

FAC 2115 AIRCRAFT MAINTENANCE HANGAR, DEPOT

FY24 SUC: \$2.27 / SF
Source: Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 2115 AIRCRAFT MAINTENANCE HANGAR, DEPOT

SUC \$2.27

Release 2023 Qtr 4
Zip Code Prefix 222
Type MR

UM SF
Design Life 40
Average Size 91594.0

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
Repair 5/8" drywall - (2% of walls)	20	141.90 S.F.	\$237.10	\$289.76	2.0000	2	2	\$579.52	\$579.52
Overhaul water heater, gas / oil, 70 gallon	5	2.00 Ea.	\$345.73	\$432.80	8.0000	8	8	\$3,462.37	\$3,462.37
Replace pipe & fittings, cast iron, 4"	40	1,600.00 L.F.	\$92,595.34	\$112,509.82	1.0000	1	1	\$112,509.82	\$112,509.82
Install new 4" gasket, 1 per M.L.F. natural gas, steel/iron	30	1.00 Ea.	\$226.30	\$280.46	1.3333	1	1	\$280.46	\$280.46
Refinish drywall	4	7,094.00 S.F.	\$4,807.17	\$5,905.60	10.0000	10	10	\$59,056.04	\$59,056.04
Replace 5/8" drywall	75	7,094.00 S.F.	\$16,761.82	\$20,583.76	0.5333	0	0	\$0.00	\$0.00
Replace stainless steel wall interior finish	75	117.43 C.S.F.	\$209,430.16	\$246,962.33	0.5333	0	0	\$0.00	\$0.00
Refinish concrete floor finished	25	625.39 C.S.F.	\$260,523.26	\$314,332.66	1.6000	1	1	\$314,332.66	\$314,332.66
Replace vinyl sheet flooring	18	315.90 S.Y.	\$27,361.31	\$32,958.28	2.2222	2	2	\$65,916.57	\$65,916.57
Replace carpet	8	631.70 S.Y.	\$34,109.63	\$39,444.91	5.0000	5	5	\$197,224.56	\$197,224.56
Repair gypsum board ceiling - (2% of ceilings)	20	2.13 C.S.F.	\$819.17	\$1,005.90	2.0000	2	2	\$2,011.79	\$2,011.79
Refinish gypsum board ceiling, up to 12' high	20	106.60 C.S.F.	\$15,468.73	\$19,031.06	2.0000	2	1	\$38,062.11	\$19,031.06
Replace gypsum board ceiling, up to 12' high	40	106.60 C.S.F.	\$42,011.97	\$51,603.85	1.0000	1	1	\$51,603.85	\$51,603.85
Replace flush valve diaphragm tankless water closet	10	12.00 Ea.	\$327.17	\$406.27	4.0000	4	4	\$1,625.09	\$1,625.09
Rebuild flush valve tankless water closet	20	12.00 Ea.	\$2,302.57	\$2,775.23	2.0000	2	2	\$5,550.46	\$5,550.46
Unplug clogged line tankless water closet	5	12.00 Ea.	\$2,759.15	\$3,453.98	8.0000	8	8	\$27,631.84	\$27,631.84
Replace tankless water closet	35	12.00 Ea.	\$16,998.65	\$19,659.85	1.1429	1	1	\$19,659.85	\$19,659.85
Clean & service water heater, gas / oil, 70 gallon	1	2.00 Ea.	\$412.20	\$516.00	40.0000	40	40	\$20,640.03	\$20,640.03
Unclog floor drain, PVC	20	1.00 Ea.	\$50.45	\$63.16	2.0000	2	2	\$126.31	\$126.31
Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas	12	2.00 Ea.	\$1,834.71	\$2,239.48	3.3333	3	3	\$6,718.45	\$6,718.45
Replace pipe and fittings, copper 3/4"	20	1,540.00 L.F.	\$38,495.59	\$46,655.79	2.0000	2	2	\$93,311.58	\$93,311.58
Replace pipe and fittings, copper 2"	25	220.00 L.F.	\$11,534.04	\$13,873.07	1.6000	1	1	\$13,873.07	\$13,873.07
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	390.00 L.F.	\$3,849.62	\$4,716.80	2.6667	2	2	\$9,433.60	\$9,433.60
Inspect/check pump/motor operation, lubricate circulation pump, bronze 1 HP	0.5	2.00 Ea.	\$16.87	\$21.12	80.0000	80	80	\$1,689.90	\$1,689.90
Replace pump / motor assembly circulation pump, bronze 1 HP	20	2.00 Ea.	\$11,267.80	\$12,929.25	2.0000	2	2	\$25,858.50	\$25,858.50
Unclog main drain pipe & fittings, cast iron	10	1.00 Ea.	\$48.84	\$61.14	4.0000	4	4	\$244.56	\$244.56
Replace pipe, 4" pipe and fittings, PVC	30	900.00 L.F.	\$74,648.36	\$92,139.70	1.3333	1	1	\$92,139.70	\$92,139.70
General maintenance & repair drain: roof, scupper, area	1	20.00 Ea.	\$783.61	\$980.94	40.0000	40	40	\$39,237.56	\$39,237.56
Replace drain: roof, scupper, area	40	20.00 Ea.	\$22,607.47	\$26,077.01	1.0000	1	1	\$26,077.01	\$26,077.01
Repair boiler, gas, 2000 MBH	7	2.00 Ea.	\$11,469.59	\$13,370.29	5.7143	5	5	\$66,851.47	\$66,851.47
Replace boiler, gas, 2000 MBH	30	2.00 Ea.	\$81,177.87	\$95,116.86	1.3333	1	1	\$95,116.86	\$95,116.86

