ATTACHMENT

J.1

Wage Determination WD 2005-2115 (Rev.17)

WD 05-2115 (Rev.-17) was first posted on www.wdol.gov on 01/05/2016

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Daniel W. Simms
Director

Division of
Wage Determinations

Wage Determination No.: 2005-2115
Revision No.: 17
Date Of Revision: 12/29/2015

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.15 for calendar year 2016 applies to all contracts subject to the Service Contract Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

States: Florida, Georgia

Area: Florida Counties of Baker, Clay, Columbia, Duval, Hamilton, Lafayette, Madison, Nassau, Putnam, Saint Johns, Suwannee, Taylor
Georgia Counties of Brantley, Camden, Charlton, Glynn, Pierce

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		12.14
01012 - Accounting Clerk II		13.62
01013 - Accounting Clerk III		16.03
01020 - Administrative Assistant		18.33
01040 - Court Reporter		15.07
01051 - Data Entry Operator I		11.53
01052 - Data Entry Operator II		13.15
01060 - Dispatcher, Motor Vehicle		16.75
01070 - Document Preparation Clerk		11.81
01090 - Duplicating Machine Operator		11.81
01111 - General Clerk I		10.83
01112 - General Clerk II		11.82
01113 - General Clerk III		18.09
01120 - Housing Referral Assistant		16.80
01141 - Messenger Courier		10.89
01191 - Order Clerk I		12.79
01192 - Order Clerk II		13.69
01261 - Personnel Assistant (Employment) I		13.47
01262 - Personnel Assistant (Employment) II		15.07
01263 - Personnel Assistant (Employment) III		16.80
01270 - Production Control Clerk		18.80
01280 - Receptionist		11.93
01290 - Rental Clerk		12.50
01300 - Scheduler, Maintenance		13.47
01311 - Secretary I		13.47
01312 - Secretary II		15.07
01313 - Secretary III		16.80
01320 - Service Order Dispatcher		14.63

01410 - Supply Technician	18.33
01420 - Survey Worker	14.09
01531 - Travel Clerk I	12.32
01532 - Travel Clerk II	13.45
01533 - Travel Clerk III	14.49
01611 - Word Processor I	12.58
01612 - Word Processor II	15.29
01613 - Word Processor III	17.11
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	18.96
05010 - Automotive Electrician	16.74
05040 - Automotive Glass Installer	14.73
05070 - Automotive Worker	14.73
05110 - Mobile Equipment Servicer	12.68
05130 - Motor Equipment Metal Mechanic	17.19
05160 - Motor Equipment Metal Worker	14.73
05190 - Motor Vehicle Mechanic	17.18
05220 - Motor Vehicle Mechanic Helper	12.01
05250 - Motor Vehicle Upholstery Worker	13.71
05280 - Motor Vehicle Wrecker	14.73
05310 - Painter, Automotive	15.73
05340 - Radiator Repair Specialist	14.73
05370 - Tire Repairer	11.70
05400 - Transmission Repair Specialist	17.19
07000 - Food Preparation And Service Occupations	
07010 - Baker	11.75
07041 - Cook I	10.86
07042 - Cook II	12.20
07070 - Dishwasher	8.18
07130 - Food Service Worker	9.21
07210 - Meat Cutter	13.65
07260 - Waiter/Waitress	9.87
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	16.52
09040 - Furniture Handler	10.58
09080 - Furniture Refinisher	16.52
09090 - Furniture Refinisher Helper	12.29
09110 - Furniture Repairer, Minor	14.40
09130 - Upholsterer	16.52
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	10.02
11060 - Elevator Operator	10.02
11090 - Gardener	12.83
11122 - Housekeeping Aide	11.17
11150 - Janitor	11.17
11210 - Laborer, Grounds Maintenance	11.30
11240 - Maid or Houseman	8.91
11260 - Pruner	10.07
11270 - Tractor Operator	12.66
11330 - Trail Maintenance Worker	11.30
11360 - Window Cleaner	12.59
12000 - Health Occupations	
12010 - Ambulance Driver	15.60
12011 - Breath Alcohol Technician	17.67
12012 - Certified Occupational Therapist Assistant	27.76
12015 - Certified Physical Therapist Assistant	22.30
12020 - Dental Assistant	16.28
12025 - Dental Hygienist	27.39
12030 - EKG Technician	21.26
12035 - Electroneurodiagnostic Technologist	21.26
12040 - Emergency Medical Technician	15.15
12071 - Licensed Practical Nurse I	15.80

12072 - Licensed Practical Nurse II		17.67
12073 - Licensed Practical Nurse III		18.89
12100 - Medical Assistant		13.57
12130 - Medical Laboratory Technician		17.22
12160 - Medical Record Clerk		13.75
12190 - Medical Record Technician		15.38
12195 - Medical Transcriptionist		15.65
12210 - Nuclear Medicine Technologist		32.90
12221 - Nursing Assistant I		10.38
12222 - Nursing Assistant II		11.67
12223 - Nursing Assistant III		12.74
12224 - Nursing Assistant IV		14.29
12235 - Optical Dispenser		19.34
12236 - Optical Technician		14.66
12250 - Pharmacy Technician		14.44
12280 - Phlebotomist		14.29
12305 - Radiologic Technologist		23.35
12311 - Registered Nurse I		23.41
12312 - Registered Nurse II		28.64
12313 - Registered Nurse II, Specialist		28.64
12314 - Registered Nurse III		34.65
12315 - Registered Nurse III, Anesthetist		34.65
12316 - Registered Nurse IV		41.52
12317 - Scheduler (Drug and Alcohol Testing)		20.99
13000 - Information And Arts Occupations		
13011 - Exhibits Specialist I		18.14
13012 - Exhibits Specialist II		22.48
13013 - Exhibits Specialist III		27.50
13041 - Illustrator I		18.79
13042 - Illustrator II		23.29
13043 - Illustrator III		28.49
13047 - Librarian		24.89
13050 - Library Aide/Clerk		12.40
13054 - Library Information Technology Systems Administrator		22.40
13058 - Library Technician		13.25
13061 - Media Specialist I		16.22
13062 - Media Specialist II		18.14
13063 - Media Specialist III		20.53
13071 - Photographer I		13.56
13072 - Photographer II		16.00
13073 - Photographer III		18.80
13074 - Photographer IV		23.00
13075 - Photographer V		27.82
13110 - Video Teleconference Technician		15.58
14000 - Information Technology Occupations		
14041 - Computer Operator I		13.44
14042 - Computer Operator II		15.03
14043 - Computer Operator III		16.96
14044 - Computer Operator IV		20.82
14045 - Computer Operator V		23.11
14071 - Computer Programmer I		24.20
14072 - Computer Programmer II	(see 1)	
14073 - Computer Programmer III	(see 1)	
14074 - Computer Programmer IV	(see 1)	
14101 - Computer Systems Analyst I	(see 1)	
14102 - Computer Systems Analyst II	(see 1)	
14103 - Computer Systems Analyst III	(see 1)	
14150 - Peripheral Equipment Operator		15.41
14160 - Personal Computer Support Technician		20.82
15000 - Instructional Occupations		
15010 - Aircrew Training Devices Instructor (Non-Rated)		28.19

15020 - Aircrew Training Devices Instructor (Rated)	34.10
15030 - Air Crew Training Devices Instructor (Pilot)	39.61
15050 - Computer Based Training Specialist / Instructor	26.70
15060 - Educational Technologist	23.96
15070 - Flight Instructor (Pilot)	37.51
15080 - Graphic Artist	22.77
15090 - Technical Instructor	20.53
15095 - Technical Instructor/Course Developer	25.11
15110 - Test Proctor	16.56
15120 - Tutor	16.56
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	8.67
16030 - Counter Attendant	8.67
16040 - Dry Cleaner	11.05
16070 - Finisher, Flatwork, Machine	8.67
16090 - Presser, Hand	8.67
16110 - Presser, Machine, Drycleaning	8.67
16130 - Presser, Machine, Shirts	8.67
16160 - Presser, Machine, Wearing Apparel, Laundry	8.67
16190 - Sewing Machine Operator	11.79
16220 - Tailor	12.51
16250 - Washer, Machine	9.44
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	16.70
19040 - Tool And Die Maker	21.00
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	15.29
21030 - Material Coordinator	18.80
21040 - Material Expediter	18.80
21050 - Material Handling Laborer	12.93
21071 - Order Filler	10.98
21080 - Production Line Worker (Food Processing)	15.29
21110 - Shipping Packer	14.88
21130 - Shipping/Receiving Clerk	14.88
21140 - Store Worker I	9.85
21150 - Stock Clerk	14.02
21210 - Tools And Parts Attendant	15.29
21410 - Warehouse Specialist	15.29
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	25.15
23021 - Aircraft Mechanic I	23.72
23022 - Aircraft Mechanic II	25.15
23023 - Aircraft Mechanic III	26.71
23040 - Aircraft Mechanic Helper	15.08
23050 - Aircraft, Painter	20.64
23060 - Aircraft Servicer	17.67
23080 - Aircraft Worker	18.98
23110 - Appliance Mechanic	18.66
23120 - Bicycle Repairer	12.87
23125 - Cable Splicer	23.45
23130 - Carpenter, Maintenance	17.89
23140 - Carpet Layer	17.55
23160 - Electrician, Maintenance	20.10
23181 - Electronics Technician Maintenance I	22.35
23182 - Electronics Technician Maintenance II	23.94
23183 - Electronics Technician Maintenance III	25.41
23260 - Fabric Worker	16.35
23290 - Fire Alarm System Mechanic	19.13
23310 - Fire Extinguisher Repairer	15.12
23311 - Fuel Distribution System Mechanic	23.13
23312 - Fuel Distribution System Operator	18.23
23370 - General Maintenance Worker	15.63

23380 - Ground Support Equipment Mechanic	23.72
23381 - Ground Support Equipment Servicer	17.67
23382 - Ground Support Equipment Worker	18.98
23391 - Gunsmith I	16.81
23392 - Gunsmith II	18.67
23393 - Gunsmith III	20.74
23410 - Heating, Ventilation And Air-Conditioning Mechanic	19.33
23411 - Heating, Ventilation And Air Contditioning Mechanic (Research Facility)	20.50
23430 - Heavy Equipment Mechanic	18.39
23440 - Heavy Equipment Operator	20.02
23460 - Instrument Mechanic	24.25
23465 - Laboratory/Shelter Mechanic	18.79
23470 - Laborer	12.93
23510 - Locksmith	16.48
23530 - Machinery Maintenance Mechanic	22.01
23550 - Machinist, Maintenance	18.54
23580 - Maintenance Trades Helper	12.29
23591 - Metrology Technician I	24.25
23592 - Metrology Technician II	25.81
23593 - Metrology Technician III	27.31
23640 - Millwright	20.21
23710 - Office Appliance Repairer	21.11
23760 - Painter, Maintenance	16.52
23790 - Pipefitter, Maintenance	19.16
23810 - Plumber, Maintenance	18.01
23820 - Pneudraulic Systems Mechanic	20.02
23850 - Rigger	19.65
23870 - Scale Mechanic	17.55
23890 - Sheet-Metal Worker, Maintenance	19.44
23910 - Small Engine Mechanic	14.74
23931 - Telecommunications Mechanic I	23.49
23932 - Telecommunications Mechanic II	25.00
23950 - Telephone Lineman	21.89
23960 - Welder, Combination, Maintenance	16.90
23965 - Well Driller	20.02
23970 - Woodcraft Worker	20.02
23980 - Woodworker	12.71
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	9.49
24580 - Child Care Center Clerk	13.34
24610 - Chore Aide	9.44
24620 - Family Readiness And Support Services Coordinator	14.20
24630 - Homemaker	19.49
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	22.27
25040 - Sewage Plant Operator	22.26
25070 - Stationary Engineer	22.27
25190 - Ventilation Equipment Tender	15.47
25210 - Water Treatment Plant Operator	22.26
27000 - Protective Service Occupations	
27004 - Alarm Monitor	15.83
27007 - Baggage Inspector	10.51
27008 - Corrections Officer	15.87
27010 - Court Security Officer	15.87
27030 - Detection Dog Handler	13.68
27040 - Detention Officer	15.87
27070 - Firefighter	13.26
27101 - Guard I	10.51
27102 - Guard II	13.68

27131 - Police Officer I		19.58
27132 - Police Officer II		21.77
28000 - Recreation Occupations		
28041 - Carnival Equipment Operator		10.32
28042 - Carnival Equipment Repairer		10.47
28043 - Carnival Equpment Worker		8.39
28210 - Gate Attendant/Gate Tender		12.73
28310 - Lifeguard		11.29
28350 - Park Attendant (Aide)		14.24
28510 - Recreation Aide/Health Facility Attendant		10.13
28515 - Recreation Specialist		17.10
28630 - Sports Official		11.34
28690 - Swimming Pool Operator		14.87
29000 - Stevedoring/Longshoremen Occupational Services		
29010 - Blocker And Bracer		18.99
29020 - Hatch Tender		18.99
29030 - Line Handler		18.99
29041 - Stevedore I		17.72
29042 - Stevedore II		22.13
30000 - Technical Occupations		
30010 - Air Traffic Control Specialist, Center (HFO)	(see 2)	35.77
30011 - Air Traffic Control Specialist, Station (HFO)	(see 2)	24.66
30012 - Air Traffic Control Specialist, Terminal (HFO)	(see 2)	27.16
30021 - Archeological Technician I		16.46
30022 - Archeological Technician II		18.41
30023 - Archeological Technician III		22.82
30030 - Cartographic Technician		22.82
30040 - Civil Engineering Technician		22.04
30061 - Drafter/CAD Operator I		16.46
30062 - Drafter/CAD Operator II		18.41
30063 - Drafter/CAD Operator III		20.54
30064 - Drafter/CAD Operator IV		25.27
30081 - Engineering Technician I		13.90
30082 - Engineering Technician II		16.57
30083 - Engineering Technician III		20.34
30084 - Engineering Technician IV		23.88
30085 - Engineering Technician V		29.16
30086 - Engineering Technician VI		35.34
30090 - Environmental Technician		21.21
30210 - Laboratory Technician		20.56
30240 - Mathematical Technician		22.18
30361 - Paralegal/Legal Assistant I		18.17
30362 - Paralegal/Legal Assistant II		22.79
30363 - Paralegal/Legal Assistant III		27.87
30364 - Paralegal/Legal Assistant IV		33.75
30390 - Photo-Optics Technician		22.82
30461 - Technical Writer I		22.03
30462 - Technical Writer II		26.95
30463 - Technical Writer III		32.60
30491 - Unexploded Ordnance (UXO) Technician I		22.74
30492 - Unexploded Ordnance (UXO) Technician II		27.51
30493 - Unexploded Ordnance (UXO) Technician III		32.97
30494 - Unexploded (UXO) Safety Escort		22.74
30495 - Unexploded (UXO) Sweep Personnel		22.74
30620 - Weather Observer, Combined Upper Air Or Surface Programs	(see 2)	20.54
30621 - Weather Observer, Senior	(see 2)	22.82
31000 - Transportation/Mobile Equipment Operation Occupations		
31020 - Bus Aide		13.82
31030 - Bus Driver		18.11
31043 - Driver Courier		15.41
31260 - Parking and Lot Attendant		9.32

31290 - Shuttle Bus Driver	15.41
31310 - Taxi Driver	10.42
31361 - Truckdriver, Light	15.41
31362 - Truckdriver, Medium	18.16
31363 - Truckdriver, Heavy	19.44
31364 - Truckdriver, Tractor-Trailer	19.44
99000 - Miscellaneous Occupations	
99030 - Cashier	8.57
99050 - Desk Clerk	9.66
99095 - Embalmer	24.27
99251 - Laboratory Animal Caretaker I	10.44
99252 - Laboratory Animal Caretaker II	11.35
99310 - Mortician	24.27
99410 - Pest Controller	14.06
99510 - Photofinishing Worker	13.91
99710 - Recycling Laborer	15.26
99711 - Recycling Specialist	19.47
99730 - Refuse Collector	13.54
99810 - Sales Clerk	12.62
99820 - School Crossing Guard	11.25
99830 - Survey Party Chief	20.53
99831 - Surveying Aide	11.63
99832 - Surveying Technician	15.94
99840 - Vending Machine Attendant	11.62
99841 - Vending Machine Repairer	14.63
99842 - Vending Machine Repairer Helper	11.62

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $4.27 per hour or $170.80 per week or $740.13 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 8 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than $27.63 (or on a salary or fee basis at a rate not less than $455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541. 400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds

$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the

following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor,

for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

ATTACHMENT

JC-1

NAVFAC Specification #N62470-16-R-2002

NAVFAC WO: 1379652

COMPONENT OVERHAUL FOR ONE 25-TON PORTAL CRANE

at

TRIDENT REFIT FACILITY
KINGS BAY, GEORGIA

PREPARED BY:

Navy Crane Center
Bldg. 491, Norfolk Naval Shipyard
Portsmouth Virginia 23709-5000

SPECIFICATION PREPARED BY:

Lead Design Engineer:	Don A. Alkire, PE
Project Manager:	Nicholas Kent, PE
Contract Specialist:	Luke Clay
Quality Assurance:	Frank Wolff

TABLE OF CONTENTS

PART 1 GENERAL

1.1 REFERENCES

The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein. In case of difference between the following documents and this specification, this specification shall govern to the extent of such difference. If standards other than those listed below are used, proof of equivalence shall be provided. NEMA, OSHA, ASME, AWS, AISC, and NFPA rules shall govern.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
360 - Specification for Structural Steel Buildings
303 - Code of Standard Practice for Steel Buildings and Bridges

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
B4.1 - Positional Fits and Tolerance for Cylindrical Parts
B17.1 - Keys and Keyseats

AMERICAN SOCIETY OF MECHANICAL ENGINEERS INTERNATIONAL (ASME)
B30.4 - Portal, Tower, and Pedestal Cranes

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
A1023/A - Standard Specification for Stranded Carbon Steel Wire Ropes for General Purposes
A314 - Standard Specification for Stainless Steel Billets and Bars for Forging
A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105ksi Minimum Tensile Strength
A490 - Standard Specification for Heat-Treated Steel Structural Bolts, 150ksi Minimum Tensile Strength
E1444 - Standard Practice for Magnetic Particle Testing
F436 - Standard Specification for Hardened Steel Washers
F593 - Stainless Steel Bolts, Hex Cap Screws, and Studs
F594 - Stainless Steel Nuts

AMERICAN WELDING SOCIETY (AWS)
D1.1 - Structural Welding Code Steel
D14.1 - Welding of Industrial and Mill Cranes and other Material Handling Equipment

DEFENSE LOGISTIC AGENCY (DLA)
RR-W-410 - Wire Rope and Strand

ENVIRONMENTAL PROTECTION AGENCY (EPA)
40 CFR Part 89 - Control of Emissions from New and In-use Nonroad Compression-Ignition Engines
40 CFR Part 1039 - Control of Emissions from New and In-use Nonroad Compression-Ignition Engines

FEDERAL ACQUISITION REGULATION (FAR)
FAR 52.236-21 - Specifications and Drawings for Construction

FEDERAL SPECIFICATION
RR-C-271 - Chains and Attachments, Carbon and Alloy Steel

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)
IEC 60529 - Degrees of Protection Provided by Enclosures

INTERNATIONAL STANDARDS ORGANIZATION (ISO)
ISO 4309 - Cranes - Wire ropes - Care and Maintenance, Inspection and Discard

NAVAL FACILITIES ENGINEERING COMMAND
NAVFAC P-307, Management of Weight Handling Equipment

NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION (NEMA)
NEMA ICS 8 - Industrial Control and Systems Crane and Hoist Controllers
NEMA MG 1 - Motors and Generators
Publication Number 250 - Enclosures for Electrical Equipment (1,000 Volts Maximum)

NATIONAL FIRE PROTECTION ASSOCIATION
NFPA 70 - National Electric Code (NEC)
NFPA 70E - Standard for Electrical Safety in the Workplace

NAVAL SHIPS TECHNICAL COMMAND (NSTM)
Chapter 613 -Wire and Fiber Rope and Rigging

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
Title 29 CFR, Part 1910.27, Fixed Ladders
Title 29 CFR, Part 1910.66, Appendix C, Personal Fall Arrest System
Title 29 CFR, Part 1910.179, Overhead and Gantry Cranes
Title 29 CFR, Part 1910.306, Specific Purpose Equipment and Installations
Title 29 CFR, Part 1926.62, Occupational Exposure to Lead for Construction

RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC)
Specification for Structural Joints Using High-Strength Bolts

SOCIETY OF AUTOMOTIVE ENGINEERS
SAE J159 - Rated Capacity System
SAE J429 - Mechanical and Material Requirements for Externally Threaded Fasteners
SAE J995 - Mechanical and Material Requirements for Steel Nuts

SPANISH ASSOCIATION FOR STANDARDIZATION AND CERTIFICATION (AENOR)
EN13411 Part 8- Terminations for steel wire ropes - Safety - Swage Terminals and Swaging

1.2 UNIT PRICES

Not applicable to this specification.

1.3 SYSTEM DESCRIPTION

The intent of this specification is to perform selected components overhauling for the K-1, a 25-ton portal crane at Trident Refit Facility Kings Bay, GA.

The overhauling works for the crane shall include:

- Replacement of the slewing ring (rotate) bearing
- Replacement of the travel drive assemblies
- Replacement of the diesel engine-generator set
- Replacement of Forsheda rings and gudgeon pin seals
- Replacement of the sheave bearings and seals
- Replacement of the travel wheel bearings and seals
- Replacement of wire ropes and wire rope end fittings for the main hoist, boom hoists and install a Government furnished wire rope assembly for the whip hoist
- Cleaning of horizontal and vertical gudgeon pins including seals replacement
- Replacement of the travel drive electrical control systems
- Replacement of limit switches
- Replacement of master switch controls in the operator's cabin
- Replacement of floodlights/spotlights,and all general lighting on the crane to LED type
- Replacement of existing line rider Load Indicator (LMI) on main hoist with a different type of overload system.
- Removal of existing attachment system for the crane's external counterweight and design and install of a new attachment system for counterweights.
- Prepare a report on all electrical, mechanical and structural deficiencies uncovered during performance of this contract, that are outside the scope of the maintenance and repairs required by this contract

The contractor shall provide engineering services, labor, supervision, equipment, quality control, materials, supplies and construction services. After completion of the overhauling works the crane shall be inspected, field tested and made ready for use in accordance with this specification.

1.3.1 Design and Performance Requirements

The design of the overhauled crane shall conform to NFPA 70, ASME B30.4, and other requirements specified herein. The crane shall comply with all applicable requirements ("shall" statements) and recommendations ("should" statements).

After contract award, and prior to initiating work the contractor shall perform an initial site visit to Kings Bay, GA to observe the current operation of the crane. The Government will operate the crane to

demonstrate to the Contractor the electrical and operational characteristics of the existing crane's components, which will be used for comparison of the new components to be installed on the crane. All new components installed shall duplicate the functionality of the existing crane except where otherwise specified herein.

1.3.2 Major Existing Data

Note: The data is provided for general information only. The contractor shall verify all data through as-built drawings, manuals, documentation and field verification.

Rotate Bearing

- Manufacturer: SKF
- Size, series: 69322-0202-T/T(V)

Travel Motor

- Power: 10HP
- Rotation Speed: 1,150RPM
- Voltage: 240V

Travel Gear Box

- Reduction Ratio: 45:1
- Service Factor: rated 17.5 HP.

Travel Brake

- Nameplate Torque: 50 ft-lb

Diesel Engine

- Manufacturer: Cummins
- Model: NT-855-G4
- Serial Number: 64902
- Engine Number: 12023281
- Start: Electric

Generator

- Manufacturer: Marathon
- Model: 573RSL4927

1.3.3 Disposal of Removed Components

The removed travel gear boxes, travel motors, diesel generator set, load banks, and all electrical components removed from the crane shall be turned over to the Government. Electrical components include, but are not limited to backplanes, contactors, drives, switches, master switches, circuit breakers, etc.

All removed components for turn over to the Government shall be palletized.

Unless specifically directed otherwise in this contract, the contractor shall be responsible for transportation and disposal of all other removed items.

The contractor shall remove all lubricant from existing travel gear boxes prior to disassembling the travel drive assemblies. The lubricant is considered hazardous material in this specification.

Some crane components for removal are suspected to contain lead based paint, and the paint is to be disposed of intact with the metal material. The contractor is required to provide a specific lead removal program in the Accident Prevention Plan should cutting, grinding, burning, or disturbing of the coating be required by the planned work.

The contractor shall adhere to all local, state, and federal regulations in the handling of these hazardous materials.

1.4 SUBMITTALS

The Contractor shall submit to the contracting officer all items of technical documentation listed hereinafter. The Contractor shall ensure that all submittals are entirely legible and suitable for reproduction. The content, number of copies, time of submission, and distribution shall be in accordance with Exhibit A of this specification and as specified below. Compliance with the requirements of this specification will be determined by a review of the design and construction submittals by the contracting officer and by field inspection.

SD-01 Preconstruction Submittals

The Contractor shall submit monthly status reports. The first page of the report shall contain the following identifying information: Title/Project Description, Reporting Period, Contract Number, Name and Title of Report Preparer, Security Classification (when required), and a Distribution Statement. The content of the report shall address the overall project status and the status of each milestone/task for the crane, for designs in process – indicate the percent complete and estimated submission dates, and for designs under review - indicate the level of Government review and projected approval dates. It shall also list and describe current Contractor Change Request Forms (CCRFs), describe outstanding problems and proposed resolutions indicating who has the next action, describe significant results from conferences and trips, list directives given from the Contracting Officer's representatives, list all contract modifications issued, provide a summary of work planned in the next month, and provide any necessary supporting documentation as an attached appendix. An updated milestone schedule shall be provided with every monthly status report. The Contractor shall submit a schedule which identifies key milestone events in the design, fabrication, and installation of each crane. At a minimum, the schedule shall include the following:

a. Post Award Conference
b. Initial Design Submittals
c. Government Review of First Design
d. Second Design Submittals
e. Government Review of Second Design
f. Third Design Submittals

g. Government Review of Third Design

h. Receive materials required for overhaul

i. Install materials required for overhaul

In addition to general time period for site work, provide a supplemental, day by day sequence of specific work items so that proper oversight may be coordinated

j. Government Witnessed Shop Test (if applicable)

k. Government Crane Inspection

In addition to general time period for inspections, provide a supplemental, day by day sequence of components to be inspected

l. Field Acceptance Test

m. Crane Acceptance

n. Contract Completion Date

o. Receipt of Final O&M Manuals

p. Completion of Warranty

SD-02 Drawings

The Contractor shall submit for approval the drawings and catalog cuts listed below via AMRDEC Safe (https://safe.amrdec.army.mil/SAFE/). After Navy Crane Center design approval and prior to shop inspection, the Contractor shall submit a complete set of final design drawings. Initial design drawings shall include certification of review by a professional engineer. Contractor shall provide new crane drawings for the complete electrical control system. Final and "As-built" drawings shall bear a complete title block with a permanent drawing number and a registered professional engineer's original seal and dated signature. Drawings within each category (such as structural, mechanical, etc.) shall be numbered consecutively. Each assembly and subassembly drawing shall include an integral Bill of Materials or shall be followed by a consecutively numbered drawing with the applicable Bill of Materials. There shall be no proprietary notes on any drawing. All drawings shall be created for viewing in AutoCAD 2006 with a drawing file format of .dwg or .dxf., and a separate copy viewable in Adobe Acrobat as a bookmarked portable document file (.pdf). An index for all drawings shall be included.

The Government shall have full rights to use, reproduce, "build-from", modify, copy, and release all submitted information.

SD-02.S Structural Drawings

The structural design drawings shall be based upon consideration of the design loads and forces to be resisted by the structural steel in the completed project, and completed in accordance with AISC 303, Section 3, "Design Drawings and Specifications."

The structural design drawings shall show the fabrication details, weldments, fastener joint details, Bill of Materials and location and size of all structural members. The fabrication details shall clearly show the size, section, material grade and location (dimensions) of all members; all geometry necessary for layout; elevations; centers and offsets; camber requirements; and joining requirements between elements

of built-up elements. The requirements of FAR 52.236-21 for shop drawings shall also be accounted for in the structural drawings submittals.

Other critical information that shall be provided on the structural design drawings includes the welded-joint configuration in accordance with AWS D1.1 and D14.1, and structural bolted-joint configuration in accordance with the RCSC "Specification for Structural Joints Using High-Strength Bolts." All members required for fabrication shall be shown on drawings and shall be labeled to correspond with the Bill of Materials.

Structural drawings shall at a minimum include:

a. Counterweight's new attachment points

SD-02.M Mechanical Drawings

Mechanical drawings shall at a minimum include:

a. New rotate bearing.
b. Installation criteria/tolerances for new rotate bearing installation for the following:
    1. Gear backlash
    2. Gear contact pattern
    3. Root tip clearance for both pinions
    4. Surface finishes of the seating surfaces
    5. Overall flatness of the seating surfaces
    6. Local flatness of the seating surfaces
    7. Overall flatness of the bearing
    8. Conicity of the bearing
    9. Ovality of the bearing
    10. Fastener tightening method and values
    11. Internal clearance ("lift-off"), including the manufacturer's recommended crane configuration (i.e. required weight, radius, etc.) to perform clearance measurement
c. Travel drive arrangements for left hand and right hand drive assemblies with detailed dimensions showing fit on existing drive axles.
d. Travel drive motor with dimensions
e. Travel drive reducer gearing
f. Travel motor to gear box adaptor, if not a standard part of the travel drive assembly
g. Travel gear box output shaft
h. Travel wheels with new bearings
i. Sheaves with new bearings

j. Base mounted component and coupling bolt torque values. Torque tables shall be its own drawing page and values shall consider any lubrication and/or washer types used. This drawing page shall include the mechanical arrangement and location of each bolt listed.

k. Diesel engine and generator installation drawing (skid)

SD-02.E Electrical Drawings

The drawings shall at a minimum include:

a. Complete schematic diagram with narrative of any special description of operation. All components shown on schematics shall have labels that correspond to the nameplates that will be on the crane. Wiring type, size, and temperature ratings shall be included on schematic diagrams. All optional equipment not installed on the crane shall be removed from the schematic diagrams. For components with adjustable settings, final settings shall be shown on the schematics.

b. Travel motor nameplate data (including all information called for in NFPA 70, Section 430.7 (A) items 1 through 7 and motor weights).

c. Rating and types of over-current protective devices.

d. Complete assembly (wiring) diagrams including a comprehensive component material list showing all electrical components used on the crane. These drawings shall show the layout of electrical equipment on the crane, including layout of travel control panel enclosures, motors, brakes, limit switches, conduits, and conductor systems.

e. Layout diagrams showing component placement in control panel enclosures

f. Marked up copies of the original crane schematics showing any circuits that will be retained upon completion of the rebuild.

SD-03 Product Data (Required only for new equipment/components)

Manufacturer's catalog data shall be provided for new components of the crane. The catalog cuts shall be marked-up or supplemented with additional sheets to clearly identify the model or size, selected options, features, and/or modifications to demonstrate compliance with specification requirements. Catalog cuts which show modifications beyond the standard options and all supplemental pages, shall bear original signatures and dates of the equipment manufacturer's authorized representative. Each catalog cut and each supplemental sheet shall clearly identify the item to which it applies. All catalog cuts shall be submitted in one file viewable in Adobe Acrobat and bookmarked as to the location of each catalog cut. In accordance with Exhibit A, the Contractor shall submit for approval, the catalog cuts listed below (as a minimum):

SD-03.S Structural Product Data

SD-03.S1 Painting System, including MSDS

SD-03.M Mechanical Product Data

SD-03.M1 Rotate Bearing

SD-03.M2 Diesel Engine-Generator Set, including fuel consumption data

SD-03.M3 Diesel Engine Control System, including starter system and voltage regulator

SD-03.M4 Travel Drive Speed Reducers, including gear ratio

SD-03.M5 Travel Drive Couplings

SD-03.M6 Travel Brakes, including electrical information

SD-03.M7 Wheel and Sheave Bearings

SD-03.M8 Seals

SD-03.M9 Forsheda Ring

SD-03.M10 Wire Ropes, including length for each rope

SD-03.M11 Wire Rope End Fittings

SD-03.E Electrical Product Data

SD-03.E1 Electronic AC Drive (including drive diagnostic display)

SD-03.E2 Electrical Enclosures

SD-03.E3 Limit Switches

SD-03.E4 Master Switches

SD-03.E5 LED Lights

SD-03.E6 LMI System

SD-03.E7 Travel Motors

SD-03.E8 Contactors and Relays

SD-03.E9 Circuit Breakers

SD-04 Samples

Not applicable to this specification.

