## BY ORDER OF THE COMMANDER LAUGHLIN AIR FORCE BASE



LAUGHLIN AIR FORCE BASE INSTRUCTION 32-1005 22 JANUARY 2020 Certified Current 18 APRIL 2024

Civil Engineering

**COOLING/HEATING POLICY** 

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This instruction establishes the criteria for determining when the Civil Engineer Squadron (CES) will activate and deactivate the heating and air conditioning system in industrial facilities and living quarters (dormitories). Secondly, this instruction establishes the authorized temperature ranges for all base facilities. Adhering to the temperature ranges will result in conserving electricity and natural gas, thereby reducing the cost of these utilities for the base. This instruction also identifies those facilities that, due to operational necessity, are exempted from the normal criteria for having heating or cooling systems and temperature ranges. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <a href="https://www.my.af.mil/gcss-af61a/afrims/afrims/.Refer\_recommended">https://www.my.af.mil/gcss-af61a/afrims/afrims/.Refer\_recommended</a> changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional chain of command.

#### **SUMMARY OF CHANGES**

There were two buildings added for exemption. The Security Forces (Building 139) and Communications Squadron (Building 348) were attached in Appendix 2. The Appendix 2 was reworked to better show the exemption breakdown and received a few administrative edits.

#### 1. Background.

- 1.1. Per Executive Order 13693, Laughlin AFB must reduce electrical and natural gas consumption by 2.5 percent each year. Heating and cooling account for a major portion of the electricity and gas consumed by the base.
- 1.2. This instruction addresses two key components of energy conservation. One is to maintain thermostats at a prescribed temperature and the other is to temporarily turn off chillers and boilers during the "No Heat No Cool" (NHNC) seasons. NHNC occurs in the spring and fall when temperatures are mild enough that neither cooling nor heating is required. The NHNC program has been used by DoD and the USAF for many years and it is integral to saving energy.

## 2. Responsibilities.

- 2.1. The 47 FTW/CC is responsible for approving the list of the facilities exempt from this instruction.
- 2.2. The 47 CES/CC, with 47 MSG/CC concurrence, is responsible for:
  - 2.2.1. Directing the date to initiate and conclude NHNC.
  - 2.2.2. Making adjustments, as the mission requires, to NHNC implementation due to weather anomalies.
- 2.3. The 47 CES/CENPE (Base Energy Manager) is responsible for:
  - 2.3.1. Monitoring the weather forecasts during the spring/fall transition seasons and comparing those forecasts to the criteria for initiation and conclusion of the NHNC seasons.
  - 2.3.2. Recommending to the 47 CES/CC when to initiate and conclude the NHNC seasons.
  - 2.3.3. Preparing and distributing announcements when the base initiates and concludes NHNC.
  - 2.3.4. Spot-checking facilities to verify compliance with this instruction.
  - 2.3.5. Periodically reviewing the list of facilities on the exemption list and presenting proposed changes to the Energy Management Steering Group (EMSG) for recommendation to the 47 FTW/CC for approval.
  - 2.3.6. Recommending to the 47 CES/CC alternative actions during weather anomalies.
- 2.4. Facility Managers are responsible for:
  - 2.4.1. Informing their facility occupants of the established temperature ranges for the air conditioning and heating seasons.
  - 2.4.2. Informing their facility occupants at the start and end of the NHNC season to activate/deactivate locally controlled heating and cooling systems.
  - 2.4.3. Spot-checking their facilities for compliance with this Instruction, especially identifying temperature set point or space heater violations.

2.4.4. Submitting a request to the 47 CES/CENPE for inclusion/removal of a facility from the exemption list when necessary.

## 3. Cooling Season.

- 3.1. During the cooling season, facility managers must check that thermostats are set correctly.
- 3.2. Administrative and shop spaces are to be kept at a minimum of 76° Fahrenheit when occupied and 84° Fahrenheit when not occupied. "Not occupied" refers to non-duty hours. EMCS will shut-down all systems that are not in the Exemption List in non-duty hours unless otherwise approved by the Energy Manager.
- 3.3. Warehouse and hangar bays are not to be cooled.

### 4. Heating Season.

- 4.1. During the heating season, facility managers must check that thermostats are correctly set.
- 4.2. Administration spaces are to be kept at a maximum of 68° Fahrenheit when occupied. When unoccupied thermostats should be set to 50° Fahrenheit.
- 4.3. Shop spaces are to be kept at a maximum of  $65^{\circ}$  Fahrenheit when occupied and a maximum of  $50^{\circ}$  Fahrenheit when unoccupied. EMCS will shut-down all systems that are not in the Exemption List in non-duty hours unless otherwise approved by the Energy Manager.
- 4.4. Warehouse and hangar bays with heating capability are to be kept at a maximum of  $60^{\circ}$  Fahrenheit when occupied.

