

**FAC 3121 MISSILE AND SPACE RDTE FACILITY**

FY22 SUC:	\$7.56 / SF
Source:	Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 3121 MISSILE AND SPACE RDTE FACILITY

Release 2021 Qtr 3  
Zip Code Prefix 222  
Type MR

UM SF  
Design Life 55  
Average Size 13971.0

SUC \$7.56

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Minor repairs to concrete floor unfinished	15	180.00 S.F.	\$7,089.92	\$8,599.27	3.6667	3	3	\$25,797.82	\$25,797.82
Repair concrete stairs	30	40.00 S.F.	\$1,320.17	\$1,526.63	1.8333	1	1	\$1,526.63	\$1,526.63
Correct water pressure drinking fountain	2	3.00 Ea.	\$125.46	\$156.91	27.5000	27	27	\$4,236.49	\$4,236.49
Replace refrigerant drinking fountain	2	3.00 Ea.	\$98.05	\$114.81	27.5000	27	27	\$3,099.81	\$3,099.81
Repair drain leak drinking fountain	4	3.00 Ea.	\$101.75	\$121.60	13.7500	13	11	\$1,580.85	\$1,337.64
Replace fountain drinking fountain	10	3.00 Ea.	\$3,843.47	\$4,543.68	5.5000	5	5	\$22,718.38	\$22,718.38
Inspect and clean shower head emergency shower station	3	2.00 Ea.	\$98.79	\$123.54	18.3333	18	18	\$2,223.76	\$2,223.76
Replace shower emergency shower station	25	2.00 Ea.	\$1,883.93	\$2,258.23	2.2000	2	2	\$4,516.46	\$4,516.46
Replace eye wash station, emergency eye wash	25	2.00 Ea.	\$2,228.68	\$2,649.99	2.2000	2	2	\$5,299.99	\$5,299.99
Resolder joint pipe & fittings, copper	10	16.00 Ea.	\$713.49	\$884.47	5.5000	5	5	\$4,422.36	\$4,422.36
Overhaul water heater, gas / oil, 70 gallon	5	2.00 Ea.	\$327.40	\$409.45	11.0000	11	11	\$4,503.98	\$4,503.98
Clean & service water heater, gas / oil, 70 gallon	1	2.00 Ea.	\$393.23	\$491.78	55.0000	55	55	\$27,047.77	\$27,047.77
Replace water heater, gas / oil, 70 gallon	12	2.00 Ea.	\$6,630.33	\$7,694.81	4.5833	4	4	\$30,779.24	\$30,779.24
Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP	0.5	2.00 Ea.	\$16.06	\$20.08	110.0000	110	110	\$2,208.65	\$2,208.65
Replace pump / motor assembly circulation pump, 1/12 HP	10	2.00 Ea.	\$2,201.15	\$2,579.99	5.5000	5	5	\$12,899.95	\$12,899.95
Unclog main drain pipe & fittings, cast iron	10	2.00 Ea.	\$92.33	\$115.47	5.5000	5	5	\$577.36	\$577.36
Replace pipe & fittings, cast iron, 4"	40	160.00 L.F.	\$10,711.53	\$12,857.23	1.3750	1	1	\$12,857.23	\$12,857.23
Unclog floor drain, PVC	20	4.00 Ea.	\$191.18	\$239.10	2.7500	2	2	\$478.19	\$478.19
Repair joint pipe and fittings, PVC	10	4.00 Ea.	\$605.17	\$752.00	5.5000	5	5	\$3,759.99	\$3,759.99
Replace pipe, 4" pipe and fittings, PVC	30	360.00 L.F.	\$29,372.03	\$36,138.30	1.8333	1	1	\$36,138.30	\$36,138.30
General maintenance & repair drain: roof, scupper, area	1	6.00 Ea.	\$221.93	\$277.54	55.0000	55	55	\$15,264.81	\$15,264.81
Replace drain: roof, scupper, area	40	6.00 Ea.	\$4,721.59	\$5,474.16	1.3750	1	1	\$5,474.16	\$5,474.16
Install new 4" gasket, 1 per M.L.F. natural gas, steel/iron	30	3.00 Ea.	\$632.86	\$785.06	1.8333	1	1	\$785.06	\$785.06
Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas	12	3.00 Ea.	\$2,791.91	\$3,392.35	4.5833	4	4	\$13,569.41	\$13,569.41
Repair boiler, gas, 250 MBH	7	2.00 Ea.	\$4,062.11	\$4,780.90	7.8571	7	7	\$33,466.31	\$33,466.31
Replace boiler, gas, 250 MBH	30	2.00 Ea.	\$18,796.09	\$22,420.25	1.8333	1	1	\$22,420.25	\$22,420.25
Repair fan, induced draft, 6700 CFM	10	2.00 Ea.	\$605.49	\$739.06	5.5000	5	5	\$3,695.30	\$3,695.30
Replace fan, induced draft, 6700 CFM	20	2.00 Ea.	\$10,435.76	\$12,056.15	2.7500	2	2	\$24,112.30	\$24,112.30