SD-05 Design Data

Calculations shall demonstrate compliance with all design requirements. Design data and calculations will not be approved if their evaluation/review is dependent on data or information not previously approved. All variables shall be listed and defined at the beginning of each calculation section. The Contractor as a minimum shall electronically submit for approval the calculations listed below.

SD-05.S Structural Calculations

SD-05.S1 Calculations for the new counterweight attachment points.

SD-05.S2 Calculations for engine room structure if the weight of new diesel generator set is greater than that of existing set

SD-05.M Mechanical Calculations

SD-05.M1 Calculations verifying travel drive coupling selection

SD-05.M2 Calculations verifying bearing selections

SD-05.M3 Calculations verifying wire rope lengths

SD-05.M4 Calculations verifying crane travel speed if new travel drive assembly has output speed is different from existing

SD-05.M5 Calculations verifying travel brake selection

SD-05.M6 Analysis of torsional vibration of the diesel-generator to verify coupling selection (performed at full load and no load)

SD-05.E Electrical Calculations

SD-05.E1 Power wire sizing for connections to the new travel drive/motors.

SD-05.E2 Conduit fill calculations for new conduit or for conduit where conductors are being added (using tables from NFPA 70, Chapter 9, or manufacturer's data sheets)

SD-05.E3 Calculation showing if loadbank resistors for the diesel engine are required

SD-05.E4 Calculations for resistor sizing (if applicable)

SD-05.E5 Calculations for diesel engine-generator sizing if the new unit prime rating is less than that of the existing. Ancillary loads shall be multiplied by 1.675 to determine the diesel engine prime rating

SD-06 Reports

SD-06.1 Pre-Work Inspection Report

The Contractor shall submit a report documenting the speeds, performance, and any other applicable information recorded during witnessing of the government post-award crane demonstration (para. 1.5.4).

SD-06.2 Deficiency Report

The Contractor shall document and submit a report on all electrical, mechanical and structural deficiencies that are uncovered at the post-award crane inspection (para. 1.5.4) that are outside the scope of the maintenance and repairs required by this contract. Additionally, the Contractor shall document and submit a report on all deficiencies that are uncovered during performance of this contract. Reports of these deficiencies shall contain sufficient information for the Government to develop a cost estimate, with labor and material costs, to repair deficiencies. A deficiency, as defined here, is any defect or problem that can or will prevent safe operation of the crane or a violation of NFPA 70, ASME B30.4, or OSHA requirements. Upon project completion, the Contractor shall document in a single report all electrical, mechanical and structural deficiencies that are uncovered during the course of the overhauling work that are outside the scope of this contract.

SD-06.3 Existing Rotate Bearing Conditions Report

The contractor shall submit a data record to the Government for approval to include, but not limited to the conditions for the following:

1. Gear backlash
2. Gear contact pattern
3. Root tip clearance for both pinions (at a minimum taken at the location of maximum runout)

4. Surface finishes of the seating surfaces
5. Overall flatness of the seating surfaces
6. Local flatness of the seating surfaces

SD-06.4 New Rotate Bearing Installation Condition Report

The contractor shall submit a data record to the Government for approval to include, but not limited to the conditions for the following:

1. Gear backlash
2. Gear contact pattern
3. Root tip clearance for both pinions (at a minimum taken at the location of maximum runout)
4. Surface finishes of the seating surfaces
5. Overall flatness of the seating surfaces
6. Local flatness of the seating surfaces
7. Overall flatness of the bearing
8. Conicity of the bearing
9. Ovality of the bearing
10. Internal clearance check (“lift-off”)

SD-07 Certificates

All certifications shall be dated and shall bear the original signature (above the printed name) of the authorized representative of the Contractor or the manufacturer of the items or equipment being certified. Each certification shall clearly identify the crane, drives, components, and location (as applicable) to which it applies.

SD-07.1 Wire Rope

The Contractor shall provide the wire rope manufacturer’s certification that the wire ropes meet the published breaking strength of samples taken from reels and tested. Certification shall be traceable to the crane, hoist and reel.

For the whip hoist, the wire rope shall be provided by the Government with certification, the Contractor shall provide a copy of the certificate, annotating with traceability to the crane, hoist and reel.

SD-07.2 Periodic Overload Testing

The Contractor shall certify crane components purchased and/or modified by this contract are capable of being load tested semi-annually up to and not exceeding 131.25% of the rated capacity without any detrimental effects.

SD-07.3 Hazardous Material

The Contractor shall certify that the crane components purchased and/or modified by this contract do not contain asbestos, lead paint, Polychlorinated Biphenyls (PCBs), or elemental mercury, and that chromates have been avoided where feasible.

SD-07.4 Loss of Power Test

The Contractor shall certify that when traveling with a test load, a loss of power test can be performed without any detrimental effects to the travel drive electronic control system.

SD-07.5 Welding Certifications

The Contractor shall provide a certificate stating that all welders, welding operators, weld inspector(s) and welding procedure (qualification) meet the requirements of AWS D 1.1 for all work performed on this crane.

All temporary welds to the crane structure in support of the slewing ring bearing removal and installation shall be in accordance with the requirements of AWS D14.1. All welds shall be inspected in accordance with ASTM E1444. At the completion of bearing replacement, all temporary welds shall be ground smooth without removing any base metal. Magnetic particle inspection of all ground areas for weld removal, and a one inch surrounding area shall be performed in accordance with ASTM E1444. The acceptance criteria shall be no linear indication greater than 1/16 inch. A linear indication is defined as any indication with a length greater than or equal to three times its width.

Magnetic particle inspection reports for removed temporary welds shall be provided.

SD-07.6 Design Review by Professional Engineer

The Contractor shall provide a certificate stating that the design has been reviewed by a professional engineer. The certificate shall indicate the name, state of licensure and license number of the professional engineer.

SD-07.7 EPA Emission Certification

The Contractor shall submit certification that the new diesel engine meets the EPA Tier 4 requirements.

SD-07.8 Original Equipment Manufacturer (OEM) Conformance Certification

The contractor shall provide an original document from the travel drive gear box manufacturer certifying that the gear boxes have been tested and satisfy technical specification requirements. The certification shall bear the unit serial numbers traceable to the gear boxes mounted on the crane.

SD-08 Manufacturer's Instructions

SD-08.1 Shop Test Procedure

A shop test procedure is not required to be submitted; however, upon request, the Government shall be given an opportunity to perform an inspection of the equipment required for the crane overhaul at the Contractor's facility in accordance with para. 2.8.1.

SD-08.2 Removal and Installation Plan

The Contractor shall submit a Removal and Installation Plan detailing the logistics involved in crane jacking operations (for all crane jacking evolutions), crane mobilization to the site, and installation and removal of the slewing ring bearing, diesel engine-generator set and counterweights on the existing crane. The plan shall include a detailed sequence of lift, lifting equipment position, any translation while suspended, the crane superstructure configuration required to maintain stability during all phases of the rotate bearing, diesel engine-generator set and counterweight removal and replacement process, and the communication system for use during lifting operations. This plan shall also include details on removal

and reinstallation of existing components (roof hatches, collector ring, wheels, etc.) that are required for accessing the equipment necessary for the performance of this specification.

A detailed Removal and Installation plan meeting the minimum requirements shown in Specification Section 3.4 and shall be submitted by the Contractor, for review and acceptance by the Government. Mobile cranes and rigging gear shall comply with OSHA requirements and any local requirements as specified in Section H.

The Removal and Installation Plan shall include the following drawings:

1. Lifting configuration shall include as a minimum:
    a. Lift load weight
    b. Center of gravity
    c. Lift Load Dimensions and location of rigging
    d. Identification of components that may shift during lift operations and method to secure components
    e. Details of rigging equipment including method of attachment to the equipment being lifted for installation, or removal
    f. Pertinent supplemental information for the lift of each item including torque of safety hoist rings or hold-down fasteners and similar information
    g. Removal of existing bearing including location of jacks and other lifting equipment
    h. Installation of new bearing including location of jacks and other lifting equipment
    i. Lay-down areas
    j. Lay-down areas
2. Any temporary structural support for the removal and reinstallation of the rotate bearing including fabrication details (e.g. dimensions, materials, welds, etc.)
3. Proposed transportation route through installation site

The Removal and Installation Plan shall include the following calculations:

1. The strength and adequacy of the jacking equipment and shoring equipment
2. Strength of crane superstructure tie down securing restraints based on 120MPH wind loading condition in any direction, as applicable
3. Maximum wheel/outrigger loads of mobile equipment used for removal and replacement of the rotate bearing
4. Strength of lifting attachments welded to the crane structure
5. Calculations ensuring the rigging method and the equipment have the capacity to support the load, in the configuration or geometry required, giving consideration to the following:
    a. Dynamic effects (beyond that considered in the design of the equipment)
    b. Adverse environmental conditions (temperature, wind, water/ice)
    c. Position of the center of gravity relative to rigging support points

d. D/d ratio

NOTE: On-site changes to the plan are not permitted without Government review and acceptance.

SD-08.3 Field Test Procedure

The Contractor shall develop and submit a field test procedure that will demonstrate the operation, performance, and safety of the overhauled crane. This test shall be based on the pre-work inspection report and shall prove the new functionality of the crane matches the functionality of the crane prior to overhauling. The test procedure shall be submitted and approved prior to conducting the field test. This test shall, as a minimum, include:

a. All demonstrations performed by the Government at the post-award crane demonstration including tests with no load, and 125%, -0/+5% load, where applicable

b. A procedure to test the diesel engine safety system warnings and alarms.

c. Procedure for balancing electrical loads across all pairs and procedure to test the travel drive system including taking measurements of electrical data for motor pairs.

d. Performance of an inspection and operational test for all systems affected by the replacement of the rotate bearing to verify that they have been reinstalled in accordance with the tolerances for that component and perform in accordance with the drawings and Operation & Maintenance Manuals. For the rotate bearing, with the boom at maximum operating radius, the contractor shall demonstrate successful rotation of the crane through 5 revolutions, both clockwise and counter-clockwise.

SD-08.4 Accident Prevention Plan (APP)

The APP shall be prepared in accordance with Appendix B, Exhibit A, and Exhibit B and shall be submitted for review and acceptance by the Contracting Officer. Installation of the crane components cannot proceed prior to the review and acceptance of the APP by the Contracting Officer.

SD-08.5 Training Course Outline

The Contractor shall prepare and submit to the Contracting Officer for approval, a training course outline. The outline shall contain enough detail for the Government to determine that all topics are adequately covered as prescribed in section 3.8 of this specification.

SD-09 Manufacturer's Field Reports

SD-09.1 Brake Adjustment Records

The Contractor shall provide a brake adjustment record for the travel brakes. The brake adjustment record shall be submitted on the official form titled "Brake Adjustment Record Form," which can be found on the NCC website. Each brake measurement shall have a tolerance traceable to the associated brake manual or documentation provided by the brake manufacturer and an actual brake setting. Changes made to settings of the brake, at any time, will void this record.

SD-09.2 Shop Test Deficient Items List

If applicable, upon completion of the government inspection of the equipment required for crane overhauling work, a list of deficient items will be compiled and attached to the "Navy Crane Center Post

Shop Test Sign Off Sheet," NCC Form 08-002, and signed by the Contractor, Navy Crane Center Representative, and activity representative (if applicable) and forwarded to the Contracting Officer.

SD-09.3 Field Test Record

The Contractor shall follow the approved field test procedure that will demonstrate operation, capacity, and safety of the crane. Any deviations from the field test required by the Contractor must be approved by the Government. Upon successful completion of all testing, the Contractor shall submit records of all test data.

SD-10 Operation and Maintenance Data

The Contractor shall submit the crane's operation and maintenance manuals to the Government for review. The operation and maintenance manuals shall include a table of contents, operation instructions, maintenance information, parts information, drawing list, all drawings, catalog cuts, and calculations.

Operation instructions shall include Contractor's detailed written procedures as well as crane operating and safety instructions including special precautions for starting/stopping.

Maintenance information shall include recommended maintenance procedures, preventative maintenance, manufacturer's installation and maintenance manuals (for purchased components), lubrication instructions, and maintenance and programming instructions for the drives. Lubrication instructions shall include the location of lubrication points, type of lubricant to be used, amount of lubrication to be used, and the frequency of lubrication, which shall agree with the lubrication drawing provided. Maintenance instructions shall include alignment, adjustment, and calibration instructions for commercial components and parts lists. Programming instructions shall include a complete listing of all control system parameters with an explanation of their functions.

Parts information shall include a recommended spare parts list, all information on Contractor-designed parts, and all purchased sub-assemblies and components including the manufacturer's part number. The information shall be broken-out to the smallest replacement part.

SD-11 Closeout Submittals

SD-11.1 Drawings on CD-ROM

The Contractor shall provide the crane's as-built drawings on CDs viewable in AutoCAD 2006. The file shall be in .dwg or .dxf format and a separate copy in a bookmarked .pdf. The as-built drawings shall be submitted to the Government following final Government acceptance of the crane. The CDs shall include an index of the drawings.

SD-11.2 Operation and Maintenance Manuals

The Contractor shall provide the operation and maintenance manuals for updated and/or new components following final Government acceptance. The manuals shall be in the form of a bookmarked .pdf that can be modified by the Government in the future when changes are required.

SD-11.3 Control System Parameter Record

After the crane has passed the final field test, the Contractor shall complete a control system parameter record for the crane and provide the crane parameter file downloaded from the new drive at time of acceptance, if applicable. The record shall include the contract number, Contractor's name and address,

date, all control system parameters, crane number, and their final settings. Each control system parameter shall be designated as either used or unused. This applies to all systems that have software as applicable such as Diesel Generator, LMI, Control System, etc.

SD-11.4 Product Data

Catalog cuts shall be submitted electronically, in .pdf format, as one unit with a cover sheet containing a title block and index sheet identifying individual catalog cuts. Ensure each page is numbered and identified to allow proper filing if separated. Linked book marking is acceptable vice page numbering for the .pdf file. The minimum sections for indexing shall be the sections noted in paragraph SD-03.

SD-11.5 Property Transfer Verification

After the crane has passed the final field test, the Contractor shall transfer possession of all small items associated with the operation and maintenance of the crane, including but not limited to keys, control software, computer cabling, remote controls, etc. The property shall be given to the point of contact of the supported command. The Contractor shall prepare and submit an itemized dated invoice showing the quantity and description of items transferred with a signature and date from the recipient.

SD-11.6 List of Parameters and Crane OEM's Approved Crane Range

After the crane has passed the final field test, the contractor shall submit Appendix F for the travel electronic drive to document the crane designed parameter ranges in which each parameter can be safely tuned by the end user for each parameter specified in Appendix F used on the crane. The crane contractor- determined design range shall be the applicable portion of the drive’s default range for each parameter. The crane contractor must provide justification for each range of each parameter on the list. When necessary, the justification shall include appropriate calculations.

1.5 QUALITY ASSURANCE

1.5.1 Qualifications

Crane design for this specification shall be accomplished by, or directly supervised by, registered professional engineers (PE). Each PE may be the Contractor's regular employee or consultant. Each PE's review and attestation of specification compliance and professional responsibility shall be signified by the PE's original seal, and dated signature on the as-built drawing and calculations. The PE’s shall only undertake and perform work under this contract only in the branch(es) of engineering in which they are licensed. Licensing shall be by a board or agency authorized to license and register professional engineers in the U.S. or Canada.

1.5.2 Regulatory Requirements

All crane functions and components shall comply with all Occupational Safety and Health Administration (OSHA) and other listed references in this specification.

The diesel engine shall conform to the U.S. EPA emission standards specified in 40 CFR 89 or 40 CFR 1039, as applicable for the manufacture or importation of non-road compression ignition engines.

1.5.3 Post-Award Conference

The Contractor shall attend a post-award conference that will be held at Kings Bay, GA. This conference will cover design submissions, shipping, site mobilization, assembly dates, Exhibit A

submissions, the APP, the crane installation plan, roles and responsibilities of the entities involved, and the overall schedule. Meeting minutes shall be prepared by the Contractor and reviewed by the Government.

1.5.4 Post-Award Crane Demonstration and Inspection

The Contractor shall perform an initial site visit to Kings Bay to observe the current operation of the portal crane. The Government will operate the crane to demonstrate to the Contractor the electrical and operational characteristics of the existing travel drive unit for comparison against the new drive installation. The demonstration will be conducted with no load. Additionally, the Contractor shall operationally check and may inspect all electrical and other components of the crane.

This demonstration and inspection may be coordinated to be held at the same time as the Post-Award Conference.

1.5.5 Pre-Installation Conference

Prior to performing crane overhaul, the Contractor shall attend a Government conducted pre-installation conference that will be held at the installation site. This conference will allow the Contractor and any Sub-contractors, the Navy Crane Center, and local command the ability to review any necessary precautions to insure a safe and accurate installation. A draft of the Removal and Installation Plan shall be available at the pre-installation conference. Meeting minutes shall be prepared by the Contractor and submitted for review and approval to the Government in accordance with Exhibit A.

1.5.6 Government Furnished Equipment and Technical Support

The government shall provide certified test weights, rigging gear, operators and riggers at the facility for acceptance testing of this delivery order and for post award demonstrations. The Government shall be notified a minimum of 5 business days prior to testing.

The government shall provide a spool of wire rope, with certification, for the whip hoist.

The Government may be able to provide existing drawings, manual and or maintenance data to support the Contractor with performing this specification.

1.6 DELIVERY, STORAGE AND HANDLING

Not applicable for this specification.

1.7 PROJECT/SITE CONDITIONS

1.7.1 Environmental Requirements

The electrical components shall be designed to operate in an indoor environment with an ambient temperature of 40° to 110° F. Travel drive components shall be suitable for outdoor operation.

1.7.2 Existing Conditions

Prior to each mobilization, the site shall be inspected by the Contractor, a facility representative, and a NCC representative to document the condition of all existing construction and record any existing damage. A “Pre/Post Installation Site Inspection Checklist,” NCC form 11-001, shall be initiated at that time. Upon completion of the work, the Contractor, a facility representative, and a NCC representative shall determine the extent of any damage that may have occurred as a result of work performed under this contract. During this final inspection the NCC Form 11-001 shall be completed. Any damage as a

result of the crane component installation and/or testing shall be the responsibility of the Contractor under this contract.

1.8 SEQUENCING AND SCHEDULING

The Contractor shall provide sequencing and scheduling to be coordinated with the installation sites via NAVCRANECEN. The Contractor shall provide a minimum of thirty days notice prior to any mobilization.

1.9 CONTRACTOR REQUESTED ENGINEERING CHANGES

All contractor-requested engineering changes must be submitted to the Navy Crane Center on the "Contractor Change Request Form" (NCC Form 07-001). The "Price Worksheet" (NCC Form 07-001A) shall be attached to any engineering changes when a price increase/decrease is proposed by the contractor. The worksheet shall compare the price of equipment as specified in the contract with the price of the proposed change. CCRFs shall be disapproved if submitted without Price Worksheet.

The forms are available at https://portal.navfac.navy.mil/ncc under the "downloads" page.

1.10 WARRANTY

See section I of the contract for warranty information.

1.11 MAINTENANCE

Not applicable to this specification.

PART 2 PRODUCTS

2.1 MATERIALS

Material shall be free from defects and imperfections that might affect the serviceability and appearance of the finished product. All material shall be new and unused.

2.1.1 Ductile Material

For the purposes of this specification, ductile is defined as having a minimum elongation of 5% in 2 inches.

2.1.2 Welding Materials

Welding materials for the crane shall conform to AWS D1.1 and AWS D14.1

2.2 MANUFACTURED UNITS

Not applicable for this specification.

2.3 EQUIPMENT

General scope of the overhauling works is as follows:

- Remove the slewing ring (rotate) bearing
- Provide and install one new slewing ring (rotate) bearing
- Remove existing 8 travel drive assemblies
- Provide and install 8 new travel drive assemblies

- Provide and install new controls/control panels for the travel function.
- Provide and install new adjustable frequency controllers with data recorders for the travel function.
- Remove existing diesel engine-generator set
- Provide and install new diesel engine/generator, generator circuit breaker, voltage regulator, electric starting system and any other equipment, wiring, conduit, or hardware necessary for the installation.
- Remove all Forsheda rings and gudgeon pin seals (complete removal of travel trucks are required)
- Provide and install new Forsheda rings and gudgeon pin seals
- Remove all bearings and seals from 16 travel wheels (8 drive and 8 idler wheels)
- Provide and install all new bearings and seals for all 16 travel wheels
- Remove all bearings and seals from the running sheaves and equalizer sheaves (if applicable) from the main, whip, and boom hoist reeving systems
- Provide and install new bearings and seals for all running sheaves and for equalizer sheaves (if applicable) of the main, whip, and boom hoist reeving systems.
- Remove all wire ropes from main, whip, and boom hoists and their end fittings
- Provide and install new wire ropes for the main and boom hoists including all end fittings on main hoist wire ropes.
- Install the Government provided whip hoist wire rope assembly.
- Remove all limit switches
- Provide and install new limit switches
- Remove the master switches in the operator's cabin
- Provide and install new master switches in the operator's cabin
- Remove all floodlights/spotlights, lights in machinery house and cabin.
- Provide and install all new LED type lights for removed floodlight/spotlights, lights in machinery house and cabin.
- Remove existing line rider Load Indicator (LMI) on main hoist
- Provide and install a new type of LMI system for main hoist
- Provide cleaning service and apply new lubrication for the horizontal and vertical gudgeon pins and bores (There are three vertical and one horizontal per corner of the crane.)
- Remove existing external counterweight system for modifying attachment points
- Re-install the external counterweight system.

Performance of this specification may require temporary removal, disassembling or temporary supporting of other components or crane structure. The contractor shall submit to the Government for approval of the temporary works.

2.3.1 Structural Design

Disassembly of major structural members (e.g., boom, A-frame, counterweight) shall not be permitted.

Where applicable, the Contractor shall be responsible for temporary modifications to the crane structure, including but not limited to, foundations, platform structures, and structural supports, to accommodate required works. Structural design, materials, fabrication, and installation shall be in accordance with the allowable stress design of the AISC 360. The allowable stresses shall not exceed 85% of the allowable stresses listed in the AISC 360. Stresses in welds shall not exceed the allowable stresses listed in AWS D1.1. Structural bolted connections shall be designed and installed in accordance with RCSC Specification for Structural Joints Using High Strength Bolts.

2.3.1.1 Stability

The overturning moments shall not exceed 80% of the stabilizing moments without tie down restraints. The superstructure and jacking arrangement shall be evaluated based on a 106 mph wind condition in any direction. Wind load is specified by the wind velocity in miles per hour. The specified wind velocity has a corresponding velocity pressure (q) in pounds per square foot (psf). Velocity pressure is defined as:

$q = 0.00256V^2$ where V equals the wind velocity in mph

For any portion of the crane, the wind load (p), in psf, shall be obtained by multiplying the velocity pressure by the appropriate shape factor (Cs) and height correction factor (Ch) in accordance with American Society of Civil Engineers.

2.3.1.2 Welding

All welding procedures and qualifications shall be in accordance with the requirements of AWS D14.1 and AWS D1.1. The contractor shall have available for review records of all welders and welding operator qualifications, all procedure qualifications, tests performed, and other information that may be required for weld acceptance.

2.3.1.3 Welding Restriction

The existing rotate bearing, the new rotate bearing, the collector ring and all travel wheel's bearings shall not be in the grounding path while welding at any time during the entire removal/installation evolution.

2.3.1.4 Structural Bolted Connections

Structural bolts shall be ASTM A325 or A490 bolts. Structural bolted connections shall be designed and installed in accordance with RCSC Specification for Structural Joints Using High-Strength Bolts.

2.3.1.5 Walkway, Ladders, Gates and Handrails

If relocation and modification to walkway, ladder and/or handrail at the crane corners are required to accommodate new travel drive assemblies, the change shall maintain the existing profile of affected features and shall meet all current safety requirements for elevated platforms, gates and ladders as specified by OSHA requirements.

2.3.2 Mechanical Design

2.3.2.1 Threaded Fasteners

Mechanical connections shall be made fastened with SAE J429, Grade 5 or Grade 8 fasteners, ASTM F436 washers, and SAE J995 Grade 5 or Grade 8 nuts when fastening all base mounted components or fastening all flange mounted components. Fasteners may be installed into tapped holes provided that adequate thread engagement is provided to develop the full tensile strength of the fastener.

Fasteners shall be pre-loaded to their full installation torques only when so prescribed by the component manufacturer. Fastener connections shall be sized neglecting any benefit to be derived from shear bars or dowel pins.

The holes or slots shall not be enlarged to accept a larger fastener to obtain the design factor required for custom designed assemblies.

All nuts shall have a minimum of one thread pitch of the bolt protruding above the nut top surface.

2.3.2.2 Fits

All components that transmit drive or brake torque shall be interference fitted onto their respective shaft or axle.

-Interference fits shall conform to the force fit requirements prescribed in ANSI B4.1 and shall be medium drive fits unless length of engagement, material, or loading indicates otherwise.

-The individual component manufacturers shall endorse these interference fits.

-Drive wheels installed on rotating axles without keys shall be machined to have the wheel/axle inference fit in the FN2 to FN3 fit range.

Travel drive speed reducers may use keyless connections.

Motor rotors, armatures, and commutators of hoist motors shall be press fitted and keyed to motor shafts.

Keys shall:

- have a metal to metal fit to the keyseat and keyway in reversing torque applications.

-have a fit that satisfies ASME B17.1 Class 2 requirements for single keys, keyseats, and keyways.

-have a fit that satisfies ASME B17.1 Class 1 requirements for double keys, keyseats, and keyways.

Bearings, bushings, and seals shall be fitted in accordance with the manufacturer's recommendations.

Where multiple interference fitted components are installed on a single shaft from the same end, there shall be clearance between each component's bore and the portion of the shaft from the installation end up to its mounting location.

2.3.2.3 Shims

Shims shall be used as necessary to fit assembly where it is allowed by the manufacturer of the component.

Shims shall:

-Be pre-cut, slotted, stainless steel, with the thickness stamped on the shim.

-Be "U" shaped and the slot widths shall approximate the mounting bolt diameters.

-Have the tabs visible, legible and unpainted after installation.

2.3.2.4 Rotate Bearing Replacement

The new rotate bearing dimensions and capacity shall be fully compatible with the existing bearing to ensure the replacement bearing provides the same fit and functionality of the existing bearing

2.3.2.4.1 Collector Ring

The collector ring will be required to be removed for removal of the existing rotate bearing and installation of the new rotate bearing. After installation of the new rotate bearing, the contractor shall reinstall the collector ring.

2.3.2.4.2 Rotate Gearing

Prior to the start of rotate bearing removal and after the new rotate bearing has been installed, all pertinent, as described in SD-07.8 and SD-07.9, installation criteria shall be measured and recorded. The new rotate gearing shall match the existing rotate gearing. These measurements include bearing manufacturer installation criteria relevant to this project. Prior to installation these measurements shall be submitted to the Government for approval.

2.3.2.4.3 Rotate Bearing Seating Surfaces

After the removal of the rotate bearing and prior to installation of the new bearing, the contractor shall mark and measure the thickness of both the upper and lower mounting surfaces and flatness at the inner and outer diameters of the mounting surfaces in accordance with bearing manufacturer's evaluation criteria. Flatness measurements shall be performed using calibrated laser or other accurate measurement equipment. The equipment shall be capable of measuring flatness to one thousandth of an inch. The contractor shall submit a certified inspection report of the results and bearing manufacturer's evaluation of the surfaces' acceptability for installation.

If machining either of the bearing seating surfaces is required, approval from the Contracting Officer is required. The Government shall approve any additional required machining, prior to work being performed. Use of any filler materials for leveling the bearing seats in prohibited.

If machining is required, after the machining is performed, the contractor shall repeat the measuring and marking requirements stated previously.

The contractor shall perform a visual inspection of the surfaces to determine if there are any indications that require further investigation. Surface flaws shall be tested in accordance with ASTM E1444 Magnetic Particle Examination to determine if they are non-propagating hot tears and if degradation has occurred to the mounting surfaces.

The contractor shall use laser measurement equipment to check flatness of the rotate bearing seats.

2.3.2.4.4 Rotate Bearing Installation

All fasteners and washers shall be new and shall meet the bearing manufacturer requirement/recommendation.

The new rotate bearing shall be installed in accordance with the bearing manufacturer's instructions.

Flat washers shall be installed such that the washer seats flat after fastener are fully tensioned. Tensioning or torqueing the fasteners shall be done in accordance with the bearing manufacturer's recommendations. Any special tools required to tension or torque the fasteners shall be considered part of the rotate bearing procurement and shall be turned over to the facility after acceptance testing is completed satisfactorily.

2.3.2.5 Travel Drive Assembly

The contractor shall remove all eight (8) travel assemblies including motors, gear boxes, mounting hardware, and electrical wirings and install new travel assemblies.
The new travel assemblies shall be selected such that the new drive assemblies do not come into contact with any crane structures when the crane travels through the tightest curves at the activity.
New travel assemblies and related components shall not expand the crane envelope beyond the existing envelope.
The motor to gear box adaptor shall be a fabricated steel housing design with two opposite water tight covered accesses for coupling inspection and maintenance without removal of the motor.

The travel motors shall be compatible with the new electrical drive. Motor and gear box combination shall be selected to provide the crane travel speed within $\pm$ 10% of the existing rated speed.

Connection from new travel drive assembly to travel truck frame shall be similar to existing, or it shall be designed to allow movement of the assembly to compensate for existing out of round condition of the drive axle. Torque arms, if required, shall not be threaded rod type and shall be designed and installed so that no eccentric loads are imposed on them.

Travel drive assembly parts shall be connected by spigot fit such that the coupling shall not require alignment.

2.3.2.5.1 Travel Gear Box

The gear boxes shall be right angle, left hand and right hand, triple reduction, and helical-bevel. The output shaft end shall be compatible with the existing drive wheel shaft. The output shaft/axle fit shall match with that of the existing assembly.

Gear boxes shall be standard commercial products suitable for outdoor travel function. Service factor shall be 1.75 or greater based on the motor horse power. Gear boxes shall be selected for the working environment specified in section 1.7.1.

Gearing shall be mounted on shafts supported by two outboard bearings. Shafts with three or more bearing supports shall not be permitted. All gears shall be pressed on and turn with their shafts or axles. The input (high speed) gear set shall be some form of angled gear tooth form – helical (including double helical and herringbone) or spiral bevel.

Gearing shall be designed in accordance with applicable standards of American Gear Manufacturers Association or International Standards Organization. Gear quality shall be A5 or higher.

The gear box housing shall be steel or ductile cast iron, and it shall be a split type (along the centerline, along the side or top) to permit removal of gears, bearings or shafts.

The gear boxes shall have a convenient means of lubricant level indication and a ball valve to facilitate draining.

Couplings connecting the motor and gear box shall be steel, full-flexible, bolted flange or steel grid type.

All bearings shall be of the antifriction, permanently lubricated sealed type with a minimum calculated B-10 bearing life of 10,000 hours.

