HAWAII AIR NATIONAL GUARD PERFORMANCE WORK STATEMENT (PWS) HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) MAINTENANCE FOR:

291st CBCS (Hilo, Hawaii); 292nd CBCS (Kahului, Maui); 297th ATCS (Kalaeloa, Oahu)

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PERFORMANCE WORK STATEMENT (HVAC) MAINTENANCE FOR: 291st CBCS (Hilo); 292nd CBCS (Maui); 297th ATCS (Kalaeloa)

- **1.1 General:** This PWS applies to the following locations; 291st CBCS (Hilo); 292nd CBCS (Maui); 297th ATCS (Kalaeloa). These locations will be referenced as GSU's, for the rest of this PWS, unless a location is called out separately. It is expected that all bids will cover all the GSUs. Attachment 1 lists known equipment at each site. However, the government makes no guarantee to the accuracy of the list. If a bid addresses less than all locations, it will be removed from consideration. Additionally, within the bid, the contractor will estimate the cost per location to facilitate government accounting.
- **1.2 Scope:** Contractor shall provide all personnel, equipment, tools, materials, supervision, quality control and other items and non-personal services necessary to perform complete regular, routine inspection, maintenance, and repair services as required for HVAC systems as defined in this PWS, except as specified in Paragraph 1.4.7 as Government Furnished. The contractor shall perform to the standards in this contract.
- **1.3 Background:** The work includes preventive maintenance, support services, inspection, repairs, alterations, calibration and administration. The government makes no representation or guarantee as to the condition of equipment on the start date of the contract. A site visit and inspection of all equipment condition is recommended prior to work starting on this contract.
- **1.4 Period of Performance (PoP):** The Period of Performance shall be approximately 12 months from contract award. Notionally, this is projected from April 14th, 2023 to March 29th, 2024.
 - **1.4.1 Conservation of Utilities:** The contractor shall instruct employees in utilities conservation practices. The contractor shall operate under conditions that preclude the waste of utilities, whichinclude turning off the water faucets or valves after using the required amount.
 - **1.4.2 Special Qualifications**: Contractor personnel shall be licensed by the State of Hawaii as Master HVAC Mechanics and HVAC Journeymen. The contractor shall provide a copy of license to the contracting office, for each employee, at time of contract start. The contractor shallsupply a copy of license for all new employee assigned to work on this contract within 15 calendar days of starting work. NOTE: The Government does not provide training to contractors. Contractors must ensure that any personnel performing under a contract are fully trained, licensed, certified and qualified for the position in which they will be serving.
 - **1.4.3 Post Award Conference/Periodic Progress Meetings**: The contractor agrees to attend anypost award conference convened by the facility manager (FM) in accordance with Federal Acquisition Regulations Subpart 42.5. The FM, building manager, and other Government personnel, as appropriate, may meet periodically with the contractor to review the contactor's performance. At these meetings, the FM will apprise the contractor of how the Government views the contractor's performance and the contractor shall apprise the Government of problems, if any, being experienced. The contractor shall resolve outstanding issues raised by the Government. Contractor attendance at these meetings shall be at no additional cost to the Government.
 - **1.4.4 Program Manager (PM):** The contactor shall provide a PM who shall ensure performanceunder this contract. The name of this person, and an alternate who shall act for the contractor when the PM is absent, shall be designated in writing to the FM. The PM or alternate shall have full authority to act for the contractor on all contract matters relating to daily operation of this contract.
 - **1.4.5 Identification of Contractor Employees:** All contact personnel attending meetings, are required to identify themselves as such to avoid creating an impression in the minds of members of the public that they are Government officials. The contractor shall also ensure

that all documents or reports produced by contractor personnel are suitably marked as contractor products. Contractor personnel shall display legible identification of the contractor's company name on their uniform.