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace fan & motor, propeller exhaust, 1000 CFM exhaust fan	15	2.00 Ea.	\$1,708.75	\$2,014.11	3.6667	3	3	\$6,042.32	\$6,042.32
Replace steam trap, 15 PSIG, 3/4" threaded	7	8.00 Ea.	\$2,277.19	\$2,653.73	7.8571	7	7	\$18,576.13	\$18,576.13
Repack gate valve gland, 3/8" - 1-1/2" valves	10	4.00 Ea.	\$111.38	\$133.24	5.5000	5	5	\$666.21	\$666.21
Repair circulator pump, 1 H.P.	5	2.00 Ea.	\$196.72	\$232.03	11.0000	11	8	\$2,552.37	\$1,856.27
Replace circulator. pump, 1 H.P.	15	2.00 Ea.	\$11,536.96	\$13,227.58	3.6667	3	3	\$39,682.74	\$39,682.74
Repair damaged pipe insulation, fiberglass 1-1/4"	5	14.00 Ea.	\$292.06	\$359.26	11.0000	11	11	\$3,951.87	\$3,951.87
Maintenance and repair explosionproof industrial heater	2	1.00 Ea.	\$202.69	\$236.84	27.5000	27	27	\$6,394.79	\$6,394.79
Maintenance and inspection explosionproof industrial heater	0.5	1.00 Ea.	\$78.85	\$98.78	110.0000	110	110	\$10,866.32	\$10,866.32
Repair terminal reheat, 36" x 36" coil	10	8.00 Ea.	\$1,303.53	\$1,630.20	5.5000	5	5	\$8,151.01	\$8,151.01
Replace terminal reheat, 36" x 36" coil	15	8.00 Ea.	\$27,539.73	\$32,002.03	3.6667	3	3	\$96,006.08	\$96,006.08
Repair computer room air conditioner, air cooled, 5 ton	10	1.00 Ea.	\$4,277.08	\$5,096.24	5.5000	5	5	\$25,481.19	\$25,481.19
Replace computer room air conditioner, air cooled, 5 ton	20	1.00 Ea.	\$38,211.35	\$43,798.01	2.7500	2	2	\$87,596.02	\$87,596.02
Repair single zone rooftop unit, 60 ton	10	2.00 Ea.	\$139,940.72	\$163,786.66	5.5000	5	4	\$818,933.30	\$655,146.64
Replace single zone rooftop unit, 60 ton	15	2.00 Ea.	\$187,817.30	\$219,385.60	3.6667	3	3	\$658,156.79	\$658,156.79
Repair central station A.H.U., 16,000 CFM	10	2.00 Ea.	\$3,005.64	\$3,492.07	5.5000	5	4	\$17,460.35	\$13,968.28
Replace central station A.H.U., 16,000 CFM	15	2.00 Ea.	\$133,879.30	\$154,090.16	3.6667	3	3	\$462,270.47	\$462,270.47
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	55.0000	55	55	\$2,361.08	\$2,361.08
Replace sprinkler head	20	85.00 Ea.	\$7,269.44	\$8,941.11	2.7500	2	2	\$17,882.22	\$17,882.22
Rebuild double check 3" backflow preventer sprinkler system	1	1.00 Ea.	\$710.41	\$851.09	55.0000	55	55	\$46,810.15	\$46,810.15
Repair 15 KV primary transformer, dry	15	1.00 Ea.	\$257.71	\$311.64	3.6667	3	3	\$934.92	\$934.92
Maintenance and inspection primary transformer, dry	0.5	1.00 Ea.	\$40.64	\$50.92	110.0000	110	110	\$5,601.36	\$5,601.36
Repair switchboard meter	10	1.00 Ea.	\$1,568.90	\$1,830.18	5.5000	5	5	\$9,150.92	\$9,150.92
Maintenance and repair rectifier, up to 600 V	2	1.00 Ea.	\$686.80	\$818.18	27.5000	27	27	\$22,090.87	\$22,090.87
Maintenance and repair motor starter, up to 600 V	5	4.00 Ea.	\$1,118.56	\$1,350.39	11.0000	11	11	\$14,854.31	\$14,854.31
Maintenance and repair secondary transformer, liquid filled	25	2.00 Ea.	\$247.47	\$306.52	2.2000	2	2	\$613.04	\$613.04
Maintenance and repair secondary transformer, dry	10	2.00 Ea.	\$464.88	\$556.53	5.5000	5	5	\$2,782.66	\$2,782.66
Maintenance and inspection lighting panel, indoor	3	4.00 Ea.	\$162.58	\$203.69	18.3333	18	18	\$3,666.35	\$3,666.35
Replace load center, 100 A	20	4.00 Ea.	\$4,376.66	\$5,347.50	2.7500	2	2	\$10,695.01	\$10,695.01
Replace armored cable	60	0.42 M.L.F.	\$2,293.76	\$2,845.69	0.9167	0	0	\$0.00	\$0.00
Maintenance and repair breaker, molded case, 480 V, 2 pole	20	6.00 Ea.	\$430.58	\$539.45	2.7500	2	2	\$1,078.90	\$1,078.90
Replace circuit breaker molded case, 600 V, 2 pole circuit breaker	50	4.00 Ea.	\$3,713.20	\$4,305.97	1.1000	1	1	\$4,305.97	\$4,305.97