Shaft seals shall be dual lip spring loaded type.

2.3.2.5.2 Travel Brake

Each travel drive assembly shall be provided with an electro-mechanical brake.

Each brake shall be motor end-mounted and spring applied, electrically released. Each brake shall have a minimum torque rating equal to 100% and not greater than 200% of the drive motor rated torque. The brakes shall be designed to permit easy access for adjustment and inspection for wear and/or setting of the friction discs. The brake shall be protected for operating in an outdoor environment. Each brake shall be equipped with a self-return to "ON" manual release mechanism.

2.3.2.6 Diesel Engine/Generator Replacement

With the exception of the load bank, the existing diesel-generator set, voltage regulator, diesel engine starters, charging systems, batteries and associated components shall be replaced with new. System components including load bank shall be accessible for maintenance and repair. The entire engine room roof is removable. The new design and placement of components shall ensure major components can be routed through the engine room roof access. The new diesel engine-generator set assembly shall have a generator with a single bearing, with a direct coupling to the engine, precluding the use of a discrete engine-generator coupling. The coupling between the diesel engine and generator shall be selected based on a torsional vibration analysis performed on the diesel engine and generator as a set. The analysis shall consider both full load and no load operation of the diesel generator set.

2.3.2.6.1 Diesel Engine Requirements

Except for interference reasons that a lower rating unit has to be used, the diesel engine shall have a prime rating in horse power no less than that of the existing unit.

The new diesel engine shall be the latest product of a manufacturer specializing and regularly engaged in the design and fabrication of such equipment, likewise, having a nationwide network of parts and service facilities. It shall meet the demand of the crane's systems allowing reliable simultaneous operation of travel in a curve, main hoist (at rated load), rotate, and ancillary loads. It shall be replaced based on a capacity rating that will provide improved fuel efficiency. The diesel engine shall conform to the U.S. EPA emission standards Tier 4 requirements per 40 CFR Part 89 or Part 1039, as applicable. The diesel engine and generator shall be an assembly mounted on a single steel frame (skid). Vibration isolators/dampers shall be provided as a means to fasten the generator set in the power module and to reduce engine vibration transmitted to the crane structure. A remote diesel engine blue colored mushroom push-pull head OFF button shall be installed in the operator's cab. The diesel engine-generator set and associated equipment shall be capable of operating over extended periods of running the diesel generator set lightly loaded as well as limited periods running at a near full load condition.

A solid state electronic speed controller shall be provided and shall be an integral part of the engine control module. The speed controller shall provide speed regulation and speed governing within the ranges prescribed by the diesel engine manufacturer when operating from no load to full load and under steady state condition. Speed regulation shall be such that a steady-state speed band of, at most, 0.25% of generator rated (60Hz) speed is maintained. Overshoot shall not exceed 3% from rated generator (60Hz) speed. Recovery time shall not exceed 6 seconds to return to the steady state band.

The diesel engine shall operate on No. 2 Ultra Low Sulfur Diesel (ULSD) or kerosene fuel. All fuel line sections from the engine to the fuel tank shall be replaced. New fuel pipe and hose sections shall match

the type and size of the existing fuel lines. New fuel line segments shall be routed below the power module deck while outside of the diesel generator envelope. Minor modifications (new pipe sections, fittings, etc.) may be accomplished to facilitate as-built conditions on the new diesel engine. The existing fuel tank shall be reused. A manual fuel priming pump, air cleaners, fuel-water separator, and full-flow type filters for fuel and lubrication oil shall be provided

The existing exhaust pipe may be reused, reconfigured, and modified as needed by the Contractor. If applicable, exhaust penetration to outside of the engine room shall be sealed. The exhaust system shall be entirely of stainless steel and shall include a spark arresting silencer and a bellows type duct section to compensate for expansion/contraction of the exhaust duct between its anchor points. All flex pipe, muffler support pipe, seals, and exhaust pipe used shall be weather-tight. A heat shroud covering the exhaust pipe located inside the power module shall be provided. Any modifications to the exhaust shall not alter the crane's operating envelope. The muffler shall remain outside of the engine room.

The cylinder liners shall be removable and the crankcase shall be oil tight. The engine shall have a crankcase ventilation recovery system and a fluid recovery canister rated such that maintenance shall not be required with a periodicity less than 500 operating hours.

The lubricating system shall be of the forced-fed type and shall include: pump, full flow continuous absorption type filter, cooler, bypass, and sump. The oil shall be delivered to the main bearings, crank bearings, and wrist pins at a pressure selected by the diesel engine manufacturer. The sump drain shall be piped with a valve to an accessible port on the outside of skid frame. Standard, commercially-available, oil shall be used.

The cooling system shall include: a radiator, a blower type fan, a circulating pump, a thermostat, piping, drain line, and valves. Additionally, the cooling system shall be equipped with a low level shut down.

The fan and pump shall be driven by the engine. A sight glass shall be provided to show coolant level. The capacity of the cooling system shall permit operation of the engine at its maximum output without exceeding the manufacturer's recommended coolant temperature. A coolant recovery bottle shall be integral to the cooling system. The fan shall be completely enclosed by a removable grill or guard installed on the engine side of the fan. When recommended by the engine manufacturer, a temperature controlled modulating shutter shall be provided on the radiator to control cooling airflow so that proper engine coolant temperature will be maintained. The radiator fan shall be arranged to blow out through the radiator away from the engine. The radiator heat shall be ducted outside of the diesel engine room through the existing gravity damper. If an alternate load bank is installed after the radiator, the airflow/cooling capacity shall be sized to permit operation of the engine with maximum output without exceeding the cooling system or load bank recommended temperatures.

Scheduled maintenance shall not be required at a periodicity less than 500hrs per diesel engine OEM recommendations.

2.3.2.6.2 Generator Requirements

A new commercially available generator shall be coupled to the diesel engine and located on the same skid.

The new generator shall be selected to have frame size and capacity compatible with the existing unit. The Contractor shall refer to Appendix A for information on the existing generator.

New generator shall meet the demand of the crane's systems allowing reliable simultaneous operation of travel in a curve, main hoist (at rated load), rotate, and ancillary loads. The generator shall have a continuous rating in kilowatt no less than that of the existing generator. The existing system loads shall be recorded during on-site field testing and used as a basis for recommended size. The generator shall have a minimum of Class F insulation and conform to the applicable requirements of NEMA MG 1. Space heaters shall be provided in the generator enclosure to mitigate condensation. Heaters shall automatically turn off while the generator is operating. The generator shall be brushless, air cooled, and self-ventilated. The generator's enclosure shall be drip-proof with ventilation openings protected by removable screens.

A new generator circuit breaker shall be provided. The breaker shall be enclosed in a panel such that the breaker's actuator lever can be accessed and locked in the open position without opening the panel. The breaker panel shall be located adjacent in the diesel engine compartment, but not on the diesel generator skid.

Voltage regulation shall conform to less than ±0.5% of $480V_{AC}$. Performance of the voltage regulator shall not be degraded by operation of the existing DC drives as well as the new AC travel drive. The Contractor is responsible for ensuring that the harmonic distortion on the AC bus does not interfere with the proper operation of power plant voltage regulator or multiple drive operation (i.e. traveling in curved parts of track while hoisting) and auxiliary loads. Distortion on the AC bus must be within the designated operating range of the drive manufacturer.

2.3.2.7 Horizontal and Vertical Gudgeon Pins Cleaning

The Contractor shall completely remove the horizontal and vertical gudgeon pins for cleaning of the pins and their associated fitting bores on the crane structure. Cleaning shall include clearing old grease from all grease paths on pins and bores (if applicable). There are 16 pins required cleaning (three vertical, and one horizontal pin at each corner of the crane).

The Contractor shall remove and replace all existing pin seals with new compatible seals.

Apply new lubrication upon reassemble the gudgeon pins.

2.3.2.8 Replacement of Forsheda Rings and Gudgeon Pin Seals

The contractor shall remove and replace all Forsheda rings and gudgeon pin seals. Existing lubrication shall be removed and replaced upon ring and seal installation.

Replacement of Forsheda rings requires complete removal of the travel trucks.

2.3.2.9 Wire Ropes

The Contractor shall remove and replace the main, whip and boom hoist wire ropes and their end fittings.

Wire rope lengths shall match those of the existing wire rope or shall be calculated to provide the same range of motion of main, whip, and boom hoists. There shall be at least two dead wraps of hoisting rope on each end of the drum when the hooks or boom is in its extreme low position.

The wire ropes size, type and class construction shall match those of existing wire rope certifications. The hoisting rope shall be pre-formed, bright (uncoated, non-galvanized), with an independent wire rope core, and in accordance with all requirements of Federal Specification RR-W-410, ASTM A1023/A, or ISO 4309.

Boom hoist wire rope shall be regular lay. Main hoist two wire ropes shall be one left lay and one right lay.
The Government shall provide the Contractor with a new 8x19, rotation resistant whip hoist wire rope including wire rope end fitting socket and wire rope certification.

Main hoist wire rope shall be equipped with sockets for end fittings. The end fitting shall be compatible with existing fittings for reinstallation. Socket sizing and capacity shall meet with existing.

Wire rope ends bearing full line pull shall have a permanent swaged or poured end fitting. Wedge sockets shall be prohibited.

Swaged end fittings used on rotation resistant wire rope shall conform to EN 13411 Part 8 and have approval of the Navy Crane Center. Swaged end fittings shall be selected in accordance with the swage fitting and wire rope manufacturer's recommendations. Swaged end connections shall be steel.

Poured fittings shall be made with molten zinc or resin socketing material approved by the NSTM Chapter 613. Other resins shall be approved by the Navy Crane Center. Qualification of personnel who perform assembly of poured socket wire rope end connections shall be either in accordance with socket OEM or in accordance with the NSTM Chapter 613.

Sockets shall be steel. Cast steel sockets shall meet the following minimum values of fracture toughness. Those cast of carbon steel shall have a minimum fracture toughness of 15 foot-pounds at 10°F. Those cast of alloy steel shall have a minimum fracture toughness of 30 foot-pounds at 10°F. The values of fracture toughness shall be determined by Charpy V-notch tests on sockets from the same lot. Sockets shall have a minimum breaking strength that is five times the manufacturer's rated safe working load. Forged steel sockets shall meet the same material requirements as shackles in RR-C-271. Stainless steel sockets shall be forged from austenitic stainless steel meeting the requirements of ASTM A314 for material composition.

Hoisting rope ends on the drum shall be anchored in accordance with existing means on each hoist drum.

Clamped hoisting rope ends shall be neatly and securely seized with wire.

2.3.2.10 Wheel, Sheave Bearings and Seals

The contractor shall replace all bearings and seals from running sheaves and equalizer sheave (if applicable) of the main, whip, and boom hoists with new bearings.

The contractor shall also replace all bearings and seals from the travel wheels.

All new bearings and seals shall be selected to provide proper fits to the existing shafts and bearing seating.

All new bearings shall have a calculated bearing L10 life of no less than 10,000hrs.

When heating bearings for installation is required, heating method and temperature control shall be in accordance with bearing manufacturer's recommendation.

2.3.2.11 Counterweight's Attachment System

Existing counterweight design is not maintenance friendly and has corrosion degradation in attachment points. The contractor shall remove the existing counterweight's attachment system and design a new

system. The weight section shall be maintained. Design for new counterweight attachment system shall be with exposed hangers or similar for ease of maintenance.

The contractor shall repair (remove corrosion and paint) the existing attachment points before install the re-designed counterweight's attachment system.

2.3.3 Electrical Design

The electrical design of the crane shall conform to NFPA 70, NEMA ICS 8, ASME B30.4, and other requirements specified herein. Travel drive mechanism shall be provided with a new separate and independent drive unit with a circuit breaker branch circuit protection device capable of being locked in the open position. The new control system shall be designed to operate on 480 V_{AC}, 3-phase, 60-Hertz diesel generator power. The control circuit shall be fed from a single phase, air cooled, double-wound transformer. Contactors and relays shall not be definite purpose. If IEC contactors are used, the application cannot exceed the contactor manufacturer's AC3 rating for the contactor. All contactors and relays shall have appropriate MOVs or R-C surge absorbers installed across the respective device's coil. As much as practical, power and control cables shall not be mixed in the same conduit in order to prevent interference. Power cables and low voltage signal cables shall not be mixed in the same conduit. Existing transformers may be reused. All control components, including, but not limited to, circuit breakers, fuses, contactors, and relays shall be replaced.

The existing control panels for the travel function shall be replaced and new backplanes for these new control panels shall be provided for the new AC drive and control. The panels shall be designed with appropriate heating and/or cooling accessories to maintain a climate within the panel that provides an appropriate internal temperature environment for proper operation of the drives. The panels shall be designed such that there shall not be any condensation inside the control panels. This shall include, at a minimum, panel heaters which can be run when hotel power is hooked up to the crane.

Indoor enclosures shall be NEMA type 12 as defined by NEMA Standards Publication Number 250. All enclosures shall be metallic and be UL or CSA listed. All control panels shall have an interior light for each 3 foot of enclosure width with a door switch to turn lights off when doors are closed. All electrical components shall be industrial grade and located so they are easily accessible for inspection and maintenance.

2.3.3.1 Wiring System

Existing wiring may be reused unless otherwise specified. The existing wiring color scheme for the identification of conductors (i.e. AC power, DC power, etc.) shall be maintained. Unless otherwise specified, interconnecting wiring shall be of copper stranded construction complying with Table 310-13 of NFPA 70. Aluminum conductors shall not be used. Aluminum connectors are allowed if they are rated for use with copper conductors (marked "AL/CU"). All conductors connected to or routed above resistors shall have, with the exception of types SA and FEPB, insulation shown in NEC Table 610-14(a) for 125°C maximum temperature. Motor branch circuit conductors shall be sized as to have an ampacity not less than 150% of the motor full load current rating. Conductors shall be selected and de-rated based on maximum ambient temperature. Continuous loads such as utility, heating, lighting, and air conditioning shall be multiplied by 2.25 to determine ampacity in order to permit application of NEC 610-14 (e) for crane supply conductors.

A separate grounding wire, sized in accordance with Section 250-122 of NFPA 70, shall be routed with all ungrounded conductors. All wiring shall be numbered or tagged at all connection points. Power conductors which are shielded shall be labeled as to the conductor size. All unused conduit openings shall be plugged. All conductors shall terminate on terminal blocks; there shall be no splices, with the following exceptions:

a. Encoder and master switch potentiometer signal conductors shall have a continuous run from the device to the drive. If the length of cable required between a drive and its respective encoder is longer than 300 feet, fiber optic cable shall be used. All subject signal cables shall be shielded.

b. Motor and brake connections may be made using split-bolts or lugged and connected with nuts, bolts, flat washers and lock washers in lieu of installing a terminal block in the motor connection box. No wire-nuts shall be permitted.

Existing conduit may be retained and reused. Cables used outside shall be a flexible, sunlight and UV resistant, fine multi-stranded, multi conductor cables similar to SOOW type cable with a 600V rating.

2.3.3.2 Travel Drive Mechanism Motors

The travel drive mechanism motors shall conform to NEMA MG 1. The travel drive motors shall be AC inverter duty, totally enclosed non-ventilated (TENV) or totally enclosed fan cooled (TEFC), squirrel cage induction type. All motors shall have a 60 minute duty rating minimum. Motor insulation shall be a minimum of Class F, but with a Class B temperature rise.

Motors shall be equipped with thermal trip type over-temperature protection. The temperature sensors shall be of the automatic resetting type and installed integral to the motor windings. Automatic resetting shall not result in motor energization until the motion control lever or pushbutton is first returned to OFF. Activation of any integral motor over-temperature device shall energize a new red indicating FAULT light mounted for the travel drive in the operator's cab and shall de-energize the travel motion in either direction.

The red indicating fault light shall remain energized until the over-temperature device resets.

The travel system shall be designed to operate when up to two pairs of motors is disabled via the existing disconnect switches. Drive parameters are to be automatically adjusted based on the status of these switches. Drive operation shall be prevented when more than one disconnect switch is open (i.e. Less than 2 travel motors are operational).

2.3.3.3 Travel Electric Controls

Static reversing, adjustable frequency controllers shall be provided for the travel electric drive. Dynamic braking shall be provided for each electric drive. Speed control shall be infinitely variable type.

The travel brakes shall set after the associated controller decelerates the drive motor to a controlled stop. Motors shall operate smoothly at all speeds without torque pulsations, and shall only be energized within the frequency range of 50-60 Hz at rated speed. With respect to AC control wiring, no neutral wire shall pass through the contacts of a control relay or contactor, i.e., a device shall not be shut off or disengaged by breaking the device's neutral conductor.

2.3.3.4 Transients and Harmonic Protection

Varistors for transient protection shall be provided internal to the travel controller.

Minimum harmonics protection shall consist of a reactor connected in series with each controller's line (input) terminals. All reactors shall be rated for continuous duty operation based upon motor nameplate amperes and shall be designed for 60 Hz operation.

For a drive motor branch circuit that exceeds 100 feet in length, a reactor shall also be connected in series with the controller load (output) terminals to provide standing wave protection.

2.3.3.5 Data Recorder and Drive Faults

The new AC drive for the travel function will provide a fault monitoring function that will record at least the last ten fault occurrences and eight hours of operational data. The fault records and operational data shall be maintained in the event of a power loss.

The new drive shall be provided with a display unit and data logging system consisting of keypad and readout. The operational drive parameters shall be viewed and changed via the display unit and accessible to a laptop through a programming port on the cabinet door with 120VAC convenience receptacle adjacent. Modification of parameters shall be protected by use of a password or keyed programming protection. Faults shall also be viewed in this display. This display shall be readable for each drive without opening the control panel doors.

The data logging system shall be passive and as such shall not have the ability to stop or otherwise change operation of any electric drive. The system shall provide graphical representation of signal inputs and outputs of the drive in real time and also have the capacity to store the information for 7 days without power. The system shall monitor at a minimum: master switch signals for each function, speed feedback, and dead-man signal. The system may be an integral part of the drive or an independent commercially available product.

2.3.3.6 Travel Brakes

All other electrical components in the travel braking circuit including, but not limited to, circuit breakers, contactors, rectifiers, transformers, resistors, etc. shall be replaced.

The new control system shall provide automatic regenerative braking for speed-reduction and slow down before brake setting. The brakes shall set after the associated controller decelerates the drive motor to a controlled stop. All electromechanical brakes associated with the travel drive motors shall release and set simultaneously.

2.3.3.7 Electrical Overload Protection

Protection shall be not less than required by NFPA 70. All protection shall be by circuit breakers or fuses. The travel motor branch circuit shall be individually protected by circuit breakers capable of being locked in the open position without use of a portable lockout device.

2.3.3.8 Diesel Engine – Generator

2.3.3.8.1 Safeties, Indicator Lights, & Alarms

A digital indicator to display all engine alarms and shutdowns as well as those engine and generator parameters required in paragraph 2.3.2.6.2 shall be provided in the operator's cab. In addition to the visual indicator, an audible alarm (used for both the warning and shutdown conditions) shall be provided in the operator's cab; the alarm shall not exceed 84dB. Audible alarms shall be silenced via a manual reset button in the operator's cab. All visual indications shall be maintained, even when the associated audible alarm is silenced.

The digital indication system provided shall also allow for viewing of key engine and generator parameters as well as alarm/shutdown indications. At a minimum, the following parameters shall be displayed: Engine Speed, Generator Voltage (Each Phase), Current (Each Phase), Operating Hours (Hours and Minutes), Oil Pressure, Coolant Temperature, and Battery Voltage.

The digital indication system shall also display alarms for engine overspeed, high coolant temperature, and low lubricating oil pressure. When any of the visual alarms settings are exceeded beyond the engine manufacturer's limits, the engine control system shall automatically shut down the diesel engine generator. In addition to the visual alarm, prior to reaching a shutdown condition an alarm shall be annunciated at the indication system. The condition causing the shutdown or alarm shall be maintained on the digital indication device including the date and time of the shutdown or alarm. A delay, or other feature, shall allow for normal startup and shutdown without errant alarms. The activation of any one shutdown shall cause the engine to shut down. The diesel engine shutdown shall be designed in a failsafe manner such that loss of battery (24V) power results in a safe shutdown.

2.3.3.8.2 Starting System

The new starting system shall be electric and shall be located in the engine room. The electric starting system shall utilize 24V (150 amp-hour minimum) lead-acid type batteries and associated charger. These batteries shall also be sized to provide power to all ancillary DC loads (emergency lighting, smoke detectors, operator's horn, etc.) powered by the existing batteries. A disconnect switch capable of being locked in the open position shall be provided between the batteries and the electric starter such that, with the switch in the open position, all power to the diesel engine is secured and the diesel will not start, but power to the ancillary DC loads is available. A commercial battery charger shall be provided and shall include: an AC disconnect switch, a DC voltmeter, a DC ammeter, and a DC output circuit breaker. Float charging and equalizing capabilities shall be provided. Battery leads shall be provided with polarized plug-in or snap-on connections. Batteries shall not be mounted on the diesel engine skid.

2.3.3.8.3 Load Banks

The Contractor shall determine, based on the newly designed control system, if load banks are required to maintain the power system quality (i.e. voltage, frequency, etc.) within the tolerances of the control system. The existing load banks may be reused if determined necessary by the Contractor, however the existing load bank control system shall be replaced.

2.3.3.8.4 Diesel Engine Software and Other Hardware

Software needed to edit or troubleshoot engine/generator control systems shall be provided. As applicable, software needed for completing the diesel engine safety testing procedure shall be provided.

TRF shall be entitled to all software patches or updates, or use of existing software for an unlimited period of time at no additional cost. Any hardware (cables, adaptors, etc.) needed to interface between a laptop computer and the diesel engine and generator control systems shall be provided. Any tools needed to perform tests of diesel engine warning and shutdown safeties shall be provided.

2.3.3.9 Limit Switches

All existing limit switches and functionality shall be maintained. All mechanical limit switches shall be replaced with new switches. All primary hoist limit switches shall be of the encoder or cam limit type. If cam limits are utilized, contacts shall be easily replaceable. Existing keyed spring return bypass switches for each primary limit shall be retained on the control panel to allow continued motion past the primary limit switch into the secondary limit switch. New secondary block actuated (weighted) upper limits shall be provided for the main and whip hoist to replace the geared type limits. A new secondary boom actuated limit switch (similar to existing) shall be provided for the luff hoist. Secondary limit switches shall remove all power from the associated hoist drive motor and brakes independent of the hoist drive controller, utilizing the new hoist line contactor, and set the brake when the secondary upper limit is reached. The existing keyed, spring return bypass switch shall be retained on the control panel for each hoist to allow resetting of the secondary upper limit switch prior to resuming operation. During resetting of the secondary limit, the hoist shall operate in the lowering direction only. If booming the crane is required, the boom and hoists shall be interlocked, such that it is not possible to two-block the hoist. A limit switch shall prevent lowering the boom beyond the maximum operating radius position. The existing mushroom head spring operated key-switch to bypass the primary boom hoist lower limit shall be retained in the operator's cab. Upon bypassing of the primary boom lower limit, the boom may be lowered to the horizontal position at varying speeds. These speeds and set points shall be the same as of the existing crane. A new mechanical cam limit switch shall be provided to prevent lowering the boom beyond the horizontal position and allow raising the boom from horizontal position at full speed.

2.3.3.10 Master Switches

The existing master switches in the operator's cab shall be replaced. Existing master switch pedestals may be reused. All master switches shall provide infinitely variable speed control to the particular function. Directional contacts shall also be utilized to ensure proper motions are executed. All master switches shall be non-spring returned to the off position with a detent in the neutral position, and shall have a lever-handle or trigger type dead-man switch; at least one dead-man switch shall be continually hand activated in order to operate all crane motions. All joysticks shall be labeled for proper function and direction. Operation of any individual dead-man switches shall allow for operation of any of the crane functions. Resetting a drive fault on a crane function shall not allow the function to operate until the master switch is returned to neutral.

2.3.3.11 Capacity Overload Protection (LMI System)

The crane currently has an overload alarm/cutout system for the main hoist. As the weight on the hook approaches capacity, an alarm is activated. Upon overload of the main hoist, power is removed from the hoist.

The existing overload system shall be replaced. A new commercially available LMI complying with SAE J159 shall be provided to provide capacity overload protection for the main hoist. The system shall be of the LMI type and shall consist of devices which monitor the crane load. The overload limit for

each hoist shall be initially set at 120% of rated load (based on load chart) and shall, at a minimum, be adjustable from 80% to 131.25% of rated capacity. When an overload is detected, the hoist function shall be limited to the lowering direction only. The Main hoist shall have a new maintained keyed override located on the outside of the control panel, which can be used to deactivate the capacity overload device during overload testing. Resetting of the overload shall only be accomplished by moving the hoist in the down direction or by cycling power.

Measurement of the load shall be performed at the hook block and wirelessly transmitted or shall utilize a load sensing system that relies on wire rope tension at the wire rope end fitting(s). The measurement device shall not be via indirect method (measurement of the lateral deflection force of wire rope between three sheaves in a rigid frame). If a wireless system is used, the battery shall have a minimum life of 3 months, be rechargeable, and field replaceable without hook/block disassembly. If signal is lost, the LMI shall provide audible/visual indication to the operator. Information, audible warnings, and visual warning from the LMI system shall be displayed in the cab as required in para. 2.3.3.11.1.

Minimum accuracy criteria for the LMI system shall be as defined by SAE J159 and shall maintain the load accuracy requirement to a minimum of 50% of rated capacity. Minimum testing for the capacity overload systems shall be as prescribed in SAE J159 and shall be performed with 50% and 100% weight. These testing requirements shall be included in submittal SD-08.

2.3.3.11.1 LMI Display and Warnings

A display shall be provided in the operator's cab that provides a constant readout of boom angle, crane capacity (from load chart), and lifted load on each hook. An audible alarm and visual indication shall notify the operator upon reaching 80% of the main hoist capacity at any crane configuration. A separate audible alarm and visual indication shall notify the operator upon reaching 100% of the main hoist capacity at any crane configuration. A final audible alarm shall notify the operator upon reaching 120% of the main hoist capacity at any crane configuration. If a wireless LMI system is used, an audible alarm and visual indication shall notify the operator upon loss of signal/communication.

Audible alarms shall be silenced via a maintained key-switch in the operator's cab. The manual reset button shall only silence each instance of the alarm. If the visual indication for the 80% and 100% load is not integrated into the operator's display, then these visual indicators shall be amber (80%) and red (100%) lights. All visual indications shall be maintained, even when the associated audible alarm is silenced. A new LMI key-switch shall be installed and have the ability to disable the new LMI lights and alarms.

An HMI screen may be used for system indicator lights/buzzers.

2.3.3.12 Crane Lights

There are 4 flood lights which currently exist on the crane shall be replaced (2 on the boom and 2 underneath the cab on the rotate platform), along with placing them in new enclosures. There is 1 spotlight outside of the operator's cab that shall be replaced with new. Existing illumination levels shall remain. Lamps shall be LED type, and designed for outdoor use, vibration resistant, and designed to prevent any material from falling from the fixture.

Also lights in the machinery house, operator's cab, interior compartments, and interior & exterior walkway lighting shall be replaced with new. Existing illumination levels shall remain. New lighting shall be LED type.

2.4 COMPONENTS

A standard commercial product/assembly is defined as an item that is advertised for sale in current commercial literature and is being sold in substantial quantities on the open market in the course of normal business operations. Nominal quantities, as normally associated with models, samples, prototypes, or experimental units are not acceptable under this definition. The Contractor may utilize standard commercial products/assemblies in the design of the crane provided such components meet the requirements of this specification. The component selection must be substantiated by means of manufacturer's published ratings, selection method, or pro-rating.

2.5 ACCESSORIES

Not applicable for this specification.

2.6 MIXES

Not applicable for this specification.

2.7 FABRICATION

2.7.1 Shop Assembly

2.7.1.1 Mechanical Assembly

All mechanical components shall be accurately aligned and positively secured to maintain the alignment. Parts shall not be forced into position to obtain apparent alignment.

2.7.1.2 Electrical Assembly

Installation of all electrical wiring, conduit, and components shall be performed in accordance with the requirements of NFPA 70. As a minimum, items below shall be followed:

a. All electrical connections shall be installed in accordance with NFPA 70 sections 110.14 or 430.9, as applicable, or as recommended by the device manufacturer.

b. Crimped terminal lugs, if used, shall be properly sized for the wire and installed using the device(s) – e.g., crimping tool and indenter – recommended by the terminal lug manufacturer.

c. All spare conductors shall be identified as spare conductors, and shall have their ends insulated to preclude accidental contact with energized equipment.

d. Adhesive-backed wiring tie wraps and cable-clamping devices shall not be used when mounting to control panel backplanes unless they are secured with fasteners, in addition to the adhesive. In other locations, use of adhesive-back wiring tie wraps and cable-clamping devices should be minimized as much as practical.

e. Wiring around sharp edges, such as panel doors, shall be wrapped in protective sleeves (e.g., “spiral wrap”) to prevent wiring insulation damage from chaffing, cutting, or abrasion.

f. Control panels shall not be used as raceways for conductors not terminating within the panel.

g. Bushings or chafing protection gear shall be used on all panel conduit entries.

h. Only equipment that needs to be viewed or accessed from the panel door (i.e. data loggers, key switches, pilot lights, etc.) shall be mounted on the panel door.

i. Panels shall have their doors, back sheets, and panel boards bonded together with flexible bonding straps. Bonding straps and equipment grounding conductors shall be connected to engineered ground points, have all paint removed from their termination points, or have tooth lock-washers (star lock-washers) installed, to insure proper grounding of the equipment. Individual components shall comply with IP20 “finger safe” standards of IEC 60529.

2.7.1.3 Mechanical Fastener Tightening

All fasteners used in securing mechanical or electrical–mechanical (i.e., brakes) components to their foundations shall be tightened to accepted torque values from standard tables based on the lubricant used. The fasteners must be lubricated and shall not be installed “dry”. Where self-locking nuts are used, the prevailing torque of the locking element shall be accounted for. All mechanical fasteners shall be nominally tightened to 70% of the fastener yield strength, except in applications where component manufacturers prescribe specific fastener torque requirements. The requirements of this paragraph also apply to fasteners mounting wheel assemblies, all pillow block bearing fasteners (unless bearing manufacturer specifies otherwise), and gear case assembly bolts (if gear case is disassembled after receipt from the manufacturer).

2.7.2 Shop and Factory Finishing

2.7.2.1 Corrosion Protection

All surfaces normally painted and requiring touch-up based on the work contained in this specification shall be cleaned, primed, and finish painted. The final condition of the crane shall include touch up painting for corrosion protection. Touch up paint shall blend in and match surrounding parts (color, shade) and existing paint system. Corrosion resistant fasteners shall conform to ASTM F593 and F594. Components that are protected from their applicable environment (i.e. manufacturer components), listed in section 1.7.1, should not be recoated.

2.7.2.2 Surface Preparation

Exterior steel surfaces, including welds shall be cleaned in accordance with requirements stated by the coating manufacturer. All grease, oil, and surface debris shall be removed by solvent wiping and/or detergent/water scrubbing prior to cleaning. All weld spatter shall be mechanically removed prior to cleaning. All exposed edges of exterior steel shall be rounded to ensure proper paint adhesion and proper paint dry film thickness. Cleanliness of surrounding areas shall be maintained by preventing spread of debris.

2.7.2.3 Painting System (Priming and Finish Painting)

The primer coat and the finish coat of paint shall be smooth, even and free of runs, sags, orange peel, or other defects. Care shall be taken to preclude painting over non-painted surfaces. Any painted over grease fittings must be replaced; they may not be cleaned and reused. The painting system shall consist of anti-corrosive primers and 2 coats of acrylic epoxy gloss (cosmetic) topcoat; primers and topcoats shall be the products of the same manufacturer. The primer and finish coats shall be identified in the technical manual or drawings. The painting scheme shall match the existing scheme of the cranes.

