

**FAC 2211 AIRCRAFT PRODUCTION PLANT**

FY22 SUC:           \$2.45 / SF  
Source:            Calculated using R.S. Means CostWorks 2021 Qtr 3  
                      component prices

FAC 2211 AIRCRAFT PRODUCTION PLANT

Release 2021 Qtr 3  
Zip Code Prefix 222  
Type MR

UM SF  
Design Life 55  
Average Size 86706.0

SUC \$2.45

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
Replace faucets sink, iron enamel	10	3.00 Ea.	\$545.18	\$656.27	5.5000	5	5	\$3,281.33	\$3,281.33
Unstop sink, iron enamel	2	3.00 Ea.	\$125.46	\$156.91	27.5000	27	27	\$4,236.49	\$4,236.49
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	3.00 Ea.	\$1,910.10	\$2,272.53	1.5714	1	1	\$2,272.53	\$2,272.53
Check / minor repairs drinking fountain	1	4.00 Ea.	\$195.53	\$244.53	55.0000	55	55	\$13,449.17	\$13,449.17
Repair internal leaks drinking fountain	4	4.00 Ea.	\$180.32	\$225.51	13.7500	13	13	\$2,931.65	\$2,931.65
Replace refrigerant drinking fountain	2	4.00 Ea.	\$130.73	\$153.08	27.5000	27	27	\$4,133.08	\$4,133.08
Repair drain leak drinking fountain	4	4.00 Ea.	\$135.66	\$162.14	13.7500	13	13	\$2,107.80	\$2,107.80
Inspect and clean shower head emergency shower station	3	8.00 Ea.	\$395.14	\$494.17	18.3333	18	18	\$8,895.04	\$8,895.04
Replace shower emergency shower station	25	8.00 Ea.	\$7,535.73	\$9,032.92	2.2000	2	2	\$18,065.84	\$18,065.84
Inspect and clean spray heads, emergency eye wash	3	8.00 Ea.	\$395.14	\$494.17	18.3333	18	18	\$8,895.04	\$8,895.04
Replace eye wash station, emergency eye wash	25	8.00 Ea.	\$8,914.73	\$10,599.97	2.2000	2	2	\$21,199.94	\$21,199.94
Replace pipe and fittings, copper 3/4"	20	32.00 L.F.	\$833.73	\$1,004.24	2.7500	2	2	\$2,008.49	\$2,008.49
Replace pipe and fittings, copper 2"	25	16.00 L.F.	\$983.75	\$1,170.32	2.2000	2	2	\$2,340.64	\$2,340.64
Minor repairs, adjustments water heater, gas / oil, 1150 GPH	2	2.00 Ea.	\$196.62	\$245.89	27.5000	27	25	\$6,639.00	\$6,147.22
Clean & service water heater, gas / oil, 1150 GPH	2	2.00 Ea.	\$1,173.17	\$1,467.18	27.5000	27	27	\$39,613.92	\$39,613.92
Replace water heater, gas / oil, 1150 GPH	20	2.00 Ea.	\$83,050.93	\$95,555.02	2.7500	2	2	\$191,110.04	\$191,110.04
Replace storage tank, glass lined, P.E., 80 gal.	50	4.00 Ea.	\$19,080.45	\$21,740.40	1.1000	1	1	\$21,740.40	\$21,740.40
Unclog floor drain, PVC	20	1.00 Ea.	\$47.80	\$59.77	2.7500	2	2	\$119.55	\$119.55
General maintenance & repair drain: roof, scupper, area	1	16.00 Ea.	\$591.80	\$740.11	55.0000	55	55	\$40,706.15	\$40,706.15
Replace drain: roof, scupper, area	40	16.00 Ea.	\$12,590.92	\$14,597.76	1.3750	1	1	\$14,597.76	\$14,597.76
Repair boiler, gas, 2000 MBH	7	2.00 Ea.	\$11,571.63	\$13,467.49	7.8571	7	7	\$94,272.44	\$94,272.44
Replace boiler, gas, 2000 MBH	30	2.00 Ea.	\$79,676.28	\$93,240.42	1.8333	1	1	\$93,240.42	\$93,240.42
Repair cooling tower, 300 ton	10	2.00 Ea.	\$15,409.57	\$18,232.15	5.5000	5	4	\$91,160.77	\$72,928.61
Replace cooling tower, 300 ton	15	2.00 Ea.	\$82,481.59	\$95,452.84	3.6667	3	3	\$286,358.53	\$286,358.53
Repair water cooled chiller, 200 ton, reciprocating	10	2.00 Ea.	\$228,563.46	\$267,670.93	5.5000	5	3	\$1,338,354.65	\$803,012.79
Rebuild flush valve tankless water closet	20	20.00 Ea.	\$3,608.68	\$4,349.14	2.7500	2	2	\$8,698.29	\$8,698.29
Unplug clogged line tankless water closet	5	20.00 Ea.	\$4,367.90	\$5,462.54	11.0000	11	11	\$60,087.90	\$60,087.90
Replace tankless water closet	35	20.00 Ea.	\$25,724.42	\$29,769.91	1.5714	1	1	\$29,769.91	\$29,769.91
Replace tankless flush valve	25	20.00 Ea.	\$5,044.30	\$5,922.21	2.2000	2	2	\$11,844.42	\$11,844.42
Replace wax ring gasket for tankless water closet	5	20.00 Ea.	\$2,830.39	\$3,536.53	11.0000	11	11	\$38,901.82	\$38,901.82
Replace flush valve diaphragm for a urinal	7	8.00 Ea.	\$209.76	\$260.29	7.8571	7	7	\$1,822.01	\$1,822.01

