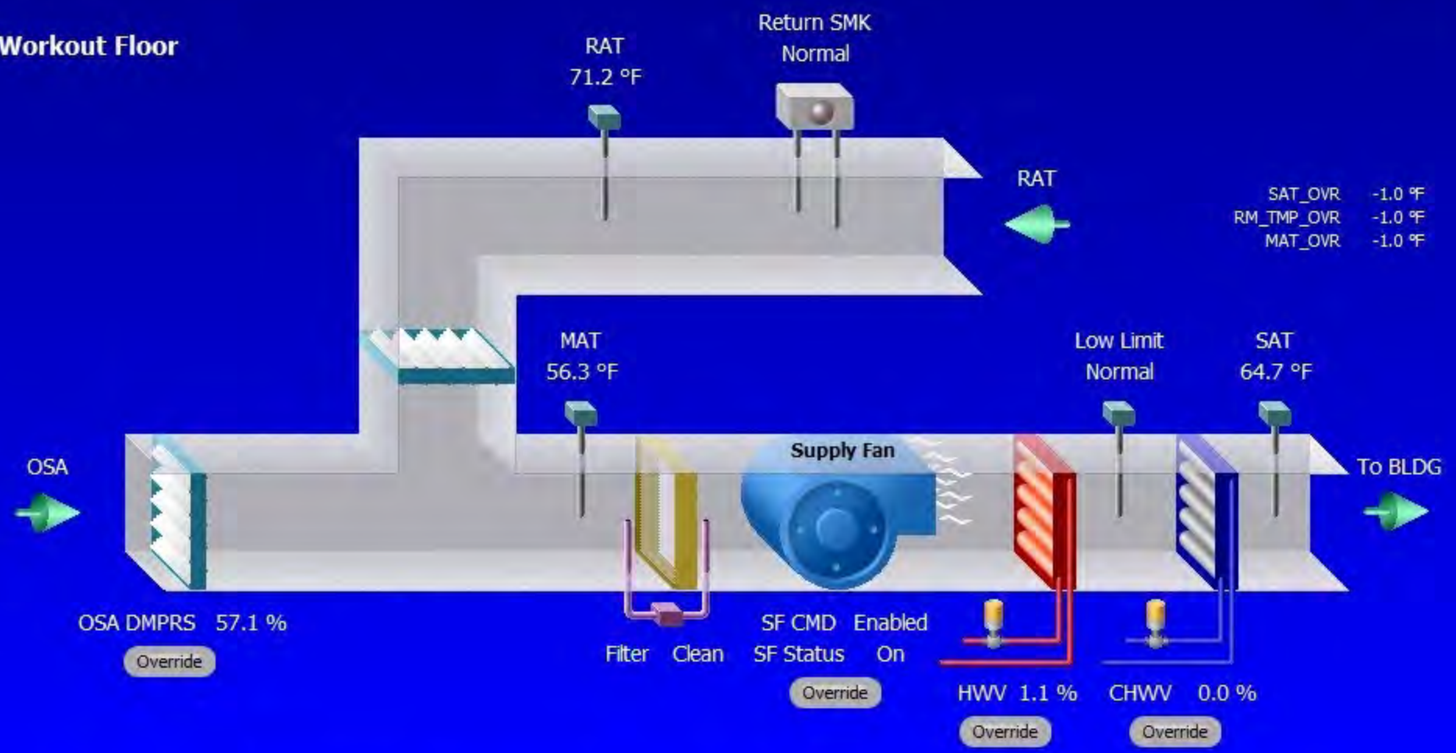
JBLM - McChord Field

Health And Wellness Center - Bldg B726

N4-4.7.109.20 ECL-300 / DDC-1

AHU-1

Serves Main Workout Floor



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SETPOINTS		MONITOR	
OCC Heat Setpoint:	68.0 °F	Space:	72.8 °F
UNOCC Heat Setpoint:	55.0 °F	Effective SAT Setpoint:	65.0 °F
SAT Setpoint Low:	65.0 °F	Occupancy Mode:	Occupied
SAT Setpoint High:	75.0 °F	Mode:	Heating
MAT Low Limit:	45.0 °F	SF Status:	On
		SF Runtime:	1516.1 hr
		OSA:	52.1 °F
		Emergency Stop:	Normal
		Fire Alarm Panel:	Normal

