

COMMISSARY NAME: BELVOIR			
TI#/TICKET#:			
Technician's Name and Company:		Date:	
Sign:			
Commissary Representative:		Unit:	
Sign:			
PM COMPONENT/CHECKS B. CHILLER, reciprocating, air cooled		Serial #:	
		FREQUENCY	Date Last Performed Discrepancy (Y/N)
1	Check unit for proper operation, excessive noise or vibration.	Quarterly	
2	Run system diagnostics test. Record results	Annually	
3	Check and record oil level in sight glass, add oil as necessary.	Quarterly	
4	Check superheat. Adjust as necessary	Annually	
5	Check and calibrate, as required, temperature and pressure gauges for chilled water system.	Annually	
6	Check contactors, sensors and mechanical safety limits.	Annually	
7	Check electrical wiring and connections; tighten loose connections.	Annually	
8	Inspect fan(s) or blower(s) for bent blades of imbalance. Test all condenser fans to insure that all run in balance without excessive vibration.	Annually	
9	Lubricate shaft bearing and motor bearings as required.	Quarterly	
10	Inspect condenser tubes and fins for excessive wear and deterioration.	Annually	
11	Check condenser for obstructions and cleanliness. Clean as necessary. Wash Condenser as necessary, but not less than Semi Annually.	Quarterly	
12	Check set point for proper setting and function.	Annually	
13	Inspect and clean evaporator tubes as needed.	Annually	
14	Have chilled water tested for corrosion inhibitor. Provide copy of analysis and any recommendations.	Annually	
15	Test Compressor Capacity. Measure and Record, Compressor Model Number, Amp Draw and Voltage, suction and discharge pressure, and Suction line temperature and discharge line temperature. Compare against base line. Conduct this Capacity Test in March or April each year.	Annually	
16	Check compressor oil system: -Check and change oil filter as needed -Check oil heater and thermostat -Check all strainers, valves, etc.	Annually	
17	Check compressor crankcase heater for proper operation,	Annually	
18	Inspect all unit control devices and report any defective devices for replacement.	Annually	
19	Test operation of makeup water valve to expansion tank.	Annually	
20	Check for moisture in refrigerant. Replace and Date filter dryers as necessary. Add refrigerant as necessary	Quarterly	
21	Clean chiller and surrounding area.	Quarterly	
22	Fill out maintenance checklist, post on government service order management system and report discrepancies to Commissary Representative	Quarterly	
Discrepancy Comments			

PM COMPONENT/CHECKS C. CONDENSER, air cooled		Serial #		
		FREQUENCY	Date Last Performed	Discrepancy (Y/N)
Primarily applies to the Product Refrigeration System, but also applies to HVAC if				
1	Check with operating or area personnel for deficiencies.	Quarterly		
2	Check unit for proper operation, excessive noise or vibration.	Quarterly		
3	Inspect Condenser and piping and valves for leaks, repair leaks. Add refrigerant as necessary.	Quarterly		
4	Check modulation of fans. Verify that all fans will run and all fans will run on computer control.	Quarterly		
5	Check Variable Frequency Drive (VFD) for proper operations, adjust for proper computer control	Quarterly		
6	Check for refrigerant flood back. Adjust or correct problem as necessary	Quarterly		
7	Clean area around equipment.	Quarterly		
8	Check electrical wiring and connections; tighten loose connections.	Quarterly		
9	Lubricate shaft bearings and motor bearings if applicable	Quarterly		
10	Check belt(s) for condition, proper tension, and misalignment; adjust for proper tensions and/or alignment. Replace as necessary,	Quarterly		
11	Check coil for corrosion and obstructions and cleanliness. Clean and wash condenser coils and blades using a brush, pressurized water and a commercially available foam coil cleaner. Do not use an acid based foam cleaner.	Semi Annual		
12	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS D. AIR-COOLED CONDENSING UNIT		Serial #		
		FREQUENCY	Date Last Performed	Discrepancy (Y/N)
Air-cooled condensing unit serving Product Refrigeration System. Also applies to HVAC				
1	Check with operating or area personnel for deficiencies.	Quarterly		
2	Check unit for proper operation, excessive noise or vibration.	Quarterly		
3	Inspect Condenser and piping and valves for leaks, repair leaks. Add refrigerant as necessary.	Quarterly		
4	Check modulation of fans and low ambient controls. Ensure that all fans will run.	Quarterly		
5	Check Variable Frequency Drive (VFD) for proper operations, adjust for proper computer control	Quarterly		
6	Check for refrigerant flood back. Adjust or correct problem as necessary	Quarterly		
7	Check for Moisture in System. Replace liquid line filter driers as necessary.	Quarterly		
8	Clean area around equipment.	Quarterly		
9	Check electrical wiring and connections; tighten loose connections.	Quarterly		
10	Lubricate shaft bearings and motor bearings if applicable, as needed Quarterly	Quarterly		
11	Check belt(s) for condition, proper tension, and misalignment; adjust for proper tensions and/or alignment. Replace as necessary,	Semi-Annual		
12	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
13	Test Compressor Capacity. Measure and Record, Compressor Model Number, Amp Draw and Voltage, suction and discharge pressure, and Suction line temperature and discharge line temperature. Compare against base line. Conduct this Capacity Test in March or April each year	Annual		
Discrepancy Comments				

PM COMPONENT/CHECKS E. Large Air Handling Unit		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
Air Handlers that have a Main Blower Fan of More than 6 Horsepower.				