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Rebuild flush valve for a urinal	20	8.00 Ea.	\$1,443.47	\$1,739.66	2.7500	2	2	\$3,479.31	\$3,479.31
Unplug line urinal	5	8.00 Ea.	\$1,160.57	\$1,451.42	11.0000	11	11	\$15,965.66	\$15,965.66
Replace wall-hung urinal	35	8.00 Ea.	\$7,750.90	\$9,352.85	1.5714	1	1	\$9,352.85	\$9,352.85
Replace washer in spud connection lavatory, vitreous china	7	20.00 Ea.	\$329.25	\$401.60	7.8571	7	7	\$2,811.20	\$2,811.20
Replace washer in faucet lavatory, vitreous china	2	20.00 Ea.	\$257.70	\$321.04	27.5000	27	27	\$8,667.98	\$8,667.98
Replace faucets lavatory, vitreous china	10	20.00 Ea.	\$3,634.52	\$4,375.11	5.5000	5	5	\$21,875.54	\$21,875.54
Clean out strainer and P trap lavatory, vitreous china	2	20.00 Ea.	\$697.39	\$872.16	27.5000	27	27	\$23,548.27	\$23,548.27
Replace lavatory, vitreous china	35	20.00 Ea.	\$13,451.49	\$16,164.42	1.5714	1	1	\$16,164.42	\$16,164.42
Replace faucet washer sink, iron enamel	2	3.00 Ea.	\$38.33	\$47.75	27.5000	27	27	\$1,289.19	\$1,289.19
Clean trap sink, iron enamel	3	3.00 Ea.	\$25.71	\$32.16	18.3333	18	18	\$578.80	\$578.80
Replace chiller, water cooled, 200 ton, reciprocating	20	2.00 Ea.	\$305,964.26	\$355,579.48	2.7500	2	2	\$711,158.95	\$711,158.95
Replace roof mounted exhaust fan, 20,300 CFM exhaust fan	20	4.00 Ea.	\$45,023.11	\$52,315.14	2.7500	2	2	\$104,630.29	\$104,630.29
Repair circulator pump, 1/12 - 3/4 H.P.	5	1.00 Ea.	\$98.13	\$115.73	11.0000	11	8	\$1,273.04	\$925.85
Replace circulator pump, 1/12 - 3/4 H.P.	15	1.00 Ea.	\$3,822.30	\$4,402.23	3.6667	3	3	\$13,206.68	\$13,206.68
Repair circulator pump, 1 H.P.	5	1.00 Ea.	\$98.36	\$116.02	11.0000	11	8	\$1,276.18	\$928.13
Replace circulator. pump, 1 H.P.	15	1.00 Ea.	\$5,768.48	\$6,613.79	3.6667	3	3	\$19,841.37	\$19,841.37
Repair damaged pipe insulation, fiberglass 3/4"	5	4.00 Ea.	\$75.76	\$93.26	11.0000	11	11	\$1,025.90	\$1,025.90
Repair damaged pipe insulation, fiberglass 2"	5	2.00 Ea.	\$48.01	\$58.68	11.0000	11	11	\$645.44	\$645.44
Replace pipe insulation, fiberglass 3/4"	5	0.03 M.L.F.	\$226.70	\$278.33	11.0000	11	11	\$3,061.64	\$3,061.64
Replace pipe insulation, fiberglass 2"	5	0.01 M.L.F.	\$97.98	\$119.27	11.0000	11	11	\$1,311.95	\$1,311.95
Repair terminal reheat, 48" x 126" coil	10	5.00 Ea.	\$1,482.76	\$1,854.36	5.5000	5	5	\$9,271.78	\$9,271.78
Replace terminal reheat, 48" x 126" coil	15	5.00 Ea.	\$56,429.97	\$66,172.63	3.6667	3	3	\$198,517.88	\$198,517.88
Repair central station A.H.U., 63,000 CFM	10	2.00 Ea.	\$14,805.89	\$17,036.22	5.5000	5	4	\$85,181.08	\$68,144.87
Replace central station A.H.U., 63,000 CFM	15	2.00 Ea.	\$534,865.44	\$615,545.52	3.6667	3	3	\$1,846,636.57	\$1,846,636.57
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	130.00 Ea.	\$11,117.96	\$13,674.64	2.7500	2	2	\$27,349.27	\$27,349.27
Rebuild double check 6" backflow preventer sprinkler system	1	2.00 Ea.	\$1,730.05	\$2,074.67	55.0000	55	55	\$114,107.00	\$114,107.00
Replace fire pump / electric motor assembly 100 H.P.	25	1.00 Ea.	\$44,139.08	\$50,910.34	2.2000	2	2	\$101,820.68	\$101,820.68
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
Replace transformer 500 KVA, dry	30	1.00 Ea.	\$43,160.76	\$49,684.34	1.8333	1	1	\$49,684.34	\$49,684.34
Repair switchgear 1200 A mainframe	5	3.00 Ea.	\$5,713.61	\$6,682.72	11.0000	11	9	\$73,509.96	\$60,144.52
Maintenance and inspection switchgear, mainframe	1	3.00 Ea.	\$194.33	\$243.47	55.0000	55	55	\$13,390.76	\$13,390.76
Replace switchgear 1200 A mainframe	20	3.00 Ea.	\$13,050.36	\$15,676.43	2.7500	2	2	\$31,352.86	\$31,352.86