Notes:

Sequence

JBLM - Main Fort
Youth Center - Bldg 6398
N4-4.6.96.28.7 / Spyder Tool 7.2.15

Equipment

- Boiler
- Chiller
- AHU-1
- AHU-2
- AHU-3
- OA Fan
- Attic Fan
- FCU-1
- FCU-2
- FCU-3
- FCU-4
- FCU-5
- FCU-6
- FCU-7
- FCU-8
- FCU-9
- FCU-10
- FCU-11
- FCU-12
- FCU-13
- FCU-14

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MONITOR

OSA	55.3 °F
HVAC ESS	Normal
Boiler ESS	Normal

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JBLM - Main Fort
Youth Center - Bldg 6398
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Boiler | Chiller

AHU-1	Off	0 %	0 %	Off	73.1 °F	70.3 °F	55.0 °F	0.01 in/wc
AHU-2	Off	0 %	0 %	Off	70.6 °F	69.2 °F	85.0 °F	0.01 in/wc
AHU-3	Off	0 %	0 %	Off	71.9 °F	72.0 °F	55.0 °F	0.00 in/wc
FCU-1	Off	0 %	0 %	Off	71.4 °F	81.6 °F	85.0 °F	0.01 in/wc
FCU-2	Off	0 %	0 %	Off	70.1 °F	70.8 °F	55.0 °F	0.01 in/wc
FCU-3	Off	0 %	0 %	Off	69.8 °F	70.0 °F	55.0 °F	0.00 in/wc
FCU-4	Off	0 %	0 %	Off	67.6 °F	70.7 °F	55.0 °F	0.00 in/wc
FCU-5	Off	0 %	0 %	Off	67.2 °F	70.0 °F	55.0 °F	0.01 in/wc
FCU-6	Off	0 %	0 %	Off	68.9 °F	71.1 °F	85.0 °F	0.01 in/wc
FCU-7	Off	0 %	0 %	Off	69.2 °F	69.5 °F	55.0 °F	0.00 in/wc
FCU-8	Off	0 %	0 %	Off	71.0 °F	70.0 °F	55.0 °F	0.00 in/wc
FCU-9	Off	0 %	0 %	Off	71.6 °F	68.4 °F	55.0 °F	0.01 in/wc
FCU-10	Off	0 %	0 %	Off	77.1 °F	75.6 °F	85.0 °F	0.01 in/wc
FCU-11	Off	0 %	0 %	Off	72.4 °F	69.0 °F	55.0 °F	0.01 in/wc
FCU-12	Off	0 %	0 %	Off	69.7 °F	71.4 °F	55.0 °F	0.00 in/wc
FCU-13	Off	0 %	0 %	Off	73.0 °F	70.1 °F	55.0 °F	0.00 in/wc
FCU-14	Off	0 %	0 %	Off	72.4 °F	71.7 °F	85.0 °F	0.01 in/wc

Global Htg Vlv Ovrd [Auto] Ovrd
Global Clg Vlv Ovrd [Auto] Ovrd
Global Sply Fan Ovrd [Auto] Ovrd

