

FAC 3131 Ship and Marine RDT&E Facility

RUC: \$240.43 SF

Source: Equated to FAC 3101
In V12, Tri-Service and USACE PAX Newsletter values were updated while
all other values were inflated only.

SUC: \$2.20 SF

Source: Cost Works model, inflated to FY-09 using Green Book Table 5-6 (O&M
less DHP)
In V12, values were inflated only.

Model follows:

Chart: A chart showing relative annual sustainment requirements
follows:

FAC 3131-Ship and Marine RDT&E Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 25,350

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Repair brick wall - 1st floor	25	1 Bric	935.200	S.F.	34,602.40	42,046.59	2008 Qtr 2	2	1	\$ 42,046.59
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	108.000	Ea.	12,415.68	14,709.60	2008 Qtr 2	2	2	\$ 29,419.20
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	108.000	Ea.	47,368.80	55,402.92	2008 Qtr 2	1	0	\$ -
Replace glass - 1st floor (1% of glass)	1	1 Carp	6.480	S.F.	58.64	68.82	2008 Qtr 2	55	55	\$ 3,784.97
Repair 3' x 4' aluminum window - 1st floor	20	1 Carp	248.000	Ea.	58,287.44	68,234.72	2008 Qtr 2	2	2	\$ 136,469.44
Replace 3' x 4' aluminum window - 1st floor	50	1 Carp	248.000	Ea.	186,240.56	215,494.64	2008 Qtr 2	1	0	\$ -
Replace glass - 1st flr. (1% of glass)	1	1 Carp	29.760	S.F.	269.33	316.05	2008 Qtr 2	55	55	\$ 17,382.82
Repair 12' x 12' steel roll-up door	10	1 Carp	3.000	Ea.	2,497.83	2,893.62	2008 Qtr 2	5	5	\$ 14,468.10
Refinish 12' x 12' steel roll-up door	5	1 Pord	3.000	Ea.	506.49	616.62	2008 Qtr 2	11	11	\$ 6,782.82
Replace 12' x 12' steel roll-up door	35	2 Carp	3.000	Ea.	9,975.81	11,548.65	2008 Qtr 2	1	1	\$ 11,548.65
Repair steel, painted, door	14	1 Carp	5.000	Ea.	2,912.20	3,431.80	2008 Qtr 2	3	3	\$ 10,295.40
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	5.000	Ea.	164.55	201.55	2008 Qtr 2	13	13	\$ 2,620.15
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	5.000	Ea.	2,660.40	3,100.20	2008 Qtr 2	1	1	\$ 3,100.20
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	25.350	M.S.F.	743.77	896.12	2008 Qtr 2	110	110	\$ 98,573.48
Non-destructive moisture inspection built-up roofing	5	2 Rofc	25.350	M.S.F.	2,301.27	2,783.43	2008 Qtr 2	11	11	\$ 30,617.73
Total roof replacement built-up roofing	28	G1	253.500	Sq.	144,692.73	171,353.33	2008 Qtr 2	1	1	\$ 171,353.33
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	5.070	Sq.	1,746.72	2,063.69	2008 Qtr 2	55	55	\$ 113,503.10
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	10.140	S.F.	34.07	40.56	2008 Qtr 2	55	55	\$ 2,230.80
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	63.380	Sq.	37,674.97	44,941.49	2008 Qtr 2	3	3	\$ 134,824.47
Repair steel painted interior door	14	1 Carp	5.000	Ea.	838.75	990.70	2008 Qtr 2	3	3	\$ 2,972.10
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	5.000	Ea.	247.00	304.10	2008 Qtr 2	13	13	\$ 3,953.30
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	5.000	Ea.	4,687.70	5,449.80	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	9.000	Ea.	1,509.75	1,783.26	2008 Qtr 2	5	5	\$ 8,916.30
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	9.000	Ea.	379.98	467.82	2008 Qtr 2	13	13	\$ 6,081.66
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	9.000	Ea.	3,300.30	3,826.08	2008 Qtr 2	1	1	\$ 3,826.08
Refinish drywall	4	1 Pord	2,449.000	S.F.	1,469.40	1,812.26	2008 Qtr 2	13	13	\$ 23,559.38
Replace 5/8" drywall	75	2 Carp	2,449.000	S.F.	5,461.27	6,587.81	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	48.980	S.F.	77.88	93.55	2008 Qtr 2	2	2	\$ 187.10
Replace carpet	8	2 Tilf	250.300	S.Y.	11,296.04	13,050.64	2008 Qtr 2	6	6	\$ 78,303.85
Refinish concrete floor finished	25	2 Cefi	221.110	C.S.F.	77,264.68	93,018.77	2008 Qtr 2	2	1	\$ 93,018.77
Replace vinyl floor	18	1 Tilf	109.600	S.Y.	5,233.40	6,389.68	2008 Qtr 2	3	2	\$ 12,779.36
Replace acoustic tile ceiling, fire-rated	20	1 Carp	32.390	C.S.F.	13,058.03	15,514.81	2008 Qtr 2	2	2	\$ 31,029.62
Check / minor repairs drinking fountain	1	1 Plum	5.000	Ea.	187.90	236.70	2008 Qtr 2	55	55	\$ 13,018.50
Repair internal leaks drinking fountain	4	1 Plum	5.000	Ea.	175.70	217.15	2008 Qtr 2	13	13	\$ 2,822.95
Correct water pressure drinking fountain	2	1 Plum	5.000	Ea.	161.05	202.50	2008 Qtr 2	27	27	\$ 5,467.50
Replace refrigerant drinking fountain	2	1 Plum	5.000	Ea.	79.20	94.30	2008 Qtr 2	27	27	\$ 2,546.10