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Maintenance and repair motor starter, up to 600 V	5	9.00 Ea.	\$2,516.75	\$3,038.38	11.0000	11	11	\$33,422.21	\$33,422.21
Maintenance and inspection motor starter, up to 600 V	0.5	9.00 Ea.	\$485.83	\$608.67	110.0000	110	110	\$66,953.78	\$66,953.78
Replace starter motor starter, up to 600 V	18	9.00 Ea.	\$7,247.80	\$8,622.67	3.0556	3	3	\$25,868.00	\$25,868.00
Maintenance and inspection lighting panel, indoor	3	10.00 Ea.	\$406.44	\$509.21	18.3333	18	18	\$9,165.86	\$9,165.86
Maintenance and repair breaker, molded case, 480 V, 2 pole	20	9.00 Ea.	\$645.86	\$809.17	2.7500	2	2	\$1,618.35	\$1,618.35
Replace circuit breaker molded case, 600 V, 2 pole circuit breaker	50	14.00 Ea.	\$12,996.21	\$15,070.89	1.1000	1	1	\$15,070.89	\$15,070.89
Replace circuit breaker enclosed, 240 V, 2 pole circuit breaker	50	34.00 Ea.	\$21,840.55	\$25,768.44	1.1000	1	1	\$25,768.44	\$25,768.44
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	18.00 Ea.	\$731.60	\$916.59	6.8750	6	6	\$5,499.52	\$5,499.52
Maintenance and inspection safety switch, 3 pole, heavy duty	1	18.00 Ea.	\$731.60	\$916.59	55.0000	55	55	\$50,412.26	\$50,412.26
Replace safety switch, heavy duty 30 A	25	18.00 Ea.	\$10,374.26	\$12,427.91	2.2000	2	2	\$24,855.82	\$24,855.82
Replace receptacle/plug receptacles and plugs	20	126.00 Ea.	\$9,066.40	\$11,175.78	2.7500	2	2	\$22,351.55	\$22,351.55
Replace 4-pin receptacle	20	34.00 Ea.	\$4,972.52	\$5,910.93	2.7500	2	2	\$11,821.86	\$11,821.86
Replace wiring devices, switches	15	46.00 Ea.	\$3,007.38	\$3,736.21	3.6667	3	3	\$11,208.62	\$11,208.62
Maintenance and repair incandescent lighting fixtures	10	33.00 Ea.	\$2,272.57	\$2,705.51	5.5000	5	3	\$13,527.53	\$8,116.52
Replace incandescent lighting fixture lamp	5	33.00 Ea.	\$378.91	\$457.63	11.0000	11	11	\$5,033.97	\$5,033.97
Replace incandescent lighting fixture	20	33.00 Ea.	\$4,635.16	\$5,602.28	2.7500	2	2	\$11,204.55	\$11,204.55
Replace fluorescent light fixture ballast, 80 W	10	88.00 Ea.	\$10,970.82	\$13,308.88	5.5000	5	3	\$66,544.38	\$39,926.63
Replace lamps (2 lamps), 4', 34 W energy saver	10	88.00 Ea.	\$2,218.83	\$2,778.95	5.5000	5	5	\$13,894.73	\$13,894.73
Replace fluorescent fixture, lay-in, recess mtd, 2' x 4', two 40 W	20	88.00 Ea.	\$20,014.46	\$24,412.53	2.7500	2	2	\$48,825.07	\$48,825.07
Replace metal halide ballast, 175 W	10	65.00 Ea.	\$9,651.50	\$11,589.56	5.5000	5	3	\$57,947.82	\$34,768.69
Replace metal halide fixture lamp, 175 W	5	65.00 Ea.	\$3,249.17	\$3,974.99	11.0000	11	11	\$43,724.87	\$43,724.87
Replace metal halide fixture, 175 W	20	65.00 Ea.	\$50,600.51	\$59,444.93	2.7500	2	2	\$118,889.85	\$118,889.85
Repair smoke detector	10	95.00 Ea.	\$5,356.82	\$6,622.84	5.5000	5	4	\$33,114.18	\$26,491.34
Replace smoke detector	15	95.00 Ea.	\$27,002.55	\$32,248.88	3.6667	3	3	\$96,746.65	\$96,746.65
Check and repair manual pull station	10	11.00 Ea.	\$964.67	\$1,186.13	5.5000	5	4	\$5,930.67	\$4,744.53
Replace manual pull station	15	11.00 Ea.	\$2,238.15	\$2,694.35	3.6667	3	3	\$8,083.06	\$8,083.06
Minor repairs to fire alarm control panel	5	2.00 Ea.	\$299.41	\$364.55	11.0000	11	11	\$4,010.05	\$4,010.05
Maintenance and inspection fire alarm control panel	0.5	2.00 Ea.	\$86.37	\$108.21	110.0000	110	110	\$11,902.89	\$11,902.89
Replace fire alarm control panel	15	2.00 Ea.	\$3,906.93	\$4,783.84	3.6667	3	3	\$14,351.52	\$14,351.52
Replace fire alarm bell, 6"	20	8.00 Ea.	\$1,559.70	\$1,882.20	2.7500	2	2	\$3,764.41	\$3,764.41
Replace EMS, Three Phase, 5 Meters	15	8.00 Ea.	\$126,419.69	\$147,198.32	3.6667	3	3	\$441,594.96	\$441,594.96