2.7.2.4 Non-Painted Items

Do not paint machined surfaces that are bearing surfaces, hooks, hook nuts, lubrication fittings, hoisting ropes, wheel treads, sheave and drum grooves, corrosion resistant steel, bronze, anodized aluminum, name plates, flange mounting faces, liquid-tight flexible conduit, brake frames, and other items not normally painted. Structural fasteners shall be painted and weathering fasteners are not permitted. Non-structural components that are adequately protected from the applicable environment shall not be recoated, unless to cover minor damage or paint chip to the part.

2.7.3 Tolerances

Tolerances shall be in accordance with this specification and all references specified.

2.8 TESTS, INSPECTIONS, AND VERIFICATIONS

2.8.1 Government Shop Test Inspection

If applicable, the Contractor will make the new panels, drives, controls, and all other equipment required for the overhaul available for Government inspection. The components shall not be considered ready for testing until all documentation is approved by the government such as final drawings, and all other documentation listed in Exhibit A as pre-requisites for shop test inspections. The Government reserves the right to waive Government witnessing of the shop test. Upon completion of the shop test and inspection, a list of deficient items will be compiled and signed by the Government representative (if applicable) and the Contractor and forwarded to the Contracting Officer.

PART 3 EXECUTION

3.1 EXAMINATION

All shop inspection identified deficient items shall be resolved prior to shipment of the crane components, unless authorized by the Contracting Officer.

3.2 PREPARATION

All items intended for permanent installation at the facility shall be cleaned of any dirt, grime, debris, etc. prior to installation.

3.3 ERECTION

The overhauling works of the K-1 crane shall be at Trident Refit Facility Kings Bay, GA. The APP (SD-08.4) shall provide safety requirements and considerations for overhauling the crane on site.

3.4 INSTALLATION

3.4.1 The Contractor shall provide an onsite representative during installation. Contractor personnel shall refer to Section H of the solicitation for security requirements

3.4.2 The contractor shall install the crane components in accordance with Removal and Installation Plan (SD-08.2). The Contractor shall secure the crane, while not directly in control of the work area, during installation.

3.4.3 Lifting of any major components shall comply with the requirements of paragraph 1.7.2 of the NAVFAC P-307. Tilting of lifted or suspended components during installation when it is necessary shall only be performed using chain-falls, ratchet hoists or similar equipment, and only in a controlled manner following approved written documents. “Lifting” is not exclusive to crane lifts and can include use of any mechanized device to lift a suspended load.

3.4.4 The Contractor’s lift director shall hold a pre-lift meeting to discuss the plan and the roles of the personnel involved. At a minimum, the following elements shall be reviewed during the pre-lift meeting:

1. Overview of the lift operation including the sequence of events for the entire lift
2. Lifting and handling equipment, and other equipment involved in the lift operation
3. Safety measures, as required
4. Load handling activity personnel assignments addressing
    a. Individual responsibility
    b. Communication method
    c. PPE requirements
    d. Qualification of assigned personnel
5. Any contingency measures
6. Any emergency plans
7. Address any questions raised during pre-lift meeting

3.4.5 The Contractor’s lift director shall hold a post lift meeting. At a minimum, the following elements shall be reviewed during the post lift meeting:

1. The development, planning, and execution of the load handling activity with the load handling personnel
2. Identify potential measures to improve future load handling activity
3. Communicate any recommendations identified to the appropriate personnel for future consideration.

3.5 APPLICATION

Not applicable for this specification.

3.6 FIELD QUALITY CONTROL

3.6.1 Field Inspection and Test

a. Contractor Preliminary Inspection and Test

Prior to scheduling the Government inspection and field acceptance test, the Contractor shall inspect the new drives and control system for form, fit, and function. The Contractor shall verify that the travel drive system is properly adjusted and operational and that it can be safely load tested. The Contractor shall notify the Contracting Officer that the crane is ready for Government drawing verification and performance testing.

b. Government Inspection

After the Contractor preliminary inspection and test is complete, the Contractor shall notify the Government. Within the next five business days, a site inspection will be conducted by the Government along with the Contractor. The Contractor shall provide (on-site) the Government with a complete set of drawings used to modify the crane. The Government will compare the drawings to the crane to verify that the drawings are accurate. During the Government drawing verification, the Government will also inspect the crane for compliance with the contract requirements and proper workmanship. A review by the Government of all crane systems will also be performed to verify the crane is satisfactory for load testing. Failure of the crane to pass any of the inspections shall be cause for rejection. The crane may again be offered for Government inspection provided the Contractor has corrected all defects and retested the crane. The Government shall have one day for re-inspection.

c. Field Acceptance Test

Following completion of Government inspection, a performance test shall be satisfactorily performed in accordance with the approved Field Test Procedure SD-08.4. The Government will operate the crane for the crane performance test. The Government shall provide crane operator, riggers, and certified test weights required to perform the crane performance test. The Contractor shall provide all equipment and additional personnel necessary to conduct the test including but not limited to personnel to supervise the test and record results, and personnel to trouble shoot and fix any problems that occur. A representative who is under direct employment of the drive manufacturer and is knowledgeable and capable of trouble shooting drives' problems shall be onsite during the 131.25% load test. Failure of the crane to accomplish any of the prescribed operations shall be cause for rejection of the crane. A completed report shall be submitted to the Contracting Officer. The Government, at its option may also conduct additional tests to determine compliance with the specification requirements.

d. Final Government Inspection

The Government shall have one day for final inspection after field acceptance test.

3.6.2 Acceptance

Final Government acceptance of the crane shall take place only after the crane and documentation meets all contract requirements, including the following:

a. Contractor receives Government Approval for reports, tests, inspections and release of all data items.

b. The crane passes a final inspection by the Government.

c. All deficient items have been corrected and accepted by the Government unless authorized by a Navy Crane Center representative. Deficient items not corrected prior to the Government's acceptance shall be carried as warranty items, which will be corrected by the Contractor.

d. Navy Crane Center "Crane Acceptance and Warranty Information" form, 93-005R, shall be completed and signed by a Contractor Representative, an Activity Representative, and a Navy Crane Center Representative.

3.7 ADJUSTING AND CLEANING

Not applicable to this specification.

3.8 TRAINING

After successful field testing of the crane, the Contractor shall provide basic on-site training for the electricians, mechanics, inspectors, and engineers who are likely to perform troubleshooting/repairs and routine preventative maintenance on the crane's new systems/components.

Training shall be conducted by a qualified representative in the operation, troubleshooting, and maintenance of the new components, drive and control system.

Training curriculum for the new diesel engine/generator shall include but not limited to operation of diesel generator, maintenance schedule, lubrication points/fluids/filters, engine sensors/sending units, diagnosing problems using the engine control system/digital indicator, tuning/modifying the engine control system including alarm/shutdown settings, and recommended method to test alarms/shutdowns.

Trainings shall be for an audience of approximately 10 people. Each attendee shall be provided with a copy of the course materials.

As a minimum the Contractor shall provide:

a. One day (8 hours) of classroom training on the new diesel engine/generator.
b. Classroom training on the diesel engine/generator shall be followed by one day (8 hours) of training on the crane.
c. One day (8 hours) of classroom training on the crane's new controls system, drives, and LMI system.
d. Classroom training on the controls system, drives, and LMI system shall be followed by one day (8 hours) of training on the crane.

Additionally, the Contractor shall provide one day (8 hours) of operator training. The operational training session shall include a general review of the entire capabilities, limitations, and safety features of the crane's new components from an operator's perspective.

3.9 PROTECTION

Not applicable to this specification.

3.10 SCHEDULES

Schedules and their submittal are defined in section SD-01. Updates to the schedule shall be submitted should events changing the schedule occur.

APPENDIX A

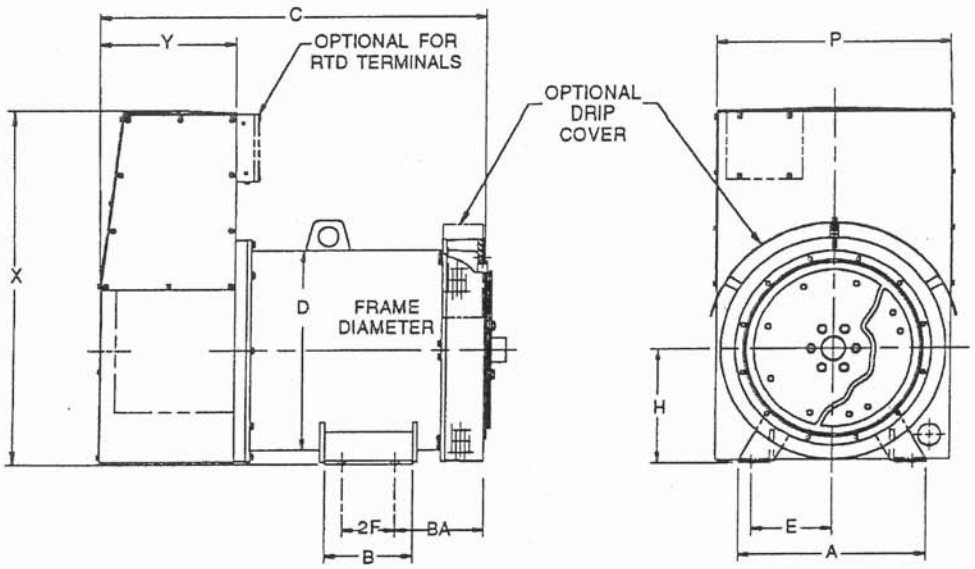
Existing Generator Information

ATTACHMENT 1

Dimensions in inches and (millimeters)

MAGNAMAX DVR

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data

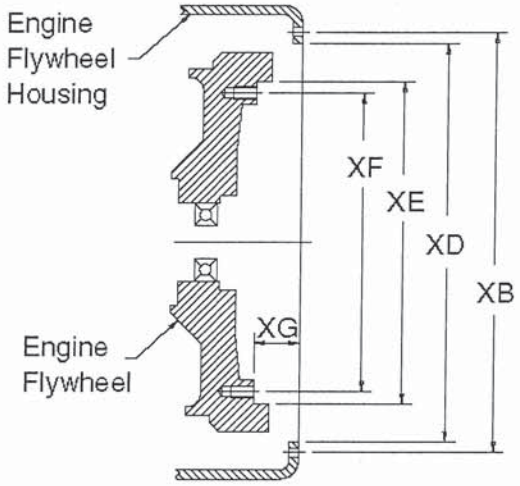


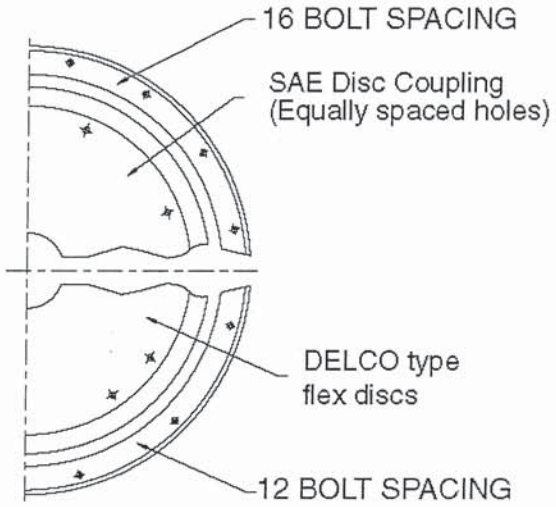
Frame Size	A	B	BA	C	D	E	2F	H	P	X	Y
431	21.00 (533)	10.00 (254)	10.00 (254)	38.40 (975)	22.64 (575)	9.00 (229)	6.00 (152)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
432	21.00 (533)	10.00 (254)	10.00 (254)	43.40 (1102)	22.64 (575)	9.00 (229)	6.00 (152)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
433	21.00 (533)	15.00 (381)	10.00 (254)	49.40 (1255)	22.64 (575)	9.00 (229)	11.00 (279)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
572	22.50 (572)	15.00 (381)	11.50 (292)	51.52 (1308)	27.64 (702)	10.00 (254)	11.00 (279)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
573	22.50 (572)	24.00 (610)	11.50 (292)	58.02 (1474)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
574	22.50 (572)	24.00 (610)	11.50 (292)	65.02 (1651)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
575	22.50 (572)	24.00 (610)	11.50 (292)	69.27 (1759)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	19.21 (488)
740	33.00 (838)	27.00 (686)	12.00 (305)	71.37 (1813)	27.64 (702)	15.00 (381)	23.00 (584)	19.00 (483)	30.77 (782)	51.45 (1307)	19.21 (488)
741	33.00 (838)	27.00 (686)	12.00 (305)	65.81 (1672)	34.24 (870)	15.00 (381)	23.00 (584)	19.00 (483)	38.02 (966)	51.45 (1307)	21.24 (539)
742	33.00 (838)	27.00 (686)	12.00 (305)	72.81 (1849)	34.24 (870)	15.00 (381)	23.00 (584)	19.00 (483)	38.02 (966)	51.45 (1307)	21.24 (539)
743	33.00 (838)	41.00 (1041)	12.00 (305)	79.31 (2014)	34.24 (870)	15.00 (381)	37.00 (940)	19.00 (483)	38.02 (966)	51.45 (1307)	21.24 (539)
744	33.00 (838)	41.00 (1041)	12.00 (305)	85.81 (2180)	34.24 (870)	15.00 (381)	37.00 (940)	19.00 (483)	38.02 (966)	51.45 (1307)	21.24 (539)

Note: Connection boxes shown are furnished as standard product. Consult factory for optional connection boxes.

MARATHON ELECTRIC
GENERATORS

Standard SAE Single Bearing Generator Adaptions





Engine Flywheel Housing Dimensions

SAE #	XD (mm)	XB (mm)	Tapped Holes Qty.	Tapped Holes Size
00	31.000 (787)	33.50 (851)	16	1/2-13
0	25.500 (678)	26.75 (678)	16	1/2-13
1/2	23.000 (584)	24.38 (619)	12	1/2-13
1	20.125 (511)	20.88 (530)	12	7/16-14
2	17.652 (448)	18.38 (467)	12	3/8-16
3	16.125 (410)	16.88 (429)	12	3/8-16
4	14.250 (362)	15.00 (381)	12	3/8-16
5	12.375 (314)	13.12 (333)	8	3/8-16
6	10.500 (267)	11.25 (283)	8	3/8-16

Engine Flywheel / Generator Flex Disc Dimensions

SAE	Twin Disc	XE (mm)	XF (mm)	XG (mm)	Tapped Holes Qty.	Tapped Holes Size
21	B-121	26.500 (673)	25.25 (641)	0 (0)	12	5/8-11
18	B-118	22.500 (572)	21.38 (543)	.62 (16)	6	5/8-11
14	SP-114	18.375 (467)	17.25 (438)	1.00 (25)	8	1/2-13
11-1/2	SP-111	13.875 (352)	13.12 (333)	1.56 (40)	8	3/8-16
10	C-110	12.375 (314)	11.62 (295)	2.12 (54)	8	3/8-16
8	C-108	10.375 (264)	9.62 (244)	2.44 (62)	6	3/8-16
7-1/2	C-107	9.500 (241)	8.75 (222)	1.19 (30)	8	5/16-18
6-1/2	C-106	8.500 (210)	7.88 (200)	1.19 (30)	6	5/16-18
Delco 17.750"		17.755 (451)	15.50 (394)	.72 (18)	8	5/8-11
Delco 15.500"		15.500 (394)	13.88 (353)	.72 (18)	8	5/8-11
Delco 12.750"		12.750 (324)	11.00 (279)	0 (0)	4	1/2-13

Your Independent Power Source for the 21st Century

100 E. Randolph Street • PO Box 8003
Wausau, WI 54402-8003 USA

www.marathonelectric.com Phone: 715-675-3359 Fax: 715-675-8026

MARATHON® ELECTRIC

A Subsidiary of Regal-Beloit Corporation

Generator Final Test

Winding H-SG	H-SG570075
Model No	573RSL4032
Serial No	MT-0000458
Customer	0
P.O. No	0
Rated Power	765.0
Rated Power Factor	0.8 Test Pass

ID Generator

RESISTANCE	TEMP C	11
	GEN. STATOR 1-2	0.00736
	GEN. STATOR 2-3	0.00738
	GEN. STATOR 3-1	0.00737
	GEN. STATOR BAL	0.27
	GEN. ROTOR	0.4993
	EXC. STATOR	23.19
	EXC. ROTOR 1-2	0.04654
	EXC. ROTOR 2-3	0.04648
	EXC. ROTOR 3-1	0.0463
	EXC. ROTOR BAL	0.51
	PMG STATOR	2.02
	SPACE HEATERS	0
	THERMAL LEADS	0
	ROTOR CURE DATE	13/02/14
INS. TO GRD.	GEN. STATOR MEGOHMS	5860
	GEN. ROTOR MEGOHMS	5440
	EXC. STATOR MEGOHMS	24100
	EXC. ROTOR MEGOHMS	5040
	PMG STATOR MEGOHMS	19300
AIR GAP	EXC. A.G. MINIMUM	0.02
PMG	PMG VOLTS O.C.	202.9
	PMG AMPS S.C.	7.9
OPEN CIRCUIT TEST	1-2 LINE VOLTS	479.8
	2-3 LINE VOLTS	479.8
	3-1 LINE VOLTS	480
	LINE VOLTS BAL	0.04
	FLD AMPS	0.81
	RPM	1800
	2 BRG. SHAFT END VIB.-VERT	0
	2 BRG. SHAFT END VIB.-HORIZ	0
	PHASE SEQ	ABC
	ROTATION O.P.E.	CCW
	CIRC. CURRENT L	16
	CIRC. CURRENT T-O	32
CORE TEST	KW @ .9 RATED VOLTS	34.1
	KW @ .2 RATED VOLTS	29.2
	CORE TEST KW	4.8

Rotor Balance

Excitor / Left / Near				Fan / Rigth / Far			
225.6	o	8.7	oz/ in	122.5	o	9.9	oz/ in

CLOCK# LUPE DATE 13/02/14

VOLTAGE REGULATOR TEST	VOLT. ADJ. RANGE - EXCEPT DVR	479.8
	RESIDUAL VOLTS L-L	45
	REG. MODEL	DVR2000E+
	REG. S/N	KJ20120016191
OVER SPEED TEST	RPM @ RATED VOLTS	2250
SHORT CIRCUIT TEST	I1	1054.3
	I2	1055.7
	I3	1046.8
	I BAL	0.85
	FLD. AMPS	1.46
	RPM	1800
	T-O LEADS AMPS.	0
AC VOLTS TO GRD 1SEC	GEN. STATOR 2650	Pass
	GEN. ROTOR 1800	Pass
	EXC. STATOR 1800	Pass
	EXC. ROTOR 1800	Pass
	PMG STATOR 1800	Pass
	SHAFT T.I.R. - 2 BRG	0
	CONDUIT BOX SQUARE	PASS
	FOOT TO FOOT HEIGTH	
	OPERATOR	CEGH
	TEST STAND #	4
	SEQ. ROTOR	RT1401255
	SEQ. STATOR	ST1401273
	SEQ. EXC. ROTOR	XR1101255
	SEQ. EXC. STATOR	XS1401220
	TESTER DATE	02/13/14 02:47
	FINAL AUDIT/DATE	D. Sotelo

APPENDIX B

Safety Requirements (Accident Prevention Plan)

ATTACHMENT 1

APPENDIX B
Solicitation N62470-16-R-2002

Submarine Base, Kings Bay, GA

1. SAFETY REGULATIONS. Work performed on Government property shall be in conformance with applicable Code of Federal Regulations (CFR); National Fire Protection Association (NFPA) 10, 70, and 241; State laws and the following:

1.1 The contractor shall comply with specific activity safety regulations contained in Section H of this contract.

1.2 The contractor shall comply with specific activity regulations pertaining to crane safety and operation (including allowable crane access routes and ground loading limitations). No vehicular loading (including mobile cranes or trucks) shall exceed the H20-S16 Highway Loading (the H20 indicating a maximum of 20 tons per truck or crane and the S16 indicating a maximum of 32,000 pounds per axle of semi-trailer) when transporting over activity roadways. The contractor shall allow spot checks of crane operations by the Contracting Officer. See site specific work requirements for building load limits.

1.3 Government safety and health inspectors, and any explicit or implicit approvals, do not relieve the contractor of an obligation to comply with all applicable safety regulations. The Government will investigate all complaints of unsafe or unhealthful working conditions received in writing from contractor employees, federal civilian employees, or military personnel.

1.4 The contractor shall secure the power to the new crane (if electrified) prior to exiting the worksite each day.

2. CRANES ENTERING GOVERNMENT PROPERTY. The Contractor is required to submit a Contractor Mobile Crane Entry Package for review and approval in accordance with special contract requirements of this solicitation. Following approval of the Mobile Crane Entry Package, the contractor shall notify the Contracting Officer no less than 2 working days in advance of the intent to bring a contractor-operated crane onto Government property. The contractor shall notify the Contracting Officer when crane entry onto Government property is scheduled during back-shift, weekend, or holiday hours of operation. All entries shall be through a prearranged entry point (e.g., truck inspection station).

3. EQUIPMENT MANUFACTURER'S SPECIFICATIONS. The contractor shall comply with the manufacturer's specifications and limitations for erection and operation of cranes, hoists and other equipment used in support of the work. Erection of a crane(s) used to assemble the crane under this contract shall be performed under the supervision of a person experienced in erection and operation of these crane(s). All testing shall be performed in accordance with manufacturer's recommended procedures.

4. PERSONAL PROTECTIVE EQUIPMENT (PPE). All contractor employees shall wear the appropriate PPE (e.g. protective footwear, protective gloves, hard hats/hard caps, safety glasses, hearing protection, body harnesses and lanyards) when on the Government job-site. All construction/crane erection areas are considered hard hat areas. The identification and analysis of personnel hazards shall be documented in the accident prevention plan and activity hazard analysis.

5. EQUIPMENT USAGE. Only equipment and/or vehicles designed to perform the intended work are authorized for use by contractor personnel. Contractor cranes being operated on Government property shall comply with the requirements contained in the "Mobile Cranes and Articulating Boom Cranes" paragraph in this section.

6. AUDITS OF OPERATIONS AND EQUIPMENT. The Government reserves the right to perform audits to ensure contractor operations and equipment brought onto Government property conforms to the requirements of the contract.

7. CONTRACTOR MISHAP (ACCIDENT) INVESTIGATION AND REPORTING.

7.1 *Definition*. The contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies or equipment. In addition to the following the requirements as outlined below, the contractor shall comply with OSHA's accident reporting requirements.

7.2 Mishaps involving contractor equipment or contractor personnel on Government property:

a. The contractor shall notify the Contracting Officer as soon as practical, but not **later than 4 hours**, when contractor operations cause a mishap that results in:

(1) a fatality, the hospitalization of three or more personnel, or property damage in excess of $200,000. Communication shall be reported via live voice with fax or e-mail follow-up within specified period.
(2) any incident involving weight handling equipment (WHE) owned, leased and/or operated by a contractor on Government property. Communication shall be reported via live voice, fax, or e-mail within the specified

period. The definitions for a WHE equipment accident (crane accident or a rigging gear accident) are found in paragraphs 7.2.e. (2) and 7.2.f (2) below.

b. The contractor shall submit the following reports as applicable to the Contracting Officer:

(1) Any contractor mishap described in paragraph a.(1) shall be investigated by the contractor and a Contractor Significant Incident Report (CSIR) form filled out and submitted to the Contracting Officer within 24 hours for the initial report and 5 days for the final report. The CSIR form can be obtained from the Contracting Officer or from the web site https://portal.navfac.navy.mil/pls/portal/docs/PAGE/NAVFAC/NAVFAC_WW_PP/NAVFAC_HQ_PP/NAVFAC_SF_PP/NAVFAC_SF_RESOURCE/CSIR.PDF. A separate CSIR form shall be completed for each person who was injured, caused, or contributed to the accident (excluding uninjured personnel and witnesses).

(2) For any contractor reportable incident described in paragraph a.(2), the contractor shall provide the Contracting Officer a Crane and Rigging Gear Accident Report ((form is shown in Enclosure (2) of this section)) within 30 days, consisting of a summary of circumstances, an explanation of causes(s), photographs (if cameras are prohibited on the Navy Activity, the contractor shall request the Navy Activity take the photographs), and corrective actions taken.

(3) Any Contractor occupational injury or illness that results in an OSHA reportable mishap, property damage in excess of $2,000 (This amount is for record purposes only. GOV is not required to enter property damage reports into the FAIR database if less than $10,000.) shall be investigated by the contractor and a Contractor Significant Incident Report (CSIR) form filled out and submitted to the Contracting Officer within 30 days. The CSIR form can be obtained from the Contracting Officer. A separate CSIR form shall be completed for each person who was injured, caused, or contributed to the accident (excluding uninjured personnel and witnesses).

c. The contractor shall notify the Contracting Officer within 24 hours when contractor operations cause a mishap which results in a lost workday.

d. If the contractor experiences a mishap described in paragraphs a.(1) and a.(2) above, the contractor shall take the following actions:

(1) Review the situation and take any further emergency action, including stopping production work or other operations that could aggravate the situation. If the mishap involves WHE or there is evidence of damage (suspected accident) to WHE, the Contractor shall stop operations, secure power, and ensure the WHE is safely secured from operation. If there is impending danger to the WHE or personnel, place the WHE and load in a safe position prior to securing the WHE.

(2) The contractor shall take action to have the accident scene secured until a mishap investigation is completed. The accident scene shall not be disturbed or equipment released prior to Contracting Officer approval.

(3) The contractor is responsible for performing the mishap investigation with assistance of the Contracting Officer's appointed representative. The contractor shall conduct an accident investigation to establish the root cause(s) of the accident. Operations shall not proceed until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer.

e. Definition of a crane accident.

(1) For cranes, it is assumed there is an "operating envelope" around any crane, and inside the envelope are the following elements:

(a) The crane.
(b) The operator.
(c) The rigger(s) and crane walker.
(d) Other personnel involved in the operation (supervisor, mechanic, tag line handler, engineer, etc.).
(e) The rigging gear between the hook and the load.
(f) The load.
(g) The crane's supporting structure (ground, rail, etc.).
(h) The lift procedure.

(2) A crane accident occurs when any one or more of the elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in the following:

(a) Personnel injury or death.
(b) Material or equipment damage.
(c) Dropped load.
(d) Derailment.

(e) Two-blocking.
(f) Overload.
(g) Collision, including unplanned contact between the load, crane, and/or other objects.

Items (c) through (g) are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage, unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

f. Definition of a rigging gear accident.
(1) For the purpose of this definition, it is assumed there is an "operating envelope" around any weight handling operation, and inside the envelope are the following:

(a) Rigging gear
(b) The user of the gear
(c) Other personnel involved with the operation (supervisor, mechanic, tag line handler, etc.)
(d) The load
(e) The gears supporting structure
(f) The load's rigging path
(g) The rigging procedure

(2) A rigging gear accident occurs when any of the elements in the operation envelope fails to perform correctly during weight handling operations resulting in the following:

(a) Personnel injury or death
(b) Material equipment damage
(c) Dropped load
(d) Two blocking of cranes or powered hoists
(e) Overload

Items (c) through (e) are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage, unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

8. ACCIDENT PREVENTION PLAN (APP). Prior to performing any work on a Government job-site, the contractor shall provide an Accident Prevention Plan.

8.1 The APP shall be prepared in accordance with the Army Corps of Engineers EM 385-1-1, "Safety and Health Requirements" as applicable, the APP shall be site specific for the anticipated field work of this project and as a minimum, contain the following information, analyses and plans:

a. Emergency Response Plan
b. Activity Hazard Analysis for each work feature – work process
c. Critical Lift Plan
d. Hazard Communication Plan
e. Hazardous Energy Control Plan
f. Fall Protection and Prevention Plan
g. Fire Protection and Prevention Plan
h. Severe Weather Plan (if outside work is involved)
i. Emergency Lighting Plan (may incorporate building emergency lighting plan)
j. Work Site Lighting Plan
k. Drug and Alcohol Prevention Plan
l. Site Sanitation Plan
m. Mobile Cranes and Articulating Boom Cranes (if this equipment is being used)
n. Jacking Operations Plan (if applicable)
o. Asbestos Hazard Abatement Plan (if applicable)
p. Material Containing Lead Removal Plan (if applicable)

8.2 The APP shall provide identification and accountability of personnel responsible for accident prevention. The APP shall be signed by the plan preparer, the plan approver, and to show concurrence signed by an officer of the contractor's firm, the contractor's on-site safety representative, the contractor's project manager, the contractor's superintendent, and representatives of the subcontractors.

8.3 Prior to site mobilization the prime contractor and subcontractors shall meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

8.4 The plan should address that all aerial work platform equipment operators will be properly trained, qualified, or licensed (if applicable) for the equipment used. A copy of these licenses will be included in the APP for record purposes.

8.5 The contractor will not be allowed to commence work on site until the APP is determined to be acceptable by NAVCRANECEN. The APP shall be kept at the Government job-site and made available for employee review.

8.6 Other information that shall be included in the plan is as follows:

a. The Contractor's corporate Safety and Health policy statement.
b. Statement noting that no work shall be performed unless a designated competent person is present on the job site and the plan must identify these personnel. The plan shall also designate the assignment of the daily job site safety and health inspection duties with procedures for documenting inspections and deficiency tracking system.
c. Procedure for coordinating the safety activities with sub-contractors.
d. Accident reporting procedures as identified in the contract.

8.7 Should the APP reference a Corporate Safety Manual for information, copies of the applicable manual sections **shall be** included with the APP for user reference.

8.8 The APP must clearly state the mishap (accident) reporting requirements.

9. EMERGENCY RESPONSE PLAN.

9.1 An emergency response plan shall be prepared by the contractor and submitted as part of the Accident Prevention Plan (APP). The emergency response plan shall contain the following procedure, duties, maps, names and plans:

a. Emergency escape procedure and emergency escape route assignments including a predetermined assembly meeting area after an evacuation.
b. Emergency rescue procedures (e.g. for employees working at heights or in confined spaces).
c. Rescue and medical duties for those employees who are to perform them.
d. The preferred means of reporting fires and other emergencies (e.g. location of phones at the job site, and the posting of emergency telephone numbers and reporting instructions for ambulance, physician, hospital, fire, and police).
e. Sketch or map that will be posted at the job-site highlighting the route to the nearest medical facility and hospital.
f. Names and job title of persons who can be contacted for further information of duties under the accident prevention plan.
g. Spill containment plant to contain and isolate the entire volume of a spilled hazard substance.
h. Person overboard plan for work over or immediately adjacent to water, including the wearing of U.S. Coast guard approved life jackets and the immediate availability of a skiff, and a person trained in operating it.

10. ACTIVITY HAZARD ANALYSIS

10.1 *Definitions.*

a. *Activity hazard analysis*: a documented process by which the steps (procedures) required to accomplish a work activity are outlined, the actual or potential hazards of each step are identified and measures for the elimination or control of those hazards are developed.

b. *Competent person*: one who can identify existing and predictable hazards in the working environment or working conditions that are dangerous to personnel and who has authorization to take prompt corrective measures to eliminate them.

10.2 An Activity Hazard Analyses shall be prepared by a competent person as defined in the paragraph above for all non-routine phases of work and hazardous activities, and for work requiring additional or unusual safety precautions that will be performed under this contract on the Government job site. This Activity Hazard Analysis shall be submitted as part of the Accident Prevention Plan (APP).

a. Analyses will define the activities being performed and identify the sequences of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level.

b. Work shall not begin on a work activity until the hazard analysis for the work activity has been accepted by the Contracting Officer and discussed with all engaged in the activity including the contractor, subcontractor(s), crane

operator and riggers (if involving a lift), and the Contracting Officer's on-site representative.