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Repair chemical feed system	15	2.00 Ea.	\$1,986.36	\$2,362.80	2.6667	2	2	\$4,725.61	\$4,725.61
Replace chemical feed system	15	2.00 Ea.	\$1,922.65	\$2,229.45	2.6667	2	2	\$4,458.90	\$4,458.90
Replace fan & motor, propeller exhaust, 1000 CFM exhaust fan	15	2.00 Ea.	\$1,845.21	\$2,173.28	2.6667	2	2	\$4,346.56	\$4,346.56
Replace roof mounted exhaust fan, 800 CFM exhaust fan	20	2.00 Ea.	\$3,423.78	\$4,013.42	2.0000	2	2	\$8,026.85	\$8,026.85
Replace axial flow fan, 15,600 CFM exhaust fan	10	6.00 Ea.	\$26,297.52	\$30,798.74	4.0000	4	4	\$123,194.97	\$123,194.97
Refill expansion tank	5	2.00 Ea.	\$31.13	\$38.97	8.0000	8	8	\$311.75	\$311.75
Replace expansion tank, 60 gal capacity	50	2.00 Ea.	\$5,835.15	\$6,694.06	0.8000	0	0	\$0.00	\$0.00
Maintenance and repair infrared heater suspended, commercial	1	2.00 Ea.	\$88.73	\$111.17	40.0000	40	40	\$4,446.78	\$4,446.78
Maintenance and repair standard suspended heater	2	40.00 Ea.	\$4,588.99	\$5,414.76	20.0000	20	20	\$108,295.27	\$108,295.27
Maintenance and inspection standard suspended heater	0.5	40.00 Ea.	\$3,292.74	\$4,125.33	80.0000	80	80	\$330,026.19	\$330,026.19
Replace heater standard suspended heater	15	40.00 Ea.	\$29,150.19	\$33,797.72	2.6667	2	2	\$67,595.43	\$67,595.43
Maintenance and repair explosionproof industrial heater	2	6.00 Ea.	\$1,274.20	\$1,489.02	20.0000	20	20	\$29,780.35	\$29,780.35
Maintenance and inspection explosionproof industrial heater	0.5	6.00 Ea.	\$493.91	\$618.80	80.0000	80	80	\$49,503.93	\$49,503.93
Repair air conditioner, DX, 20 ton	10	4.00 Ea.	\$190,529.14	\$219,818.67	4.0000	4	2	\$879,274.67	\$439,637.34
Replace air conditioner, DX, 20 ton	20	4.00 Ea.	\$83,839.65	\$97,652.04	2.0000	2	2	\$195,304.08	\$195,304.08
Inspect sprinkler system	1	1.00 Ea.	\$36.17	\$45.28	40.0000	40	40	\$1,811.38	\$1,811.38
Replace sprinkler head	20	226.00 Ea.	\$19,808.41	\$24,442.33	2.0000	2	2	\$48,884.65	\$48,884.65
Rebuild double check 3" backflow preventer sprinkler system	1	1.00 Ea.	\$748.17	\$896.73	40.0000	40	40	\$35,869.16	\$35,869.16
Replace fire pump / electric motor assembly 100 H.P.	25	2.00 Ea.	\$96,023.93	\$110,702.65	1.6000	1	1	\$110,702.65	\$110,702.65
Repair switchgear 1200 A mainframe	5	1.00 Ea.	\$1,803.55	\$2,115.75	8.0000	8	6	\$16,926.02	\$12,694.51
Maintenance and inspection switchgear, mainframe	1	1.00 Ea.	\$68.26	\$85.52	40.0000	40	40	\$3,420.61	\$3,420.61
Replace switchgear 1200 A mainframe	20	1.00 Ea.	\$4,250.93	\$5,127.30	2.0000	2	2	\$10,254.60	\$10,254.60
Maintenance and repair rectifier, up to 600 V	2	1.00 Ea.	\$670.93	\$802.03	20.0000	20	18	\$16,040.60	\$14,436.54
Maintenance and inspection rectifier, up to 600 V	0.33	1.00 Ea.	\$136.51	\$171.03	121.2121	121	121	\$20,694.69	\$20,694.69
Replace rectifier, up to 600 V	20	1.00 Ea.	\$1,191.35	\$1,374.64	2.0000	2	2	\$2,749.29	\$2,749.29
Maintenance and repair motor starter, up to 600 V	5	4.00 Ea.	\$1,051.28	\$1,277.98	8.0000	8	8	\$10,223.81	\$10,223.81
Maintenance and inspection motor starter, up to 600 V	0.5	4.00 Ea.	\$227.52	\$285.05	80.0000	80	80	\$22,804.07	\$22,804.07
Replace starter motor starter, up to 600 V	18	4.00 Ea.	\$3,364.09	\$4,002.99	2.2222	2	2	\$8,005.97	\$8,005.97
Maintenance and inspection lighting panel, indoor	3	6.00 Ea.	\$254.07	\$318.31	13.3333	13	13	\$4,137.99	\$4,137.99
Replace load center, 100 A	20	6.00 Ea.	\$7,086.18	\$8,643.21	2.0000	2	2	\$17,286.42	\$17,286.42
Repair failed breaker, 600 V, molded case, 600 V, 2 pole	10	10.00 Ea.	\$3,635.75	\$4,339.89	4.0000	4	4	\$17,359.57	\$17,359.57
Maintenance and inspection circuit breaker, molded case, 600 V, 2 pole	0.33	10.00 Ea.	\$341.28	\$427.58	121.2121	121	121	\$51,736.73	\$51,736.73