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors	20	1.00 Ea.	\$17,137.72	\$20,030.68	2.7500	2	2	\$40,061.35	\$40,061.35
Replace lamp emergency lighting fixture	2	32.00 Ea.	\$1,750.06	\$2,108.02	27.5000	27	27	\$56,916.57	\$56,916.57
Maintenance and repair exit light	20	32.00 Ea.	\$1,190.45	\$1,472.10	2.7500	2	2	\$2,944.20	\$2,944.20
Replace lamp exit light	5	32.00 Ea.	\$539.09	\$638.83	11.0000	11	11	\$7,027.14	\$7,027.14
Replace lamp with exit light L.E.D. retrofit kits	15	24.00 Ea.	\$1,730.75	\$2,001.92	3.6667	3	3	\$6,005.75	\$6,005.75
Maintenance and repair voice/data outlet	10	6.00 Ea.	\$307.76	\$384.35	5.5000	5	5	\$1,921.74	\$1,921.74
Maintenance and repair of general wiring lightning protection system	1	2.80 M.L.F.	\$270.83	\$335.51	55.0000	55	55	\$18,453.28	\$18,453.28
Maintenance and repair lightning ground rod	1	8.00 Ea.	\$703.11	\$878.30	55.0000	55	53	\$48,306.35	\$46,549.75
Replace lightning ground rod	25	8.00 Ea.	\$1,808.72	\$2,242.32	2.2000	2	2	\$4,484.65	\$4,484.65
Repair clay brick wall, 1st floor	25	2,261.00 S.F.	\$97,170.13	\$119,255.24	2.2000	2	2	\$238,510.48	\$238,510.48
Replace steel siding - 1st floor	35	28.70 C.S.F.	\$15,989.38	\$19,289.90	1.5714	1	1	\$19,289.90	\$19,289.90
Refinish steel siding - 1st floor	20	28.70 C.S.F.	\$5,195.78	\$6,412.55	2.7500	2	2	\$12,825.10	\$12,825.10
Replace steel siding - 2nd floor	35	28.70 C.S.F.	\$19,766.19	\$23,979.98	1.5714	1	1	\$23,979.98	\$23,979.98
Refinish steel siding - 2nd floor	20	28.70 C.S.F.	\$8,058.28	\$9,972.13	2.7500	2	2	\$19,944.26	\$19,944.26
Replace glass - 1st floor (1% of glass) - steel frame window	1	13.30 S.F.	\$160.37	\$188.48	55.0000	55	55	\$10,366.53	\$10,366.53
Repair 3'-9" x 5'-5" steel frame window - 2nd floor.	20	51.00 Ea.	\$17,589.21	\$20,821.52	2.7500	2	2	\$41,643.03	\$41,643.03
Finish new 3'-9" x 5'-5" steel frame window - 2nd floor.	45	51.00 Ea.	\$7,018.28	\$8,715.24	1.2222	1	1	\$8,715.24	\$8,715.24
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	1.10 S.F.	\$13.26	\$15.59	55.0000	55	55	\$857.38	\$857.38
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	25.00 Ea.	\$3,618.42	\$4,315.22	2.7500	2	2	\$8,630.45	\$8,630.45
Repair steel, painted, door	14	8.00 Ea.	\$5,000.59	\$5,952.05	3.9286	3	3	\$17,856.14	\$17,856.14
Refinish 3'-0" x 7'-0" steel, painted, door	4	8.00 Ea.	\$331.20	\$406.93	13.7500	13	13	\$5,290.09	\$5,290.09
Replace 3'-0" x 7'-0" steel, painted, door	45	8.00 Ea.	\$5,640.51	\$6,557.85	1.2222	1	1	\$6,557.85	\$6,557.85
Repair 12' x 12' steel roll-up door	10	3.00 Ea.	\$2,027.69	\$2,406.65	5.5000	5	5	\$12,033.25	\$12,033.25
Replace 12' x 12' steel roll-up door	35	3.00 Ea.	\$8,110.75	\$9,626.60	1.5714	1	1	\$9,626.60	\$9,626.60
Remove and replace electric bi-folding hangar door motor	15	4.00 Ea.	\$2,508.75	\$2,926.29	3.6667	3	3	\$8,778.86	\$8,778.86
Remove and replace electric bi-folding hangar door cables	15	4.00 Ea.	\$2,342.35	\$2,849.32	3.6667	3	3	\$8,547.95	\$8,547.95
Remove and replace electric bi-folding hangar door	20	4.00 Ea.	\$200,147.39	\$232,261.55	2.7500	2	2	\$464,523.10	\$464,523.10
Debris removal and visual inspection of built-up roofing	0.5	8.60 M.S.F.	\$323.87	\$395.03	110.0000	110	110	\$43,453.08	\$43,453.08
Non-destructive moisture inspection of built-up roofing	5	8.60 M.S.F.	\$1,004.96	\$1,225.75	11.0000	11	11	\$13,483.24	\$13,483.24
BUR flashing repairs, 2 S.F. per sq. repaired	1	21.20 S.F.	\$74.19	\$90.08	55.0000	55	55	\$4,954.22	\$4,954.22
Minor BUR membrane replacement, 25% of roof area	15	11.70 Sq.	\$9,416.02	\$11,177.17	3.6667	3	3	\$33,531.50	\$33,531.50
Total BUR roof replacement	28	86.00 Sq.	\$67,049.90	\$79,290.48	1.9643	1	1	\$79,290.48	\$79,290.48