10.3 The Contractor will identify all construction activities which will generate hazardous waste/debris. The Contractor must provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, State, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268. Should hazardous waste be generated, the Contractor shall develop a Hazardous Waste Management plan that will be in compliance with all local, state, federal regulations and meet Activity handling and storage requirements. This plan will be submitted as part of the APP and all hazardous waste will be managed in accordance with the approved Hazardous Waste. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities will be identified as being generated by the Government. Prior to removal of any hazardous waste from Government property, all hazardous waste manifests must be signed by activity personnel from the Station Environmental Office. No hazardous waste will be brought onto Government property. Provide to the Contracting Officer a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Contracting Officer immediately.

11. CRITICAL LIFT PLAN

11.1 *Definition*. Critical lifts are all lifts of major crane components (i.e., end truck, girders, trolleys, etc.) that require detailed planning or special safety precautions, and include lifts which require the load to be lifted, swung, or placed out of the operator's view; lifts of bridge crane structures where there is only a few inches of clearance between the load being lifted and the building roof beams, joists, purlins, and/or elevated building equipment; lifts made with more than one crane or hoist; lifts involving technically difficult rigging arrangement; hoisting personnel with a crane or derrick; any lifts exceeding 75% of the rated capacity of the crane(s) or hoist (lifts over 50% of the capacity of a barge mounted mobile crane's hoist) at any radius of lift, lifts of personnel, lifts involving unusual safety risks, lifts of sensitive equipment, or any lift which the crane operator believes should be considered critical.

11.2 Critical lifts require additional job planning (a critical lift plan) to ensure the safety of equipment and personnel. A critical lift plan shall be prepared by the contractor. Critical lift plans shall be developed, reviewed, and signed by all personnel involved in the lift and shall:

a. Specify the exact size and weight of the load to be lifted and all crane and rigging components which add to the weight.
b. Specify the manufacturer's maximum load limits for the entire range of the lift as listed in the load charts.
c. Specify the lift geometry and procedures, including the crane position, , the center of gravity of the load, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.
d. For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1431.
e. Include a rigging plan, which shows the lift points and describes rigging procedures and gear requirements.
f. Describe the ground condition and outrigger or crawler track requirements (and, if necessary, the design of mats) needed to achieve a level, stable foundation of sufficient bearing capacity for the lift.
g. For floating cranes or derricks describe the operating base (platform) condition (for mobile cranes mounted on barges) and any potential list. For barge mounted mobile cranes provide barge stability calculations identifying list and trim based on anticipated loading; and charts based on calculated list and trim. The amount of list and trim shall be within the manufacturer's requirements.
h. List of environmental conditions under which lift operations are to be stopped.
i. Specify coordination and communication requirements for the lift operation.
j. For tandem or tailing crane lifts, specify the make and model of the cranes, the line, boom, and swing speeds, and the requirements for an equalizer beam.
k. For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.550(g).

12. HAZARD COMMUNICATION PLAN

12.1 *Definition*. A hazard communication plan is a written plan for protecting personnel and property during the transport, storage and use of hazardous materials.

12.2 A hazard communication plan shall be prepared by a competent person as defined in the Activity Hazard Analysis paragraph, shall be submitted as part of the Accident Prevention Plan (APP), and shall address:

a. Items required by 29 CFR 1926.59(e).
b. Emergency procedures for spill response and disposal of hazardous materials.
c. Hazardous Material Exclusions. That notwithstanding any other hazardous material used in this contract, the following materials are prohibited within the limits of the Government job-site or activity following (exceptions to the use of any of these excluded materials may be considered by the Contracting Officer upon written request by the

Contractor):

(1) radioactive materials or instruments capable of producing ionizing/nonionizing radiation.
(2) mercury, mercury compounds, and components containing mercury or mercury compounds. Fluorescent and mercury vapor lamps contain mercury and the breakage of a lamp containing mercury within a naval activity constitutes a mercury spill and must be reported to the activity's Mercury Control Coordinator.
(3) asbestos or materials which contain asbestos.
(4) materials which contain polychlorinated biphenyls or di-isocynates.
(5) lead-based paints.

d. Yellow Plastic Exclusion. That **yellow packaging materials, clothes, garments, gloves, coveralls, tool bags, etc, are not permitted on naval activities**. Yellow colored materials are used by activities to contain and/or identify material. Loose yellow colored material, especially plastic, is a potential incident which results in considerable lost production time.
e. Construction equipment, including cranes, regardless of location, shall have adequate oil absorbent material staged at the crane to contain a hydraulic component/system failure/leak. Contractors are responsible to clean up non-emergency oil and hazardous substance spills from their equipment. (The contractor shall notify the Contracting Officers designated representative when setting up a crane for HAZMAT conditions.)
f. Labeling system to identify contents on all containers on-site.
g. Current inventory of hazardous chemical on site.
h. Location and use of Material Safety Data Sheets (MSDS) and that:

(1) a MSDS for each hazardous substance at the Government job site will be maintained in an inventory, provided to the Contracting Officer, and made available to all potentially exposed employees.
(2) for emergency response purposes, each entry in the inventory shall include the approximate quantities (e.g. liters, kilograms, gallons, pounds) that will be on site at any given time.
(3) a site map will be attached to the inventory showing where inventoried hazardous substances are stored.
(4) the inventory and the site map shall be updated as frequently as necessary to ensure accuracy.

i. Training (to include potential safety and health effects from exposure to hazardous substances).
j. The notification process when hazardous substances are brought onto the Government job site and that all employees potentially exposed to the substance will be advised of information in the MSDS for the substance.

13. HAZARDOUS ENERGY CONTROL PLAN.

13.1 *Definition*. An OSHA compliant Energy Control Program provides the procedures and methods for the control of hazardous energy during the installation, maintenance and inspection of all equipment where the unexpected energization or movement of this machinery could result in a release of energy which might cause injury to personnel and/or property damage.

13.2 A hazardous energy control plan shall be prepared by a competent person (as defined in the Activity Hazard Analysis paragraph), shall be submitted as part of the Accident Prevention Plan (APP), and shall describe specific energy control requirements and lockout/tagout procedures for the equipment being installed, inspected and/or maintained in accordance with an established OSHA compliant energy control program.

13.3 The contractor shall comply with 29 CFR 1910.147 "The control of hazardous energy (lockout/tagout)" and 29 CFR 1910.333 "selection and use of work practices" when on activity property. The contractor "may" use OSHA Standard STD 1-7.3 "Control of Hazardous (Lockout/Tagout) - Inspection Procedures and Interpretive Guidance" as a guide on procedures to follow in the control of hazardous energy when on the job-site.

13.4 The contractor shall use the colors designated by the activity for the "locks" used in lockout/tagout for the respective energy sources when on activity property.

13.5 Lockout/tagout tags are "danger tags" and shall comply with the colors required by 29 CFR 1926.200(b) "Danger signs shall have red as the predominating color …". In addition, the colors must conform to ANSI Z535.1.

14. FALL PROTECTION AND PREVENTION PLAN

14.1 *Definitions.*

a. *Fall Protection and Prevention Plan*: a fall protection and prevention plan is a document prepared by a contractor or subcontractor for the purpose of planning, designing, installing, monitoring and rescue of workers exposed to fall hazards and prevent fall accidents from occurring on Government property during work performed under this contract.
b. *Competent Person for Fall Protection*: a person knowledgeable of fall protection equipment, including the

manufacturer recommendations and instructions for the proper use, inspection, and maintenance; who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as in their application and use with related equipment; who is knowledgeable of rules and regulations regarding the erection of fall protection equipment and systems, AND who has the authority to take prompt correct measures to eliminate the hazards of falling.

c. *Qualified Person for Fall Protection*: a person is one with a recognized engineering degree or professional certificate, and with extensive knowledge, training, and experience in the subject field of fall protection; who is capable of performing design, analysis, and evaluation of fall protection systems and equipment.

14.2 A fall protection and prevention plan shall be written by a competent person (as defined in the definitions paragraph above), shall be submitted as part of the Accident Prevention Plan (APP), and shall include the following:

a. Description of the fall hazards at the job site.
b. Type of fall protection/prevention methods or systems to be used.
c. Training requirements for employees exposed to fall hazards.
d. Type of fall protection equipment and systems provided to the employees that might be exposed to fall hazards.
e. Identify the tie-off points (anchorages) to be used for attachment of personal fall arrest equipment that are capable of supporting at least 5,000 pounds per employee attached, or have been designed, installed, and used as follows:
   (1) as part of a complete personal fall arrest system which maintains a safety factor of at least two; and
   (2) under the supervision of a qualified person (as defined in the definitions paragraph above).

If there is a need to devise an anchor point from existing structures such as beams, or eye-bolt, a qualified person shall be used to evaluate the anchorages.

15. FIRE PROTECTION AND PREVENTION PLAN

15.1 *Definition*. A fire protection and prevention plan is a plan prepared by the contractor covering the items described in NFPA 241 including fire prevention (e.g. fire watch) during hot work (e.g. welding/grinding).

15.2. A fire protection and prevention plan shall be prepared by a competent person (as defined in the Activity Hazard Analysis paragraph), shall be submitted as part of the Accident Prevention Plan (APP), and shall state that welding, burning, and open flame work will only be performed on the Government job-site when:

a. The methods have been approved by the activity (cognizant Safety Office) where the job-site is located,
b. The activity where the job-site is located has been notified that hot work is going to be performed, when it is going to be performed, and the number of days needed,
c. Prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, a written permit shall be requested from the Fire Division. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 30 minutes after completion of the task or as specified on the hot work permit
d. When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION IMMEDIATELY.
e. Fuel bottles are placed by the contractor at ground level and outside of the hot work area.

16. SEVERE WEATHER PLAN (if outside work is involved).

16.1 *Definition*. A severe weather plan lists procedures for ceasing on-site outdoor operations during lightning, high winds, and restricting operations during reduced visibility or icing.

16.2 The contractor shall prepare a severe weather plan and submitted with the APP that list procedures followed during severe weather. State in this plan that cranes shall not be operated when wind speeds at the top of the crane approach the maximum wind velocity recommendations of the manufacturer, that operations undertaken during weather conditions that produce icing of the crane structure or reduced visibility shall be performed at reduced functional speeds and with signaling means appropriate to the situation, and when conditions are such that lightning could occur, all crane operations shall cease.

17. EMERGENCY LIGHTING PLAN.

17.1 *Definition*. Emergency lighting facilities for means of egress are described in NFPA 101-2000 Life Safety Code (National Consensus Standards). Exit access include only designated stairs, walkways, ramps, runways and passageways leading to an exit.

Emergency illumination is required for not less than 1-1/2 hours in the event of failure of normal lighting. Emergency lighting facilities must provide initial illumination that is not less than an average of 1 ft-candle (10 lux) and, at any point, not less than 0.1 ft-candle (1 lux), measured along the path of egress at floor level.

17.2 An emergency lighting plan shall be prepared by the contractor and shall be submitted as part of the APP.

17.3 If the on-site work is being performed in a building that has emergency lighting facilities that provides adequate illumination of the egress routes from the contractor work areas during a power failure then the building's emergency lighting plan may be used for this submission.

18. WORK SITE LIGHTING PLAN.

18.1 *Definition*. Absolute minimum illuminances at any time and location where safety is related to visibility are described in IESNA Lighting RR-96 (Illuminating Engineering Society of North America). Luminance levels for safety: Normal Level slight hazards requiring visual detection: 0.5 Footcandles (5.4 Lux).

18.2 A work site operations lighting plan shall be prepared by the contractor and shall be submitted as part of the APP to assure that adequate illumination is provided in the work areas within a crane, within a building, and during nighttime operations.

19. DRUG AND ALCOHOL PREVENTION PLAN.

19.1 Definition. Drug abuse is a potential health, safety and security problem. Illegal drugs, prescription drugs and alcohol can cause adverse side affects that may affect workplace safety (e.g. drowsiness or impaired reflexes or reaction time).

19.2 A drug and alcohol prevention plan shall be prepared by the contractor and shall be submitted as part of the APP that enforces a restriction against the use of illegal drugs or the consumption of alcohol at any time at the job-site, and enforces a prohibition that employees shall not work at the job-site while under the influence of alcohol or drugs, including prescription drugs that have adverse side effects that may affect workplace safety.

20. SITE SANITATION PLAN.

20.1 Government policy is to apply sound environmental principles in the design, construction and use of facilities. As part of the implementation of that policy the Contractor shall: (1) practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction and demolition waste from landfills and incinerators and to facilitate their recycling or reuse. The Contractor shall take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the work. In the management of waste consideration shall be given to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. The Contractor shall be responsible for implementation of any special programs involving rebates or similar incentives related to recycling of waste. Revenues or other savings obtained for salvage, or recycling shall accrue to the Contractor. Firms and facilities used for recycling, reuse, and disposal shall be appropriately permitted for the intended use to the extent required by federal, state, and local regulations.

20.2 A site sanitation plan shall be prepared by the contractor and shall be submitted as part of the APP that shall name individuals on the Contractor's staff responsible for waste prevention and management, provide estimate on types and quantity of waste expected, shall map out the provisions for supplying adequate drinking water, toilet facilities, washing facilities and waste disposal, steps taken to reduce solid waste generation, and steps taken to ensure all debris is kept cleared from work areas, passageways and stairs, in and around work structures.

20.3. If the Government is furnishing drinking water, toilet facilities and washing facilities to the contractor, indicate this in the site sanitation plan.

21. MOBILE CRANES AND ARTICULATING BOOM CRANES (and alternate lifting equipment).

21.1 Comply with ASME B30.5 for mobile cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, ASME B30.8 for floating cranes and ANSI/ITSDF B56.6 for rough terrain folklifts.

21.2 For mobile cranes with original equipment manufacturer's (OEM) rated capacities of 50,000 pounds or greater, the crane operator needs to be designated as qualified by a source that qualifies crane operators (i.e., a union, a government agency, or an organization that tests and qualifies crane operators). The contractor shall provide to the Contracting Officer proof of current qualifications as per contract data requirements list (CDRL) "Crane Operator's Qualification" contained in this contract.

21.3 All hooks used on cranes, hoists, other machines, and rigging gear shall have self-closing latches or the throat opening shall be "moused" (secured with wire, rope, heavy tape, etc.) or otherwise secured to prevent the attached item from coming free of the hook under a slack condition. The following exceptions apply and shall be approved by the contractor's technical organization: items where the hook throat is fully obstructed and not available for manual securing and lifts where securing the hook throat increases the danger to personnel such as forge shop, dip tank, or underwater work.

21.4 The Accident Prevention Plan shall indicate that in addition to the requirements of 29 CFR 1926, mobile cranes will be equipped with:

a. An anti-two-block device or a two-block damage prevention feature for all points of two-blocking.
b. A boom angle indicator or radius indicator readable from the operator's station.
c. A boom hoist disconnect, shutoff, or hydraulic relief to automatically stop the boom hoist when the boom reaches a predetermined high angle.
d. For telescoping booms: A boom length indicator readable from the operator's station.
e. For telescoping booms: An integrally mounted holding device (such as a load hold check valve) provided with the telescopic hydraulic cylinder(s) to prevent uncontrolled retraction of the boom in the event of a hydraulic system failure (e.g., supply hose).
f. For telescoping booms: An integrally mounted holding device (such as a load hold check valve) provided with boom support hydraulic cylinder(s) to prevent uncontrolled lowering of the boom in the event of a hydraulic system failure (e.g., supply hose).

21.5 For night operations, lighting shall be adequate to illuminate the working areas while not interfering with the operator's vision.

21.6 Multi-purpose machines, material handling equipment, or construction equipment used to lift loads suspended by rigging gear require proof or authorization from the machine OEM that the machine is capable of making lifts of loads suspended by rigging equipment. This equipment must be properly configured to make these lifts and have a load chart.

21.7 Each load shall be rigged/attached independently to the hook/master-link in such a fashion that the load cannot slide or otherwise become detached. The practice of "Christmas tree lifting" steel is prohibited. Long slender objects (e.g. steel beams, pipe, bars) shall be rigged to be lifted horizontally using two independent choker or eyebolt type pick-up points in such a fashion that the load cannot slide or otherwise become detached, taking into account the sling angle to the load in determining sling loadings.

21.8 Piers and waterfront areas such as along dry docks and quay walls may have load restrictions.

a. Notify the Contracting Officer prior to moving a crane onto a pier, dry dock, or other waterfront area. Provide the Contracting Officer with the crane make, model, and configuration in which it is to be used.
b. The contractor shall comply with cribbing requirements issued with the contract.
c. Fueling and equipment maintenance is prohibited on piers and other over water sites.

22. JACKING OPERATIONS PLAN (if applicable).

22.1 *Definition*. Jacking operations shall be designed and planned by a registered professional engineer who has experience in jacking systems. A jacking operation plan shall be implemented by the contractor and shall include detailed instructions and sketches indicating the prescribed method of erection or disassembly. These plans and designs shall include provisions for ensuring lateral stability of the ground or pier area during the lifting of the crane onto the crane rails.

22.2 A jacking operations plan shall discuss the following:

a. Jacks/lifting units shall be marked to indicate their rated capacity as established by the manufacturer. The rated load shall be legibly and permanently marked in a prominent location on the jack by casting, stamping, or other suitable means.
b. Jacks/lifting units shall not be loaded beyond their rated capacity as established by the manufacturer.
c. The operator shall make sure that the jack used has a rating sufficient to lift and sustain the load. Jacking equipment shall be capable of supporting at least two and one-half times the load being lifted during jacking operations and the equipment shall not be overloaded. For the purpose of this provision, jacking equipment includes any load bearing component, which is used to carry out the lifting operation(s). Such equipment includes, but is not limited, to the following: threaded rods, lifting attachments, lifting nuts, hook-up collars, T-caps, shearheads, columns, and footings.
d. Equipment shall be designed and installed so that the lifting rods cannot slip out of position or the contractor shall institute other measures, such as the use of locking or blocking devices, which will provide positive connection between the lifting rods and attachments and will prevent components from disengaging during lifting operations. In

the absence of a firm foundation, the base of the jack shall be blocked. If there is a possibility of slippage of the cap, a block shall be placed in between the cap and the load.

e. Jacks/lifting units shall be designed and installed so that they will neither lift nor continue to lift when they are loaded in excess of their rated capacity.
f. Jacks/lifting units shall have a safety device installed which will cause the jacks/lifting units to support the load in any position in the event any jack lifting unit malfunctions or loses its lifting ability.
g. Jacking operations shall be synchronized in such a manner to ensure even and uniform lifting of the load. During lifting, all points at which the load is supported shall be kept within 1/2 inch of that needed to maintain the load in a level position. The operator shall watch the stop indicator, which shall be kept clean, in order to determine the limit of travel. The indicated limit shall not be overrun.
h. If leveling is automatically controlled, a device shall be installed that will stop the operation when the 1/2 inch tolerance set forth in paragraph g above is exceeded or where there is a malfunction in the jacking (lifting) system.
i. If leveling is maintained by manual controls, such controls shall be located in a central location and attended by a competent person whole lifting is in progress. The competent person must be experienced in the lifting operation and with the lifting equipment being used. A "competent person" is defined as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
j. After the load has been raised, it shall be cribbed, blocked, or otherwise secured at once.
k. The maximum number of annually controlled jacks/lifting units on the load shall be limited to a number that will permit the operator to maintain the load level within specified tolerances of paragraph g above, but in no case shall that number exceed fourteen.
l. Under no circumstances, shall any employee who is not essential to the jacking operation be permitted immediately beneath the load while it is being lifted.
m. Jacks/lifting units shall be positively secured so that they do not become dislodged or dislocated.
n. Each jack shall be thoroughly inspected at times which depend upon the service conditions. Inspections shall be not less frequent than the following: (a) for constant or intermittent use, once every 6 months, (b) for jacks sent out of shop for special work, when sent out and when returned, and (c) for a jack subjected to abnormal load or shock, immediately before and immediately thereafter. Repair or replacement parts shall be examined for possible defects. Jacks, which are out-of-order, shall be tagged accordingly, and shall not be used until repairs are made. All jacks shall be properly lubricated at regular intervals. Hydraulic jacks exposed to freezing temperatures shall be supplied with an adequate antifreeze liquid.

23. ASBESTOS HAZARD ABATEMENT PLAN (if applicable).

23.1 *Definition*. Non-friable asbestos containing materials do not always require special handling, however, during demolition and removal of this material, dust and airborne asbestos fibers will sometimes be released requiring asbestos hazard abatement operations.

23.2 Asbestos containing material: Items, components, or materials which are specified to be worked on under this contract do not involve asbestos. Other materials especially thermal insulation, in the general work area may contain asbestos. All thermal insulation, in all work areas should be considered to be asbestos unless positively identified by conspicuous tags or previous laboratory analysis certifying asbestos free. The Contractor will not remove or perform work on any such materials without the prior approval of the Contracting Officer. The Contractor will not engage in any activity, which would remove or damage such materials of cause the generation of fibers from such materials. The Contractor will immediately stop all work which would generate further damage to the material, evacuate the potential asbestos exposed area, and notify the Contracting Officer for resolution of the situation prior to resuming normal work activities in the affected area.

23.3 The contractor shall prepare and submit as part of the APP a detailed job-specific plan of the work procedures to be used in the removal of material containing asbestos in accordance with 29 CFR 1926.1101 The plan shall include, but not limited to:

a. safety precautions such as lockout tagout, fall protection, and fall protection, and confined space entry procedures and equipment and work procedures to be used in the encapsulation, and removal of materials containing asbestos.
b. the precise personal protective equipment to be used including, but not limited to respiratory protection, type of whole-body protection, the location of the asbestos control areas including clean and dirty areas, buffer zones, showers, storage areas, change rooms, encapsulation method, interface of trades involved in the asbestos work, sequencing of asbestos related work, disposal plan, type of wetting agent and asbestos sealer to be used, locations of local exhaust equipment, planned air monitoring strategies, and a detailed description of the method to be employed in order to control environmental pollution.
c. if the work being performed is in a building, the special safety precautions that must be taken if any portions of the building is occupied.
d. certificates prior to the start of work, signed by each employee doing asbestos removal work that the employee has received training in the proper handling of materials and wastes that contain asbestos in accordance with 40 CFR 763, understands the health implications and risks involved, and understands the use and limits of respiratory equipment to

be used.

e. the name, address, and telephone number of each testing laboratory selected for the sampling, analysis, an reporting of airborne concentrations of asbestos fibers alone with certification that each laboratory is American Industrial Hygiene Association (AIHA) accredited and that persons counting the samples have been judged proficient by current inclusion on the AIHA Asbestos Analysis Registry and successful participation of the laboratory in the Proficiency Analytical Testing Program.
f. written evidence that the landfill for disposal is approved for asbestos disposal by EPA State and local regulations.
g. statement that the contractor will comply with all applicable laws, ordinances, criteria, rules, and regulations of Federal, State, regional, and local authorities regarding handling storing, transporting, and disposing of asbestos waste materials.

24. MATERIAL CONTAINING LEAD REMOVAL PLAN (if applicable).

24.1 *Definition*. Material containing lead is classified as a hazardous waste and special handling, storage, and disposal must be made according to federal and local hazardous waste management regulations.

24.2 The contractor shall prepare and submit as part of the APP a detailed job-specific plan of the work procedures to be used in the removal of material containing lead. The plan shall include, but not limited to:

a. sketch showing the location, size, and details of lead control areas, critical barriers, physical boundaries, location and details of decontamination facilities, viewing ports, and mechanical ventilation system.
b. description of equipment and materials, the appropriate engineering controls implemented, and job responsibilities for each activity such as cutting, sawing, sanding, scraping, abrasive blasting, and/or high temperature cutting of materials containing lead paint from which lead is emitted.
c. eating, drinking, smoking and sanitary procedures, interface of trades, sequencing of lead related work, collected waste water and dust containing lead and debris, air sampling, respirators, personal protective equipment, and a detailed description of the method of containment of the operation to ensure that airborne lead concentrations of 30 micrograms per cubic meter of air are not reached or exceeded outside of the lead control area.
d. operational and environmental sampling, training and strategy, sampling and analysis strategy and methodology, frequency of sampling, duration of sampling, and qualifications of sampling personnel in the air sampling portion of the plan.
e. certificate fore each employee, signed and dated by the accredited training provider, stating that the employee has received the required training in accordance with 40 CFR 745.
f. the name, address, and telephone number the testing laboratory selected to perform the air and wipe sampling, testing, and reporting of airborne concentrations of lead (use a laboratory participating in the EPA National Lead Laboratory Accreditation Program).
g. description of the disposal of all material, whether hazardous or non-hazardous in accordance with all laws and provisions and all federal, State or local regulations.

25. SCAFFOLDING

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access to scaffold platforms greater than 6 m (20 feet) in height shall be accessed by use of a scaffold stair. Vertical ladders commonly provided by scaffold system manufacturers shall not be used for accessing scaffold platforms greater than 6 m (20 feet) in height. The use of an adequate gate is required. Contractor shall ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Special care shall be given to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Work platforms shall be placed on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

26. STILTS

The use of stilts for gaining additional height in construction, renovation, repair or maintenance work is prohibited.

27. Electrical

27.1 Portable Extension Cords

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70E.

28. Releases/Spills of Oil and Hazardous Substances

Take precautions to prevent releases/spills of oil and hazardous substances. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the Base or Activity Fire Department, the activity's Command Duty Officer, and the Contracting Officer. The Contractor is responsible for verbal and written notifications as required by the federal 40 CFR 355, State, local regulations and Navy Instructions. Spill response will be in accordance with 40 CFR 300 and applicable State and local regulations. Contain and clean up these spills without cost to the Government. If Government assistance is requested or required, the Contractor will reimburse the Government for such assistance. Provide copies of the written notification and documentation that a verbal notification was made within 20 days. The Contractor shall notify the Contracting Officer immediately upon discovery of any spill. The contractor shall maintain spill cleanup equipment and materials at the work site. The Contractor shall clean up all hazardous and non-hazardous (WHM) waste spills caused by the Contractor. The Contractor shall reimburse the government for all material, equipment, and clothing generated during any spill cleanup. The Contractor shall reimburse the government for all costs incurred including sample analysis materials, equipment, and labor if the government must initiate its own spill cleanup procedures, for Contractor responsible spills, when:

a. The Contractor has not begun spill cleanup procedure within one (1) hour of spill discovery/occurrence, or

b. If, in the government's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas.

29. Operation of Diesel Engines within Enclosed Areas

The use of mobile crane indoors has the potential to create hazardous conditions. The Contractor is responsible to minimize the safety risk of the crane exhaust emissions caused by gas and particulate matter discharges. Should a mobile crane be operated in an enclosed area, the Contractor shall take actions that will be effective in minimizing or controlling concentrations to an acceptable level. Ensure adequate ventilation via roof vents, open doors and windows, roof fans or other mechanical system are used to move fresh air through work areas. Safety and Health personnel should be used to determine appropriate fresh air exchange rates and /or the need for on-site monitoring. If practical, the crane exhaust should be directed to the weather via an attached approved exhaust hose to the tail pipe of the diesel equipment. The termination should be such that the exhaust does not re-enter the building. The exhaust duct should be inspected routinely for defects and damage. Should the crane engine not permit direct attachment, the exhaust may be captured via a portable exhaust system that directs the diesel exhaust to the weather. The portable exhaust system should be of adequate capacity for the application.

CERTIFICATE OF COMPLIANCE

This certificate shall be signed by an official of the company that provides cranes (or multi-purpose machines, material handling equipment, or construction equipment used to lift loads suspended by rigging gear) or rigging gear for any application under this contract. Post a completed certificate on each crane or alternate machine (or in the Contractor's on-site office for rigging operations) brought onto Navy property.

CONTRACTING OFFICER'S POINT OF CONTACT (Government Representative)	**PHONE**
PRIME CONTRACTOR/PHONE	**CONTRACT NUMBER**
CRANE OR ALTERNATE MACHINE SUPPLIER/PHONE (if different from prime contractor)	**CRANE OR ALTERNATE MACHINE NUMBER** (i.e., ID number)
CRANE OR ALTERNATE MACHINE MANUFACTURER/TYPE/CAPACITY	
CRANE OR ALTERNATE MACHINE OPERATOR'S NAME(S)	

I certify that

1. The above noted crane and associated rigging gear conform to applicable OSHA regulations (host country regulations for naval activities in foreign countries) and applicable ASME B30 standards. The following OSHA regulations and ASME standards
apply:_____
2. The operators noted above have been trained and are qualified for the operation of the above noted crane(s) or alternate machine(s).
3. The operators noted above have been trained not to bypass safety devices during lifting operations.
4. The operators, riggers, and company officials are aware of the actions required in the event of an accident as specified in the contract.

COMPANY OFFICIAL SIGNATURE	DATE
COMPANY OFFICIAL NAME/TITLE	

POST ON CRANE

(IN CAB OR VEHICLE)
(or in the Contractor's on-site office for rigging operations)

Figure P-1

CRANE AND RIGGING GEAR ACCIDENT REPORT

Accident Category: ☐ Crane Accident ☐ Rigging Gear Accident

From: **UIC:**	**To: Navy Crane Center** **NNSY, Bldg 491** **Portsmouth, VA 23709-5000** **Fax (757) 967-3799**

Activity:	**Report No:**

Crane No:	**Category:**	**Accident Date:**	**Time: hrs**

Category of Service: ☐ **SPS** ☐ **GPS**		**Crane Type:**	**Crane Manufacturer:**

Location:	**Weather:**

Crane Capacity:	**Hook Capacity:**	**Weight of Load on Hook:**

Fatality or Permanent Disability? ☐ **Yes** ☐ **No** **Material/Property Cost Estimate:**

Reported to NAVSAFECEN? ☐ **Yes** ☐ **No**

Accident Type:

☐ **Personal Injury** ☐ **Overload** ☐ **Derail** ☐ **Damaged Rigging Gear**

☐ **Load Collision** ☐ **Two Blocked** ☐ **Dropped Load** ☐ **Damaged Crane**

☐ **Crane Collision** ☐ **Damaged Load** ☐ **Other Specify** _____

Cause of Accident:

☐ **Improper Operation** ☐ **Equipment Failure** ☐ **Inadequate Visibility**

☐ **Improper Rigging** ☐ **Switch Alignment** ☐ **Inadequate Communication**

☐ **Track Condition** ☐ **Procedural Failure** ☐ **Other Specify** _____

Chargeable to:

☐ **Track Walker** ☐ **Rigger** ☐ **Operator**

☐ **Maintenance** ☐ **Management/Supervision** ☐ **Other Specify** _____

Crane Function:

☐ **Travel** ☐ **Hoist** ☐ **Rotate** ☐ **Luffing** ☐ **Telescoping** ☐ **Other** ☐ **N/A**

Is this accident indicative of a recurring problem? ☐ **Yes** ☐ **No**

If yes, list Accident Report Nos.: _____

ATTACH COMPLETE AND CONCISE SITUATION DESCRIPTION AND CORRECTIVE/PREVENTIVE ACTIONS TAKEN AS ENCLOSURE (1). Include probable cause and contributing factors. Assess damages and define responsibility. For equipment malfunction or failure, include specific description of the component and the resulting effect or problem caused by the malfunction or failure. List immediate and long term corrective/preventive actions assigned and respective codes.

Preparer:	**Phone and email**	**Code**	**Date**

Concurrences:

	Code	**Date**
	Code	**Date**
Certifying Official (Crane Accidents Only):	**Code**	**Date**

CRANE AND RIGGING GEAR ACCIDENT REPORT INSTRUCTIONS

This form is designed for facsimile transmission without a cover page or by Email and, with enclosures and signatures, shall be the official document. Electronic submission will be accepted without signatures but the names of the preparer, concurring personnel, and certifying official (for crane accidents only) must be filled in. The E-mail address is http://accident@ncc.navfac.navy.mil.