1	Check unit for proper operation, excessive noise or vibration. Check controls for proper operation.	Quarterly		
2	Check Variable Frequency Drive (VFD) for proper operations, adjust for proper computer control	Quarterly		
3	Check with operating or area personnel for deficiencies.	Quarterly		
4	Clean area around equipment.	Quarterly		
5	Inspect and verify function of all access hatches, doors and associated hardware etc. Are in proper working order. Check for unusual noise or vibration.	Quarterly		
6	Lubricate shaft bearings and motor bearings if applicable, as needed Quarterly	Quarterly		
7	On Large Air Handlers which contain compressors and or condensers, also complete PM in accordance with Air Cooled Condensing Units and Air Cooled Condensers checklist.	Quarterly		
8	Replace all air filters as necessary but not less than quarterly. Provide pleated type filter in accordance with manufacturer recommendations but not less than MERV 6. Write with ink on filter, date (MM,DD,YYYY) when filter was changed. If the air filter is not replaced, technician will sign and date next to the previous date to verify the filter was inspected.	Quarterly		
9	Check belt(s) for condition, proper tension, and misalignment; adjust for proper tensions and/or alignment. Submit TI for belt replacement if necessary.	Semi Annual		
10	Inspect evaporator drain pan, blower, motor and condensate drain piping. Clean as Necessary.	Semi Annual		
11	Check motor condition temperature and Amp Draw and each Phase to Neutral Voltage and Phase to Phase Voltage. Compare to Motor listed FLA and Service Factor. Indicate on report.	Annual		
12	Check operation and clean dampers, louvers and shutters; lubricate all pivot points and linkages, reconnect or tighten all linkage connections.	Annual		
13	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS		Serial #		
F. Refrigeration Compressor Racks		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Add refrigerant as necessary with heat reclaim on to maintain 30% receiver level Current Receiver Level:	Quarterly		
2	Check for refrigerant flood back. Thermostatic expansion valves must be checked for proper superheat settings. Feeler bulbs must be in positive contact with the suction line and should be insulated. Adjust to correct this problem and indicate this condition in Checklist and coordinate with respective DeCA Field Engineer.	Quarterly		
3	Check oil level for each compressor; clean and adjust floats and reservoir and separator as necessary, add oil as necessary to bring level to bottom 1/4 of the sight glass . Change oil filter as necessary.	Quarterly		
4	Check Suction Pressure Transducer Calibration. Recalibrate as necessary or provide proposal to replace.	Quarterly		
5	Check unit for proper operation, excessive noise or vibration.	Quarterly		
6	Check with operating or area personnel for deficiencies.	Quarterly		
7	Clean area around equipment.	Quarterly		
8	Furnish and maintain a refrigerant logbook in the facility and in compliance with EPA rules but no less than, recording refrigerant transfers, itemize services performed, actions taken, and amount of refrigerant added to, or removed from each system installed. This book shall be maintained up to date. Electronic data can be stored off site but shall not be in lieu of the physical logbook.	Quarterly		
9	Inspect Compressor and Condenser Contactor Contacts.	Quarterly		
10	Review alarm history for recurring problems. Provide written list of suspected problems and solutions.	Quarterly		
11	Check Discharge and Condensing Pressure Transducer Calibration. Recalibrate as necessary or provide proposal to replace.	Semi Annual		