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Minor metal roof finish repairs, 2% of roof area, metal panel roofing	5	1,561.00 S.F.	\$5,452.72	\$6,542.09	11.0000	11	11	\$71,963.04	\$71,963.04	
Metal roof flashing replacement, 2 SF/sq repaired, metal panel roofing	1	21.80 S.F.	\$398.94	\$483.36	55.0000	55	55	\$26,584.79	\$26,584.79	
Minor metal roof panel replacement, 2.5% of roof area	20	1,368.20 S.F.	\$15,635.25	\$18,569.32	2.7500	2	2	\$37,138.64	\$37,138.64	
Total metal roof panel replacement	30	680.30 Sq.	\$574,953.24	\$680,991.35	1.8333	1	1	\$680,991.35	\$680,991.35	
Repair 8" concrete block wall - (2% of walls) painted	25	1.90 C.S.F.	\$2,070.34	\$2,485.88	2.2000	2	2	\$4,971.75	\$4,971.75	
Refinish concrete block wall painted	4	96.80 C.S.F.	\$9,768.93	\$11,895.58	13.7500	13	13	\$154,642.50	\$154,642.50	
Repair steel painted interior door	14	14.00 Ea.	\$4,108.33	\$4,781.90	3.9286	3	3	\$14,345.69	\$14,345.69	
Refinish 3'-0" x 7'-0" steel painted interior door	4	14.00 Ea.	\$736.19	\$907.01	13.7500	13	13	\$11,791.11	\$11,791.11	
Repair solid core wood door, interior	11	9.00 Ea.	\$2,641.07	\$3,074.08	5.0000	5	5	\$15,370.38	\$15,370.38	
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	9.00 Ea.	\$390.28	\$479.25	13.7500	13	12	\$6,230.21	\$5,750.96	
Replace 3'-0" x 7'-0" solid core wood door, interior	40	9.00 Ea.	\$4,404.85	\$5,092.29	1.3750	1	1	\$5,092.29	\$5,092.29	
Repair medium weight vinyl wall covering - (2% of walls)	1	0.08 C.S.F.	\$21.75	\$25.88	55.0000	55	55	\$1,423.45	\$1,423.45	
Replace medium weight vinyl wall covering	15	4.30 C.S.F.	\$1,459.48	\$1,752.23	3.6667	3	3	\$5,256.70	\$5,256.70	
Repair 5/8" drywall - (2% of walls)	20	136.80 S.F.	\$229.19	\$278.87	2.7500	2	2	\$557.73	\$557.73	
Refinish concrete floor finished	25	683.00 C.S.F.	\$288,108.04	\$346,062.61	2.2000	2	2	\$692,125.23	\$692,125.23	
Replace vinyl tile flooring	18	229.50 S.Y.	\$11,338.10	\$13,923.77	3.0556	3	3	\$41,771.32	\$41,771.32	
Replace vinyl sheet flooring	18	236.10 S.Y.	\$21,559.68	\$25,810.60	3.0556	3	3	\$77,431.80	\$77,431.80	
Repair gypsum board ceiling - (2% of ceilings)	20	1.50 C.S.F.	\$543.26	\$666.94	2.7500	2	2	\$1,333.87	\$1,333.87	
Replace gypsum board ceiling, up to 12' high	40	79.70 C.S.F.	\$29,592.58	\$36,339.56	1.3750	1	1	\$36,339.56	\$36,339.56	
Acoustic tile repairs - (2% of ceilings)	9	1.30 C.S.F.	\$1,180.01	\$1,371.40	6.1111	6	6	\$8,228.39	\$8,228.39	
Replace acoustic tile ceiling, fire-rated	20	67.90 C.S.F.	\$35,595.12	\$41,954.47	2.7500	2	2	\$83,908.93	\$83,908.93	
Replace flush valve diaphragm tankless water closet	10	20.00 Ea.	\$524.40	\$650.72	5.5000	5	5	\$3,253.59	\$3,253.59	
			\$3,576,835.60	\$4,205,775.38				MR Subtotal	\$9,895,059.34	
									MR Per Year	\$179,665.31
									PM Total	\$32,929.64
									Subtotal	\$212,594.95
									Total Per Unit	\$2.45