1. Accident Category: Indicate either crane accident or rigging gear accident.

2. From: The naval activity that is responsible for reporting the accident and UIC number.

3. Activity: The naval activity where the accident took place.

4. Report No.: The activity assigned accident number (e.g., 95-001).

5. Crane No.: The activity assigned crane number (e.g., PC-5), if applicable.

6. Category: Identify category of crane (i.e., 1, 2, 3, or 4), if applicable.

7. Accident Date: The date the accident occurred.

8. Time: The time (24 hour clock) the accident occurred (e.g., 1300).

9. Category of Service: Check the applicable service.

10. Crane Type: The type of crane involved in the accident (e.g., mobile, bridge), if applicable.

11. Crane Manufacturer: The manufacturer of the crane (e.g., Dravo, Grove, P&H), if applicable.

12. Location: The detailed location where the accident took place (e.g., building 213, dry dock 5).

13. Weather: The weather conditions at time of accident (e.g., wind, rain, cold).

14. Crane Capacity: The certified capacity of the crane (e.g., 120,000 pounds), if applicable.

15. Hook Capacity: The capacity of the hook involved in the accident at the maximum radius of the operation, if applicable.

16. Weight of Load on Hook: If applicable, the weight of the load on the hook.

17. Fatality or Permanent Disability?: Check yes or no.

18. Material/Property Cost Estimate: Estimate total cost of damage resulting from the accident.

19. Reported to NAVSAFECEN?: Self-explanatory.

20. Accident Type: Check all that apply.

21. Cause of Accident: Check all that apply.

22. Chargeable to: Check all that apply.

23. Crane Function: Check the function(s) in operation at time of accident. Check all that apply. Check N/A if a rigging gear accident.

24. Is this a recurring problem?: Check yes or no. Identify any other similar accidents.

25. Situation Description/Corrective Actions: Self-explanatory.

26. Preparer: Self-explanatory.

27. Concurrences: Self-explanatory.

28. Certifying Official (Crane Accidents Only): Self-explanatory.

APPENDIX C

Subbase Instruction 11262.4

ATTACHMENT 1

SUBASEINST 11262.4
PRKB33
8 Aug 11

NAVSUBASE KINGS BAY INSTRUCTION 11262.4

Subj: CONTRACTOR OPERATED WEIGHT HANDLING EQUIPMENT AND MATERIAL HANDLING EQUIPMENT (WHE/MHE) OVERSIGHT

Ref: (a) NAVFAC P-307, Management of Weight Handling Equipment
(b) NAVFAC Southeast Instruction 11240.1 Management Of Certified Equipment
(c) NAVFAC P-300 Management of Civil Engineering Support Equipment
(d) CORPS OF ENGINEERS/MANUAL EM 385-1-1
(e) NAVFAC GUIDE SPEC NFGS-01525
(f) OSHA REGULATIONS (STANDARDS 29 CFR 1926.32)

Encl: (1) Certificate of Compliance Form P-1 from reference (a)
(2) Contractor Crane or Rigging Operation Checklist
(3) Contractor WHE/MHE Operating Permit
(4) Contractor WHE/MHE Non-Operation Permit
(5) Contractor WHE/MHE Discrepancy Form
(6) Contractor WHE/MHE Discrepancy Response Form
(7) Crane and Rigging Accident Report Form from reference (a)

1. Purpose. To establish a contractor crane operated cranes and multi-purpose equipment (WHE/MHE) oversight plan per references (a) and (b) to minimize the potential for damage to government property and injury to government personnel by contractors operating cranes and equipment on naval installations within the area of responsibility (AOR) of Naval Submarine Base (SUBASE), Kings Bay. This oversight plan is intended to implement policy and provide guidance for contractor owned and operated WHE/MHE throughout the AOR of SUBASE Kings Bay.

2. Scope. This oversight plan relates directly to the use of non-Navy-owned cranes and multi-purpose equipment such as Backhoes, Excavators, Loaders, Fork Trucks and aerial lifts, etc. (WHE/MHE), which is used in weight handling operations and operated by contractor personnel, conducting business on Navy property. These WHE/MHE, often from a variety of sources, are incidental to construction contracts, ship repair contracts,

demolition contracts, maintenance and other service contracts, deliveries of supplies and equipment, etc. Numerous organizations, including tenant activities, ships, supply departments, Facilities Engineering and Acquisition Department (FEAD), etc., have contracting authority which often involves the use of non-Navy-owned and operated WHE/MHE.

3. General Requirements

a. The SUBASE Kings Bay Public Works Department is responsible for the oversight of all contractor WHE/MHE in the SUBASE Kings Bay AOR.

b. Contractor WHE/MHE oversight services are provided by NAVFAC Southeast in support of Commander, Naval Installations Command (CNIC).

c. For entry into any SUBASE Kings Bay AOR Installation and for specific requirements of the installation during normal work hours (0730 - 1600, M-F), Security shall notify WHE/MHE surveillance personnel and not allow the WHE/MHE to enter the installation without the proper documentation. The following contact numbers are provided.

SUBASE Kings Bay	(912) 573-4640/Fax 912 573-2444
	(912) 573-8309
	(912) 573-1244

d. NAVFAC Southeast WHE/MHE surveillance personnel shall review documentation, inspect contractor WHE/MHE and associated rigging gear for compliance with applicable OSHA regulations and reference (a). Contractor Crane Compliance Review Form, (enclosure (1), shall be used as a guide to ensure compliance with applicable requirements. If the WHE/MHE is determined to be in compliance, and all required documentation has been verified, the person conducting the review shall issue a WHE/MHE Operating Permit (enclosure (3)). Enclosure (2) shall be used for initial set up of contractor cranes and multi-purpose equipment. The Operating Permit shall be valid for the duration of the contract, but not to exceed 30 days. For contracts with a duration of more than 30 days, a complete review of the WHE/MHE documentation will be required. If determined to be in compliance, a new Operating Permit will be issued. The

following documentation will be required at the designated point of entry:

(1) WHE/MHE annual maintenance record.

(2) Certificate of compliance.

(3) Copies of operator medical certificate & qualifications by a source that qualifies crane operators (union, governmental agency, or an organization that tests and qualifies crane operators for the equipment being operated).

(4) Personnel designated and qualified by the crane contractor conducting weight-handling operations, to perform rigger-in-charge duties as identified within reference (a), section 10.2.1.1. For further guidance refer to paragraph 6c. of this instruction.

(5) Copy of the load chart for that specific crane.

(6) Waterfront operational permit if applicable.

(7) Cribbing plan if applicable.

(8) Routine and critical lift plan (e.g. weights, crane radius, net crane capacity, type of rigging gear, rigging gear net capacity).

(9) Listing of rigging gear to be used with OEM specifications.

(10) Other documentation specific to the Contracting Officer.

e. Commercial service vehicles and other commercial vendors often enter Navy property with category 4 cranes/MHE that they do not intend to operate. For those instances, and in lieu of a compliance review, the contractor may elect to complete a Contractor WHE/MHE Non-Operation Permit (enclosure (5)) certifying that the WHE/MHE will not be operated on Navy property. The permit must be posted in a conspicuous location on the WHE/MHE or in the cab and shall be obtained from the NAVFAC Southeast Crane Surveillance Personnel.

f. Contractor WHE/MHE access to SUBASE Kings Bay shall be per reference (a).

g. Contractor WHE/MHE access to SUBASE Kings Bay shall be restricted to the Franklin Gate.

h. NAVFAC Southeast WHE/MHE surveillance personnel shall not allow entry of any contractor WHE/MHE without issuance of a valid Contractor WHE/MHE Operating Permit posted in the front windshield or a Contractor Crane Non-Operation Permit posted on the crane or in the vehicle cab.

i. NAVFAC Southeast WHE/MHE Surveillance personnel shall randomly monitor contractor crane operations on a daily basis, when possible. To ensure contractor compliance, surveillance personnel will check for valid Crane Operating Permits, Certificates of Compliance, and crane operator qualifications. In addition to verifying proper documentation, surveillance personnel shall randomly observe crane operations for safe crane operation, proper set up, adequate pier support and proper rigging practices.

j. Deficiencies noted during WHE/MHE and documentation review, or while monitoring WHE/MHE operations shall be documented on the contractor WHE/MHE oversight discrepancy form (enclosure (5)) and forwarded to the appropriate contracting official for resolution. Contracting officials shall submit a written response to all discrepancies within 10 work days to the NAVFAC Southeast WHE/MHE Surveillance Personnel. The contractor WHE/MHE discrepancy response form (enclosure (6)) shall be used to identify the root cause(s) and any corrective actions taken to prevent recurrence.

k. NAVFAC Southeast WHE/MHE Surveillance Personnel shall provide Installation Commanding Officers and the Certified Equipment Program Manager with a monthly status report of contractor WHE/MHE operations. The monthly status report shall consist of all documented deficiencies during oversight of contractor cranes and a brief summary of the overall status of contractor WHE/MHE compliance on Naval property.

4. Contractor Crane Accidents

a. Any Crane or Rigging gear accident as defined in reference (a), section 12 must be reported and investigated. In the event of an accident, contractors shall secure the accident site, protect evidence, and immediately notify the DOD Contracting Officer (or the designated local representative) and the NAVFAC Southeast Crane WHE/MHE Personnel. Additional notification must be made to the Navy Crane Center within the guidelines set forth by the reference (a).

b. The DOD Contracting Officer, or local representative, will notify the NAVFAC Southeast Certified Equipment Program Manager upon notification by the contractor by using the following e-mail address; W_NAVFAC_JAXS_PWBL_BSVE_Certified_Equipment_US01@NAVY.MIL. Additionally, the contracting officer/rep must notify the Navy Crane Center (610)595-0505 (or e-mail accident@ncc.navfac.navy.mil) of an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane or adjacent property as soon as possible, preferably within 24 hours of notification by the contractor.

c. The contractor, will conduct an immediate accident investigation to establish the root cause(s). Crane operations shall not proceed until cause is determined and corrective actions (note: includes recovery plans) have been approved and implemented to the satisfaction of the contracting officer and the investigation team.

d. Within 25 days, the contractor must provide the contracting officer and the NAVFAC Southeast Certified Equipment Program Manager the WHE accident report using enclosure (7) to include summary of circumstances, an explanation of cause(s), photographs (if available), and corrective actions taken. The contracting officer must forward this report to Navy Crane Center (regardless of severity) upon 5 days (total of 30 days) receipt from the contractor.

e. These notifications and reporting requirements are in addition to those promulgated by OPNAVINST 5100.23 (series) and related claimant instructions.

5. Tenant Commands Responsibilities

a. Ensure all existing and future contracts include requirements of this instruction for contractor WHE/MHE being operated on SUBASE Kings Bay.

b. Recognize this instruction as the "DOD Contracting Officer oversight plan for contractor WHE/MHE operations" for the installation.

c. Designate in writing the NAVFAC Southeast WHE/MHE Surveillance Personnel as the agent for promulgating discrepancies and practices.

d. Designate in writing the NAVFAC Southeast WHE/MHE Surveillance Personnel as the agent(s) to oversee contractor crane accident investigations and resulting corrective actions.

6. DOD Contracting Officer for WHE/MHE Services Responsibilities

a. Include the minimum requirements of reference (a), for contractor WHE/MHE in contracts and require the WHE/MHE contractor to comply with specific installation regulations governing WHE/MHE safety. For NAVFAC construction contracts, ensure the requirements of references (a), (d) and (e) are cited and followed.

b. Ensure WHE/MHE contractors provide documentation to the NAVFAC Southeast WHE/MHE Surveillance Personnel as identified within paragraph 3d. of this instruction.

c. Require the WHE/MHE contractor that is conducting weight-handling operations to recognize their responsibilities for the safe operation of the WHE/MHE. This includes the designation of qualified personnel to perform rigger-in-charge duties as identified within reference (a), section 10. DOD personnel (military & civilian) designated to perform rigger in charge duties shall be qualified and trained per reference (a), section 13.2, table 13-1 and have prior approval by the NAVFAC Southeast Certified Equipment Program Manager. Non-DOD personnel designated to perform rigger in charge duties shall be qualified as defined within reference (f), 1926.32 (m).

d. Provide oversight in conjunction with the NAVFAC Southeast WHE/MHE Surveillance personnel.

e. Ensure the requirements of paragraph 4 of this instruction are cited and followed.

7. NAVFAC Southeast WHE/MHE Surveillance Personnel Responsibilities

a. Manage the entry process of all contractor WHE/MHE onto SUBASE Kings Bay.

b. Serve as Naval Installation Commanding Officer and DOD Contracting Officers “agent” in matters pertaining to contractor WHE/MHE requirements per references (a) and (b).

c. Provide coordination between WHE/MHE contractors and NAVFAC Southeast WHE/MHE Engineering in matters of ground loading permits.

d. Provide incidental oversight to contractor WHE/MHE operations.

e. Provide accident reporting and investigation as required per reference (a) and herein.

/s/
JOHN S. O'NEILL

Distribution: (SUBASEINST 5605.1L)
List A, B, G, H, I(2)

CERTIFICATE OF COMPLIANCE

This certificate shall be signed by an official of the company that provides cranes (or multi-purpose machines, material handling equipment, or construction equipment used to lift loads suspended by rigging gear) or rigging gear for any application under this contract. Post a completed certificate on each crane or alternate machine (or in the contractor's on-site office for rigging operations) brought onto Navy property.

CONTRACTING OFFICER'S POINT OF CONTACT (Government Representative)	PHONE
PRIME CONTRACTOR/PHONE	CONTRACT NUMBER
CRANE OR ALTERNATE MACHINE SUPPLIER/PHONE (if different from prime contractor)	CRANE OR ALTERNATE MACHINE NUMBER (i.e., ID number)
CRANE OR ALTERNATE MACHINE MANUFACTURER/TYPE/CAPACITY	
CRANE OR ALTERNATE MACHINE OPERATOR'S NAME(S)	

I certify that
1. The above noted crane or alternate machine and all rigging gear conform to applicable OSHA regulations (host country regulations for naval activities in foreign countries) and applicable ASME B30 standards. The following OSHA regulations and ASME standards
apply:_____
2. The operators noted above have been trained and are qualified for the operation of the above noted crane(s) or alternate machine(s).
3. The operators noted above have been trained not to bypass safety devices during lifting operations.
4. The operators, riggers and company officials are aware of the actions required in the event of an accident as specified in the contract.

COMPANY OFFICIAL SIGNATURE	DATE
COMPANY OFFICIAL NAME/TITLE	

POST ON CRANE (OR ALTERNATE MACHINE)

(IN CAB OR VEHICLE)
(or in the contractor's on-site office for rigging operations)

CONTRACTOR CRANE OR RIGGING OPERATION CHECKLIST			
		YES	NO
1	Is the Certificate of Compliance, P-1, in the operator's cab (or in the contractor's on-site office for rigging operations) with the current operator's name listed?		
2	Is the crane/machine transited to and from the job site correctly? Are the OEM instructions for travel being followed?		
3	Does the operator know the weight of the load to be lifted?		
4	Is the load to be lifted within the crane/machine manufacturer's rated capacity in its present configuration?		
5	Are outriggers or stabilizers required?		
6	If outriggers are required, are outriggers fully extended and down, and the crane load off the wheels?		
7	Is the crane/machine level and on firm ground, if the ground is not firm is the crane/machine blocked?		
8	If blocking is required, is the entire surface of the outrigger pad supported and is the blocking material of sufficient strength to safely support the loaded outrigger pad?		
9	If outriggers are not used, is the crane/machine rated for on-rubber lifts by the manufacturer's load chart? If stabilizers are used and not outriggers and the wheels are not off the ground is this the correct setup in accordance with the OEM?		
10	Is the swing radius of the crane counterweight clear of people and obstructions and accessible areas within the swing area barricaded to prevent injury or damage?		
11	Has the hook been centered over the load in such a manner to minimize swing?		
12	Is the load well secured and balanced in the sling or lifting device before it is lifted more than a few inches?		
13	Is the lift and swing path clear of obstructions?		
14	If rotation of the load being lifted is hazardous, is a tag or restraint line being used?		
15	Are personnel prevented from standing or passing under a suspended load?		
16	Is the operator's attention diverted?		
17	Are proper signals being used at all times? Is the operator responding properly to the signals? Are radios used for blind lifts?		
18	Is the load lifted a few inches to ensure it is secure and balanced?		
19	Are empty hooks lashed or otherwise secured during travel to prevent swinging?		
20	Does the operator remain at the controls while the load is suspended?		
21	Do the operations ensure that side loading is prohibited?		
22	Are personnel prevented from riding on a load?		
23	Are start and stop motions in a smooth fluid motion (no sudden acceleration or deceleration)?		
24	If operating near electric power lines, are the rules and guidelines understood and adhered to?		
25	Is the lift a critical lift?		
26	If so, are all regulations understood and check-off sheets initialed and signed off?		
27	Are any overhead power lines in the vicinity?		
28	If so, are complex lift rules and 1926.1407-1411 being followed?		
29	If pick and carry operations are allowed and performed, are OEM directions followed (e.g. rotation lock engaged, boom centered over front or rear, etc.)?		
30	When the crane/machine is left unattended, is it in a safe condition?		
31	Is rigging gear undamaged and acceptable for the application?		

32	Does rigging gear meet applicable ASME or host country standards (e.g. ASME B30.9 for slings, B30.10 for hooks, B30.26 for hardware such as shackles, safety hoist rings, eyebolts, etc, B30.20 for below the hook lifting devices, etc.)?		
33	Is the rigging gear inspected prior to use?		
34	Is chafing gear used to protect slings (especially synthetic slings) and equipment from damage due to sharp corners and edges?		
35	Is the rigging gear used in accordance with its working load limit? Is the load limit visible?		
36	Are positive latching devices used on crane and rigging hooks, or are the hooks "moused"?		
	Contractor: Subcontractor:		
	Location: Date:		
	Notes:		
	Signature of Contracting Officer's Representative		

NAVFAC SOUTHEAST
CONTRACTOR WHE/MHE
OPERATING PERMIT

_____

DATE ISSUED

_____

EXPIRATION DATE

CONTRACTING OFFICIAL PHONE #_____

CONTRACT #_____

AUTHORIZED LOCATION_____

CRANE CONTRACTOR_____

CRANE NUMBER_____

CONTRACTOR WHE/MHE NON-OPERATION PERMIT (CATEGORY 4 CRANES) **POST IN A CONSPICUOUS LOCATION ON THE CRANE OR IN THE VEHICLE CAB**	
Company:	*Point of Contact (Name / Phone)*
Crane Manufacture:	Vehicle ID / Serial Number:
Contracting Official:	Phone:
Work Location:	
I certify that this vehicle will be used for the transportation of personnel and materials only. At no time will the crane be operated while on Navy property.	
Company Official / Title: (print) Signature: Date:	

Date:	**Crane:____ Rigging: ____ Operations: ____**	**Control #**

Contractor:	**Sub Contractor:**	
Crane Owner:	**Crane Mfg:**	**Model / Ser #**
Location Of Operations:		
Contracting Official:	**Phone:**	**Contract #**

Note: Contracting Officials shall submit a written response to all discrepancies within 10 work days to the NAVFAC Southeast WHE/MHE Surveillance Personnel. Identify the root cause(s) and any corrective / preventive actions taken to prevent recurrence.

Item #	**Discrepancy**
Oversight Personnel's Signature:	**Date:**

CONTRACTOR CRANE DISCREPANCY RESPONSE FORM

Date:	**Control #**	**Contractor:**	
Sub Contractor:		**Crane Owner:**	
Location Of Operations:			
Contracting Official:		**Phone:**	**Contract #**
Root Cause			
Corrective / Preventive Action Action Taken To Prevent Recurrence			
Contracting Representatives Signature:		**Date:**	

Note: Contracting Officials shall submit a written response to all discrepancies within ten (10) work days to the NAVFAC Southeast WHE/MHE Surveillance Personnel. Identify the root cause(s) and any corrective/preventive actions taken to prevent recurrence.

FOR OFFICIAL USE ONLY

CRANE AND RIGGING GEAR ACCIDENT REPORT

Accident Category: ☐ **Crane Accident** ☐ **Rigging Gear Accident**

From: **UIC:**	**To: Navy Crane Center** **Bldg 491 NNSY** **Portsmouth, VA 23709** **Fax (757) 967-3808**

Activity:			**Report No:**
Crane No:	**Category:**	**Accident Date:**	**Time: hrs**
Category of Service: ☐ **SPS** ☐ **GPS**		**Crane Type:**	**Crane Manufacturer:**

Was Crane/Rigging Gear Being Used in SPS? **Yes _____ No_____**	**Was Crane/Rigging Gear Being Used in a Complex Lift/Critical non-crane rigging operation?** **Yes_____ No_____**
Location:	**Weather:**

Crane Capacity:	**Hook Capacity:**	**Weight of Load on Hook:**

Fatality or Permanent Disability? ☐ **Yes** ☐ **No** **Material/Property Cost Estimate:**

Reported to NAVSAFECEN? ☐ **Yes** ☐ **No**

Accident Type:

☐ **Personal Injury** ☐ **Overload** ☐ **Derail** ☐ **Damaged Rigging Gear**

☐ **Load Collision** ☐ **Two Blocked** ☐ **Dropped Load** ☐ **Damaged Crane**

☐ **Crane Collision** ☐ **Damaged Load** ☐ **Other Specify** _____

Cause of Accident:

☐ **Improper Operation** ☐ **Equipment Failure** ☐ **Inadequate Visibility**

☐ **Improper Rigging** ☐ **Switch Alignment** ☐ **Inadequate Communication**

☐ **Track Condition** ☐ **Procedural Failure** ☐ **Other Specify** _____

Chargeable to:

☐ **Crane Walker** ☐ **Rigger** ☐ **Operator**

☐ **Maintenance** ☐ **Management/Supervision** ☐ **Other Specify** _____

Crane Function:

☐ **Travel** ☐ **Hoist** ☐ **Rotate** ☐ **Luffing** ☐ **Telescoping** ☐ **Other** ☐ **N/A**

Is this accident indicative of a recurring problem? ☐ **Yes** ☐ **No**

If yes, list Accident Report Nos.: _____

ATTACH COMPLETE AND CONCISE SITUATION DESCRIPTION AND CORRECTIVE/PREVENTIVE ACTIONS TAKEN AS ENCLOSURE (1). Include probable cause and contributing factors. Assess damages and define responsibility. For equipment malfunction or failure, include specific description of the component and the resulting effect or problem caused by the malfunction or failure. List immediate and long term corrective/preventive actions assigned and respective codes.

Preparer:	**Phone and email**	**Code**	**Date**

Concurrences:

	Code	**Date**
	Code	**Date**
Certifying Official (Crane Accidents Only):	**Code**	**Date**

FOR OFFICIAL USE ONLY

CRANE AND RIGGING GEAR ACCIDENT REPORT INSTRUCTIONS

This form is designed for fax transmission without a cover page or by e-mail and, with enclosures and signatures, shall be the official document. Electronic submission will be accepted without signatures but the names of the preparer, concurring personnel, and certifying official (for crane accidents only) shall be filled in. The e-mail address is m_nfsh_ncc_accident@navy.mil. The fax number is (757) 967-3808.

1. Accident Category: Indicate either crane accident or rigging gear accident.
2. From: The naval activity that is responsible for reporting the accident and UIC number.
3. Activity: The naval activity where the accident took place.
4. Report No.: The activity assigned accident number (e.g., 95-001).
5. Crane No.: The activity assigned crane number (e.g., PC-5), if applicable.
6. Category: Identify category of crane (i.e., 1, 2, 3, or 4), if applicable.
7. Accident Date: The date the accident occurred.
8. Time: The time (24 hour clock) the accident occurred (e.g., 1300).
9. Category of Service: Check the applicable service (SPS as defined by NAVSEA 0989-030-7000).
10. Crane Type: The type of crane involved in the accident (e.g., mobile, bridge), if applicable.
11. Crane Manufacturer: The manufacturer of the crane (e.g., Dravo, Grove, P&H), if applicable.
12. SPS: Was the crane or rigging gear being used in an SPS lift?
13. Complex lift: Was the crane or rigging gear being used in a complex lift?
14. Location: The detailed location where the accident took place (e.g., building 213, dry dock 5).
15. Weather: The weather conditions at time of accident (e.g., wind, rain, cold).
16. Crane Capacity: The certified capacity of the crane (e.g., 120,000 pounds), if applicable.
17. Hook Capacity: The capacity of the hook involved in the accident at the max radius of the operation, if applicable.
18. Weight of Load on Hook: If applicable, the weight of the load on the hook.
19. Fatality or Permanent Disability?: Check yes or no.
20. Material/Property Cost Estimate: Estimate total cost of damage resulting from the accident.
21. Reported to NAVSAFECEN?: Self-explanatory.
22. Accident Type: Check all that apply.
23. Cause of Accident: Check all that apply.
24. Chargeable to: Check all that apply.
25. Crane Function: Check all functions in operation at time of accident. Check N/A if a rigging gear accident.
26. Is this a recurring problem?: Check yes or no. Identify any other similar accidents.
27. Situation Description/Corrective Actions: Self-explanatory.
28. Preparer: Self-explanatory.
29. Concurrences: Self-explanatory.
30. Certifying Official (Crane Accidents Only): Self-explanatory.

APPENDIX D

Installation Safety Requirements

ATTACHMENT 1

APPENDIX D
SAFETY REQUIREMENTS: INSTALLATION OR REMOVAL

Test Information:
Date of Test: _____
Contract Number _____
Job Location _____

Contents

Description

GENERAL: The forms provided in this Appendix D are guidance; the submitted forms shall depict the actual method and equipment to be used.

Rigging Sketch for Lifting Beam: Page D-2

Details of rigging equipment, method of attachment to the equipment being lifted for installation, or removal, on site shall be identified for major components. Pertinent supplemental information for the lift of each item of equipment shall be provided and center of gravity location, torque of safety hoist rings or holddown fasteners and similar information.

Placement of Beam Into Building: Page D-3

This appendix provides details of the movement of equipment into or from buildings. This information should recognize all interferences that will impede placement of equipment prior to or in conjunction with landing equipment onto the deck level along with details about translation of equipment to clear obstacles.

Detailed Sequence of Lift: Page D-4

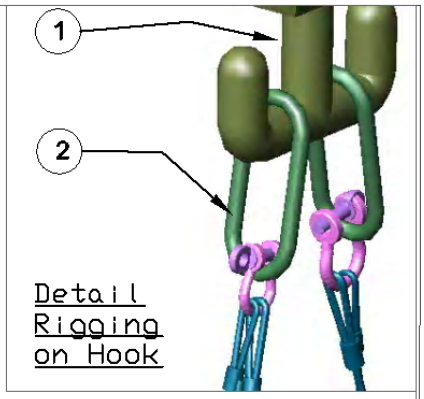
The details for lifting of the equipment into position or from an existing position to the deck should be provided. Details such as mobile crane or tri lifter positioning and/or boom positions should be provided in this form. Any translation while suspended should be provided.

Base Ingress or Egress Route: Page D-5

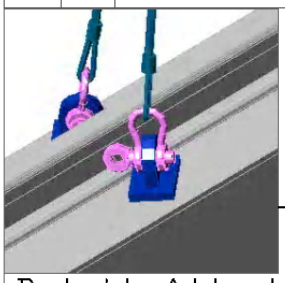
Transportation of large components may require specific roads or paths be identified for access to the facility. This form will provide the command/base/facility with information needed for preparatory actions allowing safe and timely delivery of equipment.

RIGGING SKETCH FOR LIFTING BEAM

ITEM	QTY	DESCRIPTION
1	1	HOOK: Minimum capacity 35 tons. hook safety latch required.
2	2	Master Link: Size, Part #, manufacturer, Minimum capacity .
3	6	SHACKLE: type or style, size, minimum capacity, manufacturer.
4	4	SLING (PENDANT): Size (diameter), Construction, strength or minimum capacity, minimum length, manufacturer.
5	4	PADEYE: material, connection details, factor of safety, size, limitations on use, location.
6		GIRDER: Weight in the "final to be lifted" configuration Location of Center of gravity

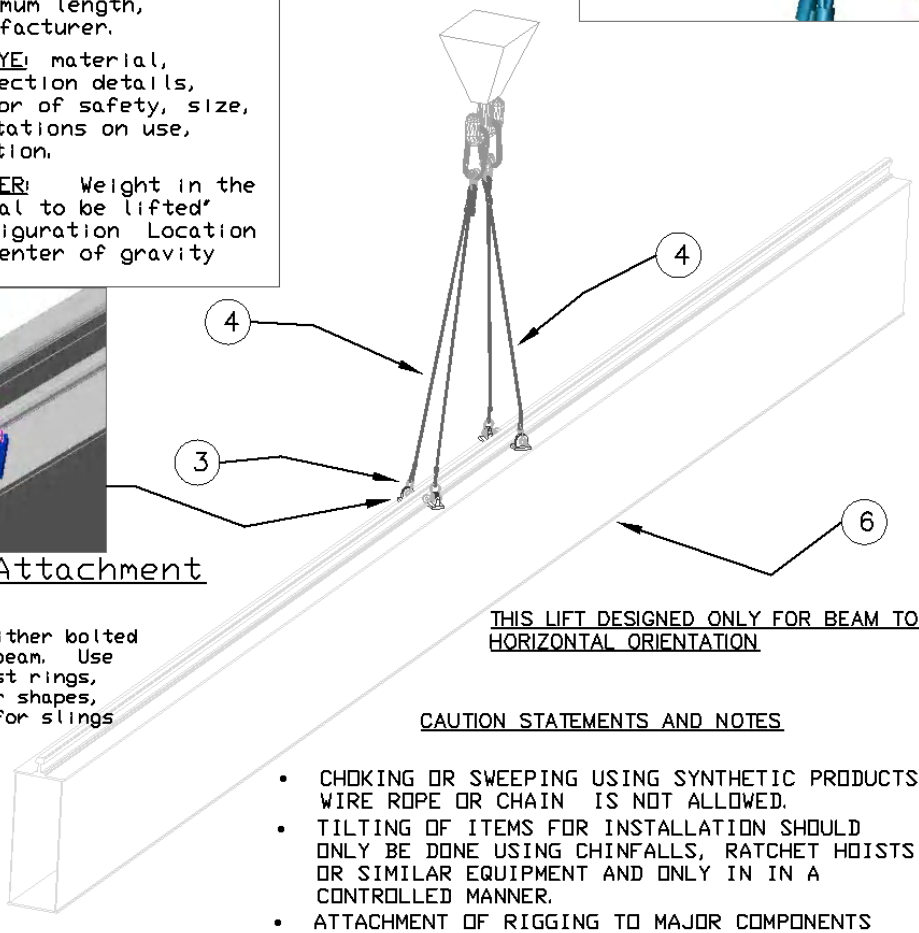


Detail Rigging on Hook



Detail Attachment to Beam

Padeyes are either bolted or welded to beam. Use of safety hoist rings, welded bars or shapes, through pipe for slings are allowed.



THIS LIFT DESIGNED ONLY FOR BEAM TO BE IN HORIZONTAL ORIENTATION

CAUTION STATEMENTS AND NOTES

- CHOKING OR SWEEPING USING SYNTHETIC PRODUCTS, WIRE ROPE OR CHAIN IS NOT ALLOWED.
- TILTING OF ITEMS FOR INSTALLATION SHOULD ONLY BE DONE USING CHINFALLS, RATCHET HOISTS OR SIMILAR EQUIPMENT AND ONLY IN IN A CONTROLLED MANNER.
- ATTACHMENT OF RIGGING TO MAJOR COMPONENTS IS ONLY VIA HARD ATTACHMENT POINTS. SEE "DETAIL ATTACHMENT TO BEAM" FOR EXAMPLE.
- ONSITE CHANGES TO THIS SKETCH SHOULD BE PRESENTED TO THE ON SITE NAVY CRANE CENTER REPRESENTATIVE(OR DESIGNEE) FOR REVIEW PRIOR TO LIFT.

THIS ILLUSTRATION IS GUIDANCE FOR INSTALLATION OR REMOVAL OF ITEMS.