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MONITOR

OSA	55.2 °F
HVAC ESS	Normal
Boiler ESS	Normal

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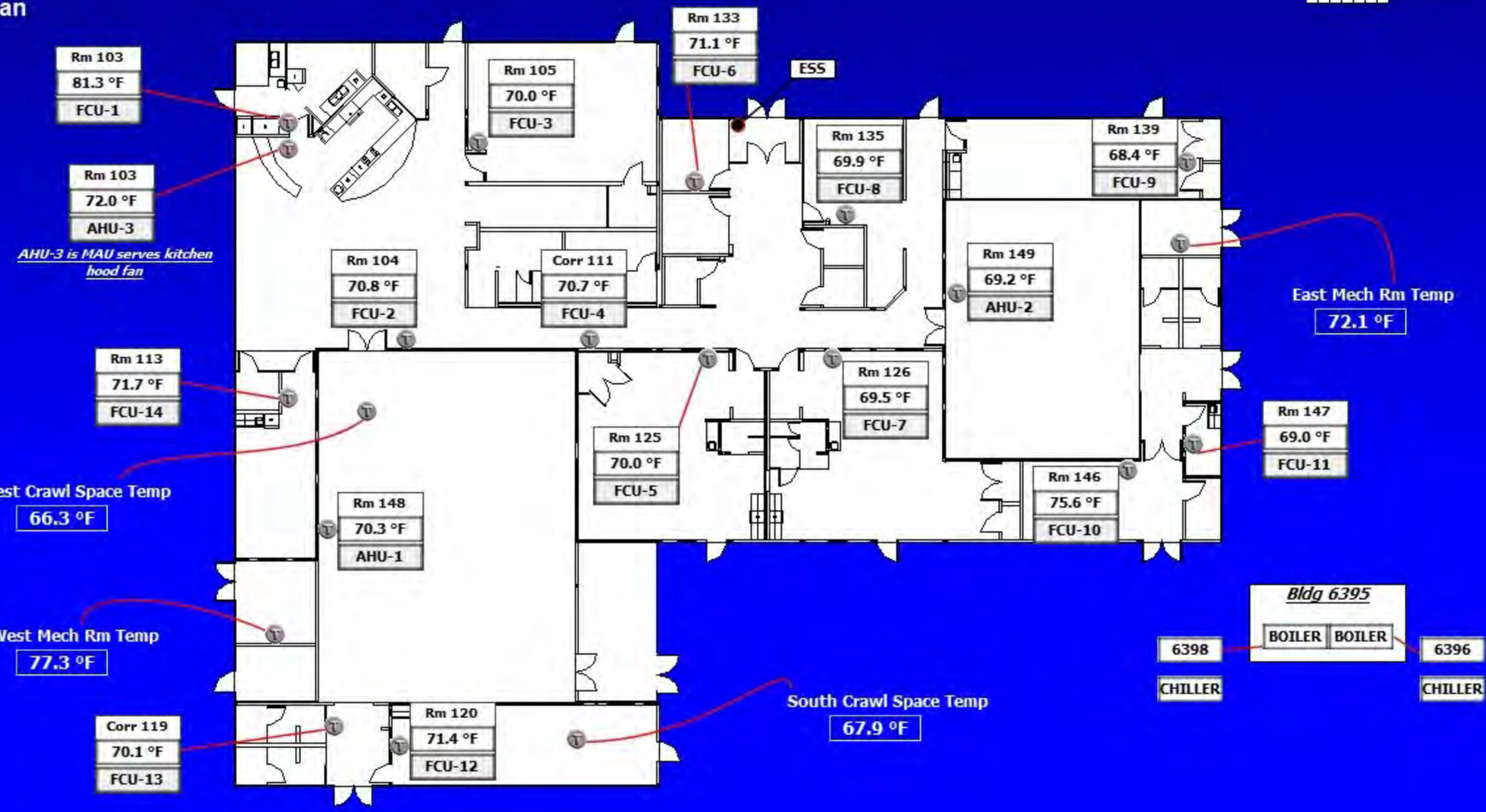
Youth Center - Bldg 6398
N4-4.6.96.28.7 / Spyder Tool 7.2.15

Floor Plan



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MONITOR	
OSA	55.2 °F
HVAC ESS	Normal
Boiler ESS	Normal

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JBLM - McChord Field

Health And Wellness Center - Bldg B726

N4-4.7.109.20

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MONITOR	
Outside Air Temp:	52.1 °F
Fire Alarm:	Normal
Emergency Stop:	Normal

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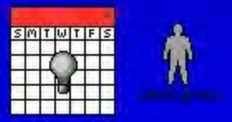
JBLM - Main Fort
Youth Center - Bldg 6398
N4-4.6.96.28.7 / Spyder Tool 7.2.15