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Maintenance and repair breaker, enclosed, 240 V, 2 pole	25	24.00 Ea.	\$1,722.30	\$2,157.80	2.2000	2	2	\$4,315.59	\$4,315.59
Maintenance and repair safety switch general, 2 pole	8	4.00 Ea.	\$162.58	\$203.69	6.8750	6	6	\$1,222.12	\$1,222.12
Maintenance and inspection safety switch, 2 pole	1	4.00 Ea.	\$162.58	\$203.69	55.0000	55	55	\$11,202.72	\$11,202.72
Maintenance and repair receptacles and plugs	20	56.00 Ea.	\$2,365.63	\$2,953.36	2.7500	2	2	\$5,906.72	\$5,906.72
Replace receptacle/plug receptacles and plugs	20	56.00 Ea.	\$4,029.51	\$4,967.01	2.7500	2	2	\$9,934.02	\$9,934.02
Maintenance and repair wiring devices, switches	10	30.00 Ea.	\$1,267.30	\$1,582.16	5.5000	5	5	\$7,910.79	\$7,910.79
Replace wiring devices, switches	15	30.00 Ea.	\$1,961.33	\$2,436.66	3.6667	3	3	\$7,309.97	\$7,309.97
Replace fluorescent light fixture ballast, 80 W	10	58.00 Ea.	\$7,230.77	\$8,771.76	5.5000	5	5	\$43,858.80	\$43,858.80
Replace lamps (2 lamps), 4', 34 W energy saver	10	58.00 Ea.	\$1,462.41	\$1,831.58	5.5000	5	5	\$9,157.89	\$9,157.89
Repair smoke detector	10	36.00 Ea.	\$2,029.95	\$2,509.71	5.5000	5	4	\$12,548.53	\$10,038.83
Check operation smoke detector	1	32.00 Ea.	\$518.22	\$649.25	55.0000	55	55	\$35,708.68	\$35,708.68
Replace smoke detector	15	32.00 Ea.	\$9,095.59	\$10,862.78	3.6667	3	3	\$32,588.34	\$32,588.34
Check and repair manual pull station	10	6.00 Ea.	\$526.18	\$646.98	5.5000	5	4	\$3,234.91	\$2,587.93
Replace manual pull station	15	6.00 Ea.	\$1,220.81	\$1,469.65	3.6667	3	3	\$4,408.94	\$4,408.94
Minor repairs to fire alarm control panel	5	1.00 Ea.	\$149.71	\$182.27	11.0000	11	11	\$2,005.02	\$2,005.02
Maintenance and inspection fire alarm control panel	0.5	1.00 Ea.	\$43.18	\$54.10	110.0000	110	110	\$5,951.45	\$5,951.45
Replace fire alarm control panel	15	1.00 Ea.	\$1,953.46	\$2,391.92	3.6667	3	3	\$7,175.76	\$7,175.76
Minor repairs to annunciation panel	5	1.00 Ea.	\$149.71	\$182.27	11.0000	11	11	\$2,005.02	\$2,005.02
Maintenance and inspection annunciation panel	0.5	1.00 Ea.	\$43.18	\$54.10	110.0000	110	110	\$5,951.45	\$5,951.45
Replace fire alarm bell, 6"	20	6.00 Ea.	\$1,169.77	\$1,411.65	2.7500	2	2	\$2,823.31	\$2,823.31
Replace EMS, Three Phase, 5 Meters	15	2.00 Ea.	\$31,604.92	\$36,799.58	3.6667	3	3	\$110,398.74	\$110,398.74
Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors	20	2.00 Ea.	\$34,275.44	\$40,061.35	2.7500	2	2	\$80,122.70	\$80,122.70
Maintenance and repair building structure ground	7	0.90 M.L.F.	\$79.10	\$98.81	7.8571	7	7	\$691.66	\$691.66
Maintenance and repair of general wiring lightning protection system	1	1.00 M.L.F.	\$96.72	\$119.83	55.0000	55	55	\$6,590.46	\$6,590.46
Replace lightning protection general wiring system	25	1.20 M.L.F.	\$13,210.95	\$15,715.19	2.2000	2	2	\$31,430.38	\$31,430.38
Maintenance and repair lightning ground rod	1	6.00 Ea.	\$527.33	\$658.72	55.0000	55	53	\$36,229.76	\$34,912.32
Replace lightning ground rod	25	6.00 Ea.	\$1,356.54	\$1,681.74	2.2000	2	2	\$3,363.49	\$3,363.49
Maintenance and repair computer ground system	4	1.00 Ea.	\$21.59	\$27.05	13.7500	13	13	\$351.68	\$351.68
Replace computer ground system	50	0.50 M.L.F.	\$932.90	\$1,139.42	1.1000	1	1	\$1,139.42	\$1,139.42
Replace lamp emergency lighting fixture	2	9.00 Ea.	\$492.20	\$592.88	27.5000	27	27	\$16,007.79	\$16,007.79
Replace emergency lighting fixture	20	9.00 Ea.	\$5,421.31	\$6,387.85	2.7500	2	2	\$12,775.71	\$12,775.71
Maintenance and repair exit light	20	9.00 Ea.	\$334.81	\$414.03	2.7500	2	2	\$828.06	\$828.06
Replace lamp exit light	5	9.00 Ea.	\$151.62	\$179.67	11.0000	11	11	\$1,976.38	\$1,976.38
Replace lighting fixture exit light	20	9.00 Ea.	\$1,719.31	\$2,067.85	2.7500	2	2	\$4,135.69	\$4,135.69