- **1.4.6 Data Rights:** The Government has unlimited rights to all documents/material produced under this contract. All documents and materials, to include the source codes of any software, produced under this contract shall be Government owned and are the property of the Governmentwith all rights and privileges of ownership/copyright belonging exclusively to the Government. These documents and materials may not be used or sold by the contractor without written permission from the FM. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. This right does not abrogate any other Government rights.
- 1.4.7 Government Furnished Property, Material, Equipment and Services (GFP/M/E/S): The Government will provide no Government furnished equipment or property. Utilities: All utilities in the facility will be available for the contactor's use in the performance ofthis contract. Except for those items specifically stated to be Government-Furnished the contractor shall furnish everything required to perform these services.

1.5 General Information:

- **1.5.1 Quality Control (QC):** The contractor shall develop and maintain an effective QC program to ensure services are performed in accordance with this PWS. The contractor shall develop and implement procedures to identify, prevent, and ensure non-recurrence of defective services. The contractor's QC program is the means by which it assures itself that its work complies with the requirements of the contract.
- **1.5.2 Recognized Holidays:** The following are recognized US holidays. The contractor shall notperform services on these days:
 - a. New Year's Day: January 1st
 - **b.** Martin Luther King, Jr.'s Birthday: Third Monday in January
 - **c.** President's Day: Third Monday in February
 - **d.** Memorial Day: Last Monday in May
 - **e.** Juneteeth: Third Monday in June
 - **f.** Independence Day: July 4th
 - g. Labor Day: First Monday in September
 - **h.** Columbus Day: First Monday in October
 - i. Veteran's Day: November 11th
 - i. Thanksgiving Day: Third Thursday in November
 - k. Christmas Day: December 25th
- **1.5.3 Place and Performance of Services**: The contractor shall provide services between the hours of 0630 1530 on Monday Friday except on recognized US holidays or when the Government facility/installation is closed due to local or national emergencies, administrative closings, or similar Government-directed facility/installation closings. Performance shall be at facilities listed in Facilities Equipment list in Attachment 1.
- **1.5.4 Work Force Requirements:** The contractor shall at all times maintain an adequate work force for the uninterrupted performance of all tasks defined within this PWS when the Government facility/installation is not closed for the above reasons. When hiring personnel, the contractor shall keep in mind that the stability and continuity of the work force are essential.
- **1.5.5 Security Requirements:** Contractor and all associated sub-contractor's employees shallmaintain contact with the "Building manager" on the grounds of that facility and with the "Facility Manager" on Honolulu, HI with the 154th Civil Engineer Squadron, Hawaii Air National Guard. At the close of each work period, Government facilities, equipment and materials shall be secured.