FAC 3131-Ship and Marine RDT&E Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 25,350

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Repair drain leak drinking fountain	4	1 Plum	5.000	Ea.	113.15	135.15	2008 Qtr 2	13	13	\$ 1,756.95
Replace fountain drinking fountain	10	2 Plum	5.000	Ea.	5,029.20	5,967.85	2008 Qtr 2	5	5	\$ 29,839.25
Inspect and clean spray heads, emergency eye wash	3	1 Plum	3.000	Ea.	113.40	142.32	2008 Qtr 2	18	18	\$ 2,561.76
Replace eye wash station, emergency eye wash	25	2 Plum	3.000	Ea.	1,721.76	2,087.64	2008 Qtr 2	2	1	\$ 2,087.64
Inspect and clean shower head emergency shower station	3	1 Plum	3.000	Ea.	113.40	142.32	2008 Qtr 2	18	18	\$ 2,561.76
Replace shower emergency shower station	25	2 Plum	3.000	Ea.	2,179.17	2,620.74	2008 Qtr 2	2	1	\$ 2,620.74
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	23.000	Ea.	552.23	651.59	2008 Qtr 2	7	7	\$ 4,561.13
Replace washer in faucet lavatory, vitreous china	2	1 Plum	23.000	Ea.	226.55	282.67	2008 Qtr 2	27	27	\$ 7,632.09
Replace faucets lavatory, vitreous china	10	1 Plum	23.000	Ea.	2,840.27	3,428.38	2008 Qtr 2	5	5	\$ 17,141.90
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	23.000	Ea.	621.92	772.11	2008 Qtr 2	27	27	\$ 20,846.97
Replace lavatory, vitreous china	35	2 Plum	23.000	Ea.	12,194.37	14,621.10	2008 Qtr 2	1	1	\$ 14,621.10
Replace faucet washer sink, iron enamel	2	1 Plum	2.000	Ea.	19.58	24.38	2008 Qtr 2	27	27	\$ 658.26
Clean trap sink, iron enamel	3	1 Plum	2.000	Ea.	13.20	16.50	2008 Qtr 2	18	18	\$ 297.00
Replace faucets sink, iron enamel	10	1 Plum	2.000	Ea.	246.98	298.12	2008 Qtr 2	5	5	\$ 1,490.60
Unstop sink sink, iron enamel	2	1 Plum	2.000	Ea.	64.42	81.00	2008 Qtr 2	27	27	\$ 2,187.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	2.000	Ea.	1,105.44	1,315.38	2008 Qtr 2	1	1	\$ 1,315.38
Replace flush valve diaphragm tankless water closet	10	1 Plum	13.000	Ea.	919.62	1,079.78	2008 Qtr 2	5	5	\$ 5,398.90
Rebuild flush valve tankless water closet	20	1 Plum	13.000	Ea.	1,715.74	2,080.13	2008 Qtr 2	2	2	\$ 4,160.26