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Replace circuit breaker molded case, 600 V, 2 pole circuit breaker	50	10.00 Ea.	\$10,098.19	\$11,702.24	0.8000	0	0	\$0.00	\$0.00
Maintenance and repair breaker, enclosed, 240 V, 1 pole	25	26.00 Ea.	\$1,971.85	\$2,470.44	1.6000	1	1	\$2,470.44	\$2,470.44
Maintenance and inspection circuit breaker, enclosed, 240 V, 1 pole	1	26.00 Ea.	\$887.33	\$1,111.70	40.0000	40	40	\$44,467.94	\$44,467.94
Replace circuit breaker enclosed, 240 V, 1 pole circuit breaker	50	26.00 Ea.	\$12,716.45	\$15,165.96	0.8000	0	0	\$0.00	\$0.00
Maintenance and repair safety switch general, 2 pole	8	11.00 Ea.	\$465.79	\$583.56	5.0000	5	5	\$2,917.81	\$2,917.81
Maintenance and inspection safety switch, 2 pole	1	11.00 Ea.	\$465.79	\$583.56	40.0000	40	40	\$23,342.50	\$23,342.50
Replace safety switch, 240 V, 2 pole	25	11.00 Ea.	\$4,931.40	\$5,979.60	1.6000	1	1	\$5,979.60	\$5,979.60
Maintenance and repair receptacles and plugs	20	138.00 Ea.	\$6,077.96	\$7,587.49	2.0000	2	2	\$15,174.99	\$15,174.99
Replace receptacle/plug receptacles and plugs	20	138.00 Ea.	\$10,326.62	\$12,732.91	2.0000	2	2	\$25,465.82	\$25,465.82
Maintenance and repair wiring devices, switches	10	60.00 Ea.	\$2,642.59	\$3,298.91	4.0000	4	4	\$13,195.64	\$13,195.64
Replace wiring devices, switches	15	60.00 Ea.	\$4,000.87	\$4,980.41	2.6667	2	2	\$9,960.82	\$9,960.82
Maintenance and repair incandescent lighting fixtures	10	44.00 Ea.	\$2,962.70	\$3,539.69	4.0000	4	2	\$14,158.77	\$7,079.38
Replace incandescent lighting fixture lamp	5	44.00 Ea.	\$564.96	\$679.96	8.0000	8	8	\$5,439.72	\$5,439.72
Replace incandescent lighting fixture	20	44.00 Ea.	\$6,147.37	\$7,456.21	2.0000	2	2	\$14,912.42	\$14,912.42
Replace fluorescent light fixture ballast, 80 W	10	40.00 Ea.	\$4,184.25	\$5,159.63	4.0000	4	4	\$20,638.53	\$20,638.53
Replace lamps (2 lamps), 4', 34 W energy saver	10	40.00 Ea.	\$1,059.43	\$1,326.76	4.0000	4	4	\$5,307.03	\$5,307.03
Replace metal halide ballast, 175 W	10	65.00 Ea.	\$10,847.65	\$12,984.69	4.0000	4	2	\$51,938.75	\$25,969.38
Replace metal halide fixture lamp, 175 W	5	65.00 Ea.	\$3,711.29	\$4,516.95	8.0000	8	8	\$36,135.61	\$36,135.61
Replace metal halide fixture, 175 W	20	65.00 Ea.	\$48,017.38	\$56,606.03	2.0000	2	2	\$113,212.05	\$113,212.05
Repair smoke detector	10	78.00 Ea.	\$4,524.79	\$5,602.94	4.0000	4	3	\$22,411.76	\$16,808.82
Check operation smoke detector	1	78.00 Ea.	\$1,326.07	\$1,661.37	40.0000	40	40	\$66,454.86	\$66,454.86
Replace smoke detector	15	78.00 Ea.	\$23,599.09	\$28,175.04	2.6667	2	2	\$56,350.07	\$56,350.07
Repair heat detector	10	12.00 Ea.	\$751.24	\$924.63	4.0000	4	4	\$3,698.50	\$3,698.50
Check operation heat detector	1	12.00 Ea.	\$204.01	\$255.60	40.0000	40	40	\$10,223.82	\$10,223.82
Replace heat detector	15	12.00 Ea.	\$2,125.28	\$2,601.91	2.6667	2	2	\$5,203.82	\$5,203.82
Check and repair manual pull station	10	20.00 Ea.	\$1,797.67	\$2,214.94	4.0000	4	3	\$8,859.75	\$6,644.81
Replace manual pull station	15	20.00 Ea.	\$4,175.17	\$5,035.26	2.6667	2	2	\$10,070.52	\$10,070.52
Repair joint pipe and fittings, PVC	10	1.00 Ea.	\$168.16	\$208.23	4.0000	4	4	\$832.91	\$832.91
Replace lightning ground rod	25	1.00 Ea.	\$245.60	\$303.67	1.6000	1	1	\$303.67	\$303.67
Maintenance and repair special ground system	4	1.00 Ea.	\$22.69	\$28.43	10.0000	10	10	\$284.26	\$284.26
Replace special ground system	50	1.00 M.L.F.	\$2,425.55	\$2,923.14	0.8000	0	0	\$0.00	\$0.00
Maintenance and repair exit light	20	40.00 Ea.	\$1,539.62	\$1,906.82	2.0000	2	2	\$3,813.64	\$3,813.64
Replace lamp exit light	5	40.00 Ea.	\$653.87	\$777.54	8.0000	8	8	\$6,220.36	\$6,220.36
Replace lighting fixture exit light	20	40.00 Ea.	\$7,042.60	\$8,540.28	2.0000	2	2	\$17,080.56	\$17,080.56
Replace lamp with exit light L.E.D. retrofit kits	15	24.00 Ea.	\$2,617.52	\$3,011.49	2.6667	2	2	\$6,022.98	\$6,022.98