**FAC 2211 AIRCRAFT PRODUCTION PLANT**

SUC \$2.45

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 55

Type PM

Average Size 86706.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Air handling unit, over 50 tons, annualized	2.00	6.55	\$798.69	\$329.49	\$0.00	\$1,128.18	\$1,306.90	\$1,525.55
VAV Boxes, annualized	8.00	7.47	\$76.84	\$451.07	\$0.00	\$527.91	\$670.91	\$817.76
Backflow prevention device, over 4", annualized	2.00	0.99	\$26.79	\$59.03	\$0.00	\$85.82	\$106.21	\$127.93
Extinguishing system, deluge / preaction, annualized	1.00	11.59	\$68.24	\$691.59	\$0.00	\$759.83	\$974.13	\$1,191.84
Fire pump, motor/engine driven, annualized	1.00	69.87	\$192.09	\$4,184.75	\$0.00	\$4,376.84	\$5,651.47	\$6,935.71
Extinguishing system, dry pipe, annualized	1.00	13.02	\$122.33	\$775.28	\$0.00	\$897.61	\$1,142.43	\$1,393.36
Circuit breaker, high voltage air, annualized	14.00	6.58	\$212.18	\$435.12	\$0.00	\$647.30	\$799.05	\$961.42
Switch, automatic transfer, annualized	2.00	10.63	\$30.31	\$704.48	\$0.00	\$734.79	\$949.17	\$1,165.06
Panelboard, 225 A and above, annualized	10.00	4.41	\$231.97	\$290.08	\$0.00	\$522.05	\$632.28	\$754.10
Crane, electric bridge, over 15 tons, annualized	2.00	16.53	\$648.64	\$580.06	\$0.00	\$1,228.70	\$1,467.58	\$1,738.89
Hoist / winch, chain / cable, electric, annualized	4.00	6.60	\$614.26	\$232.02	\$0.00	\$846.28	\$977.31	\$1,139.06
Fire alarm annunciator system, annualized	1.00	11.05	\$179.39	\$652.68	\$0.00	\$832.07	\$1,045.82	\$1,268.53
Controls, central system, electro/pneumatic, annualized	4.00	7.68	\$283.08	\$461.64	\$0.00	\$744.72	\$911.53	\$1,092.48
Hanger doors, sliding, annualized	4.00	9.03	\$165.89	\$375.47	\$0.00	\$541.36	\$670.59	\$808.12
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	3.00	12.21	\$122.88	\$506.43	\$0.00	\$629.31	\$793.53	\$963.89
Fire doors, swinging, annualized	8.00	3.14	\$114.57	\$116.46	\$0.00	\$231.03	\$277.43	\$329.55
Urinals, annualized	8.00	1.82	\$50.55	\$91.62	\$0.00	\$142.17	\$174.72	\$209.79
Toilet (vacuum breaker type), annualized	20.00	3.54	\$168.84	\$177.96	\$0.00	\$346.80	\$417.07	\$495.79
Lavatories, annualized	20.00	6.96	\$119.30	\$414.07	\$0.00	\$533.37	\$669.52	\$811.63
Drink fountain, annualized	7.00	4.34	\$145.08	\$218.93	\$0.00	\$364.01	\$444.19	\$531.63
Water heater, gas, to 120 gal., annualized	1.00	1.72	\$58.64	\$86.78	\$0.00	\$145.42	\$177.31	\$212.14
Boiler, hot water, oil, gas, or comb. fired, over 1000 MBH, annualized	2.00	39.40	\$154.68	\$2,378.70	\$0.00	\$2,533.38	\$3,262.46	\$3,999.27
Water cooling tower, 50 thru 500 tons, annualized	2.00	19.82	\$315.43	\$1,198.16	\$0.00	\$1,513.59	\$1,904.58	\$2,311.35
Chiller, recip., water cooled, over 50 tons, annualized	2.00	21.82	\$35.59	\$1,312.69	\$0.00	\$1,348.28	\$1,745.64	\$2,144.79
						\$21,660.83	\$27,171.83	\$32,929.64