PLACEMENT OF BEAM INTO BUILDING

ITEM	NOTE	DESCRIPTION
1		Girder on trailer. Extended length trailer requires large open area for manuvering outside of building.
2		Door allowing access into structure. Other doors do not allow suitable clearance for lifting girder from trailer and placing onto end trucks on runway rails.
3		Interferences in building documented by contractor on pre-installation site check. Interferences cause routing for lift and identify critical items needing to be moved or protective cover to be installed.
4		Door allowing mobile crane entrance into structure. Floor loads determined adequate. Swing envelopes for counter weights checked. Boom height and capacity needed at radius determined.

IDENTIFICATION OF INTERFERENCES

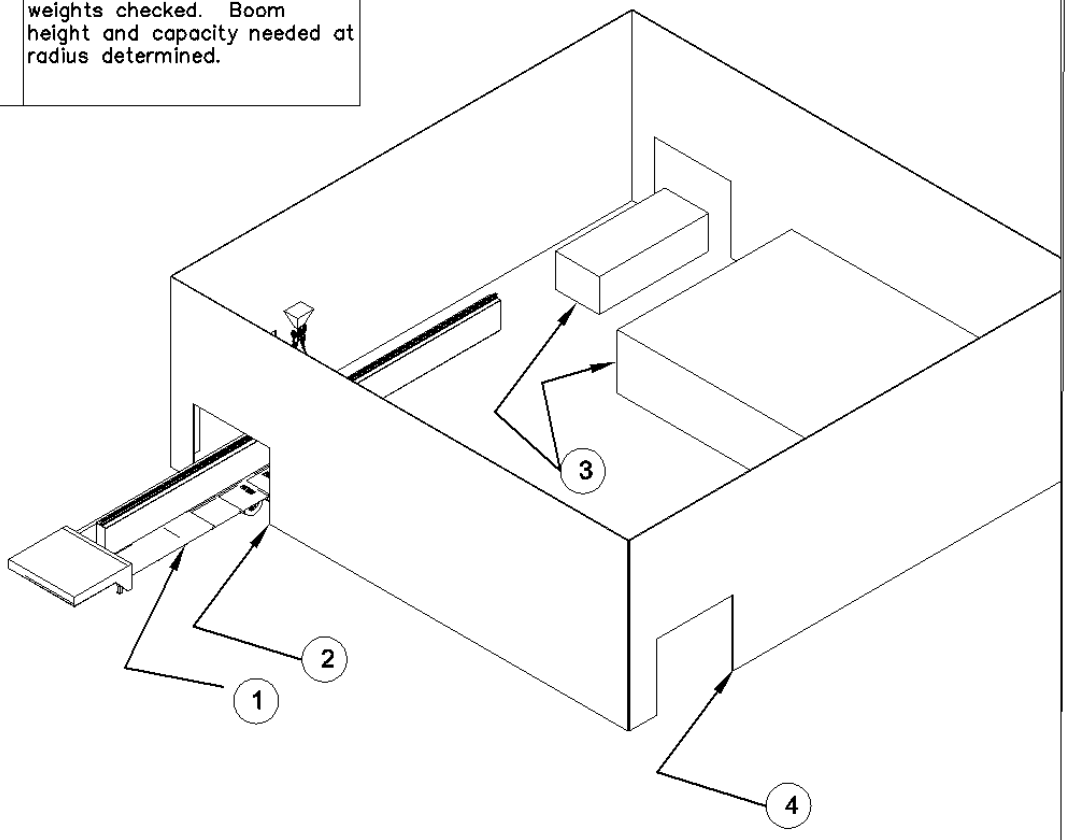
1 Two items of equipment (3) in the building cannot be moved and are of high value.

2 The trailer is an interference for lifting the beam through the door until the beam is lifted free of the trailer at initial lift. The trailer will then be removed from the building

3 After initial connection of rigging to the beam, while beam is on the trailer, all ladders and JLG/manlift devices will be removed. No access to the rigging or beam is possible since no room exists for ladders or JLG/manlifts to enter the facility. No equipment or personnel are allowed under a suspended load.

4 The mobil crane must have barriers/tape to prevent personnel between the crane, counter weight and wall, and other equipment in the building.

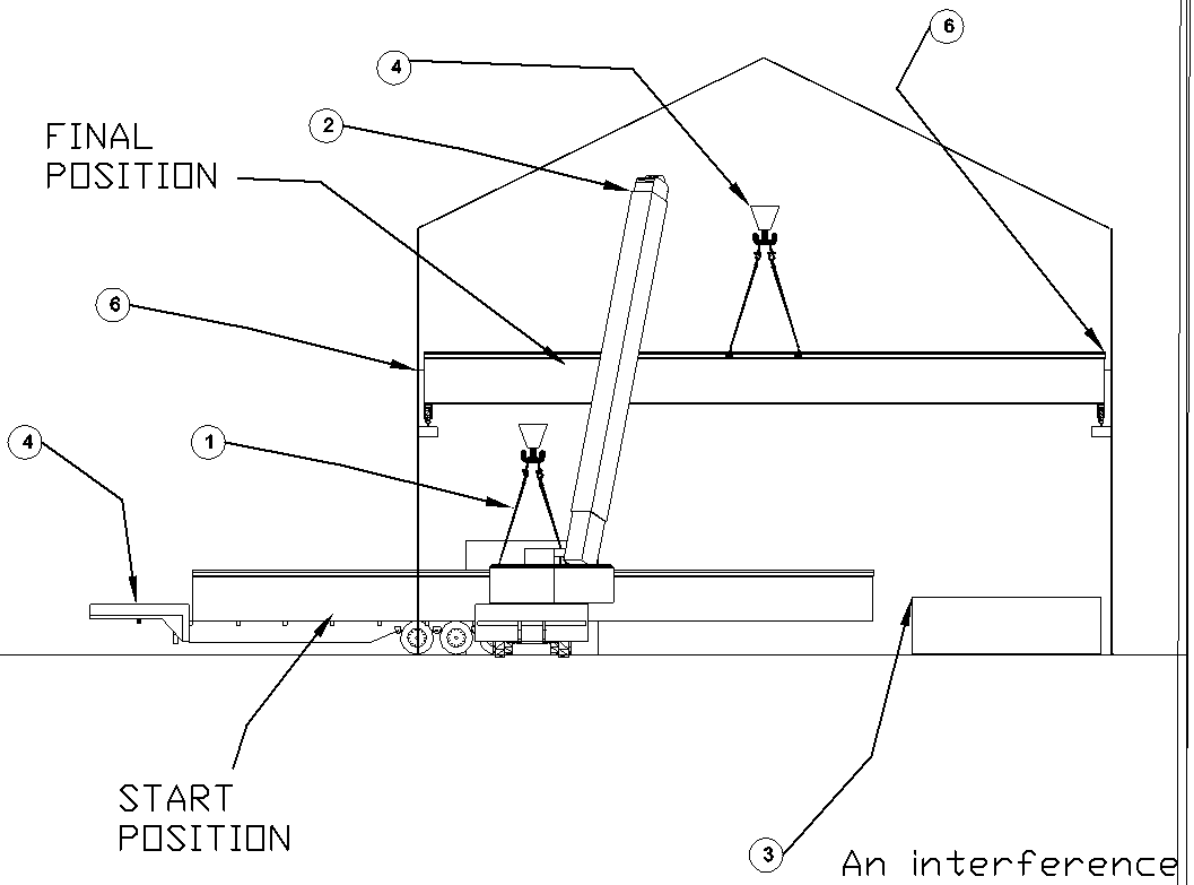
5 Access for tag line handlers and other personnel is limited due to certain equipment in the area. Facility personnel will need to escort and watch personnel when access to these areas is necessary.



DETAILED SEQUENCE OF LIFT

SEQUENCE OF LIFT

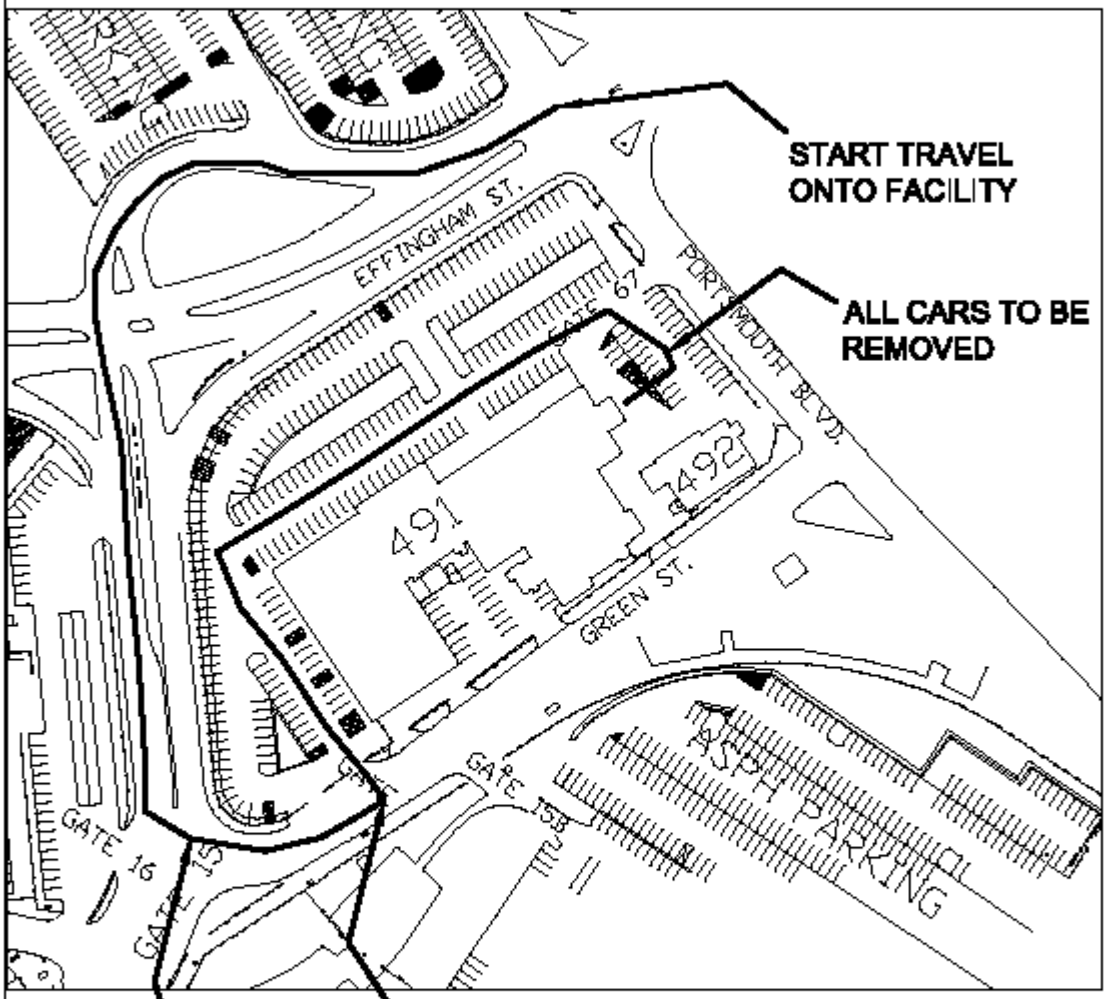
1. **Initial Lift Point:** Beam on trailer at location allowing rigging and crane boom to attach for first time and perform check of all items for proper balance and control.
2. **Crane Boom Interference Check:** A final check for boom clearence and any unforseen interferences must be done at this time. If any interferences are detected the beam/load should not be lifted until the condition is evaluated. Do not leave a load suspended for a long interval (20 minutes or greater).
3. **Begining of the Lift:** Initiate the lift: use the swing function of the crane to move the beam. All critical interferences are known and designated watchstanders monitor for problems as the load is lifted
4. **Trailer Removal:** The lift progresses to allow safe removal the trailer.
5. **Final Lift Point:** The load is raised while remaining in a horizontal orientation and located in the final position for installation onto the trucks. All taglines are manned and watchstanders are monitoring the load movement.
6. **Secure Beam/load:** The lift is completed with fasteners secured prior to disconnecting rigging and removing the crane boom. JLG/manlift devices may be moved into position at that time.



APPENDIX D **BASE INGRESS/EGRESS ROUTE**

MAP SHOWING TRAFFIC, ROUTE

CRITICAL AREAS OF ROUTE: All areas that require base security for traffic control and all areas that will have difficult manuvering are indicated.



APPENDIX E

Forklift/Aerial Platform Information

ATTACHMENT 1

Fork Truck/ RT Telescope Boom	SERIAL #	**CERTIFICATION DATE**	**DATE** **2012**	
	LOCATION			

Contractors Name (Print)	**S- SATISFACTORY U- UNSATISFACTORY** **NA-NOT APPLICABLE**

INSPECTION

		S	U	NA				S	U	NA
1	Warning/Labels Instruct.					14	Engine Belts			
2.	Instruments and Gauges					15.	Transmission			
3.	Brakes – Main*					16.	Exhaust System			
4.	Brakes - Parking					17.	Fluid Leaks			
5.	Brakes – Dead man's*					18.	Horns*			
6.	Main Operating controls*					19.	Alarms*			
7.	Locking Devices					20.	Emergency Shut Down*			
8.	Limit Switches*					21.	Hydraulic Hoses & Fittings			
9.	Tires & Wheels – Solid*					23.	Hydraulic Cylinders lift, extend, steer, tilt, side shift and rotate *			
10.	Tires & Pneumatic*					24.	Booms & Masts *			
11.	Forks*					25.	Operators Manual			
12.	Battery					26.	Structural Damage*			
13.	Engine Cooling System					27.	Safety and Operational Checks Basket and Ground			

Remarks: (Unsatisfactory)

Government Representative Name Jerry L Harrelson	**Government Representative's Signature** DATE: / /

INSTRUCTIONS**- INSPECT ALL APPLICABLE ITEMS PRIOR TO USE. SUSPEND ALL OPERATIONS IMMEDIATELY WHEN OBSERVING AN UNSATISFACTORY CONDITION OF ANY ITEM INDICATED ABOVE WITH AN ASTERISK (*). IN ADDITION, SUSPEND OPERATION WHEN ANY UNSAFE CONDITION IS OBSERVED AND IMMEDIATELY NOTIFY YOUR SUPERVISOR. OTHER CONDITIONS AFFECTING SAFETY SHALL BE NOTED UNDER THE "REMARKS" SECTION AND REPORTED TO YOUR SUPERVISOR.**

CERTIFICATE OF COMPLIANCE

This certificate shall be signed by the official of the company that provides cranes (multi-purpose machines, material handling equipment or construction equipment used to lift loads suspended by rigging gear) or rigging gear for any under this contract. This certificate is to include MHE (aerial man lifts and fork trucks).

CONTRACTING OFFICER POINT OF CONTACT (government representative)

PHONE #

PRIME CONTRACTOR PHONE #	**CONTRACT NUMBER**		
EQUIPMENT/MACHINE SUPPLIER (if different from prime contractor)	EQUIPMENT/MACHINE ID NUMBER		
EQUIPMENT MANUFACTURE	**TYPE**	**MODEL**	**CAPACITY**

EQUIPMENT / MACHINE OPERATOR(cranes' multi-purpose machines, material handling equipment or construction equipment used to lift loads suspended by rigging gear) and MHE.

I CERTIFY THAT

1. The above noted equipment/ machine and all rigging gear conform to applicable OSHA regulations (host country regulations for naval activities in foreign countries) and applicable ASME B30 standards The following OSHA regulations and ASME standard apply:_____

_____

2.The operators noted above have been trained and are qualified for the operation of the above noted equipment or machine.

3. The operator noted above have been trained not to bypass safety devices during operations.

4.The operators, riggers and company officials are aware of actions required in the event of an accident as specified in the contract.

COMPANY OFFICIAL SIGNATURE	**DATE**

COMPANY OFFICIAL NAME AND TITLE

POST ON EQUIPMENT / MACHINE (IN CAB OR VEHICLE)

(OR IN THE CONTRACTOR'S ON SITE OFFICE FOR RIGGING OPERATION)

Transportation Department (912)573-4640 FAX (912)573-2444

AEREAL WORK PLATFORM CHECKS

DATE	OPERATOR (Name, Shop)	HOUR METER START
LOCATION	MACHINE NUMBER	HOUR METER ENDING
CERTIFICATION EXPIRATION DATE: _____ TAGS: (S) (U) (N/A)		

GENERAL CHECKS

	SAT	UNSAT	N/A		SAT	UNSAT	N/A
1. Area Safety				8. Hydraulic Cylinders			
2. Placards & Warnings				9. Power Track & Wiring			
3. Leaks				10. Hydraulic Oil Level			
4. Tires				11. Engine Oil Level*			
5. Lug nuts				12. Fuel Level			
6. Lower Frame				13. Fire Extinguisher			
7. Control Markings				14. Extendable Axles			
FUNCTIONAL (Lower Controls)							
15. Controls & Switches				20. Steering*			
16. Emergency Stop Buttons*				21. Boom Telescope / Retract*			
17. Axle Interlocks				22. Platform Leveler			
18. Boom Up / Down				23. Platform Pivot			
19. Swing Left / Right							
WALK AROUND CHECKS							
24. Housekeeping				28. Operator's Manual			
25. Structures & Welds				29. Guardrail System			
26. Gate and Locking Device*				30. Fall Protection Anchors			
27. Platform Structure				31. Air/Electrical Systems			
FUNCTIONAL (Upper Controls)							
32. Controls / Switches*				36. Motion Alarm			
33. Out of Level Warning				37. Lights			
34. Capacity Indicator				38. Travel Fwd/Reverse			
35. Dead Man Switch *				39. Safety Interlocks/ Limits			
36. Steering*				40. Emergency Electrical Operations*			

WEIGHT VERIFICATION:
Aerial platform capacity is _____ pounds from stencil or OEM placard

Inspector _____ Date _____

REMARKS:

PRE-OPERATIONAL CHECKS: REFER TO OPERATOR'S MANUAL KEPT ON THE EQUIPMENT

Certification Date - Ensure that the platform certification is current. Enter Certification expiration date on the space provided at the top of the form. If the Certification date cannot be found, or is out of date, do not use the equipment.
Caution/Danger Tags- *Circle One*-Satisfactory if tag is legible and attached. **Unsatisfactory** if missing or illegible. **N/A** if there are no tags.

GENERAL CHECKS

1. Area Safety-Check area conditions for obstructions, firm level surface, overhead obstructions, and travel route.
2. Placards & Warnings- Make sure appropriate placards, and warning labels are legible, and not missing.
3. Leaks- Check for hydraulic, or fuel leaks, on the machine or on the ground.
4. Tires- Check tires for tread, gouges, cuts, or sidewall damage, and check for loose or missing lug nuts.
5. Tie Rods & Steering- Check tie rod ends and steering linkages at connections points.
6. Lower Frame- Check welds for cracking, look for damage, and check swing bull and pinion gears.
7. Control Markings- Ensure controls are legible, properly marked for the function, or missing.
8. Hydraulic Cylinders- Check for leaks, and check connection points.
9. Power Track and Wiring- Check the track, wiring, and hydraulic hoses for damage.
10. Hydraulic Oil Level- Check the tank indicator for proper level. (all cylinders retracted).
11. Engine Oil Level- Check dip stick for proper level. (engine secured)
12. Fuel Level- Check Fuel tank level.
13. Fire Extinguisher- (if equipped). Check gauge for proper level.
14. Extendable Axles- Check to ensure axles are extended for the operation intended. (fully extended or retracted).

FUNCTIONAL (Lower Controls)

15. Controls & Switches- Check momentary switches to ensure they spring back to off, if momentary type.
16. Emergency Stop Buttons- Ensure proper operation of both buttons.
17. Axle Interlocks- Ensure they are extended.
18. Boom Up/Down- Ensure switch operates the proper function, and operate in both directions.
19. Swing Left/Right-Check for proper operation, binding, or unusual noises.
20. Steering- Check for proper operation.
21. Boom Telescope/Retract- Check for proper operation, or unusual noises, check wear pads.
22. Platform Leveler- Check for proper operation.
23. Platform Pivot- Check for proper operation.

WALK AROUND CHECKS

24. Housekeeping- Check Basket and machinery house for trash, loose tools, or equipment.
25. Structures & Welds- Check for cracked paint around welds and for rust trails, indicating possible weld cracks.
26. Gate & Locking Device- Check latch, and ensure the gate locks securely.
27. Platform Structure- Check the condition of the platform, and connection points.
28. Operator's Manual- Should be stowed on the machine in a weather proof container.
29. Guardrail System- Check to ensure that the guard rails are in good condition, and that welds are not cracked.
30. Fall Protection Anchors- Check to ensure that the anchor points are in good condition, and stenciled for capacity.
31. Air/Electrical Systems- Check auxiliary air/electrical lines to the basket from the ground are in good condition.

FUNCTIONAL (Upper Controls)

32. Controls/Switches- Check to ensure that momentary switches spring back to off position, and check functions.
33. Out of Level Warning- Check operation of switch if applicable.
34. Capacity Indicator- Extend Level Boom to ensure capacity indicator warning lights work.
35. Dead Man Switch- Check for proper On/Off operation.
36. Motion Alarm- Check audible alarm when operating the machine.
37. Lights- Check flashing warning lights for proper operation if equipped.
38. Travel Fwd/Reverse- Travel the machine forward and reverse, check markings on platform for proper direction.
39. Safety Interlocks/Locks- Check safety interlocks to ensure warning lights operate properly within the capacity.

APPENDIX F

Visit Request Instructions

ATTACHMENT 1

TRIDENT REFIT FACILITY, KINGS BAY, GA.
VISIT / ACCESS REQUEST

Visit Requests are required to be on Company Letter Head or OPNAV 5521/27 and should include:

- Individuals Name
- Social Security Number
- Place of Birth
- Purpose of the Visit (including work and/or project being supported)
- Duration of Visit (should be only for the period of time to support this project, one year visits for convenience purposes are discouraged.)
- Point of Contact and Phone Number should not be an individual at the Pass and ID office or the TRF security office, it needs to be whoever is actually sponsoring the visit from this command. If we in security cannot make contact with a sponsor the visit request could get held up from being processed)
- Citizenship (are the visitors U.S. citizens? Foreign nationals are rarely granted access unless certain arrangements have been made with SUBASE and TRF)
- Security Clearance Type and Date (if applicable)
- Signed by Company Security Manager (or and individual verifying that all the information provided is true and accurate , this should not be done by the visitor)
- If the Visitor does not maintain a Security Clearance or a Facility Access Determination (FAD) and has not been on the Command within a year an NCIC Background Check Consent Form will be required at the Pass and ID Office (this will delay the visitors access, approximately one hour while they run a background check)
- Visits can also be entered into JPAS. Our SMO code is 444665. Please do not use a Security employee as your POC.

Should any questions arise in filing out the Visit Request the visitor can contact the TRF Security Office---Monday thru Friday, 0700-1530 @ 912-573-8466 / 5291 Fax: 912-573-3784

APPENDIX G

Parameter List

ATTACHMENT 1

List of Paramaters and Crane OEM's Approved Crane Range

(Complete one form for each drive on the crane, identify Parameter Identification, Crane Design Range, Current Setting and Drive OEM Range for all parameters used, identify all parameters not used as "Not Applicable".)

Crane Drive Usage **Date**

Crane	
Function (Hoist / Bridge / Trolley)	

Manufacturer and Drive

Drive Manufacturer	
Drive Type	

Acceleration and Deceleration Times *(Identify the range for any acceleration and deceleration rates of the drive)*

Function	***Parameter ID***	***Drive OEM Range***	***Crane Range***	***Current Setting***	***Applicable***
Acceleration Time 1					
Deceleration Time 1					
Acceleration Time 2 (If multiple acceleration rates are required)					
Deceleration Time 2 (If multiple decceleration rates are required)					

Emergency Stop/ Quick Stop/ Reverse Plugging Simulation *(Identify if a quick stop, emergency stop, simulated plugging or other function which causes an increased acceleration or deceleration rate can be activated and provide acceptable ranges of deceleration and acceleration (as applicable)*

Function	***Parameter ID***	***Drive OEM Range***	***Crane Range***	***Current Setting***	***Applicable***
Emergey Stop/ Quick Stop Enable					
Emergency Stop/ Quick Stop Deceleration time					
Reverse Plug Enable					
Reverse Plug Decel Time					
Reverse Plug Accel Time					

Micro Speed/ Slow Speed/Ultra Lift/Quick Lift *(Identify if a function that can limit the speed to below 60 HZ or allow speeds greater than 60 HZ can be activated and provide the acceptable speed ranges for these functions.)*

Function	***Parameter ID***	***Drive OEM Range***	***Crane Range***	***Current Setting***	***Applicable***
Micro Speed/Slow Speed Enable					
Micro Speed/Slow Speed Gain Multiplier					
Ultra Lift/Quick Lift/Fast Lift Enable					
Ultra Lift/Quick Lift/Fast Lift Maximum Frequency Forward					
Ultra Lift/Quick Lift/Fast Lift Maximum Frequency Reverse					
Ultra Lift/Quick Lift/Fast Lift Maximum Torque Allowed Fast Speed Forward					
Ultra Lift/Quick Lift/Fast Lift Maximum Torque Allowed Fast Speed Reverse					
Maximum Frequency Of Operation At Fast Speed					

No-Load Brake Start/Stop *(Indentify for Hoist Functions without load brakes the maximum duration of load float)*

Function	***Parameter ID***	***Drive OEM Range***	***Crane Range***	***Current Setting***	***Applicable***
Load Float Time					

Speed Points *(For Functions with unique speed points identify the speeds each speed point can be set.)*

Function	***Parameter ID***	***Drive OEM Range***	***Crane Range***	***Current Setting***	***Applicable***
Speed Point 1					
Speed Point 2					
Speed Point 3					
Speed Point 4					
Speed Point 5					

ATTACHMENT

JF-1

Exhibit A-Contract Data Requirements List (CDRLs)

EXHIBIT A

Contracts Data Requirements List

DD Forms 1423

K-1, 25 Ton Portal Crane
TRF Kings Bay GA

1.0 The data items included in this Section are required by the applicable clauses of Federal Acquisition Regulations (FAR) 52.2 and Defense Federal Acquisition Regulations (DFAR) 252.227

1.1 Data to be delivered under this contract is identified in Exhibit A (DD Forms 1423) and further described in Exhibit B (DD Forms 1664) and technical specification. All data submitted shall utilize British System units of measure and the English language exclusively. Quantities/distribution points listed in block 14 of DD Forms 1423 shall apply to all submissions. Latest edition of referenced document noted in block 4 is required. Codes used in blocks 8 and 10 are described as follows:

Code	Frequency
DAILY	Daily
WEEKLY	Weekly
BI-WE	Each two weeks
MTHLY	Monthly
BI-MO	Each two months
QRTLY	Quarterly
2/MTH	Semimonthly
XTIME	X separate submittals
2TIME/R	2 separate submittals
ANNLY	Annually
SEMIA	Each six months
OTIME	One time
ONE/R	One time with revisions as required
ASREQ	As required
CP/RQ	Change pages as required when procuring
2TIME	Two separate submittals
*DFDEL	Deferred delivery (rarely used)
ONE/P	One time preliminary & revisions draft

1.2 Distribution addresses for the submission of data are provided on page 2.

1.3 References include subordinate paragraphs.

1.4 The NAVCRANECEN Project Manager shall be notified by email when a submission is uploaded to Projnet for review. The Government review period will begin on the latter date of: email notification or date of complete submission package.

K-1, 25 Ton Portal Crane
TRF Kings Bay GA

Abbreviations used:

NAVCRANECEN	Navy Crane Center, Naval Facilities Engineering Command
TRF	Trident Refit Facility
DCMA	Defense Contract Management Agency

Distribution addresses for the submission of data:

NAVCRANECEN:
Director, Navy Crane Center
Naval Facilities Engineering Command
Attn: Nick Kent
Code 01
Norfolk Naval Shipyard, Bldg 491
Portsmouth VA 23709-1044
email: nicholas.kent@navy.mil
phone; 757.967.3813

TRF
Trident Refit Facility
Deputy Director Waterfront Support Dept.; Code: 201
Attn: Mark Dahlke
Kings Bay GA
email: mark.dahlke@navy.mil
phone: 912.573.4391

DCMA: Address provided after contract award

CONTRACT DATA REQUIREMENTS LIST
TABLE OF CONTENTS
K-1, 25 Ton Portal Crane
TRF Kings Bay GA

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A001	STATUS REPORT	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MGMT-80368A	Para. 1.4 , SD-01	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		MTHLY	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide initial schedule within 15 days of contract award, and monthly status report and schedule thereafter by the 1st of the month. Provide a submission in accordance with blocks 4 and 5. The contractor will be notified within 14 days if revision and resubmission is required. Resubmittals, if required, shall be provided to NAVCRANECEN within 7 days after return of Government review comments.

In addition to the narrative report described in block 4, the crane contractor shall prepare and submit a detailed graphic and tabular schedule showing design, manufacturing, delivery and acceptance activities for the crane. Initial schedule submission shall be the baseline from which monthly progress shall be measured.

Each monthly report after the initial submission should address issues that will potentially delay or has delayed the schedule previously provided. This report shall also identify all NCC to Contractor issues that have not been resolved.

The status report and schedule may be submitted electronically.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	0	1
TRF	0	1
DCMA	0	1
15. TOTAL	0	3

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A002	Design Drawings & Calculations	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-SESS-81000E, DI-MCCR-80700	Para 1.4, SD-02, SD-05, SD-11.1	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ASREQ	ASREQ
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			ASREQ

16. REMARKS

Provide engineering drawings and supporting calculations in accordance with block 4 and 5. Submit pre-final engineering drawings and calculations (accompanied by a certification letter stating that design has been prepared under the supervision and reviewed by a licensed, registered professional engineer) for government approval in accordance with contractor's design schedule.

NAVCRANECEN will determine acceptability of initial crane design submittal within 21 days after receipt. All subsequent Government review periods shall be complete within 14 days of receipt of resubmission. Initial drawings and calculations may be submitted electronically.

Government approval of final drawings & calculations is required 30 days prior to crane shipment. Final drawings shall be submitted 14 days after approval. Structural drawings shall be stamped and sealed by a licensed, registered professional engineer and submitted not less than 5 days prior to shipment. Final drawings and calculations may be submitted electronically.

Submit as-built drawings no later than 30 days after government crane acceptance. All as-built drawings submitted shall be stamped and sealed by a licensed, registered professional engineer.

Note: Drawing review period will not commence until until the entire design package (including all supporting information such as catalog cuts, calculations, etc) are received.

SUBMISSIONS
Drawings submittals for pre-final & final shall be delivered electronically. Submit as-built CD-ROM and hard prints via private courier.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
PRE-FINAL		
NAVCRANECEN	0	1
TRF	0	1
DCMA	0	0
FINAL		
NAVCRANECEN	0	1
TRF	0	1
DCMA	0	1
AS-BUILT		
Prints:		
NAVCRANECEN	0	0
TRF	2	0
DCMA	0	0
AS-BUILT		
CD-ROM:		
NAVCRANECEN	1	0
TRF	2	0
DCMA	0	0
15. TOTAL	5	5

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A003	Manufacturer's Catalog Data	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-SDMP-81261	Para 1.4, SD-03, SD-11.4	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		ASREQ	See Block 16	
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**	
A			ASREQ	

16. REMARKS

Provide required data in accordance with blocks 4 and 5 along with design drawing & calculation submittals, and prior to part/material being ordered. This submittal shall be submitted as one electronic file, and each catalog cut shall be bookmarked within this file .

NAVCRANECEN will determine acceptability of initial crane design submittal within 21 days after receipt. All subsequent Government review periods shall be complete within 14 days of receipt of resubmission. Initial catalog data may be submitted electronically.

Government approval is required 30 days prior to shipment, and is necessary for NCC approval of the crane design.