12	Check compressor crankcase heater for proper operation and record Amp Draw.	Semi Annual		
13	Check operation of heat reclaim system, adjust as needed	Semi Annual		
14	Check EPR, SORIT controls for proper operation and setting. Provide record of outlet pressure.	Annual		
15	Check System for Moisture and replace/date liquid line filters when necessary but not less than Annually.	Annual		
16	Perform Compressor Capacity Test. Measure and Record, Compressor Model Number, Amp Draw and Voltage, suction and discharge pressure, and Suction line temperature and discharge line temperature. Compare against base line. Conduct this Capacity Test in March or April each year.	Annual		
17	Test staging and unloading of each compressor. Test Computer Control staging and test backup Manual Conventional Controls (cut-in/cut-out) with Computer Controls powered down. Adjust controls as necessary.	Annual		
18	Verify all refrigerant sniffers and oxygen deprivation sensors are working with exhaust fans.	Annual		
19	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS G. Package Unit, air cooled		Serial #		
		Frequency	Date Last Performed	Discrepancy (N/Y)
For HVAC with main blower of 5 Horsepower or Less. <u>If Larger than 5 Horsepower, perform</u>				
1	Check with operating or area personnel for deficiencies.	Quarterly		
2	Check unit for proper operation, excessive noise or vibration. Check controls for proper operation.	Quarterly		
3	Replace all air filters as necessary but not less than quarterly. Provide pleated type filter in accordance with manufacturer recommendations but not less than MERV 6. Write with ink on filter, date (MM,DD,YYYY) when filter was changed. If the air filter is not replaced, technician will sign and date next to the previous date to verify the filter was inspected.	Quarterly		
4	Furnish and maintain a refrigerant logbook in the facility and in compliance with EPA rules but no less than, recording refrigerant transfers, itemize services performed, actions taken, and amount of refrigerant added to, or removed from each system installed. This book shall be maintained up to date. Electronic data can be stored off site but shall not be in lieu of the physical logbook.	Quarterly		
5	During operation of unit, check refrigerant pressure; repair leaks add refrigerant as necessary.	Quarterly		
6	Inspect Condenser coil monthly. Clean as necessary. Wash coil as necessary, but not less than Semi Annually.	Quarterly		
7	Clean area around equipment.	Quarterly		
8	Lubricate shaft and motor bearings if applicable.	Annual		
9	Check electrical wiring and connections; tighten loose connections.	Annual		
10	Inspect Evaporator coils, evaporator drain pan, blower, motor and condensate drain piping. Clean as Necessary.	Annual		
11	Perform operational check of unit; make adjustments on controls and other components as required	Annual		
12	Add refrigerant as necessary with heat reclaim on to maintain at 20% receiver level. Current Receiver Level:	Annual		
13	Check tension, condition and alignment of belts; adjust or replace as necessary.	Annual		
14	Perform Compressor Capacity Test. Measure and Record, Compressor Model Number, Amp Draw and Voltage, suction and discharge pressure, and Suction line temperature and discharge line temperature. Compare against base line. Conduct this Capacity Test in March or April each year.	Annual		
15	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS		Serial #		
H. Air Conditioning Split System, DX and fan and coil units		Frequency	Date Last Performed	Discrepancy (Y/N)
For Systems that have a Small Air Handler with Main Blower Fans of 5 Horsepower or less.				