# FAC 2211 AIRCRAFT PRODUCTION PLANT

## Modeled Component List CostWorks Release 2021 Qtr 3

### D20 Plumbing

Sink, Iron Enamel	3.0 Ea.
Emergency Shower Station	8.0 Ea.
Emergency Eye Wash	8.0 Ea.
Water Heater, Gas / Oil, 1150 GPH	2.0 Ea.
Storage Tank, Domestic Hot Water	4.0 Ea.
Drain: Roof, Scupper, Area	16.0 Ea.
Tankless Water Closet	20.0 Ea.
Urinal	8.0 Ea.
Lavatory, Vitreous China	20.0 Ea.

### D30 HVAC

Boiler, Gas, 2000 MBH	2.0 Ea.
Cooling Tower, 300 ton	2.0 Ea.
Chiller, Water Cooled, Reciprocating, 200 ton	2.0 Ea.
Exhaust Fan, roof mounted exhaust fan, 20300 CFM exhaust	4.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	1.0 Ea.
Circulator Pump, 1 H.P.	1.0 Ea.
Terminal Reheat Coil, 48" x 126"	5.0 Ea.
Central Station Air Conditioning Air Handling Unit, 63,000 CFM	2.0 Ea.
VAV Box	8.0 Each

### D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	130.0 Ea.
Sprinkler System, Fire Suppression, 6" backflow preventer	2.0 Ea.
Fire Pump Electric Motor	1.0 Ea.
Fire Pump, Engine, annualized	1.0 Each
Extinguishing system, dry pipe, annualized	1.0 Each

### D50 Electrical

Primary Transformer, Dry	1.0 Ea.
Switchgear, Mainframe	3.0 Ea.
Motor Starter, Up To 600 V	9.0 Ea.
Load Center, 100 A, maintenance & inspection	10.0 Ea.
Circuit Breaker, molded case, 600 V, 2 pole	14.0 Ea.
Safety Switch, Heavy Duty	18.0 Ea.
Incandescent Lighting Fixtures	33.0 Ea.
Fluorescent Lighting Fixture	88.0 Ea.
Metal Halide Fixture	65.0 Ea.
Smoke Detector	95.0 Ea.
Manual Pull Station	11.0 Ea.
Fire Alarm Control Panel	2.0 Ea.
Fire Alarm Bell	8.0 Ea.
Lightning Ground Rod	8.0 Ea.

### B20 Exterior Enclosure

Steel, Painted	8.0 Ea.
Steel Single, Roll-Up	3.0 Ea.
Electric Bifolding Hangar Door Motor	4.0 Ea.

### B30 Roofing

Built-Up Roofing	86.0 Sq.
Metal Steep Roofing	680.3 Sq.