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Maintenance and inspection UPS battery	0.17	1.00 Ea.	\$68.26	\$85.52	235.2941	235	235	\$20,096.09	\$20,096.09
Replace motor generator UPS battery	15	1.00 Ea.	\$1,066.21	\$1,264.47	2.6667	2	2	\$2,528.94	\$2,528.94
Maintenance and repair voice/data outlet	10	32.00 Ea.	\$1,738.34	\$2,170.93	4.0000	4	4	\$8,683.72	\$8,683.72
Replace voice/data outlet	20	32.00 Ea.	\$851.00	\$1,038.20	2.0000	2	2	\$2,076.39	\$2,076.39
Maintenance and inspection patch panel	0.5	2.00 Ea.	\$182.02	\$228.04	80.0000	80	80	\$18,243.26	\$18,243.26
Replace patch panel	15	2.00 Ea.	\$1,772.80	\$2,133.61	2.6667	2	2	\$4,267.22	\$4,267.22
Replace tankless flush valve	25	12.00 Ea.	\$3,242.91	\$3,806.61	1.6000	1	1	\$3,806.61	\$3,806.61
Replace wax ring gasket for tankless water closet	5	12.00 Ea.	\$1,789.97	\$2,238.64	8.0000	8	8	\$17,909.13	\$17,909.13
Replace flush valve diaphragm for a urinal	7	4.00 Ea.	\$109.06	\$135.42	5.7143	5	5	\$677.12	\$677.12
Rebuild flush valve for a urinal	20	4.00 Ea.	\$767.52	\$925.08	2.0000	2	2	\$1,850.15	\$1,850.15
Replace wall-hung urinal	35	4.00 Ea.	\$4,350.08	\$5,232.19	1.1429	1	1	\$5,232.19	\$5,232.19
Replace washer in spud connection lavatory, vitreous china	7	21.00 Ea.	\$363.75	\$443.96	5.7143	5	5	\$2,219.79	\$2,219.79
Replace washer in faucet lavatory, vitreous china	2	21.00 Ea.	\$284.92	\$355.26	20.0000	20	20	\$7,105.22	\$7,105.22
Replace faucets lavatory, vitreous china	10	21.00 Ea.	\$4,104.91	\$4,937.55	4.0000	4	4	\$19,750.20	\$19,750.20
Clean out strainer and P trap lavatory, vitreous china	2	21.00 Ea.	\$773.19	\$967.90	20.0000	20	20	\$19,358.09	\$19,358.09
Replace water heater, gas / oil, 70 gallon	12	2.00 Ea.	\$6,428.64	\$7,475.57	3.3333	3	3	\$22,426.70	\$22,426.70
Replace storage tank, glass lined, P.E., 80 gal.	50	1.00 Ea.	\$4,781.79	\$5,449.34	0.8000	0	0	\$0.00	\$0.00
Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP	0.5	1.00 Ea.	\$8.44	\$10.56	80.0000	80	80	\$844.95	\$844.95
Replace pump / motor assembly circulation pump, 1/12 HP	10	1.00 Ea.	\$1,218.91	\$1,426.89	4.0000	4	4	\$5,707.58	\$5,707.58
Replace lavatory, vitreous china	35	21.00 Ea.	\$15,093.18	\$18,131.53	1.1429	1	1	\$18,131.53	\$18,131.53
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$13.45	\$16.77	20.0000	20	20	\$335.39	\$335.39
Clean trap sink, iron enamel	3	1.00 Ea.	\$9.01	\$11.27	13.3333	13	13	\$146.56	\$146.56
Replace faucets sink, iron enamel	10	1.00 Ea.	\$195.47	\$235.12	4.0000	4	4	\$940.49	\$940.49
Unstop sink, iron enamel	2	1.00 Ea.	\$44.01	\$55.09	20.0000	20	20	\$1,101.88	\$1,101.88
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$1,208.43	\$1,409.28	1.1429	1	1	\$1,409.28	\$1,409.28
Inspect / clean shower head fiberglass	3	3.00 Ea.	\$154.61	\$193.54	13.3333	13	13	\$2,516.03	\$2,516.03
Replace mixing valve barrel shower, fiberglass	2	3.00 Ea.	\$894.67	\$1,052.50	20.0000	20	20	\$21,049.92	\$21,049.92
Replace mixing valve shower, fiberglass	10	3.00 Ea.	\$880.18	\$1,070.79	4.0000	4	4	\$4,283.16	\$4,283.16
Replace shower and fittings, fiberglass	20	3.00 Ea.	\$3,297.24	\$3,930.92	2.0000	2	2	\$7,861.84	\$7,861.84
Check / minor repairs drinking fountain	1	4.00 Ea.	\$206.10	\$258.00	40.0000	40	40	\$10,320.02	\$10,320.02
Correct water pressure drinking fountain	2	4.00 Ea.	\$176.04	\$220.38	20.0000	20	20	\$4,407.51	\$4,407.51