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Maintenance and inspection generator, diesel, 750 KW	0.08	1.00 Ea.	\$64.78	\$81.16	687.5000	687	687	\$55,754.24	\$55,754.24
Replace diesel generator component, 750 KW	25	1.00 Ea.	\$227,966.93	\$261,102.57	2.2000	2	2	\$522,205.15	\$522,205.15
Replace acoustic tile ceiling, fire-rated	20	56.00 C.S.F.	\$29,356.80	\$34,601.62	2.7500	2	2	\$69,203.24	\$69,203.24
Replace flush valve diaphragm tankless water closet	10	6.00 Ea.	\$157.32	\$195.22	5.5000	5	5	\$976.08	\$976.08
Rebuild flush valve tankless water closet	20	6.00 Ea.	\$1,082.60	\$1,304.74	2.7500	2	2	\$2,609.49	\$2,609.49
Unplug clogged line tankless water closet	5	6.00 Ea.	\$1,310.37	\$1,638.76	11.0000	11	11	\$18,026.37	\$18,026.37
Replace tankless water closet	35	6.00 Ea.	\$7,717.33	\$8,930.97	1.5714	1	1	\$8,930.97	\$8,930.97
Replace tankless flush valve	25	6.00 Ea.	\$1,513.29	\$1,776.66	2.2000	2	2	\$3,553.33	\$3,553.33
Replace wax ring gasket for tankless water closet	5	6.00 Ea.	\$849.12	\$1,060.96	11.0000	11	11	\$11,670.55	\$11,670.55
Replace flush valve diaphragm for a urinal	7	3.00 Ea.	\$78.66	\$97.61	7.8571	7	7	\$683.25	\$683.25
Rebuild flush valve for a urinal	20	3.00 Ea.	\$541.30	\$652.37	2.7500	2	2	\$1,304.74	\$1,304.74
Unplug line urinal	5	3.00 Ea.	\$435.22	\$544.28	11.0000	11	11	\$5,987.12	\$5,987.12
Replace wall-hung urinal	35	3.00 Ea.	\$2,906.59	\$3,507.32	1.5714	1	1	\$3,507.32	\$3,507.32
Replace washer in spud connection lavatory, vitreous china	7	10.00 Ea.	\$164.63	\$200.80	7.8571	7	7	\$1,405.60	\$1,405.60
Replace washer in faucet lavatory, vitreous china	2	10.00 Ea.	\$128.85	\$160.52	27.5000	27	27	\$4,333.99	\$4,333.99
Replace faucets lavatory, vitreous china	10	10.00 Ea.	\$1,817.26	\$2,187.55	5.5000	5	5	\$10,937.77	\$10,937.77
Clean out strainer and P trap lavatory, vitreous china	2	10.00 Ea.	\$348.69	\$436.08	27.5000	27	27	\$11,774.14	\$11,774.14
Replace lavatory, vitreous china	35	10.00 Ea.	\$6,725.75	\$8,082.21	1.5714	1	1	\$8,082.21	\$8,082.21
Check / minor repairs drinking fountain	1	3.00 Ea.	\$146.65	\$183.40	55.0000	55	55	\$10,086.88	\$10,086.88
Repair internal leaks drinking fountain	4	3.00 Ea.	\$135.24	\$169.13	13.7500	13	13	\$2,198.74	\$2,198.74
Refinish metal hand rail	7	12.00 L.F.	\$24.76	\$30.51	7.8571	7	7	\$213.59	\$213.59
Point and refinish painted concrete block wall, 1st floor	25	52.00 C.S.F.	\$24,428.40	\$30,149.87	2.2000	2	2	\$60,299.74	\$60,299.74
Replace steel siding - 1st floor	35	24.00 C.S.F.	\$13,370.91	\$16,130.93	1.5714	1	1	\$16,130.93	\$16,130.93
Refinish steel louver, 1st floor	5	4.00 Ea.	\$388.15	\$481.62	11.0000	11	11	\$5,297.85	\$5,297.85
Replace glass - 1st floor (1% of glass) - steel frame window	1	19.80 S.F.	\$238.74	\$280.60	55.0000	55	55	\$15,432.88	\$15,432.88
Repair 3'-9" x 5'-5" steel frame window - 1st floor.	20	32.00 Ea.	\$9,545.72	\$11,213.38	2.7500	2	2	\$22,426.76	\$22,426.76
Refinish 3'-9" x 5'-5" steel frame window - 1st floor.	5	32.00 Ea.	\$2,562.65	\$3,179.10	11.0000	11	11	\$34,970.05	\$34,970.05
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	4.32 S.F.	\$52.09	\$61.22	55.0000	55	55	\$3,367.17	\$3,367.17
Repair steel, painted, door	14	3.00 Ea.	\$1,875.22	\$2,232.02	3.9286	3	3	\$6,696.05	\$6,696.05
Refinish 3'-0" x 7'-0" steel, painted, door	4	3.00 Ea.	\$124.20	\$152.60	13.7500	13	13	\$1,983.78	\$1,983.78
Replace 3'-0" x 7'-0" steel, painted, door	45	3.00 Ea.	\$2,115.19	\$2,459.19	1.2222	1	1	\$2,459.19	\$2,459.19
Replace tempered glass - (3% of glass) steel painted door	1	1.89 S.F.	\$42.71	\$51.03	55.0000	55	55	\$2,806.74	\$2,806.74
Repair 12' x 24' aluminum double roll-up door	10	2.00 Ea.	\$4,843.91	\$5,611.38	5.5000	5	5	\$28,056.88	\$28,056.88