#### 5. No Heat – No Cool (NHNC).

- 5.1. The fall NHNC season will begin and cooling season will end when the extended forecast shows four consecutive days with low temperatures below 55° Fahrenheit and no high temperatures above 80°. Fall NHNC will end and heating season will begin when the temperature is forecasted to have lows below 45° Fahrenheit and highs below 60° Fahrenheit for four consecutive days. During the fall NHNC, exempted facilities will continue to operate in cooling mode.
- 5.2. The spring NHNC season will begin and heating season will end when the extended forecast shows four consecutive days with high temperatures above 68° Fahrenheit and low temperatures above 45° Fahrenheit. Spring NHNC will end and cooling season will begin when the temperature is forecasted to have highs above 80° Fahrenheit for four consecutive days. During the spring NHNC, exempted facilities will continue to operate in heating mode.

### 6. Exempted Facilities.

- 6.1. The 47 CES/CENPE maintains the exemption list. Requests for exemption should be submitted in letter format from the Unit Commander of the building in question to 47 CES/CENPE. The letter should contain the regulation requiring a temperature and the specific area. An excerpt of the applicable regulation should be attached. 47 CES/CENPE will compare the request to the criteria in paragraph 5.2. He or she will then make a recommendation to the Wing Commander at the next EMSG meeting. The exemption list is found in Attachment 2.
- 6.2. Entire facilities are not normally exempt. Rooms qualify for exemption if they meet one of the following criteria:
  - 6.2.1. Sleeping Quarters
  - 6.2.2. Enclosed Network/Communications Rooms
  - 6.2.3. Technical Order or AFI requirement
  - 6.2.4. Fitness Center
- 6.3. Rooms on the exemption list will not be subject to the NHNC season.
- 6.4. It should be noted that some facilities, although exempt, cannot provide heating and cooling simultaneously due to system construction. In this case, if a facility is transitioned from heating to cooling, but temperatures are cool in the morning, heat will not be available because the mechanical equipment was physically switched to cooling.
- 6.5. Dormitory, Visitor Quarters (VQ), Unaccompanied Officer Quarters (UOQ), Duplex and TLFS residents have individual room temperature controls. Residents are asked to comply with the established temperatures. For heating, maintain thermostat at 68° Fahrenheit. For cooling, maintain the thermostat at 76° Fahrenheit. Doors and windows should be closed when heating and cooling the residence.

#### 7. Space Heaters.

7.1. Space heaters can mask underlying HVAC issues, allowing these issues to continue to make occupants uncomfortable and waste energy. Therefore, it is in everyone's best interest to notify CES of all space heaters. By tracking trends in space heater use, CES can develop projects to investigate and repair ongoing problems. Facility Managers shall provide to the 47 CES/CENPE upon request a current list of all space heaters in use and their precise locations within the building. The Energy Manager will request such lists from all Facility Managers at least once per year but may do so more often as needed to pinpoint problems.

## 8. Recommending Changes to Cooling/Heating Policy.

8.1. Cooling/Heating Policy is managed by the EMSG. The 47 FTW/CC is responsible for approving the list of the facilities exempt from this instruction. Recommended changes to Cooling/Heating Policy should be submitted in letter format to the 47 CES/CENPE. 47 CES/CENPE, with approval from the 47 CES/CC, may make minor adjustments to the Cooling/Heating policy in the spirit of energy conservation, as long as the mission is not negatively affected and personnel comfort is only minimally impacted.

LEE G. GENTILE, JR., Colonel, USAF Commander

# **Attachment 1**

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

# Prescribed Forms

No Forms or IMTs prescribed by this publication

# Adopted Forms

AF Form 847, Recommendation for Change of Publication

#### **Attachment 2**

#### **EXEMPTION LIST**

**A2.1.** All of the facilities in the table below are exempt from NHNC. The portion of the building exempted is listed in the third column. The fourth and fifth columns indicate whether the facility is on the standard set points indicated in **paragraphs 3** and **4** above or whether it is on approved alternate set points for cooling/heating. In some cases, a facility is exempt from No Heat or from No Cool but not both; these cases are indicated in the fifth column. Notes are explained following the table.

Figure A2.1. Exemption from NHNC.