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Replace refrigerant drinking fountain	2	4.00 Ea.	\$141.62	\$165.72	20.0000	20	20	\$3,314.38	\$3,314.38
Repair drain leak drinking fountain	4	4.00 Ea.	\$116.38	\$140.76	10.0000	10	8	\$1,407.57	\$1,126.06
Replace fountain drinking fountain	10	4.00 Ea.	\$6,483.25	\$7,617.20	4.0000	4	4	\$30,468.82	\$30,468.82
Inspect and clean spray heads, emergency eye wash	3	4.00 Ea.	\$206.14	\$258.05	13.3333	13	13	\$3,354.70	\$3,354.70
Replace eye wash station, emergency eye wash	25	4.00 Ea.	\$3,143.65	\$3,822.20	1.6000	1	1	\$3,822.20	\$3,822.20
Resolder joint pipe & fittings, copper	10	1.00 Ea.	\$50.13	\$61.84	4.0000	4	4	\$247.38	\$247.38
Minor repairs to fire alarm control panel	5	1.00 Ea.	\$149.42	\$182.60	8.0000	8	8	\$1,460.76	\$1,460.76
Maintenance and inspection fire alarm control panel	0.5	1.00 Ea.	\$45.50	\$57.01	80.0000	80	80	\$4,560.81	\$4,560.81
Replace fire alarm control panel	15	1.00 Ea.	\$2,196.12	\$2,675.47	2.6667	2	2	\$5,350.95	\$5,350.95
Minor repairs to annunciation panel	5	1.00 Ea.	\$149.42	\$182.60	8.0000	8	8	\$1,460.76	\$1,460.76
Maintenance and inspection annunciation panel	0.5	1.00 Ea.	\$45.50	\$57.01	80.0000	80	80	\$4,560.81	\$4,560.81
Replace annunciation panel	15	1.00 Ea.	\$1,125.25	\$1,357.42	2.6667	2	2	\$2,714.84	\$2,714.84
Replace fire alarm bell, 6"	20	5.00 Ea.	\$903.03	\$1,098.86	2.0000	2	2	\$2,197.72	\$2,197.72
Maintenance and repair building structure ground	7	1.00 M.L.F.	\$92.28	\$115.32	5.7143	5	5	\$576.61	\$576.61
Replace building structure ground	50	1.00 M.L.F.	\$5,386.63	\$6,531.10	0.8000	0	0	\$0.00	\$0.00
Maintenance and repair of general wiring lightning protection system	1	1.00 M.L.F.	\$109.50	\$134.89	40.0000	40	40	\$5,395.47	\$5,395.47
Replace lightning protection general wiring system	25	1.00 M.L.F.	\$12,548.36	\$14,875.43	1.6000	1	1	\$14,875.43	\$14,875.43
Maintenance and repair lightning ground rod	1	1.00 Ea.	\$92.28	\$115.32	40.0000	40	39	\$4,612.86	\$4,497.54
Minor repairs to concrete floor unfinished	15	540.00 S.F.	\$20,592.26	\$25,129.93	2.6667	2	2	\$50,259.86	\$50,259.86
Replace fire escape stair and platform	25	3.00 Flight	\$19,016.90	\$23,197.84	1.6000	1	1	\$23,197.84	\$23,197.84
Refinish fire escape ladder	7	3.00 V.L.F.	\$13.26	\$16.07	5.7143	5	5	\$80.35	\$80.35
Replace steel decking	30	80.00 S.F.	\$472.35	\$548.83	1.3333	1	1	\$548.83	\$548.83
Replace aluminum siding, 1st floor	35	75.00 C.S.F.	\$46,473.70	\$55,976.63	1.1429	1	1	\$55,976.63	\$55,976.63
Replace aluminum siding, 2nd floor	35	75.00 C.S.F.	\$56,990.61	\$69,042.60	1.1429	1	1	\$69,042.60	\$69,042.60
Replace aluminum siding, 3rd floor	35	75.00 C.S.F.	\$63,346.99	\$76,939.61	1.1429	1	1	\$76,939.61	\$76,939.61
Replace aluminum louver, 1st floor	60	6.00 Ea.	\$3,624.88	\$4,242.01	0.6667	0	0	\$0.00	\$0.00
Replace aluminum louver, 2nd floor	60	6.00 Ea.	\$3,925.36	\$4,615.32	0.6667	0	0	\$0.00	\$0.00
Replace glass - 1st floor (1% of glass) - steel frame window	1	21.84 S.F.	\$287.18	\$337.22	40.0000	40	40	\$13,488.82	\$13,488.82
Repair 3'-9" x 5'-5" steel frame window - 1st floor.	20	104.00 Ea.	\$33,686.37	\$39,545.79	2.0000	2	2	\$79,091.58	\$79,091.58
Refinish 3'-9" x 5'-5" steel frame window - 1st floor.	5	104.00 Ea.	\$9,069.93	\$11,228.49	8.0000	8	8	\$89,827.90	\$89,827.90
Replace 3'-9" x 5'-5" steel frame window - 1st floor.	45	104.00 Ea.	\$187,839.52	\$216,220.30	0.8889	0	0	\$0.00	\$0.00