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Remove and replace electric bi-folding hangar door motor	15	1.00 Ea.	\$627.19	\$731.57	3.6667	3	3	\$2,194.71	\$2,194.71	
Remove and replace electric bi-folding hangar door cables	15	1.00 Ea.	\$585.59	\$712.33	3.6667	3	3	\$2,136.99	\$2,136.99	
Debris removal and visual inspection of built-up roofing	0.5	13.90 M.S.F.	\$523.47	\$638.48	110.0000	110	110	\$70,232.31	\$70,232.31	
Non-destructive moisture inspection of built-up roofing	5	13.90 M.S.F.	\$1,624.29	\$1,981.15	11.0000	11	11	\$21,792.67	\$21,792.67	
Minor BUR membrane repairs, 2% of roof area	1	0.28 Sq.	\$135.07	\$160.29	55.0000	55	55	\$8,815.86	\$8,815.86	
BUR flashing repairs, 2 S.F. per sq. repaired	1	4.48 S.F.	\$15.68	\$19.04	55.0000	55	55	\$1,046.93	\$1,046.93	
Minor BUR membrane replacement, 25% of roof area	15	34.90 Sq.	\$28,087.11	\$33,340.44	3.6667	3	3	\$100,021.31	\$100,021.31	
Total BUR roof replacement	28	139.70 Sq.	\$108,917.11	\$128,800.94	1.9643	1	1	\$128,800.94	\$128,800.94	
Repair steel painted interior door	14	6.00 Ea.	\$1,760.71	\$2,049.38	3.9286	3	3	\$6,148.15	\$6,148.15	
Replace 3'-0" x 7'-0" steel painted interior door	60	6.00 Ea.	\$7,308.21	\$8,472.50	0.9167	0	0	\$0.00	\$0.00	
Safety glass replacement, (3% of glass) steel painted interior door	1	2.89 S.F.	\$52.07	\$62.07	55.0000	55	55	\$3,413.80	\$3,413.80	
Repair solid core wood door, interior	11	8.00 Ea.	\$2,347.62	\$2,732.51	5.0000	5	5	\$13,662.56	\$13,662.56	
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	8.00 Ea.	\$346.92	\$426.00	13.7500	13	12	\$5,537.97	\$5,111.97	
Replace 3'-0" x 7'-0" solid core wood door, interior	40	8.00 Ea.	\$3,915.42	\$4,526.48	1.3750	1	1	\$4,526.48	\$4,526.48	
Repair 5/8" drywall - (2% of walls)	20	144.00 S.F.	\$241.25	\$293.54	2.7500	2	2	\$587.08	\$587.08	
Refinish drywall	4	7,200.00 S.F.	\$4,471.07	\$5,500.15	13.7500	13	13	\$71,501.99	\$71,501.99	
Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	0.02 C.S.F.	\$19.70	\$23.74	5.5000	5	5	\$118.71	\$118.71	
Refinish concrete floor finished	25	24.00 C.S.F.	\$10,123.86	\$12,160.33	2.2000	2	2	\$24,320.65	\$24,320.65	
Replace vinyl tile flooring	18	310.00 S.Y.	\$15,315.08	\$18,807.71	3.0556	3	3	\$56,423.14	\$56,423.14	
Replace rubber tile floor	18	28.00 S.Y.	\$5,432.71	\$6,411.06	3.0556	3	3	\$19,233.18	\$19,233.18	
			\$1,348,466.11	\$1,581,004.63				MR Subtotal	\$4,573,108.57	
									MR Per Year	\$83,060.50
									PM Total	\$22,617.34
									Subtotal	\$105,677.84
									Total Per Unit	\$7.56