- **1.5.6 Key Control:** The contractor shall establish and implement methods of ensuring all keys/key cards issued by the Government are not lost or misplaced and are not used by unauthorized persons. NOTE: All references to keys include key cards. No keys issued by the Government shall be duplicated. The contractor shall develop procedures covering key control that shall be included in the QC Plan Such procedures shall include turn-in of any issued keys bypersonnel who no longer require access to locked areas. The contractor shall immediately report any occurrences of lost or duplicated keys/key cards to the FM, FM representative, or building manager as appropriate. In the event keys, other than master keys, are lost or duplicated the contractor shall, upon direction by the FM, re-key or replace the affected lock or locks; however, the Government, at its option, may replace the affected lock or locks or perform re-keying. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Government and the total cost deducted from the monthly payment due the contractor.
- **a.** Prohibitions: The contactor shall prohibit the use of the Government issued keys/key cards by any persons other than the contractor's employees. The contractor shall prohibit the opening of locked areas by contractor employees to permit entrance of persons other than contactor employees engaged in the performance of services in those areas, or personnel authorized entrance by the FM.
- **b.** Lock Combinations: The contractor shall establish and implement methods of ensuring all lock combinations are not revealed to unauthorized persons. The contractor shall ensure that lock combinations are changed when personnel having access to the combinations no longer have a need to know such combinations. These procedures shall be included in the Contractor's QC Plan.
- 2.0 Maintenance Requirements: Contractor is required to perform a minimum of quarterly maintenance on all HVAC equipment. The contractor shall provide a "digital soft copy" schedule to the FM and listed building managers not later than the 15th of each month preceding the scheduled maintenance to be performed. All preventative maintenance tasks shall be performed in accordance with industry standards and equipment manufacturers' recommended maintenance schedules. The frequency of preventative maintenance, in an effort to minimize repair requirements, may be increased at the contractor's discretion with notification to the FM. All work shall be documented in the schedule and submitted to the FM no later than (NLT) the 5th workday of the month after the work has been accomplished with a summary of work performed. Contractor shall supply all replacement parts and components necessary to maintain equipment. The contractor shall schedule and arrange work so as to cause the least interference with the normal occurrence of government business and mission. Prior approval shall be obtained from the FM/building manager, except in emergencies, for work requiring shut-down of any equipment for more than thirty (30) minutes or for critical equipment as designated by the building manager for any period of time. All such requests must be submitted at least 72 hours in advance. In cases where shutdown is necessary, the contractor shall coordinate the shutdown with the building manager and FM/154 CES CustomerService or other designated representative in the affected facility.
 - **2.1 Equipment List:** The contractor shall provide in writing, a detailed overview of the condition of the equipment to the FM after contract award, by facility and equipment. This initial report is to specify preventative maintenance which will be performed, repair work accomplished, and any potential problems with recommended solutions as needed.
 - **2.2 Preventative Maintenance:** All preventative maintenance parts i.e. filters, belts, grease, coil cleaner materials etc. will be billed towards this service contract. Any minor or major repair or replacement recommendations i.e. compressor replacements, condenser coil repairs or replacements etc., the contractor must put together a separate

- proposal or quote itemizing all repair or replacement costs. Any repairs or replacement costs will be taken care of as a separate expense which will not be tied to this preventative maintenance service contract (See paragraph 4.0, Service Calls).
- **2.3 Recommended solutions:** The contractor will be expected to provide recommendations in reference to major repairs or replacement of HVAC units if needed. This information should be communicated in a report categorizing the equipment in the following criteria:

RED = Needs to be repaired or replaced immediately

AMBER = suggest repairing or replacing unit within 2-3 years

GREEN = unit is fully operational with minor issues that can be fixed in the field

- **2.3.1 One-time Cleaning of Split Air Systems**: A one-time deep cleaning of facilities' split air systems may be recommended by the contractor on an as-needed basis. This may occur any time during the contract period, but preferably during the first 6 months of the contract. This will be billed separately from this contract and should not be included in the bid amount.
- 3.0 Special Conditions: All maintenance and repairs shall be accomplished between 6:30 AM and 3:30 PM, Monday through Friday, except for Federal holidays. Any work outside of these hours is considered after hours. Contractor shall be responsible for damage or loss to government property due to negligent acts by the contractor's employee(s). All replacement parts for HVAC control systems shall be the same manufacturer as that installed, or equal. Where components are no longer produced, then the contractor shall come up with a recommended course of action e.g. revised or upgraded new components or upgraded system. The contractor shall submit schematic drawings of any new components or control system revision (s) to the contracting officer for approval prior to any installation. The contractor shall, when working on the existing HVAC systems, perform all work within the guidelines set forth in the Clean Air Act Amendments of 1990, Title VI, Section 608. Work shall include, but not be limited to, purging, evacuating, and charging of said systems with refrigerant.
 - **3.1** Spills: The contractor is responsible for cleanup and remediation of all spills during filling/refilling at the site(s). Cleanup shall follow all Environmental Protection Agency (EPA), state, and local requirements. If any spills occur, the contractor shall provide cleanup at no additional expense to the government.
- **4.0 Service Calls:** Service calls are defined as maintenance or repair actions that is not regular, preventative maintenance as defined in this PWS and is normally used to return inoperative equipment to working condition. The facility manager will receive service calls from the building manager for buildings during normal duty hours. The facility manager will then call the contractor to assess the situation. The contractor will provide recommendations on how to resolve the issue. After completion, the contractor will provide in writing within two (2) working day to the Facility Manager, what actions were performed on the service call. The contractor will also include in the written report, man-hours used and any parts/materials that were required to make the repair. Service calls are separately invoiced outside of this contract and at the end of the month, detailing location, date, man-hours, and cost of parts/materials, if applicable.
- **5.0 Exclusions:** It is understood that the services and maintenance provided herein does not include the following: Repairs to equipment caused by freezing, corrosion, erosion, electrolytic action or any other reason beyond the contractor's control; damage caused by lightning, power deficiency, single phasing or phase reversal; damage caused by fire, vandalism, flood, war, sabotage, insurrection or explosion; damage caused by improper operation or unauthorized repair. This includes damage that can be attributable to excessive