1	Check with operating or area personnel for deficiencies.	Quarterly		
2	Replace all air filters as necessary but not less than quarterly. Provide pleated type filter in accordance with manufacturer recommendations but not less than MERV 6. Write with ink on filter, date (MM,DD,YYYY) when filter was changed.	Quarterly		
3	Clean area around equipment.	Quarterly		
4	Inspect Condenser coil quarterly. Clean and wash coil quarterly, but not less than Semi Annually.	Quarterly		
5	Lubricate shaft and motor bearings.	Quarterly		
6	Inspect evaporator drain pan, blower, motor and condensate drain piping. Clean quarterly.	Quarterly		
7	During operation of unit, check and record refrigerant pressure; add refrigerant as necessary.	Quarterly		
8	Check electrical wiring and connections, tighten loose connections.	Annual		
9	Check unit control devices including contactors, thermostats, sensors. Report any defective devices for replacement.	Annual		
10	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS I. Dehumidifier, desiccant wheel		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Check belts for wear and proper tension; adjust or replace as necessary.	Quarterly		
2	Check blower and motor for excessive vibration and noise; adjust or replace as required.	Quarterly		
3	Check blower belt(s) for wear, proper tension and alignment; adjust as required. Replace as required. Lubricate wheel as necessary.	Quarterly		
4	Check gear reducer oil level; add as required.	Quarterly		
5	Check that the regeneration outlet air temperature is within the proper heat range.	Quarterly		
6	Check wheel belt(s) for wear, proper tension and alignment; adjust as necessary. Provide a proposal to replace as necessary in the form of a TI	Quarterly		
7	Check wiring, connections, switches, etc.; adjust or tighten all connections as needed.	Quarterly		
8	Check with operating or area personnel for deficiencies. Check and record Relative humidity in sales area to evaluate functionality of dehumidifier.	Quarterly		
9	Replace all air filters as necessary but not less than quarterly. Provide pleated type filter in accordance with manufacturer recommendations but not less than MERV 6. Write with ink on filter, date (MM,DD,YYYY) when filter was changed.	Quarterly		
10	Clean the equipment and the surrounding area.	Quarterly		
11	Check electrical wiring and connections; make appropriate adjustments.	Annual		
12	Check wheel seals for tears or punctures. Clean the desiccant wheel and check for softening of wheel faces. Check desiccant wheel and motor for vibration and noise, adjust as required.	Annual		
13	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS L. Dual Path AC		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Electrical/Control Compartment: Check for loose wires, discolored components	Quarterly		
2	Burner Section: Check/Ensure burner mount secure/unobstructed	Quarterly		
3	Burner Section: Check Heat exchanger drain line clear; no excessive H ₂ O	Quarterly		
4	Filters Section: Visually inspect. Change filters. Record date of filter change.	Quarterly		
5	Filters Section: Record Magnahelic Gauge PD Reading	Quarterly		
6	Evaporator Section: Inspect Evaporator Coil; clean/unobstructed	Quarterly		
7	Evaporator Section: Drain Pans/Condensate lines clean/unobstructed	Quarterly		
8	Blower Section: Motor Mounts Tight (Blower section is for supply and return blower section.)	Quarterly		
9	Blower Section: Blower Dust Free	Quarterly		
10	Blower Section: Date Blower Bearings lubricated (per door of unit)	Quarterly		
11	Blower Section: Belt Tension Reading	Quarterly		
12	Blower Section: Belt Guard Reinstalled	Quarterly		
13	Economizer Section: Verify dampers/Actuators operating freely; linkages tight	Quarterly		
14	Multizone section: Verify dampers/Actuators operating freely; linkages tight	Quarterly		
15	Condenser Section: Inspect Condenser Coil; clean/unobstructed	Quarterly		
16	Condenser Section: Check fan Mountings secure; Fans unobstructed	Quarterly		
17	Condenser Section: Check compressor mountings are secure.	Quarterly		
18	Condenser Section: Refrigerant sightglasses show proper color	Quarterly		
19	Condenser Section: Inspect condenser coils and remove hail guards for cleaning if necessary.	Quarterly		
20	Condenser Section: Clean Condenser Coils with pressurized air or hot water (Clean from inside condenser section outward using care not to damage coil fins)	Quarterly		
21	Check setscrews on pulleys and blowers are secure	Quarterly		
22	Check Motor Bearings for Dryness	Quarterly		
23	Clean evaporator coils with pressurized air or hot water (Caution should be used so coil fins are not damaged)	Quarterly		
24	Check Cabinet for air leaks	Quarterly		
25	Verify unit panels are secure and undamaged	Quarterly		
26	Check blown fuses or tripped overloads. Replace any blown fuses with fuses of equal amperage and type.	Quarterly		
27	Check unit for casing integrity and security	Quarterly		
28	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS O. Refrigerated Display Cases		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Inspect and verify air flow at each fan. Report and defective fan motors.	Quarterly		
2	Replace burned out lamps. Replace failed ballasts, and lamp sockets.	Quarterly		
3	Verify condition of door seals and gaskets. Report any damaged gaskets or seals that need replacement. Adjust doors tensioners as needed in order to close properly.	Quarterly		