**FAC 3121 MISSILE AND SPACE RDTE FACILITY**

SUC \$7.56

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 55

Type PM

Average Size 13971.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Transformer, dry type 500 KVA and over, annually	2.00	1.54	\$30.31	\$101.53	\$0.00	\$131.84	\$165.33	\$200.33
Panelboard, 225 A and above, annually	4.00	1.76	\$92.79	\$116.03	\$0.00	\$208.82	\$252.91	\$301.64
Motor control center, over 400 A, annually	4.00	1.56	\$92.79	\$103.60	\$0.00	\$196.39	\$236.75	\$281.75
Fire alarm annunciator system, annualized	1.00	11.05	\$179.39	\$652.68	\$0.00	\$832.07	\$1,045.82	\$1,268.53
Power stablizer, annualized	1.00	0.62	\$9.28	\$36.78	\$0.00	\$46.06	\$58.02	\$70.44
Light, emergency, hardwired system, annualized	9.00	2.25	\$69.59	\$132.87	\$0.00	\$202.46	\$249.28	\$299.58
Crane, electric bridge, over 15 tons, annualized	1.00	8.27	\$324.32	\$290.03	\$0.00	\$614.35	\$733.79	\$869.45
Emergency diesel or gas generator, over 15 KVA, annually	1.00	2.11	\$86.09	\$124.32	\$0.00	\$210.41	\$256.31	\$306.52
Package unit, air cooled, 3 thru 24 ton, annualized	1.00	2.40	\$176.92	\$144.48	\$0.00	\$321.41	\$382.45	\$452.33
Hanger doors, sliding, annually	1.00	1.17	\$17.82	\$48.07	\$0.00	\$65.89	\$82.09	\$99.18
Door, emergency egress, swinging, annualized	3.00	0.78	\$43.78	\$32.25	\$0.00	\$76.02	\$90.08	\$106.32
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	2.00	8.14	\$81.92	\$337.62	\$0.00	\$419.54	\$529.02	\$642.60
Fire doors, swinging, annualized	3.00	1.18	\$42.96	\$43.67	\$0.00	\$86.64	\$104.03	\$123.58
Urinals, annualized	3.00	0.68	\$18.96	\$34.36	\$0.00	\$53.32	\$65.52	\$78.67
Toilet (vacuum breaker type), annualized	6.00	1.06	\$50.65	\$53.39	\$0.00	\$104.04	\$125.12	\$148.74
Lavatories, annualized	10.00	3.48	\$59.65	\$207.04	\$0.00	\$266.68	\$334.76	\$405.82
Drink fountain, annualized	3.00	1.86	\$62.18	\$93.83	\$0.00	\$156.00	\$190.37	\$227.84
Water heater, gas, to 120 gal., annualized	2.00	3.44	\$117.28	\$173.56	\$0.00	\$290.83	\$354.63	\$424.29
Boiler, hot water, oil, gas, or comb. fired, 120 - 500 MBH, annualized	2.00	31.76	\$154.68	\$1,894.15	\$0.00	\$2,048.83	\$2,632.55	\$3,223.99
Chiller, recip., air cooled, over 25 tons, annualized	2.00	25.78	\$182.99	\$1,550.56	\$0.00	\$1,733.55	\$2,217.02	\$2,709.63