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Finish new 3'-9" x 5'-5" steel frame window - 1st floor.	45	104.00 Ea.	\$7,899.48	\$9,772.79	0.8889	0	0	\$0.00	\$0.00	
Repair steel, painted, door	14	6.00 Ea.	\$4,214.01	\$5,005.16	2.8571	2	2	\$10,010.31	\$10,010.31	
Refinish 3'-0" x 7'-0" steel, painted, door	4	6.00 Ea.	\$276.33	\$338.38	10.0000	10	10	\$3,383.77	\$3,383.77	
Replace 3'-0" x 7'-0" steel, painted, door	45	6.00 Ea.	\$5,502.66	\$6,371.56	0.8889	0	0	\$0.00	\$0.00	
Remove and replace electric bi-folding hangar door motor	15	8.00 Ea.	\$5,293.81	\$6,175.57	2.6667	2	2	\$12,351.15	\$12,351.15	
Remove and replace electric bi-folding hangar door cables	15	8.00 Ea.	\$4,981.60	\$6,060.60	2.6667	2	2	\$12,121.21	\$12,121.21	
Remove and replace electric bi-folding hangar door	20	8.00 Ea.	\$461,324.92	\$534,438.96	2.0000	2	2	\$1,068,877.92	\$1,068,877.92	
Replace door panic device	25	4.00 Ea.	\$8,785.33	\$10,043.16	1.6000	1	1	\$10,043.16	\$10,043.16	
Debris removal, by hand and visual inspection, metal panel roofing	1	101.20 M.S.F.	\$2,483.53	\$3,029.17	40.0000	40	40	\$121,166.93	\$121,166.93	
Minor metal roof finish repairs, 2% of roof area, metal panel roofing	5	2,000.00 S.F.	\$9,244.13	\$10,985.92	8.0000	8	8	\$87,887.36	\$87,887.36	
Metal roof flashing replacement, 2 SF/sq repaired, metal panel roofing	1	50.00 S.F.	\$1,265.36	\$1,512.32	40.0000	40	40	\$60,492.62	\$60,492.62	
Minor metal roof panel replacement, 2.5% of roof area	20	2,500.00 S.F.	\$32,195.04	\$38,165.47	2.0000	2	2	\$76,330.93	\$76,330.93	
Total metal roof panel replacement	30	915.00 Sq.	\$809,718.30	\$959,910.14	1.3333	1	1	\$959,910.14	\$959,910.14	
Repair steel painted interior door	14	15.00 Ea.	\$4,184.83	\$4,885.23	2.8571	2	2	\$9,770.47	\$9,770.47	
Refinish 3'-0" x 7'-0" steel painted interior door	4	15.00 Ea.	\$864.77	\$1,063.16	10.0000	10	10	\$10,631.59	\$10,631.59	
Replace 3'-0" x 7'-0" steel painted interior door	60	15.00 Ea.	\$19,193.22	\$22,258.76	0.6667	0	0	\$0.00	\$0.00	
Repair solid core wood door, interior	11	12.00 Ea.	\$3,347.86	\$3,908.19	3.6364	3	3	\$11,724.56	\$11,724.56	
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	12.00 Ea.	\$528.18	\$650.85	10.0000	10	9	\$6,508.53	\$5,857.68	
Replace 3'-0" x 7'-0" solid core wood door, interior	40	12.00 Ea.	\$6,798.60	\$7,849.17	1.0000	1	1	\$7,849.17	\$7,849.17	
Repair medium weight vinyl wall covering - (2% of walls)	1	0.14 C.S.F.	\$63.08	\$73.93	40.0000	40	40	\$2,957.34	\$2,957.34	
Replace medium weight vinyl wall covering	15	7.15 C.S.F.	\$3,669.45	\$4,337.70	2.6667	2	2	\$8,675.41	\$8,675.41	
			\$3,592,112.24	\$4,249,668.18				MR Subtotal	\$6,979,972.40	
									MR Per Year	\$174,165.05
									PM Total	\$33,586.43
									Subtotal	\$207,751.48
									Total Per Unit	\$2.27