4	Inspect door frame heaters for proper operation. Report any defective door heaters.	Quarterly		
5	Verify operation of sensor, heaters, fans, and seal any penetrations and provide condensate pan screens as needed.	Quarterly		
6	Adjust RMCS controls and reset setpoints to contract requirements for the correct temperature range and function. See Appendix 4 for limits.	Quarterly		
7	Inspect, adjust, clean and repair damage to discharge air honeycomb	Semi Annual		
8	Verify Display Case Temperature and Measure/Balance Superheat of each display case. Adjust SORIT valve and TXVs as necessary to maintain recommended superheat. Record and submit measured superheat.	Semi Annual		
9	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS P. Refrigeration Unit Coolers		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Verify air flow at each fan. Initiate TI to replace fan motors as needed with EMC motors	Quarterly		
2	Clean all unit cooler fan guards of dirt or ice accumulation. Clean all unit cooler fan blades of dirt or ice accumulation.	Quarterly		
3	Check drain pans and drains to ensure drains are clear of debris (run water into the drain line to verify flow), remove obstructions or ice buildup and are a free drain. Replace drain line heaters and drain line insulation and drain pan heaters as needed.	Quarterly		
4	Adjust RMCS controls and reset setpoints to contract requirements for the walk-in refrigerated room. Verify operation of sensors, heaters, fans. See Appendix 4 for settings and temperature limits.	Quarterly		
5	Visually check for ice buildup and cleanliness on evaporator coils; Remove ice buildup as necessary. Clean coils of dirt or ice accumulation	Quarterly		
6	Inspect electrical wiring and components, visually inspect all wiring for wear, kinks, bare areas and discoloration. Replace any wiring found to be damaged.	Quarterly		
7	Verify Unit cooler operation. Balance Superheat of each unit cooler coil. Adjust SORIT valve and TXVs as necessary. Verify operation of sensor, heaters, fans.	Annual		
8	Fill out maintenance checklist, post on government service order management system and report deficiencies to Field Engineer	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS T. Walk-in Coolers and Freezer		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Inspect walk-in doors, freezer doors, double action doors and strip curtains for proper operation and adjustment. Make adjustments as needed for proper operation and sealing	Quarterly		
2	Inspect flooring materials for condition and report any items that require repairs	Quarterly		
3	Replace any burned out light bulbs, damaged lamp sockets and ballasts	Quarterly		
4	Inspect door frame heater, floor threshold heater and test for voltage and operations. Report deficiencies.	Quarterly		
5	Inspect all wall and ceiling joint connection and apply appropriate sealing material where needed.	Quarterly		
6	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS U. Self-Contained Refrigerated Cases		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Verify air flow at each fan. Initiate TI to replace fan motors.	Quarterly		
2	Replace burned out lamps, lamp sockets and damaged ballasts	Quarterly		
3	Inspect, adjust, clean and repair damage to discharge air honeycomb.	Quarterly		
4	Clean condenser coil and condensate evaporation pan. Replace filters.	Quarterly		
5	Adjust case temperature as required for proper operation	Quarterly		
6	Verify condition of door seal and gaskets	Quarterly		
7	Inspect and verify operation of door heaters,	Quarterly		
8	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Quarterly		
Discrepancy Comments				

PM COMPONENT/CHECKS V. Unit Heaters, Exhaust Fans and Wall Louvers		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
1	Verify Exhaust fan and louver control operations during March or April and then again during July or August of each year. Replace belts and adjust. Replace missing screws in covers. Lubricate as necessary.	Semi Annual		
2	Verify all exterior covers/bonnets are properly attached to provide weather seal.	Semi Annual		
3	Verify Unit Heater Control Operation and adjust as necessary. Test operation during September or October of each year.	Annual		
4	Fill out maintenance checklist, post on government service order management system and report deficiencies to Commissary Representative	Semi Annual		
Discrepancy Comments				

PM COMPONENT/CHECKS Y. Miscellaneous Equipment and Inventory		Serial #		
		Frequency	Date Last Performed	Discrepancy (Y/N)
A	Ice Machine			
1	Check Condenser coil monthly. Clean coils and fans. Straighten with a fin comb as needed.	Monthly		
2	Check electrical wiring and connections; make appropriate adjustments.	Semi Annual		
3	Check with operating or area personnel for deficiencies	Semi Annual		
4	Change filters and wipe all exposed surfaces of dust and dirt	Semi Annual		
5	Flush out drain lines in ice machine and bins.	Semi Annual		
6	Clean and sanitize entire re-circulation water circuit, ice bins with ice machine cleaning solution.	Annual		
7	Fill out maintenance checklist and report deficiencies Fill out maintenance checklist, post on CMMS and report deficiencies to Field Engineer	Annual		
B	Produce Misting System			
1	Change pre-filter cartridge of reverse osmosis system	Semi Annual		
Discrepancy Comments				