equipment cycling caused by load shedding devices.

6.0 Quarterly Service:

6.1 Indoor Air Handler Maintenance

- 6.1.1 Inspect Exterior for Leaks, Oil and Water Stains, Condition of Insulation. . etc.
- 6.1.2 Inspect Refrigerant Piping & Gas Lines (if applicable) for signs of leaks
- 6.1.3 Inspect Accessible Ductwork for Air Leaks and General Condition
- 6.1.4 Inspect Disconnect and Wiring
- 6.1.5 Tighten Electrical Connections/Fittings
- 6.1.6 Check/Test Fan Motor Relay, Test Voltage Drop Across Relay
- 6.1.7 Check Indoor Air Fan & Motor for Cleanliness Clean Motor (If Applicable)
- 6.1.8 Check Belts and Adjust Tension (If Applicable)
- 6.1.9 Inspect Coil for General Condition & Oil Stains
- 6.1.10 Inspect/Clean Inlet Side of Coil
- 6.1.11 Inspect/Clean Condensate Pan
- 6.1.12 Inspect/Clean Condensate Piping for P-Trap and Vent
- 6.1.13 Inspect/Clean Overflow Condensate Pan
- 6.1.14 Clear Condensate Lines With Nitrogen
- 6.1.15 Test Condenser Fan Capacitor
- 6.1.16 Check Amp Draw of Indoor Air Fan
- 6.1.17 Clear drain lines upon service and add tablets to control the growth of algae

6.2 Outdoor Unit Maintenance

- 6.2.1 Inspect Condensing Unit Externally for Signs of Leaks, Damage to Cabinet. . etc.
- 6.2.2 Inspect Refrigerant Piping and Condenser Areas for Signs of Leaks
- 6.2.3 Inspect Disconnect and Wiring
- 6.2.4 Inspect/Tighten Condenser Electrical Connections/Fittings
- 6.2.5 Check/Test Main Contact Relay, Check for Voltage Drop Across Relay
- 6.2.6 Check/Test Defrost Control Board (If Applicable)
- 6.2.7 Clean Control Cabinet
- 6.2.8 Inspect/Test Electrical Safety Circuits
- 6.2.9 Inspect Condenser Fan Motor For Shaft Play, Fan Condition, and Lubricate (If Applicable)
- 6.2.10 Test Fan Capacitor
- 6.2.11 Check Fan Motor Amp Draw
- 6.2.12 Inspect Compressor Electrical Terminals, Crank Case Heater
- 6.2.13 Test Compressor Run Capacitor
- 6.2.14 Test Compressor Star Capacitor and Potential Relay
- 6.2.15 Check Compressor Amp Draw
- 6.2.16 Check Refrigerant Pressures (If Applicable)
- 6.2.17 Ensure All Service Ports are Capped and Tight
- 6.2.18 Ensure All Service Valves are Capped and Tight
- 6.2.19 Inspect/Clean Condenser Coil With Water
- 6.2.20 Clean Debris From Inside Cabinet
- 6.2.21 Inspect/Repair Refrigerant Piping Insulation