Unplug clogged line tankless water closet	5	1 Plum	13.000	Ea.	2,187.38	2,732.34	2008 Qtr 2	11	11	\$ 30,055.74
Replace tankless water closet	35	2 Plum	13.000	Ea.	7,124.00	8,428.68	2008 Qtr 2	1	1	\$ 8,428.68
Replace tankless flush valve	25	1 Plum	13.000	Ea.	2,723.50	3,189.81	2008 Qtr 2	2	1	\$ 3,189.81
Replace wax ring gasket tankless water closet	5	1 Plum	13.000	Ea.	1,424.41	1,783.60	2008 Qtr 2	11	11	\$ 19,619.60
Replace flush valve diaphragm urinal	7	1 Plum	5.000	Ea.	353.70	415.30	2008 Qtr 2	7	7	\$ 2,907.10
Rebuild flush valve urinal	20	1 Plum	5.000	Ea.	659.90	800.05	2008 Qtr 2	2	2	\$ 1,600.10
Unplug line urinal	5	1 Plum	5.000	Ea.	560.70	699.55	2008 Qtr 2	11	11	\$ 7,695.05
Replace wall-hung urinal	35	2 Plum	5.000	Ea.	4,208.15	5,032.85	2008 Qtr 2	1	1	\$ 5,032.85
Inspect / check pump / motor operation, lub. circulation pump, 1/12 HP	0.5	1 Plum	2.000	Ea.	12.38	15.44	2008 Qtr 2	110	110	\$ 1,698.40
Replace pump / motor assembly circulation pump, 1/12 HP	10	2 Plum	2.000	Ea.	1,472.66	1,726.58	2008 Qtr 2	5	5	\$ 8,632.90
Resolder joint pipe & fittings, copper	10	1 Plum	2.000	Ea.	65.70	80.90	2008 Qtr 2	5	5	\$ 404.50
Replace pipe and fittings, copper 3/4"	20	2 Plum	16.000	L.F.	283.52	343.68	2008 Qtr 2	2	2	\$ 687.36
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	652.96	785.76	2008 Qtr 2	2	1	\$ 785.76
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	1 Plum	16.000	L.F.	112.16	136.64	2008 Qtr 2	3	3	\$ 409.92
Overhaul water heater, gas / oil, 70 gallon	5	1 Plum	2.000	Ea.	253.16	316.04	2008 Qtr 2	11	11	\$ 3,476.44
Clean & service water heater, gas / oil, 70 gallon	1	1 Plum	2.000	Ea.	302.56	376.74	2008 Qtr 2	55	55	\$ 20,720.70
Replace water heater, gas / oil, 70 gallon	12	2 Plum	2.000	Ea.	4,936.16	5,714.22	2008 Qtr 2	4	4	\$ 22,856.88
Unclog main drain pipe & fittings, cast iron	10	1 Plum	1.000	Ea.	35.62	44.41	2008 Qtr 2	5	5	\$ 222.05

FAC 3131-Ship and Marine RDT&E Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 25,350