FAC 2115 AIRCRAFT MAINTENANCE HANGAR, DEPOT

Release 2023 Qtr 4

Zip Code Prefix 222

Type PM

UM SF

Design Life 40

Average Size 91594.0

SUC \$2.27

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, emergency egress, swinging, annualized	18.00	4.68	\$301.75	\$206.70	\$0.00	\$508.45	\$600.63	\$707.90
Fire doors, swinging, annualized	15.00	5.88	\$234.98	\$231.84	\$0.00	\$466.82	\$559.87	\$664.67
Urinals, annualized	4.00	0.91	\$26.51	\$48.66	\$0.00	\$75.17	\$92.42	\$111.00
Toilet (vacuum breaker type), annualized	12.00	2.12	\$106.26	\$113.53	\$0.00	\$219.79	\$264.48	\$314.48
Lavatories, annualized	12.00	4.18	\$93.51	\$261.60	\$0.00	\$355.11	\$442.94	\$535.45
Showers, annualized	3.00	0.68	\$40.53	\$43.03	\$0.00	\$83.56	\$100.53	\$119.52
Drink fountain, annualized	4.00	2.48	\$149.78	\$132.54	\$0.00	\$282.32	\$337.06	\$399.29
Water heater, gas, to 120 gal., annualized	1.00	1.72	\$102.21	\$91.56	\$0.00	\$193.77	\$231.46	\$274.26
Boiler, hot water, oil, gas, or comb. fired, over 1000 MBH, annualized	2.00	39.40	\$177.10	\$2,485.20	\$0.00	\$2,662.30	\$3,425.57	\$4,197.69
Package unit, air cooled, 3 thru 24 ton, annualized	4.00	9.59	\$667.92	\$606.91	\$0.00	\$1,274.83	\$1,523.70	\$1,805.96
Backflow prevention device, up to 4", annualized	1.00	0.33	\$14.02	\$20.93	\$0.00	\$34.94	\$42.62	\$51.01
Extinguishing system, deluge / preaction, annualized	1.00	11.59	\$49.59	\$728.12	\$0.00	\$777.71	\$1,001.10	\$1,226.98
Fire pump, electric motor driven, annualized	2.00	95.50	\$74.89	\$5,973.20	\$0.00	\$6,048.09	\$7,847.54	\$9,650.73
Extinguishing system, FM200, annualized	2.00	18.52	\$1,285.24	\$985.36	\$0.00	\$2,270.60	\$2,694.73	\$3,183.13
Switchboard, with air circuit breaker, annualized	2.00	26.64	\$31.97	\$1,855.80	\$0.00	\$1,887.77	\$2,447.71	\$3,009.24
Panelboard, 225 A and above, annualized	6.00	2.65	\$132.01	\$182.49	\$0.00	\$314.49	\$382.44	\$456.99
Motor control center, over 400 A, annualized	4.00	1.56	\$88.00	\$107.22	\$0.00	\$195.23	\$236.20	\$281.56
Fire alarm annunciator system, annualized	1.00	11.05	\$163.44	\$695.92	\$0.00	\$859.36	\$1,084.48	\$1,317.78
Crane, electric bridge, 5 to 15 ton, annualized	1.00	7.67	\$504.92	\$282.72	\$0.00	\$787.64	\$922.95	\$1,083.50
Crane, electric bridge, over 15 tons, annualized	1.00	8.27	\$388.40	\$306.28	\$0.00	\$694.68	\$825.40	\$975.55
Hanger doors, sliding, annualized	8.00	18.06	\$236.66	\$795.17	\$0.00	\$1,031.83	\$1,294.05	\$1,568.10
Controls, central system, electro/pneumatic, annualized	2.00	3.84	\$338.01	\$242.42	\$0.00	\$580.42	\$686.95	\$810.38
Air compressor, centrifugal, to 40 H.P., annualized	2.00	6.82	\$119.42	\$432.51	\$0.00	\$551.93	\$693.62	\$841.29
						\$22,156.83	\$27,738.45	\$33,586.43