6.3 Chiller Unit Maintenance

- 6.3.1 Quarterly lubricate chiller pump system.
- 6.3.2 Inspect water inlet and outlet for leaks.
- 6.3.3 Clean out and inspect the sump for corrosion.
- 6.3.4 Cooling coils need to be inspected and surfaces cleaned; check for leaks, corrosion, or bent fins
- 6.3.5 The zone control actuators should be inspected, cleaned, and adjusted as necessary
- 6.3.6 Check various compressor areas to include: refrigerant charge, vibration, crankcase

- heater, oil levels and changes, operating temperatures, and if there are any leaks.
- 6.3.7 Condenser fans should be cleaned, bearings checked for wear and lubricated; and belts and couplings need to be checked for tightness and adjusted as necessary.
- 6.3.8 Check the condenser coil should be for corrosion and leaks and check all fins or combs for bent sections.
- 6.3.9 Inspect electrical disconnect for proper operation and contacts should be inspected and cleaned.
- 6.3.10 Check return air dampers for proper operation, calibration; and bearings are lubricated.
- 6.3.11 Inspect/calibrate the fresh air damper and bearings lubricated as needed.
- 6.3.12 Inspect the filter dryer; replace any old, dirty, or damaged filters.

6.4 Split System Maintenance

- 6.4.1 Clean annually, coil/blower wheel
- 6.4.2 Clear drain lines upon services and add tablet to control growth quarterly
- 6.4.3 Clean filters and or evaporator coil if needed
- 6.4.4 Wash outdoor coils and clean all debris
- **7.0 Invoicing:** While the contractor may submit one overall invoice per month for billing purposes, within the invoice, costs per location will be broken out to facilitate government accounting per location. Note: the state of Hawaii only allows for payment of invoices after the service has been performed and/or after goods have been delivered.
- **8.0 Contract extensions:** The government, upon notice to contractor, may extend the duration of the contract an additional period, NTE 90 days, under the same terms and conditions. This extension will be used only to prevent a lapse in coverage until a new contract is awarded. Upon award of a new contract, the current extension will be terminated.

9.0 Unit Locations and Contact List:

• JBPHH-154th CES (Civil Engineer Squadron)

Address:

335 Gardener Ave (Bldg 3392)

JBPHH, HI 96853

Point of contact-1: MSgt Noah Raymond (Facility Manager)

Ph: 808-789-0103

Email: noah.raymond@us.af.mil

Point of contact-2: Mr Glen Marumoto (Resource Advisor)

Ph: 808-789-0104

Email: glen.marumoto.1 @us.af.mil

• <u>Hilo-291st CBCS (Combat Communications Squadron)</u>

Address:

1300 Kekuanaoa st. Hilo, HI 96720

Point of contact: MSgt Alexander Chai (Bldg

Manager)Ph: 808-789-0572 Email. Alexander.chai@us.af.mil

• Maui-292nd CBCS (Combat Communications Squadron)

Address:

75 Kuleana st. Kahului, HI 96732 Point of contact: MSgt Roy Moriyasu (Bldg Manager)

Ph: 808-789-5171

Email: roy.moriyasu@us.af.mil

• Kalaeloa-297th ATCS (Air Traffic Controller Squadron) info:

Address:

91-1367 Saratoga Ave Kapolei, HI 96707

Point of Contact: TSgt Marvin Isidro (Bldg Manager)