Bldg	Name	Portion of Building	Std Set	Alt Set	Notes
		Exempted	Points?	Points	
7	Contracting	Server Room only		75°/not	
				exempt	
8	Fuels	Lab Room only	<b>✓</b>		
33	Corrosion Control	Painting Bays only		76°/60°	1
	Hangar				
51	Corrosion Control Paint	Bay Area only		not	
	Barn			exempt/60°	
52	NDI Shop	NDI SOAP Lab only		74°/69°	
53	Fuels Maintenance Dock	Fuel Maintenance Bay &		76°/60°	1
		Repair Room only			
68	ERRC	Balancing Shop		75°/68°	
68	ERRC	Bearing Room		76°/70°	
77	Logistics	Supply Server Room only		75°/not	
				exempt	
100	Civil Engineer	Server Room only		75°/not	
				exempt	
139	Security Forces	Kennel Area only	✓	78°/60°	
139	Security Forces	All, excluding Kennel	✓	75°/68°	
		Area			
190	Flight Shack	All	✓		
201	Egress Shop	Canopy Area only		74°/65°	2
211	Component Repair Shop	Avionics Shop	<b>√</b>		
211	Component Repair Shop	PMEL Lab		73°/73°	
212	Flight Shack T-38 Flight	All	<b>√</b>		

	Line				
216	Flight Shack T-1	All	<b>√</b>		
220	Fire Station	Excludes Office and Bay Areas	<b>√</b>		
221	Education Center	Education Test Rooms	✓		3
222	AMOC	MOC and Server Rooms only		75°/not exempt	
223	FSS Network Operations Center	Server Room only		75°/not exempt	

Bldg	Name	Portion of Building	Std Set	Alt Set	Notes
		Exempted	Points?	Points	
241	Network Control Center	Server Room only		68°/not	
				exempt	
246	Force Support	DEERS System Room		75°/not	
		only		exempt	
253	Stripes Enlisted Lounge	All	<b>√</b>		4,5
255	Unaccompanied Enlisted Quarters	All	<b>✓</b>		4,6
256	Unaccompanied Enlisted Quarters	All	<b>√</b>		4,6
307	T-1 Squadron Operations	All	<b>√</b>		
308	Base Ops Weather Station	RAPCON Rooms		76°/not	
	1			exempt	
308	Base Ops Weather Station	Server Room		75°/not	
				exempt	
309	Control Tower	All	<b>✓</b>		
320	Student Training Center	All	<b>√</b>		
328	Simulator Building	Simulator Bays only	<b>✓</b>		
339	OSI/Telephone Center	All	<b>✓</b>		
344	Wing Headquarters	EOC/ECC/CP Rooms	<b>✓</b>		
344	Wing Headquarters	Server Rooms		75°/not exempt	
348	Communications Squadron	Room 22	<b>√</b>	74°	
357	Bowling Center	All		74°/68°	
359	Chapel	All	<b>✓</b>		
362	Fitness Center	All		76°/74°	
375	Clinic	All		73°/73°	

380	Aerospace Physiology	Oxygen Equipment Room only	<b>√</b>		
390	Youth Center	All		74°/74°	
405	Flight Shack T-6 B-Cell	All	<b>✓</b>		
413	Flight Shack T-6 A-Cell	All	<b>✓</b>		
446	Unaccompanied Officer Quarters	All	<b>✓</b>		6
449	Unaccompanied Officer Quarters	All	<b>√</b>		6
450	Unaccompanied Officer Quarters	All	<b>√</b>		6
454	Visitor Quarters	All	<b>√</b>		6
472	Club XL	All	<b>~</b>		5
Bldg	Name	Portion of Building Exempted	Std Set Points?	Alt Set Points	Notes
476	Child Development Center	All		74°/74°	
505	Airfield Lighting Vault	All	<b>✓</b>		
612	North Lariat Runway Control Structure	All	<b>✓</b>		
650	Communication Receiver	All	<b>✓</b>		
651	Communications Site	All	<b>✓</b>		
655	VORTAC	All	<b>✓</b>		
670	South Lariat Runway Control Structure	All	<b>✓</b>		
690	ILS Guide Slope	All	<b>✓</b>		
820	Old CE Readiness	Communication Room only		75°/not exempt	
1700	North Honcho Runway Control Structure	All	<b>√</b>	1	
3016	North Spofford Control Structure	All	<b>√</b>		

3017	South Spofford Control	All	✓		
	Structure				
6002	Localizer 31, NAV Aid	All	<b>✓</b>		
6003	Localizer 13, NAV Aid	All	<b>✓</b>		
6012	ILS Glide Slope	All	<b>✓</b>		
7010	Digital Airport Surveillance Radar (DASR)	All		70°/70°	
13000	NEXRAD Doppler Weather Radar	All		75°/70°	
13001	NEXRAD Doppler Weather Radar	All		75°/70°	
9001- 9005	Visitor Quarters TLFs	All	<b>√</b>		6
9008- 9010	Visitor Quarters TLFs	All	<b>√</b>		6
9200- 9220	Unaccompanied Officer Quarters Duplexes	All	<b>√</b>		6

Note 1: Exempt for cooling only when individuals are completing tasks in PPE suit.

Note 2: Exempt during application of primer or adhesive and the installation of Flexible Linear Shape Charge (FLSC) and Mild Detonating Cord (MDC) only.

Note 3: Exempt only during testing.

Note 4: These facilities are on a central plant and can be in cooling or heating only.

Note 5: Exempt only during dining times and special events coordinated with Energy Manager. Note 6: Living quarters