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Replace pipe & fittings, cast iron	40	2 Plum	16.000	L.F.	670.40	811.20	2008 Qtr 2	1	1	\$ 811.20
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	16.000	L.F.	947.20	1,171.04	2008 Qtr 2	1	1	\$ 1,171.04
Repair joint pipe and fittings, PVC	10	1 Plum	1.000	Ea.	115.94	144.14	2008 Qtr 2	5	5	\$ 720.70
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	2	\$ 91.74
General maintenance & repair drain: roof, scupper, area	1	1 Plum	8.000	Ea.	226.80	285.36	2008 Qtr 2	55	55	\$ 15,694.80
Replace drain: roof, scupper, area	40	1 Plum	8.000	Ea.	3,186.72	3,745.12	2008 Qtr 2	1	1	\$ 3,745.12
Install new 4" gasket, 1 per M.L.F. natural gas, steel/iron	30	1 Stpi	1.000	Ea.	157.52	195.63	2008 Qtr 2	1	1	\$ 195.63
Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas	12	B35	1.000	Ea.	796.82	957.19	2008 Qtr 2	4	4	\$ 3,828.76
Replace roof mounted exhaust fan, 800 CFM exhaust fan	20	Q20	4.000	Ea.	3,624.04	4,310.24	2008 Qtr 2	2	2	\$ 8,620.48
Repair single zone rooftop unit, 60 ton	10	Q6	1.000	Ea.	39,670.17	46,952.35	2008 Qtr 2	5	5	\$ 234,761.75
Replace single zone rooftop unit, 60 ton	15	Q7	2.000	Ea.	141,620.00	165,785.20	2008 Qtr 2	3	3	\$ 497,355.60
Minor repairs to fire alarm control panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	11	11	\$ 1,440.67
Maintenance and inspection fire alarm control panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	110	110	\$ 4,198.70
Replace fire alarm control panel	15	1 Elec	1.000	Ea.	2,615.62	3,107.84	2008 Qtr 2	3	3	\$ 9,323.52
Replace sprinkler head	20	1 Plum	148.000	Ea.	9,424.64	11,612.08	2008 Qtr 2	2	2	\$ 23,224.16
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	55	55	\$ 1,808.95
Rebuild double check 3" backflow preventer sprinkler system	1	1 Plum	1.000	Ea.	598.06	715.83	2008 Qtr 2	55	55	\$ 39,370.65
Replace fire alarm bell, 6"	20	1 Elec	6.000	Ea.	853.68	1,029.06	2008 Qtr 2	2	2	\$ 2,058.12
Maintenance and repair safety switch gen., 2 pole	8	1 Elec	5.000	Ea.	142.50	178.15	2008 Qtr 2	6	6	\$ 1,068.90
Maintenance and inspection safety switch, 2 pole	1	1 Elec	5.000	Ea.	142.50	178.15	2008 Qtr 2	55	55	\$ 9,798.25
Replace safety switch 240 V, 2 pole	25	2 Elec	5.000	Ea.	1,769.90	2,106.90	2008 Qtr 2	2	1	\$ 2,106.90
Repair switchgear 1200 A mainframe	5	1 Elec	1.000	Ea.	1,694.09	1,975.10	2008 Qtr 2	11	11	\$ 21,726.10
Maintenance and inspection switchgear, mainframe	1	1 Elec	1.000	Ea.	45.81	57.01	2008 Qtr 2	55	55	\$ 3,135.55
Replace switchgear 1200 A mainframe	20	3 Elec	1.000	Ea.	4,052.28	4,808.24	2008 Qtr 2	2	2	\$ 9,616.48
Replace lamp emergency lighting fixture	2	1 Elec	12.000	Ea.	648.00	769.68	2008 Qtr 2	27	27	\$ 20,781.36
Replace emergency lighting fixture	20	1 Elec	12.000	Ea.	10,119.00	11,659.20	2008 Qtr 2	2	2	\$ 23,318.40
Maintenance and repair exit light	20	1 Elec	12.000	Ea.	393.96	478.44	2008 Qtr 2	2	2	\$ 956.88
Replace lamp exit light	5	1 Elec	12.000	Ea.	148.20	175.44	2008 Qtr 2	11	11	\$ 1,929.84
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	338.000	Ea.	33,658.04	40,587.04	2008 Qtr 2	5	5	\$ 202,935.20
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	338.000	Ea.	8,598.72	10,538.84	2008 Qtr 2	5	5	\$ 52,694.20
Maintenance and repair receptacles and plugs	20	1 Elec	180.000	Ea.	5,596.20	6,971.40	2008 Qtr 2	2	2	\$ 13,942.80
Replace receptacle/plug receptacles and plugs	20	1 Elec	180.000	Ea.	9,496.80	11,595.60	2008 Qtr 2	2	2	\$ 23,191.20
Maintenance and repair wiring devices, switches	10	1 Elec	45.000	Ea.	1,399.05	1,742.85	2008 Qtr 2	5	5	\$ 8,714.25
Replace switch wiring devices, switches	15	1 Elec	45.000	Ea.	2,304.45	2,805.75	2008 Qtr 2	3	3	\$ 8,417.25
Check and repair manual pull station	10	1 Elec	3.000	Ea.	207.63	254.61	2008 Qtr 2	5	5	\$ 1,273.05
Replace manual pull station	15	1 Elec	3.000	Ea.	377.22	455.67	2008 Qtr 2	3	3	\$ 1,367.01