### C10 Interior Construction

Concrete Block, Painted	96.8 C.S.F.
Solid Core Interior Doors	9.0 Ea.
Fire Doors, Swinging, annualized	8.0 Each

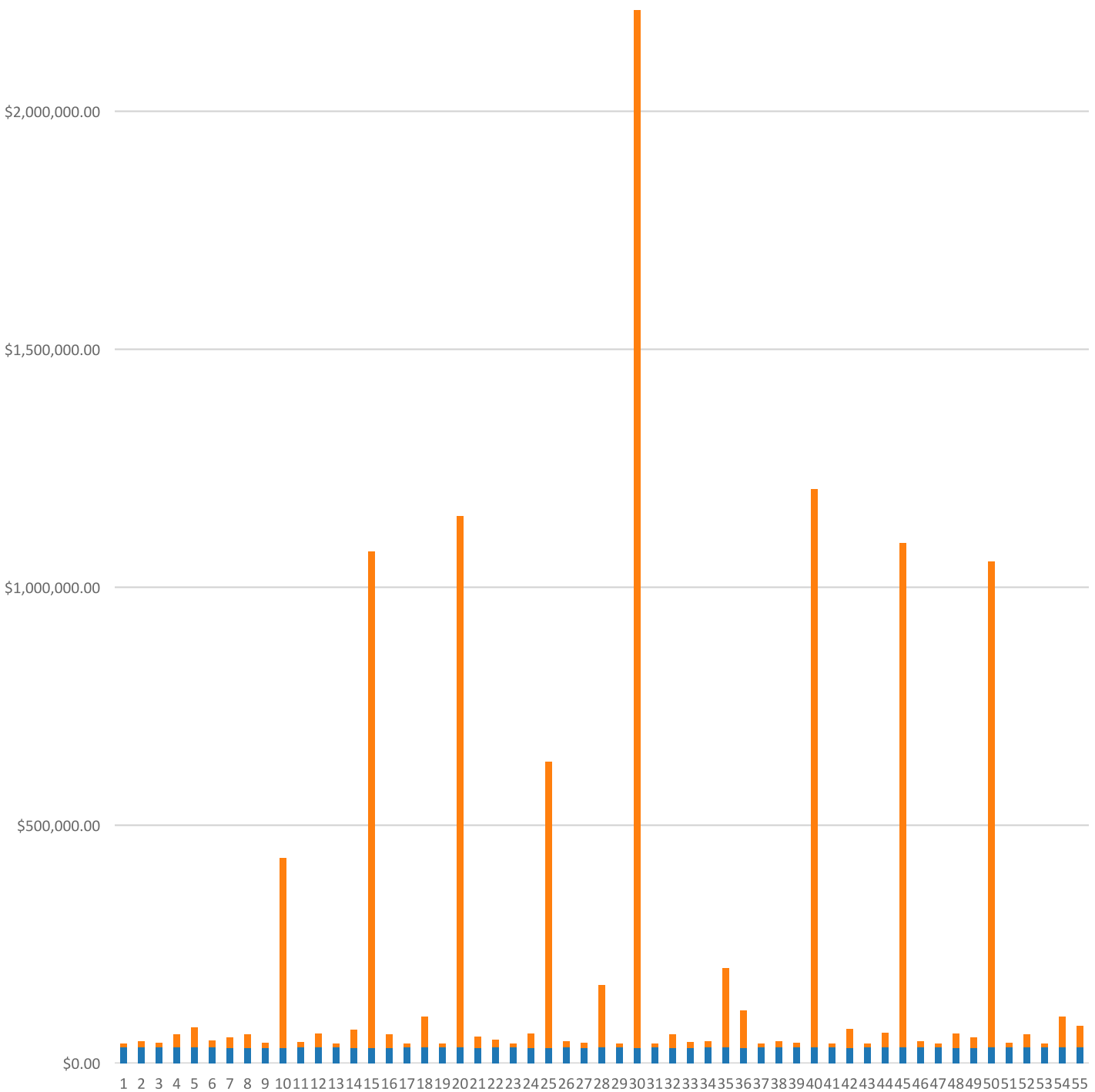
C30 Interior Finishes

Vinyl Wall Covering	4.3 C.S.F.
Concrete, Finished	683.0 C.S.F.
Vinyl	229.5 S.Y.
Vinyl Sheet	236.1 S.Y.
Gypsum Wall Board	79.7 C.S.F.
Acoustic Tile, fire-rated	67.9 C.S.F.

E10 Equipment

Crane, Electric, over 15 ton, annualized	2.0 Each
Hoist/Winch, Chain/Cable, annualized	4.0 Each

FAC 2211 AIRCRAFT PRODUCTION PLANT  
Sustainment by Year  
CostWorks Release 2021 Qtr 3



PM Cost  
MR Cost