Ph: 808-789-0926

Email: marvin.isidro@us.af.mil

1 Attachment - Facility Equipment List

BUILDING EQUIPMENT INVENTORY BLDG. # 1922 - Kalaeloa 297TH AIR TRAFFIC CONTROL

ID NUMBER & EQUIP. TYPE	EQUIP. MANUF.	NUF. MODEL SERIAL# SIZE EQUIP. DESCRIF		EQUIP. DESCRIPTION	LOCATION	QTY.	DATE INSTALLED	FAN BELT	FILTER SIZE	REFRIGERANT	
CU#1	TRANE	TTA120C300GC	7471T64AD		Condensing Unit DX	East Center	1				R22
CU CU	III	TTATZUCSUUGC	7471104AD		Condensing Offic DX	East Center	1				NZZ
AHU # 1	TRANE	RC 094-3E-20-AA	K86L19037		Air Handling Unit DX	East Center	1				R22
AHU	ITOANE	NC 054 5E 20 AA	NOOE13037		All Handling Offices	Interior Mech Room	_				INEE.
Packaged # 1	SKIL-AIRE	PAA024H1A-B	J61075		Packaged Unit	Ceiling North	1				R22
1 dckdgcd # 1	JAIL AIRE	17440241117 0	301073		i ackaged Offic	Coming North	_				1,22
Packaged # 2	SKIL-AIRE	PAA024H1A-B	J61064		Packaged Unit	Ceiling South	1				R22
r dekagea # 2	JAIL AIRE	17440241117 0	301004		i ackaged Offic	Centry Count	_				1,22
ACCU # 1	Midea	MCHSU-24PHH2	2413480920876130000000	2 Ton	Air Cooled Condensing Unit	Southwest Corner	1				R410A
Condensing Unit	I III I		211310032007013000000	2.0	7 th Oodiod Condensing Cris	Courinos Corrior	1				11.120/1
FCU SPLIT # 1	Midea	MEHUSU-24PHH2	2413480221076130000000		Fan Coil Uni	Rm 4	1			Washable	R410A
Fan Coil Unit	I III I		211310022107013000000		1 411 5511 5111	1411-4	1			Washabie	11.120/1
ACCU # 2	Mitsubishi	MUY-D36NA-1	6001415T	3 Ton	Air Cooled Condensing Unit	Southwest Corner	1				R410A
Condensing Unit					Split		1				
FCU SPLIT # 2	Mitsubishi	MSY-D36NA-8	6002306		Fan Coil Unit Split	Comm Room	1			Washable	R410A
Fan Coil Unit											
ACCU # 3	Fujitsu	AOU30CLX1	GEN010850	2.5 Ton	Air Cooled Condensing Unit	Northwest Corner	1				R410A
Condensing Unit	,				Split						
FCU SPLIT # 3	Fujitsu				Fan Coil Unit Split	Classroom	1			Washable	R410A
Fan Coil Unit	, ,				1						
ACCU #4	Daikin	RK12AXVJU		12K	Air Cooled Condensing Unit		1				
Condensing unit											
FCU Split #4	Daikin	FTK12AXVJU		12K	Fan Coil Unit Split		1			Washable	R410A
Fan coil unit											
ACCU #5	Daikin	3MXS24RMVJUA			3-port condensing unit		1			Washable	R410A
Condensing unit											
ACCU #6	Daikin	3MXS24RMVJUA			3-port condensing unit		1			Washable	R410A
Condensing unit											
FCU# 5	Daikin	FTXS12LVJU			12K wall unit		1			Washable	R410A
Fan coil unit unit											
FCU# 6	Daikin	FTXS12LVJU			12K wall unit		1			Washable	R410A
Fan coil unit unit											
FCU# 7	Daikin	FTXS12LVJU			12K wall unit		1			Washable	R410A
Fan coil unit unit											
FCU# 8	Daikin	FTXS12LVJU			12K wall unit		2			Washable	R410A
Fan coil unit unit											
]						
					1						
TVDE											