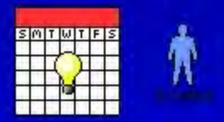
Schedules

Main Building



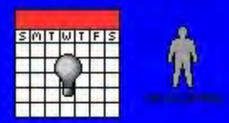
Current Event:	Unoccupied
Next Event:	Occupied
Next Event Time:	14-May-19 7:00 AM PDT

Boiler



Current Event:	Occupied
Next Event:	Unoccupied
Next Event Time:	21-May-19 12:00 AM PDT

Chiller



Current Event:	Unoccupied
Next Event:	Occupied
Next Event Time:	30-May-19 12:00 AM PDT

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MONITOR

OSA	55.2 °F
HVAC ESS	Normal
Boiler ESS	Normal

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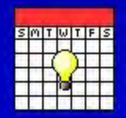
JBLM - McChord Field

Health And Wellness Center - Bldg B726

N4-4.7.109.20



Main Building

Current event:	Occupied
Next event:	UnOccupied
Next event time:	15-May-19 8:30 PM PDT

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MONITOR	
Outside Air Temp:	61.9 °F
Fire Alarm:	Normal
Emergency Stop:	Normal

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JBLM - McChord Field

Health And Wellness Center - Bldg B726

N4-4.7.109.20

Sequences

AHU-1
AHU-2
FCU's
CHWS
HWS
EF-1

1. Control of supply fan: Unless the fan is stopped as a result of an internal safety shutdown by control relay, or fire alarm, the fan is on or off based on operation mode, (occupied / unoccupied) as determined by system time schedule. When system is in unoccupied mode, and room sensor senses space temperature below 55°F. The supply fan is turned on until space temperature reaches 60°F.

2. Control of dampers & economizer operation: When time schedule is on ventilation delay mode, based upon optimal start/stop control block, outside air damper actuator, and return air damper actuator are de-energized which returns the dampers to their normal positions. Outside air damper remains closed and return air damper is open fully. When time schedule is in occupied mode dampers are controlled by the DDC analog output. When mixed air temperature is below setpoint (45°F) dampers are at minimum outside air position. When mixed air temperature rises above setpoint the dampers are modulated for free cooling.

3. Economizer.
AHU-1...When the OAT is below the RAT, the controller is in the economizer mode. When the OAT rises above the RAT, the economizer mode is de-activated and returned to minimum outside air position. When the OAT falls below the RAT minus DB(3°F), the economizer is re-enabled.
AHU-2...When the OAT is below the OAT lockout, the controller is in the economizer mode. When the OAT rises above the OAT lockout, the economizer mode is de-activated and returned to minimum outside air position.

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3. Duct temperature control: Duct temperature is controlled to maintain supply air temp of 60°F (adj). DDC modulates hot water valve, and chilled water valve to maintain supply air setpoint. When economizer mode is active DDC modulates damper for free cooling.

4. Unoccupied mode operation: In unoccupied mode, SF-1 is off, the outside air damper is closed and return air damper is open, hot water control valve is open, and chilled water valve is closed. If space temperature drops to 55°F, supply fan SF-1 is started and provide heat to the space. During this time return air damper remains open and outside air remains closed to reduce heating load. During this time the hot water valve remains fully open which provides maximum heat to space and minimizes time required to heat space to 60°F. When space temperature rises to 60°F, SF-1 is off.

5. Safety shutdown of supply fan: If duct smoke detector is activated, the supply fan is stopped. A remote switch (in off position) at the fire alarm panel provides remote shutdown capability by simulating a fire alarm condition. When the freezestat detects coil air below 35°F, the supply fan is stopped. When supply duct high pressure switch detects 1" W.C. the supply fan is stopped. A remote switch in the hand position at the fire alarm panel provides remote safety override capability at SF-1. When fire alarm override switch is placed in the auto mode control of SF-1 reverts to AHU-1 control panel.

6. Filter condition monitoring: When differential pressure switch reaches setpoint a dirty filter an alarm is sent to the DDC.