FAC 3131-Ship and Marine RDT&E Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 25,350

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Repair smoke detector	10	1 Elec	90.000	Ea.	3,437.10	4,230.00	2008 Qtr 2	5	5	\$ 21,150.00
Check operation smoke detector	1	1 Elec	90.000	Ea.	1,026.00	1,287.00	2008 Qtr 2	55	55	\$ 70,785.00
Replace smoke detector	15	1 Elec	90.000	Ea.	17,059.50	20,429.10	2008 Qtr 2	3	3	\$ 61,287.30
					\$1,034,767.29	\$1,222,908.43				
									MR Subtotal	\$ 2,786,283.85
									MR Per Year	\$ 50,659.71
									PM Per Year	\$ 6,758.80
									Subtotal	\$ 57,418.51
									Total Per Unit	\$ 2.27

CostWorks 2009 Quarter 1 - FAC 3131-Ship and Marine RDT&E Facility

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
3.000	B2035 410 1950	Door, overhead, electric, roll up, to 24' high x 25' w	720.48	870.36	200	FMR	2008 Qtr 2
14.000	B2035 225 1950	Door, emergency egress, swinging, annualized	693.14	805.14	200	FMR	2008 Qtr 2
5.000	C1025 110 1950	Fire doors, swinging, annualized	124.45	149.30	200	FMR	2008 Qtr 2
5.000	D2015 100 1950	Urinals, annualized	64.65	80.75	200	FMR	2008 Qtr 2
13.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	168.09	209.95	200	FMR	2008 Qtr 2
23.000	D2015 100 4950	Lavatories, annualized	567.64	691.84	200	FMR	2008 Qtr 2
5.000	D2015 800 1950	Drink fountain, annualized	247.50	296.80	200	FMR	2008 Qtr 2
1.000	D2025 260 1950	Water heater, gas, to 120 gal., annualized	156.50	189.02	200	FMR	2008 Qtr 2
12.000	D3045 160 1950	VAV Boxes, annualized	735.72	912.00	200	FMR	2008 Qtr 2
4.000	D3045 210 1950	Fan, axial, up to 5,000 CFM, annualized	282.20	344.80	200	FMR	2008 Qtr 2
2.000	D3055 210 2950	Package unit, air cooled, 25 thru 50 ton, annualized	569.88	682.20	200	FMR	2008 Qtr 2
1.000	D4015 100 1950	Backflow prevention device, up to 4", annualized	18.89	23.42	200	FMR	2008 Qtr 2
1.000	D4015 150 1950	Extinguishing system, wet pipe, annualized	806.79	983.35	200	FMR	2008 Qtr 2
1.000	D5095 250 1950	Light, emergency, hardwired system, annualized	14.25	17.87	200	FMR	2008 Qtr 2
1.000	E1095 122 3950	Crane, electric bridge, over 15 tons, annualized	409.54	502.00	200	FMR	2008 Qtr 2
			\$5,579.72	\$6,758.80			

FAC 3131 Sustainment by Year - Terminal Cutoff Applied