Air handling unit, 25 thru 50 tons, annualized	2.00	3.88	\$758.25	\$195.58	\$0.00	\$953.83	\$1,088.33	\$1,260.74
Controls, central system, electro/pneumatic, annualized	1.00	1.92	\$70.77	\$115.41	\$0.00	\$186.18	\$227.88	\$273.12
Backflow prevention device, up to 4", annualized	4.00	1.33	\$53.58	\$79.29	\$0.00	\$132.87	\$162.02	\$193.84
Extinguishing system, deluge / preaction, annualized	1.00	11.59	\$68.24	\$691.59	\$0.00	\$759.83	\$974.13	\$1,191.84
Fire pump, electric motor driven, annualized	1.00	47.75	\$53.08	\$2,841.22	\$0.00	\$2,894.30	\$3,751.98	\$4,612.31
Switchboard, with air circuit breaker, annualized	2.00	26.64	\$34.33	\$1,750.84	\$0.00	\$1,785.17	\$2,313.86	\$2,844.26
						\$14,777.34	\$18,624.03	\$22,617.34





# FAC 3121 MISSILE AND SPACE RDTE FACILITY

## Modeled Component List CostWorks Release 2021 Qtr 3

### D20 Plumbing

Drinking Fountain	3.0 Ea.
Emergency Shower Station	2.0 Ea.
Emergency Eye Wash	2.0 Ea.
Water Heater, Gas / Oil, 70 Gallon	2.0 Ea.
Circulation Pump, 1/12 HP	2.0 Ea.
Drain: Roof, Scupper, Area	6.0 Ea.
Tankless Water Closet	6.0 Ea.
Urinal	3.0 Ea.
Lavatory, Vitreous China	10.0 Ea.

### D30 HVAC

Boiler, Gas, 250 MBH	2.0 Ea.
Draft Fan, 6700 CFM	2.0 Ea.
Exhaust Fan, propeller exh., 4700 CFM	2.0 Ea.
Circulator Pump, 1 H.P.	2.0 Ea.
Terminal Reheat Coil, 36" x 36"	8.0 Ea.
Computer Room A/C Units, Air Cooled, 5 ton	1.0 Ea.
Single Zone Air Conditioner, 60 ton	2.0 Ea.
Central Station Air Conditioning Air Handling Unit, 16,000 CFM	2.0 Ea.

### D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	85.0 Ea.
Sprinkler System, Fire Suppression, 3" backflow preventer	1.0 Ea.
Fire Pump, Electric, annualized	1.0 Each

### D50 Electrical

Load Center, 100 A, maintenance & inspection	4.0 Ea.
Load Center, 100 A, replacement	4.0 Ea.
Circuit Breaker, molded case, 600 V, 2 pole	4.0 Ea.
Smoke Detector	32.0 Ea.
Manual Pull Station	6.0 Ea.
Fire Alarm Control Panel	1.0 Ea.
Fire Alarm Bell	6.0 Ea.
Lightning Protection System	1.2 M.L.F.
Lightning Ground Rod	6.0 Ea.
Computer Ground System	0.5 M.L.F.
Emergency Lighting Fixture	9.0 Ea.
Exit Light	9.0 Ea.
Generator, Diesel, 750 KW	1.0 Ea.

### C30 Interior Finishes

Acoustic Tile, fire-rated	56.0 C.S.F.
Concrete, Finished	24.0 C.S.F.
Vinyl	310.0 S.Y.
Rubber Tile	28.0 S.Y.