iEMS ID#	COMMENTS

TYPE
CONTROLS
ELECTRIC
ELECTRONIC

BUILDING EQUIPMENT INVENTORY 291ST CBCS- HILO AC UNITS

ID NUMBER & EQUIP. TYPE	EQUIP. MANUF.	MODEL	SERIAL#	SIZE	EQUIP. DESCRIPTION	LOCATION	DATE INSTALLED	PM	QTY.	FAN BELT	FILTER SIZE FILTER CHANGE	REFRIGERANT	COMMENTS
ACCU #1	MITSUBISHI	PK30FK3	2ZG80087A	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #2	MITSUBISHI	PU18EK1	32D00780	1.5 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #3	MITSUBISHI	PU24EK1	26E00947C	2 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #4	MITSUBISHI	PU18EK1	32D0076D	1.5 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #5	MITSUBISHI	PU30EK1	2YE00017A	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #6	MITSUBISHI	PU30EK1	23E000472B	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #7	MITSUBISHI	PU30EK1	2YE00028A	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #8	MITSUBISHI	PU30EK1	11900890C	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #9	MITSUBISHI	PU30EK1	15E08580	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #10	MITSUBISHI	PU30EK1	23E00500B	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #11	MITSUBISHI	PU30EK2	87E00282A	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #12	MITSUBISHI	MU09NW2	9000478J	3/4 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #13	MITSUBISHI	PE18EK1	32D00647B	1.5 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #14	MITSUBISHI	PU30EK2	3ZE00287A	3 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #15	MITSUBISHI	MU12TN	SN: 20013696	1 TON	AIR COOLED CONDENSING UNIT				1				
ACCU #16	MITSUBISHI	PU24EK1	26E000927C	2 TONS	AIR COOLED CONDENSING UNIT				1				
ACCU #17	CARRIER	38AK5016510	2099F20071	15 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #18	MITSUBISHI	PK30FK3	2ZG0091A	3 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #19	MITSUBISHI	PK24FK3	SN: 3160046613	2 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #20	MITSUBISHI	PK24FK3	SN: 31G00425B	2 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #21	MITSUBISHI	PK30FK3	2ZG00022A	3 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #22	MITSUBISHI	PK18FK3	28G00723D	1.5 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #23	MITSUBISHI	PK30FK3	2ZG00024A	3 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #24	MITSUBISHI	PK30FK3	2ZG00083A	3 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #25	MITSUBISHI	PK30FK3	3ZG00045A	3 TONS	AIR COOLED CONDENSING UNIT				1				
FCU #26	MITSUBISHI	PK30FK3	2ZG00023A		AIR COOLED CONDENSING UNIT				1				
FCU #27	MITSUBISHI	MSH09TN	SN: 1002980		AIR COOLED CONDENSING UNIT				1				
FCU #28	MITSUBISHI	PK18FK3	32G00223A		AIR COOLED CONDENSING UNIT				1				
FCU #29	MITSUBISHI	MSH09TN	SN: 1002939		AIR COOLED CONDENSING UNIT				1				
FCU #30	MITSUBISHI	PK18FK3	28G006231		AIR COOLED CONDENSING UNIT				1				
FCU #31	MITSUBISHI	MSH09NW2	100214TJ		AIR COOLED CONDENSING UNIT				1				
FCU #31	MITSUBISHI	MSH12TN	Z00067	1 TON	AIR COOLED CONDENSING UNIT				1				
FCU #32		MSH12TN MSH12EN	35000282C										
	MITSUBISHI			1 TON	AIR COOLED CONDENSING UNIT				1				
FCU #34	CARRIER	3.90E+11	SN: 8139030330	15 TON	AIR COOLED CONDENSING UNIT				1				

