAVY
NAVAL AIR STATION
22268 CEDAR POINT ROAD
PATUXENT RIVER, MARYLAND 20670-1154

NASPAXRIVINST 11380.3C
N4
6 Oct 2016

NAS PATUXENT RIVER INSTRUCTION 11380.3C

From: Commanding Officer, Naval Air Station Patuxent River

Subj: Heating, Ventilation and Air Conditioning

Ref: (a) Energy Independence and Security Act of 2007
(b) Secretary of the Navy Shore Energy Policy Memo of 1 Dec 11

Encl: (1) Waiver Request Form

1. Purpose. To establish policy regarding use of existing Heating, Ventilation & Air Conditioning (HVAC) systems and set guidelines for utilization.

2. Cancellation. NASPAXRIVINST 11380.3B

3. Scope. Applicable to all personnel residing/working aboard Naval Air Station (NAS) Patuxent River.

4. Background.

a. All Navy commands were tasked by reference (a) to achieve overall reduction in energy consumption. The most effective manner to achieve the reduction during the spring and summer months is through strict control of HVAC systems. Excessive use of HVAC systems wastes significant amounts of electricity, natural gas, oil, or propane and must be curtailed where possible.

b. Reference (b) outlines the Secretary of the Navy's (SECNAV) guidance for shore installations. SECNAV established short and long-term actions to reduce energy usage while continuing to meet mission requirements.

5. Action.

a. Use of Existing Systems:

(1) When HVAC systems are activated to support operation of electronic or other equipment, temperature settings will be no lower or higher than those specified by the equipment manufacturer to maintain adequate operating conditions. During unoccupied times, if applicable, systems will be placed in a setback mode which consists of lower (heating) or higher (cooling) temperature of no lower than 57 degrees for heating and no higher than 85 degrees for cooling.

(2) HVAC systems will be operated outside of parameters specified in this instruction for personal health reasons only when the need and the appropriate temperature requirements have been certified by proper medical authority.

(3) Air conditioning (Cooling) for personal comfort will not be used when satisfactory environmental control (temperature and humidity) requirements (a temperature no cooler than 78°F and a maximum Relative Humidity of 60%) can be achieved by other means such as using outside air, drawing blinds to reduce heat gain, securing air conditioning compressors, and using fans to circulate outside air. Thermostats will be set to achieve the environmental control requirements. Where environmental control is not available, systems shall only be operated to achieve comparable environmental conditions. Environmental control settings on central systems will be setback for the maximum efficiency when spaces are unoccupied, over a weekend or longer periods of time. Smaller packaged units and individual window units will be turned off one-half hour before the end of the work day and whenever spaces are unoccupied for any extended period of time.

(4) Heating for personal comfort will not be used when satisfactory environmental control (temperature and humidity) requirements (a temperature no warmer than 68°F and a minimum Relative Humidity of 30 percent) can be achieved by other means such as opening blinds to for heat gain, closing doors, and using fans to circulate air. Thermostats will be set to achieve the environmental control requirements. Where environmental control is not available, systems shall only be operated to achieve comparable environmental conditions. Environmental control settings on central systems will be setback for the maximum efficiency when spaces are unoccupied, over a weekend or longer periods of time. Smaller packaged units and individual heater units (where authorized by Public Works Department (PWD) and Fire Department) will be turned off one-half hour before the end of the work day and whenever spaces are unoccupied for any extended period of time.

(5) Process for documenting facility environmental control (temperature and humidity) requirements:

(a) Each Building Energy Monitor (BEM) will work with the Facility Coordinator and building leadership to document and maintain their requirements for every space in their facilities utilizing a spreadsheet tool at the following link:

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(b) All environmental controls requirements deviating from the standard must be justified for each space. Any required waivers for temperature setting will be forwarded by Public Works Officer (PWO) for approval by the Installation Commanding Officer (ICO). Enclosure (1) will be used to request any waiver of temperature settings and will document

where the required temperatures deviate. The spreadsheet tool can be used to provide the supplemental documentation for temperature and humidity requirements for each space. Please note spaces requiring deviation on the spreadsheet by highlighting them. Justification for deviation shall be noted on waiver form.