### B20 Exterior Enclosure

Steel, Painted	3.0 Ea.
Electric Bifolding Hangar Door Motor	1.0 Ea.

### B30 Roofing

Built-Up Roofing	139.7 Sq.
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### C10 Interior Construction

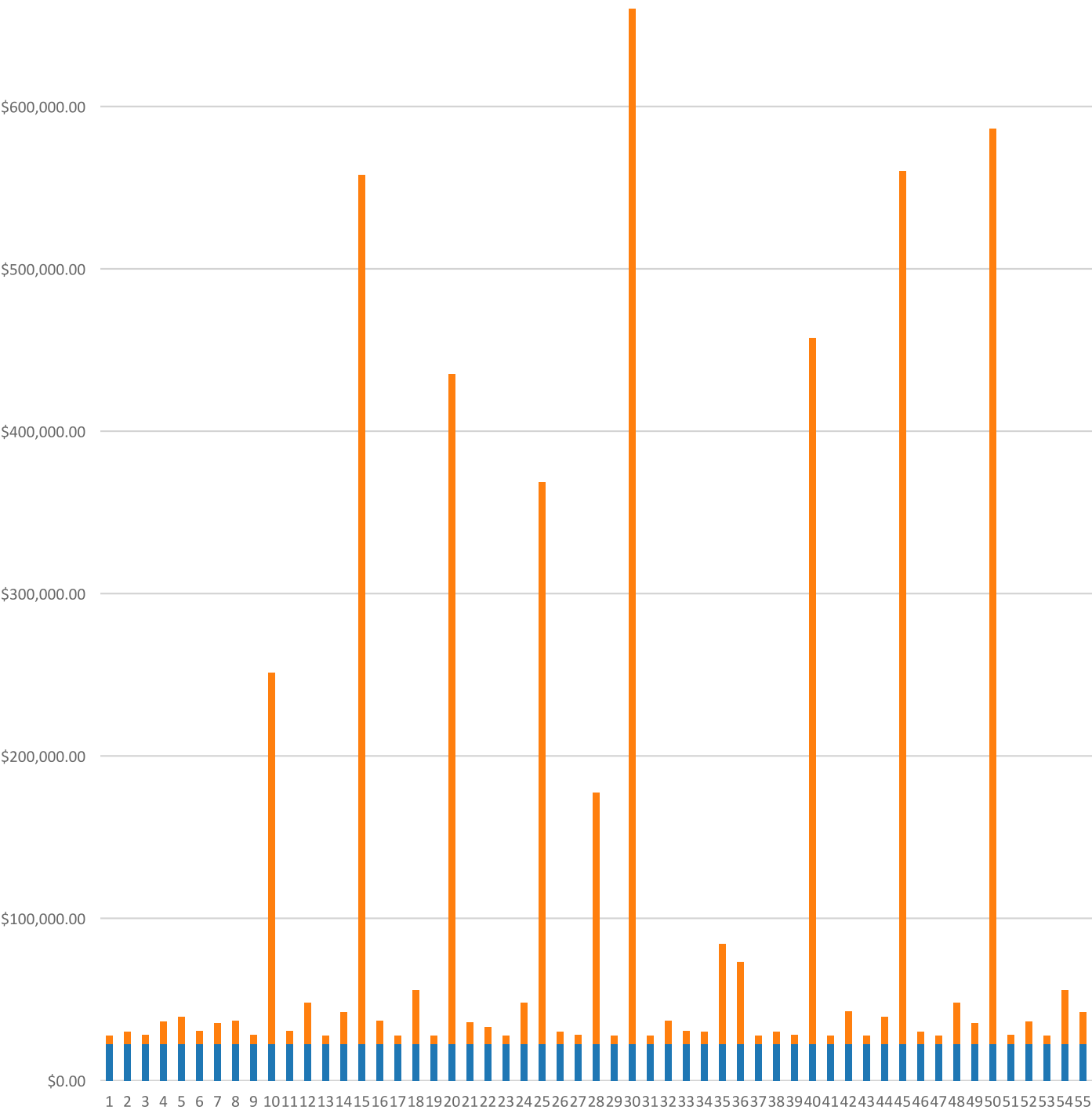
Steel Painted Interior Doors	6.0 Ea.
Solid Core Interior Doors	8.0 Ea.
Fire Doors, Swinging, annualized	3.0 Each

### E10 Equipment

Crane, Electric, over 15 ton, annualized

1.0 Each

FAC 3121 MISSILE AND SPACE RDTE FACILITY  
Sustainment by Year  
CostWorks Release 2021 Qtr 3



PM Cost  
MR Cost