POINT OF CONTACT: MSgt Alexander Chai 808-789-0590

292 CBCS- Maui

ID NUMBER &	EQUIP. MANUF.	MODEL	SERIAL#	SIZE	EQUIP. DESCRIPTION	LOCATION	DATE INSTALLED	PM	QTY.	FAN BELT	ELT FILTER SIZE REFRIGERANT			COMMENTS
EQUIP. TYPE										FILTER CHANGE				
AHU #1	CARRIER	39MN12W027LYY1/1XCE	022lu32378	12W	MODULAR AIR HANDLING UNIT, 208V/3PH	BLDG 501	21-May		1	Forward Curve	2x16x20	CHW Coil		
						RM 105								
FCU #2	CARRIER	42DHA20LRDMYYYAMYG	2lu-00000114	20	FCU-2:42DH HORJZONTAL DI RECT DRIVE FCU, 208V/1PH	BLDG 501	21-Jun		1	N/A	2x201/2x22	CHW Coil		
						RM 115								
AHU #3	CARRIER	42DHA22BRNMYYY AMYG	21u-00000115	22	AHU2:42DH HORIZONTAL DIRECT DRIVE FCU, 208V/3PH	BLDG 501	21-Jun		1	N/A	2x201/2x22	CHW Coil		
						RM 110A								
AHU #4	CARRIER	42DHA22LRNMYYY AMYG	21u-00000116	22	AHU3: 42DH HORIZONTAL DIRECT DRIVE FCU, 208V/3PH	BLDG 501	21-May		1	N/A	2x201/2x22	CHW Coil		
						RM 112								
AHU #5	CARRIER	42DHA16LRNMYYY AMYG	2lu-00000112	16	AHU4:42DH HORIZONTAL DIR ECT DRIVE FCU, 208V/3PH	BLDG 501	21-Jun		1	N/A	2x181/2x21-1/2	CHW Coil		
						RM 128								
AHU #6	CARRIER	42DHA20BRNMYYY AMYG	2lu-00000113	20	AHU5:42DH HORIZONTAL DIRECT DRIVE FCU, 208V/3PH	BLDG 501	21-May		1	N/A	2x201/2x22	CHW Coil		
						RM 102								
AHU #7	CARRIER	42DHA128RCMYYYAMYG	2lu-00000111	12	AHU6:42DH HORIZONTAL DIR ECT DRIVE FCU, 115V/1PH	BLDG 501	21-Jun		1	N/A	2x181/2x33	CHW Coil		
						RM 102								
WATER CHILLER	CARRIER	30RAP010-150			AIR COOLED CHILLER	BLDG 501	2013 JUL			N/A	N/A	410A		
						ROOF								
ACCU #1	CARRIER	MCY-MAP0367HS-UL	904 E0010	3 TONS	AIR COOLED CONDENSING UNIT	BLDG 501	21-Jun		1	N/A	REUSABLE	410A		
						COVE								
ACCU #2	CARRIER	MCY-MAP0367HS-UL	906 E0007	3 TONS	AIR COOLED CONDENSING UNIT	BLDG 501	21-Jun		1	N/A	REUSABLE	410A		
						COVE								
ACCU #3	CARRIER	MCY-MAP0367HS-UL	808B0010	3 TONS	AIR COOLED CONDENSING UNIT	BLDG 501	21-Jun		1	N/A	REUSABLE	410A		
						LAB								
ACCU #4	CARRIER	RAV-SP180AT2-UL	60024	1 TON	AIR COOLED CONDENSING UNIT	BLDG 501	21-Jun		1	N/A	REUSABLE	410A		
						SERVER ROOM								
ACCU #5	DAIKIN	2MXS18GVJU	G029010	3 TONS	AIR COOLED CONDENSING UNIT	BLDG 502	2019		1	N/A	REUSABLE	410A		_
	·		·			RM 159								
ACCU #6	DAIKIN	2MXS18GVJU	E006333	3 TONS	AIR COOLED CONDENSING UNIT	BLDG 502	2019		1	N/A	REUSABLE	410A		
						RM 161				, and the second		•		
ACCU #14	TRANE	TTA090A300FA	4402REFAD	5 TONS	AIR COOLED CONDENSING UNIT	BLDG 502	Sep-04		1	UNKNOWN?	UNKNOWN?	410A		
						SATCOM				, and the second				

POINT OF CONTACT: MSgt Roy Moryasu 808-789-0652