FAC 2115 AIRCRAFT MAINTENANCE HANGAR, DEPOT

Modeled Component List CostWorks Release 2023 Qtr 4

C30 Interior Finishes

Drywall	7094.0 S.F.
Stainless Steel Interior Finish	117.43 C.S.F.
Concrete, Finished	625.39 C.S.F.
Vinyl Sheet	315.9 S.Y.
Carpet	631.7 S.Y.
Gypsum Wall Board	106.6 C.S.F.
Vinyl Wall Covering	7.15 C.S.F.

D20 Plumbing

Tankless Water Closet	12.0 Ea.
Circulation Pump, Bronze 1 HP	2.0 Ea.
Drain: Roof, Scupper, Area	20.0 Ea.
Urinal	4.0 Ea.
Water Heater, Gas / Oil, 70 Gallon	2.0 Ea.
Storage Tank, Domestic Hot Water	1.0 Ea.
Circulation Pump, 1/12 HP	1.0 Ea.
Lavatory, Vitreous China	21.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Shower, Fiberglass	3.0 Ea.
Drinking Fountain	4.0 Ea.
Emergency Eye Wash	4.0 Ea.

D30 HVAC

Boiler, Gas, 2000 MBH	2.0 Ea.
Chemical Feed System	2.0 Ea.
Exhaust Fan, propeller exh., 4700 CFM	2.0 Ea.
Exhaust Fan, roof mounted exhaust fan, 800 CFM exhaust	2.0 Ea.
Exhaust Fan, axial flow, 15,600 CFM	6.0 Ea.
Expansion Tank	2.0 Ea.
Standard Suspended Heater	40.0 Ea.
Air Conditioner, DX Package, 20 ton	4.0 Ea.

D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	226.0 Ea.
Sprinkler System, Fire Suppression, 3" backflow preventer	1.0 Ea.
Fire Pump Electric Motor	2.0 Ea.
Fire Pump, Electric, annualized	2.0 Each
Extinguishing system, FM200	2.0 Each

D50 Electrical

Switchgear, Mainframe	1.0 Ea.
Rectifier, Up To 600 V	1.0 Ea.
Motor Starter, Up To 600 V	4.0 Ea.
Load Center, 100 A, maintenance & inspection	6.0 Ea.
Load Center, 100 A, replacement	6.0 Ea.
Circuit Breaker, molded case, 600 V, 2 pole	10.0 Ea.
Circuit Breaker, molded case, 240 V, 1 pole	26.0 Ea.
Safety Switch, General Duty, 240 V, 2 pole	11.0 Ea.
Incandescent Lighting Fixtures	44.0 Ea.
Metal Halide Fixture	65.0 Ea.
Smoke Detector	78.0 Ea.
Heat Detector	12.0 Ea.
Manual Pull Station	20.0 Ea.
Lightning Ground Rod	1.0 Ea.
Special Ground System	1.0 M.L.F.

Exit Light	40.0 Ea.
UPS Battery, maintenance & inspection	1.0 Ea.
UPS Battery, replace motor	1.0 Ea.
Fire Alarm Control Panel	1.0 Ea.
Annunciation Panel	1.0 Ea.
Fire Alarm Bell	5.0 Ea.
Building Structure Ground	1.0 M.L.F.
Lightning Protection System	1.0 M.L.F.
B10 Superstructure	
Steel Decking	80.0 S.F.
B20 Exterior Enclosure	
Aluminum Siding, 1st floor	75.0 C.S.F.
Aluminum Siding, 2nd floor	75.0 C.S.F.
Aluminum Siding, 3rd floor	75.0 C.S.F.
Steel Frame, Operating, 1st floor	104.0 Ea.
Steel, Painted	6.0 Ea.
Electric Bifolding Hangar Door Motor	8.0 Ea.
B30 Roofing	
Metal Steep Roofing	915.0 Sq.
C10 Interior Construction	
Steel Painted Interior Doors	15.0 Ea.
Solid Core Interior Doors	12.0 Ea.
Fire Doors, Swinging, annualized	15.0 Each
E10 Equipment	
Crane, Electric, 5 to 15 ton, annualized	1.0 Each
Crane, Electric, over 15 ton, annualized	1.0 Each

FAC 2115 AIRCRAFT MAINTENANCE HANGAR, DEPOT
Sustainment by Year
CostWorks Release 2023 Qtr 4