(c) The Installation Energy Manager (IEM) will review each document for completeness prior to forwarding to PWO for further review and approval by Installation Commanding Officer.

(d) This documentation will be used by the Base Operating Support Services (BOS) contractor to set your HVAC system temperatures.

(6) Timeframe for reviewing and submitting environmental controls (temperature and humidity). It is recommended that requests be submitted two months prior to seasonal changeover. Specific seasonal changeover times are listed below but typically occur in November and April.

(a) Heating to Cooling (Spring): Secure heat when the extended forecast (7 day) indicates warming trends of five consecutive days with highs above 65 degrees and lows above 55 degrees.

(b) Cooling to Heating (Fall): Heat should be turned on when the extended forecast (7-10 day) indicates cooling trends of five consecutive days with highs below 65 degrees and lows below 55 degrees.

(7) If the environmental control (temperature and humidity) requirement is not met by the mechanical systems, then a service request is required to take corrective action. This service request will be used by Public Works to identify system problems that require repairs or corrections to the design.

b. New Installation. All HVAC system installations require review and approval by the (PWO). Activities will not procure, install, or relocate HVAC systems or smaller package systems without approval.

c. Inventory Control. PWD will maintain a complete inventory of all HVAC systems and smaller package unit equipment that will include size, type, location, identifying/control number, etc., and will install identifying/control markings on each unit. All maintenance, repair, improvement and relocation will be controlled by PWD. Any action by other than PWD to modify, relocate, etc., will result in PWD disclaiming responsibility for any air conditioning equipment not on current inventory.

d. Typical HVAC systems and design temperature settings.

Window Air Conditioners	68 heating	78 cooling
Packaged Terminal Air Conditioners	68 heating	78 cooling
Split System	68 heating	78 cooling
Variable Refrigerate (VRF)	68 heating	78 cooling
Roof Top Units (RTU)	68 heating	78 cooling
Chilled Water (2 pipe)	68 heating	78 Cooling
Chilled Water (4 pipe)	72-76 band always	
GSHP	72-76 band always	

NOTE: Typical humidity range is 30-50 percent for systems designed in ASHRAE 90.1-2007 zone 4a. If control of humidity is not part of system operation, temperature settings along with augmented humidity measurement devices may be required to achieve required results for health and comfort.

6. Review Authority. The PWO shall review this instruction annually, making changes as necessary.

S. B. STARKEY

Releasability and distribution:
This instruction is cleared for public release and is available electronically only via
https://directives.navair.navy.mil
https://g2.cnic.navy.mil//CC/Documents/Forms/Directives%20Only.aspx
https://g2.cnic.navy.mil/NASPATUXENTRIVERMD/SitePages/Home.aspx

NASPAXRIVINST 11380.3C
30 Sep 2016

From: **(Tenant Command Name and Competency)**
To: Public Works Officer, NAS Patuxent River

Subj: WAIVER REQUEST FOR CHANGE TO HVAC TEMPERATURE SETTING STANDARDS

Ref: (a) NASPAXRIVINST 11380.3C

1. In accordance with reference (a), **(Tenant Command Name and Competency)** are requesting a waiver to the temperature settings in reference (a) for Building **####.**

2. The following is a list of room ID's/type of use, heating/cooling temperature and humidity percentage heating/cooling required for our operational parameters:

Example: Room 100/office, 68/78, 30%/50%
Note: That the spreadsheet used in the instruction can be attached as support documentation to this request.

3. Justification: **Please note the details of why you are requesting a deviation away from temperature standards and any corrective actions underway to resolve problem.**

4. My point of contact for further information is **(Name, phone number and email)**

5. Reviewers and Approval

Reviewer: IEM Name _____

Signature _____ Date_____

Reviewer: PWO Name _____

Signature _____ Date_____

Approval: ICO Name_____

Signature _____ Date_____

Copy to:
Installation Energy Manager
Base Operating Support Services Contract Manager

Enclosure (1)