Note:
Pre-Final drawing packages submitted for review shall contain all catalog cuts that support the drawings (Data Item A002) submitted in that package. The Navy review period does not begin until all catalog cuts referenced on a drawing are submitted. Drawing design will not be approved until all related catalog cuts pertaining to that drawing have been submitted and are approvable.

Final Design Catalog Cuts files should be submitted with final drawings via Submittal A002.

Submit as-built catalog cuts no later than 30 days after government crane acceptance in CD format.

SUBMISSIONS
Catalog cuts submittals for pre-final & final shall be delivered electronically. Submit as-built CD-ROM and hard prints via private courier

a. ADDRESSEE	Reg	Electronic
PRE-FINAL / Final		
NAVCRANECEN	0	1
TRF	0	1
DCMA	0	1
AS-BUILT		
Prints:		
NAVCRANECEN	0	0
TRF	2	0
DCMA	0	0
AS-BUILT		
CD-ROM:		
NAVCRANECEN	1	0
TRF	2	0
DCMA	0	0
15. TOTAL	5	3

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A004	Contractor Change Request	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80639C/80640C/80642C	Para 1.9	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Contractor Change Requests for engineer changes shall be prepared in accordance with Block 4 & 5. For cost and credit proposals, detailed price information and analysis comparing price of proposal to as specificed, to enable Navy Crane Center to evaluate the price impact of the proposed change.

The Contractor shall use the Contractor Change Request form as noted in Specification paragraph 1.9. This form shall be submitted in .pdf file electronically or via hard copy.

Navy Crane Center will review and evaluate the submitted engineering change request. NAVCRANECEN will determine acceptability within 30 days after receipt. All subsequent Government review periods shall be complete within 14 days of receipt of resubmission. Determination of the request will be provided upon completion of NCC evaluation.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	0	1
TRF	0	0
DCMA	0	0
15. TOTAL	0	1

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP TM X
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A005	Operations & Maintenance Manual	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-TMSS-80527B	Para. 1.4, SD-10, SD-11.2, SD-11.4	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

DRAFT SUBMISSIONS

Furnish draft paper copies of the technical manual in accordance with blocks 4 and 5 with crane shipment. Draft technical manual must be on site prior to beginning field testing.

PRE-FINAL SUBMISSIONS

Furnish pre-final electronic copies of the technical manual in accordance with blocks 4 and 5 at time of crane shipment. NAVCRANECEN will determine acceptability within 21 days after submittal. All subsequent Government review periods shall be complete within 14 days of receipt of resubmission.

FINAL CD-ROM VERSION

Provide manuals on CD-ROM in accordance with blocks 4 and 5 no later than 30 days after acceptance of the crane. Provide data in PDF format and this submittal shall be bookmarked as a minimum based on the manual information required categories of SD 10.

FINAL PAPER VERSION

Furnish final copies of the manual in accordance with blocks 4 and 5 no later than 30 calendar days after acceptance of the crane. Paper copies of the FINAL manual shall be bound in durable, water-resistant, hard-cover binders and shall include record (as-built) drawings reduced in size to 11-in x 17-in, and shall include a spare parts list.

ALL HARD COPY SUBMISSIONS

Submit all printed manuals via non-government overnight delivery.

14. DISTRIBUTION a. ADDRESSEE	Reg	Electronic
DRAFT PAPER COPIES		
NAVCRANECEN	0	0
TRF	1	0
PREFINAL		
NAVCRANECEN	0	1
TRF	0	1
FINAL PAPER VERSION		
NAVCRANECEN	0	0
TRF	2	0
		0
CD-ROM VERSION		
NAVCRANECEN	0	1
TRF	0	2
15. TOTAL	3	5

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A006	Certification, Wire Rope	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.3.2	Para. 1.4, SD-07.1	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the govermnent Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A007	Certification, Periodic Load Testing	
4. AUTHORITY	**5. CONTRACT REFERENCE**	**6. REQUIRING OFFICE**
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-07.2	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A008	Certification, Non-hazardous Materials	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-07.3	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A009	Certification, Loss of Power	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-07.4	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO. 0001	B. EXHIBIT A	C. CATEGORY TDP X TM
D. SYSTEM/ITEM K-1, 25 Ton Portal Crane	E. CONTRACT/PR NO. N62470-16-R-2002	F. CONTRACTOR
1. DATA ITEM NO. A010	2. TITLE OF DATA ITEM Certification, Welding	3. SUBTITLE
4. AUTHORITY DI-MISC-80678, para 10.3.2	5. CONTRACT REFERENCE Para. 1.4, SD-07.5	6. REQUIRING OFFICE NAVCRANECEN

7. DD 250 REQ LT	9. DISTRIBUTION STATEMENT	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION See Block 16
8. APPL CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBM. See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	1
TRF	1	1
DCMA	1	1
15. TOTAL	3	3

G. PREPARED BY Nick Kent, P.E.	H. DATE 11/25/2015	I. APPROVED BY Charles Cotton, P.E.	J. DATE 11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A011	Certification, Professional Engineer Review	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-02, SD-07.6	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide certification along with the initial design submittal as required by blocks 4 and 5. NAVCRANECEN will determine acceptability within 21 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 30 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A012	Certification, EPA Emissions	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-07.7	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ASREQ	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A013	Certification, OEM Conformance	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.2.4	Para. 1.4, SD-07.8	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A014	Inspection and Condition Reports	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B	Para. 1.4, SD-06	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide pre-work inspection report within 5 days of post award meeting / crane demonstration in accordance with blocks 4 and 5.

Provide initial deficiency report within 5 days of post award meeting / crane demonstration in accordance with blocks 4 and 5. Provide interim deficiency reports as work progresses along with monthly status reports. Within 30 days of project completion, provide a single report documenting all deficiencies discovered in accordance with blocks 4 and 5.

Provide existing rotate bearing conditions report within 14 days of disassembly and removal of the existing bearing in accordance with blocks 4 and 5.

Provide new rotate bearing installation conditions report within 14 days of new bearing installation, and prior to accpetance testing of the crane, in accordance with blocks 4 and 5.

For each submittal, NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Data shall be submitted electronically.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A015	Test Procedures and Reports	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B	Para. 1.4, SD-08.1, 08.3, 09.2, 09.3, Para. 2.8.1, 3.1, 3.6.1, 3.6.2	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide field test procedure for review at least 30 days prior to field test in accordance with blocks 4 and 5. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

As applicable, submit a Completed Shop Test Record and Deficient Items List within 5 days of completion of test, and prior to crane component shipment. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

Completed Field Acceptance Test Record and Final Punchlist shall be submitted within 5 days of completion of test. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Data shall be submitted electronically.

Note: Government approval of Contractor developed field test procedure is required a minimum of 10 days prior to field testing of the crane. When applicable, Government approval of Shop Test Record and Deficient Items List is required prior to crane component shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A016	Crane Installation Plan	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
OT-24206	Para. 1.4, SD-08.2: Para. 3.4.3, & Appendix D	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide a detailed removal, installation lift & rigging plan in accordance with blocks 4 and 5 a minimum of 15 days prior to Pre-installation Conference, but no later than 30 days prior to mobilization should the conference be delayed. The pre-installation conference shall be conducted a minimum of 30 days prior to mobilization.

NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

Plans shall be submitted electronically.

Note: Government approval required by earlier event of: 2 days prior to crane shipment or 7 days prior to desired entry of Contractor Mobile crane or material handling equipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A017	Accident Prevention Plan	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
OT-24206	Para. 1.4, SD-08.4, Appendix E	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide an Accident Prevention Plan (APP) written by the contractor for the specific work and hazards of the contract and in accordance with blocks 4 and 5. **Submit a minimum of 15 days prior to Pre-installation Conference, but no later than 30 days prior to mobilization should the conference be delayed.**

NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The APP should cover all features discussed in Appendix E that are applicable to the specific installation. As a minimum, details of Activity Hazard Analysis of each feature of work, energy control, fall protection requirements, severe weather, copies of licenses, etc. should be addressed.

Prior to submission of the APP, the contractor and subcontractors shall meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

The APP should contain blank sign in sheets for the briefings held prior to each unique feature of work.

Note: Government acceptance required prior to mobilization at site and crane shipment.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A018	Training Outline	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-ILSS-81075	Para. 1.4, SD-08.5, para 3.8	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide a training course outline as required by blocks 4 and 5 a minimum of 14 days prior to crane shipment. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7days of receipt of resubmission.

Data shall be submitted electronically.

Note: Government approval required before installation of the crane.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A019	Brake Shoe Adjustment, Setting & Contact Area	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.3.2	Para. 1.4, SD-09.1	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data 30 days prior to crane shipment in accordance with blocks 4 and 5. Data shall be submitted on the required official data form. NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Certification shall be submitted electronically.

Note: Government approval required a minimum of 5 days prior to crane shipment.

Field verification of brake settings after crane installation could require resubmission of brake data for Government approval.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A020	Control System Parameter Record	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B, DI-MCCR-80700	PARA. 1.4, SD-11.3	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data in accordance with blocks 4 and 5 submitted along with Field Test Report within 30 days after crane acceptance. Documents shall include title, version/revision indicator, date, contract number, CDRL number, and identifier for the system, subsystem, or item.

NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Data shall be submitted electronically.

14. DISTRIBUTION a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A021	Control System Adjustable Parameter Range	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B, DI-MCCR-80700	PARA. 1.4, SD-11.6, Appendix F	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide data in accordance with blocks 4 and 5 submitted along with Field Test Report within 30 days after crane acceptance. Documents shall include title, version/revision indicator, date, contract number, CDRL number, and identifier for the system, subsystem, or item.

NAVCRANECEN will determine acceptability within 14 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Data shall be submitted electronically.

14. DISTRIBUTION a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A022	Property Transfer Verification	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80678, para 10.3.2	Para. 1.4, SD-011.5	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide Property Transfer Verification in accordance with blocks 4 and 5 submitted at crane acceptance. Verification shall include printed name and signature of recipient at the supported command and the date received.

The crane serial number, contract number, CDRL number and CLIN number shall be included on submitted documentation.

Verification shall be submitted electronically.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A023	Conference Minutes	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-ADMIN-81250A	Para. 1.5.3, 1.5.5	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		ASREQ	See Block 16	a. ADDRESSEE / Reg / Electronic
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**	
A			See Block 16	

16. REMARKS

The contractor shall be responsible for recording and submitting meeting minutes. **Provide data in accordance with blocks 4 and 5 within 5 days after of each conference.**

NAVCRANECEN will determine acceptability within 7 days after receipt. All subsequent Government review periods shall be complete within 7 days of receipt of resubmission.

Data shall be submitted electronically.

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	0	0
DCMA	0	0
15. TOTAL	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A024	Contractor Mobile Crane Entry Package	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
OT-24206	Appendix E & Section H	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

Provide complete entry package in accordance with Blocks 4 and 5 a minimum of 7 days prior to desired entry of a Contrator owned mobile crane to the Government job-site.

The lift plan is a part of this this entry package and requires approval prior to inclusion and forwarding of the Contrator Mobile Crane Entry Package to the Supported Command.

Note: Government acceptance required prior to mobile crane entry inspection.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	0	1
TRF	0	0
15. TOTAL	0	1

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY
0001	A	TDP X TM
D. SYSTEM/ITEM	**E. CONTRACT/PR NO.**	**F. CONTRACTOR**
K-1, 25 Ton Portal Crane	N62470-16-R-2002	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A025	Contractor Significant Incident Reporting	

4. AUTHORITY	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
OT-24206	Appendix E	NAVCRANECEN

7. DD 250 REQ	9. DISTRIBUTION STATEMENT	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ONE/R	See Block 16
8. APPL CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBM.**
A			See Block 16

16. REMARKS

SIGNIFICANT INCIDENTS (ACCIDENTS) INVOLVING CONTRACTOR EQUIPMENT OR PERSONNEL ON THE GOVERNMENT WORKSITE:

Notify the Contracting Officer as soon as practical, but no later than 4 hours after a significant incident. Refer to Appendix E for description of incidents that require immediate reporting. For significant incidents, provide to the Contracting Officer a completed Contractor Significant Incident Report (CSIR) using the CSIR form that can be downloaded from the Navy Crane Center Website. Provide the intial report no later than 24 hours, and final report within 5 days.

SIGNIFICANT INCIDENTS (ACCIDENTS) INVOLVING CONTRACTOR WEIGHT HANDLING EQUIPMENT ON THE GOVERNMENT WORKSITE:

Notify the Contracting Officer as soon as practical, but no later than 4 hours after a significant incident. Within 30 days of a weight handling accident, provide to the Contracting Officer a completed Crane and Rigging Gear Accident Report using the form provided in Appendix E.

14. DISTRIBUTION

a. ADDRESSEE	Reg	Electronic
NAVCRANECEN	1	0
TRF	1	0
DCMA	0	0
15. TOTAL	2	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Nick Kent, P.E.	11/25/2015	Charles Cotton, P.E.	11/30/2015

DD Form 1423-1, JUN 90 *Previous editions are obsolete* Page 1 of 1

1059/183

ATTACHMENT

JF-2

Exhibit B- Data Item Description (DID)

EXHIBIT B

Data Item Descriptions

ATTACHMENT 2

EXHIBIT B

Data Items Descriptions

DD Forms 1664

TABLE OF CONTENTS

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Status Report	DI-MGMT-80368A

3. DESCRIPTION/PURPOSE

3.1 The Status Report documents the status of contractor effort towards achieving contract objectives. It identifies accomplishments to date and difficulties encountered, and compares the status achieved to planned goals and the resources expended. It is used by the Government to monitor and evaluate contractor performance.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20061030	NS/DA02		

7. APPLICATION/INTERRELATIONSHIP

7.1 This (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 It is not intended that all the requirements herein should be applied to every program. Portions of the DID are subject to tailoring by deletion depending on the specific status reporting requirements of the project.

7.3 This DID is related to DI-FNCL-80331, Funds and Man-Hour Expenditure Report which can be used in conjunction with this report if Block 10 paragraph 10.2.2.3 below is deleted.

7.4 This DID supersedes DI-MGMT-80368.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		7619

10. PREPARATION INSTRUCTIONS

10.1 Format. The status Report shall be in contractor format.

10.1.1 Identification. The data indicated below shall be contained on a title page or on the first page of the report.

a. Title/Identification of the system/component/program/project.
b. Type of report (e.g., monthly, interim, final).
c. Period covered by the report.
d. Contract number.
e. Preparing activity or contractor's title.
f. Security classification, when required.
g. Distribution Statement.

10.1.2 Page Size. The report shall be on 8 1/2 by 11 inch (metric A4) paper.

10.2 Content. The report shall contain the following:

10.2.1. Summary. The summary shall include a brief statement of the overall project status, covering the accomplished technical activities and development, objectives of efforts, summary results of efforts, identification of major problems/deficiencies with impact, and recommended solutions.

10.2.2. Body of report. The Status Report shall contain the following items, where applicable:

10.2.2.1 Milestone/task status. The status of each milestone/task as defined by the statement of work or contract, as applicable:

a. A statement as to whether or not the program/project/task is on schedule; if not, the effort planned to meet the schedule shall be indicated. Include an overall status of each milestone, task, or unit of work. Include updated schedule sheets, milestone charts, or task synopsis sheets identifying phase of task and percentage of completion of each task, technical instruction, or order.

b. A comparison of achieved end-product performance capabilities projected against contract baseline values, requirements, or allocations.

c. Effort expended on each task to date, and a brief description of technical developments and accomplishments.

d. Key dates in any testing program and a description of tests performed and significant test results. If applicable, a description of the amount and type of down time on the equipment or system under test.

e. A list of all designs completed and a brief description of each item. For designs in process, provide estimated dates for design and drawing completion.

f. A narrative of outstanding problems existing as of the previous status report, and their resolution status.

g. New problem areas encountered or anticipated, their effect on the overall work effort/project, and steps being taken to remedy problem situations.

h. Significant results of conferences, trips, or directives from the Contracting officer's representatives.

i. Any other information which may cause significant changes in the program schedule.

10.2.2.2 Future plans. Summary of future plans, recommendations and proposals both for the next reporting period and for any long term plans.

10.2.2.3 Itemized man-hours and costs. Itemized man-hours and cost expenditure incurred for the reporting period by category and task, total contractual expenditures, and funds remaining as of the reporting date.

10.2.2.4 Contract deliveries status. The status of each deliverable end item, including data deliveries, as required by the contract. Provide item and contract identification, shipping/transmittal data, acceptance status, security classification, and scheduled due date information.

10.2.2.5 Report paper. Name of person(s) preparing report and telephone number(s).

10.2.3 Appendices. Appendices, where applicable, for tables, references, charts, or other descriptive material. Each appendix shall be identified and referenced in the appropriate area of the report.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Product Drawings / Models and Associated Lists	DI-SESS-81000E

3. DESCRIPTION/PURPOSE

3.1 Product Drawings and Associated Lists provide engineering data to support competitive procurement and maintenance for items interchangable with the original items. These drawings represent the highest level of design disclosure.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20130226	AR		

7. APPLICATION/INTERRELATIONSHIP

7.1 This DID contains the format and content preparation for Product Drawings / Models and Associated Lists resulting from the work task described in 5.3.3.3 of MIL-DTL-31000.

7.2 This DID is applicable to acquisitions of military systems, equipment, and components. It is intended for acquiring drawings / models and Associated Lists at the end of the Engineering and Manufacturing Development Phase and during subsequent phases of the DoD material life cycle.

7.3 It is not intended that all the requirement contained herein should be applied to every program. This DID should be tailored to the minimum data requirements of the applicable contract or purchase order.

7.4 This DID supersedes DI-SESS-81000D.

7.5 This DID is related to DI-SESS-81001E, DI-SESS-81002F, and DI-SESS-81003E.

7.6 A purchased item, as defined by ASME Y14.24, an item which is sold or traded in the course of conducting normal business operations, is used by commercial industry, or is a specialized version of a supplier's general product line which he routinely customizes. Purchased items are used herein have also been referred to as vendor items or vendor developed items.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		A7532

10. PREPARATION INSTRUCTIONS

10.1 Reference Documents. The applicable issue of documents cited herein, including they approval dates and the dates of applicable amendments, notices, and revisions, shall be cited in the contract.

10.2 General. Product Drawings / Models and Associated Lists shall meet the requirements of MIL-DTL-31000. Product Drawings and Associated Lists shall provide the design disclosure information necessary to enable a manufacturer of similar products at the same or similar state of the art to produce and maintain quality control of item(s) so that the resulting physical and functional characteristics duplicate those of the specified item. These drawings shall:

a. Reflect the end product at its current level of design maturity.

b. Provide the engineering data for Logistics Support products.

c. Provide the necessary data to permit competitive acquisition of the original item(s).

10.3 Format. Product Drawings / Models and Associated Lists shall be in either the contractor's format or Government's format as specified on the TDP Option Selection Work Sheet incorporated into the contract or purchase order.

10.4 Content. Product Drawings / Models and Associated Lists shall conform to the requirements of ASME Y14.100, or, if applicable, ASME Y14.100 and Appendices B through E, as required, and ASME Y14.34 and ASME Y14.41. They shall document directly or by reference the following, as applicable:

a. Details of unique processes, i.e., not published or generally available to industry, when essential to design and manufacture.

b. Performance ratings.

c. Dimensional and tolerance data.

d. Critical manufacturing processes and assembly sequences.

e. Tolerated input and output characteristics.

f. Diagrams.

g. Mechanical and electrical connections.

h. Physical characteristics, including form, finishes, and protective coatings.

i. Details of material identification, including material condition, and mandatory treatments and coatings.

j. Inspection, test and evaluation criteria.

k. Equipment calibration requirements.

l. Quality assurance requirements.

m. Hardware marking requirements.

n. Requirements for reliability, maintainability, environmental conditioning, shock, and vibration testing and other operational or functional tests.

o. Vendor substantiation data when required by the contract or purchase order.

p. Requirements for programming software into devices or assemblies including a description of the input media and the procedures for validating that the software has been installed correctly.

q. Special consideration items and processes.

10.5 Item Definition. All parameters required to define each unity, assembly, subassembly, part or material shall be presented on the applicable drawing. This includes data such as:

a. All necessary mechanical dimensions to fully define fabrication, acceptance, interface, or installation of the item depicted.

b. All necessary electrical dimensions to fully define fabrication, acceptance, interface, or installation of the item depicted.

c. All necessary physical dimensions to fully define fabrication, acceptance, interface, or installation of the item depicted, I.e., weight, pressure, viscosity, etc.

d. All necessary environmental conditions which units, assemblies, subassemblies, parts, and materials must meet to perform effectively in the end item, such that the end item will meet its specification requirements.

10.6 CAGE code and document numbers. Product Drawings / Models and Associated Lists shall be identified with the contractor's CAGE code and contractor document numbers or with a Government CAGE code and document numbers as specified in the TDP Option Selection Work Sheet incorporated in the contract or purchase order.

10.7 Selection of Drawings. The types of drawings required will vary according to the complexity of the contract end item. The TDP Option Selection Work Sheet incorporated in the contract or purchase order will specify whether the contractor or the Government is responsible for selecting the types of drawings / models and Associated Lists.

10.7.1 Vendor Item Control Drawings. Vendor Item Control Drawings shall be used to specify the requirements for purchased items when such items have been approved for use in the design and are used without alteration, selection or source qualification (testing of an item prior to procurement action to ensure that it satisifies the specified requirements).

10.7.2 Source Control Drawings. Source Control Drawings shall be used to specify the requirements for purchased items (see 7.6) only when such items have been approved for use in the design and:

a. the item is for a critical application and

b. the requirements can be met by an item from one or more sources and

c. the application required source qualification (testing of an item prior to procurement action to ensure that is satisfies the specified requirements).

10.7.3 Standardized Microcircuit Drawings. Standardized Microcircuit Drawings (MIL-HDBK-780) shall be used to specify the requirements of microcircuits.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Commercial Item Description (CID)	DI-SDMP-81261

3. DESCRIPTION/PURPOSE

3.1 A CID describes by functional or performance characteristics an acceptable commercially available product that will satisfy the Government's needs.

3.2 This document will be used as a reference in acquisition documents to describe the item being procured.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
920428	A/MICOM		

7. APPLICATION/INTERRELATIONSHIP

7.1 This (DID) contains the format, content and preparation instructions for the product generated by the specific and discrete task requirement as delineated in this contract.
7.2 The Federal Property Management Regulations (FPMR) Handbook 101-29 is available from General Services Administration, Federal Supply Service, Washington, D.C. 20046.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		A6729

10. PREPARATION INSTRUCTIONS

10.1 Referenced Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions shall be as specified in the contract.

10.2 Format. The CID format shall be in accordance with the guidelines of chaper 7 of FPMR Handbook 101-29.

10.3 Content. The CID shall contain data as required by the guidelines stated in chapter 7 of FPMR Handbook 101-29.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Engineering Change Proposal (ECP)	DI-CMAN-80639C Modified by NCC

3. DESCRIPTION/PURPOSE

3.1 An Engineering Change Proposal (ECP) provides the documentation in which the engineering change is described. It includes change impacts to systems, configuration items and other associated configuration documentation affected by the proposed change. In addition, it typically describes how the proposed change will be implemented along with providing estimated schedules and associated costs.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20000930	D/DUSD(AT&L)SE		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format, content, and preparation instructions for the data product resulting from the work task specified in the contract. This DID is used in conjunction with a Notice of Revision (NOR) (DI-CMAN-80642B). A requirement for NORs should be contractually imposed in conjunction with this DID.

7.2 Data Item submittal in Extensible Markup Language (XML) is acceptable. An XML Document Type Definition (DTD), associated XML document template, and other information is available from http://www.geia.org/836/

7.3 This DID supersedes DI-CMAN-80639B.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		D7388

10. PREPARATION INSTRUCTIONS

10.1 Referenced Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices and revisions shall be as specified in the contract.

10.2 Format and Content. The Engineering Change Proposal (EPC) shall be prepared using NCC's Contractor Change Request Form (CCRF). The ECP content shall inculde, where applicable, the following information:

a. the change priority, change classification, and change justification

b. a complete description of the change to be made and the need for that change

c. complete listing of other configuration items impacted by the proposed change and a description of the impact on those CIs.

d. proposed changes to documents controlled by the government

e. proposed serial (or lot) number effectivities of units to be produced in, or retrofitted to, the proposed configuration.

f. recommendation about the way a retrofit should be accomplished.

g. impacts to any logistics support elements (such as software, manuals, spares, tools, and similar) being utilized by government personnel in support of the product

h. impacts to the operational use of the product

i. complete estimated life-cycle cost impact of the proposed change, and cost analysis of proposed change compared to as specified.

j. milestones relating to the processing and implemenation of the engineering change

The following references may be useful in defining content: MIL-HDBK-61, Configuration Management Guidance (paragraph 4.2 and Table 4-6) and ANSI/EIA-649-1998, National Consensus Standard for Configuration Management (paragraph 5.3.1).

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Request for Deviation (RFD)	DI-CMAN-80640C Modified by NCC

3. DESCRIPTION/PURPOSE

3.1 A Request for Deviation describes a proposed departure from (a non-conformance with) the contractually-specified configuration documentation for a specific number of units or for a specified period of time.

3.2 A Request for Deviation enables the Government to determine the impact on performance, operational readiness, logistics support, or other affected areas.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20000930	D/DUSD(AT&L)SE		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format, content, and preparation instructions for the data product resulting from the work task specified in the contract.

7.2 Data Item sumbittal in Extensible Markup Language (XML) is acceptable. An XML Document Type Definition (DTD), associated XML document template, and other information is available from http://www.geia.org/836/

7.3 This DID supersedes DI-CMAN-80640B and DI-CMAN-80641B.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		D7389

10. PREPARATION INSTRUCTIONS

10.1 Referenced Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices and revisions shall be as specified in the contract.

10.2 Format and Content. The Request for Deviation shall be prepared using NCC's Contractor Change Request Form (CCRF). The RFD content shall include the consideration (ie. cost, quality, or time) to be provided if the government accepts the deviation and, where applicable, the following information:

a. a complete description of the contract requirement affected and the nature of the deviation (non-conformance)

b. number of units (and serial/lot numbers) to be delivered in this

c. any impacts to logistics support elements (such as software, manuals, spares, tools, and similar) being utilized by government personnel or to the operational use of the product

d. information about remedial actions being taken to prevent reoccurance of the non-conformance

The following references may be useful in defining content: MIL-HDBK-61, Configuration Management Guidance (paragraph 4.3 and Table 4-9) and ANSI/EIA-649-1998, National Consensus Standard for Configuration Management (paragraph 5.3.4).

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Notice of Revision (NOR)	DI-CMAN-80642C

3. DESCRIPTION/PURPOSE

3.1 A Notice of Revision (NOR) describes the proposed changes to a technical document being requested by an Engineering Change Proposal (ECP).

3.2 After ECP approval, the NOR is forwarded to the custodian of each specification, drawing, associated list, or other applicable document(s) so they can make the required documentation changes.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20000930	D/DUSD(AT&L)SE		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format, content, and preparation instructions for the data product resulting from the work task specified in the contract. This DID is used in conjunction with a Engineering Change Proposal (ECP), DI-CMAN-80639C. A requirement for ECPs should be contractually imposed in conjunction with this DID. This DID is also used with Specification Change Notices (SCNs), DI-CMAN-80463C.

7.2 Data Item submittal in Extensible Markup Language (XML) is acceptable. An XML Document Type Definition (DTD), associated XML document template, and other information is available from http://www.geia.org/836/

7.3 This DID supersedes DI-CMAN-80642B.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		D7390

10. PREPARATION INSTRUCTIONS

10.1 Referenced Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices and revisions shall be as specified in the contract.

10.2 Format and Content. The Notice of Revision (NOR) shall be prepared in contractor format. The NOR content shall include, where applicable, the following information:

a. a listing of the identifier, revision level, and title of the affected document

b. the identifier of the ECP which proposed the change

c. a complete description of the changes to be made to the affected document

The following references may be useful in defining content: MIL-HDBK-61, Configuration Management Guidance (paragraph 4.4 and Table 4-10) and ANSI/EIA-649-1998, National Consensus Standard for Configuration Management (paragraph 5.3.3).

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Commercial Off-the-Shelf (COTS) Manual and Associated Supplemental Data	DI-TMSS-80527B

3. DESCRIPTION/PURPOSE

3.1 Commercial Off-the-Shelf Manuals may be used as is or with supplementation to support COTS equipment used by DOD. This DID is used to:

a. Acquire sample COTS manuals for evaluation

b. Acquire COTS manuals which have been evaluated and found to be acceptable

c. Acquire associated supplemental data, if required

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
20061017	TM		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains format, content, and intended use information for the data deliverable(s) resulting from the work task specified in the contract.

7.2 Data Item sumbittal in Extensible Markup Language (XML) is acceptable. An XML Document Type Definition (DTD), associated XML document template, and other information is available from http://www.geia.org/836/

7.3 This DID supersedes DI-TMSS-80527A, Dated 21 May 97.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		7595

10. PREPARATION INSTRUCTIONS

10.1 Content. The manual shall contain all technical information on the assembly, installation, operation, parts, and maintenance of commercial equipment.

10.2 Evaluation. The manual shall be evaluated using the criteria found in MIL-PRF-32216.

10.3 Supplementation. The manual may be supplemented with existing data to comply with the contract. Supplemental data shall be prepared in accordance with MIL-PRF-32216.

10.4 Format. The basic manual shall be in the contractor's format. Supplemental data shall be in the format specified by the contracting activity. MIL-HDBK-1221 may be used as guidance.

10.5 Digital Files. Interactive Electronic Technical Manuals (IETMs) or PDF are preferred for electronic COTS manuals.

10.6 PDF Files. PDF files shall be searchable, capable of having links added, and have fonts embedded. A list of preferred fonts is provided in MIL-PRF-32216.

10.7 IETMs. IETMs shall meet the general style and format and user interface requirements in MIL-PRF-87268 or MIL-STD-40051-1 (Army only).

10.8 Paper Manuals. If paper manuals are required, the data shall be clearly legible and on paper of sufficient quality for long term use.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Certification/Data Report	DI-MISC-80678

3. DESCRIPTION/PURPOSE

3.1 Certification data is required to verify that specific qualifications have been obtained, tests have been performed, parts/assemblies/equipments/systems have been installed, tested, inspected and are ready for operation; that personnel have specific qualifications to perform assignments/operations/inspections; or to certify identicality, interchangeability, compatability, reliability, or completeness of documentation being prepared or reviewed by a contractor. The technical effort involved will be the result of equipment/procurement specification requirements.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
880912	N/SEA 55Z3		

7. APPLICATION/INTERRELATIONSHIP

7.1 Certification may be required for a single event/operation, or may be required for a specified time period, or certification may be required on a continuing basis with periodic re-certification or updating of the original certification.

7.2 The technical content requirements for this item shall be specified in the contract. When this DID is applied to contracts acquiring items via a military specification prepared in accordance with MIL-STD-961, the necessary detailed technical requirements shall be prepared as an appendix to the military specification entitled "Certification Data/Report Technical Content Requirements." The appropriate paragraph in block 10 herein, i.e., 10.3.1 or 10.3.2 shall be specified on the DD Form 1423, Contract Data Requirements List (CDRL).

7.3 This DID supersedes UDI-A-23264B.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		N4533

10. PREPARATION INSTRUCTIONS

10.1 Format. The report shall be typewritten in narrative form on the contractor's form. The report shall cover the type of certification specified in Block 3, "Subtitle," of the CDRL, DD Form 1423.

10.2 Content. The report shall contain the contract number and data item sequence number, and shall contain a statement that specifically identifies the purpose and applicability of this certification.

10.2.1 Certification of Completion. Certification that tests have been performed, inspections made, parts/assemblies/equipments/systems have been installed, tested, inspected, and area ready for operation, or that specific qualifications have been obtained shall provide objective evidence in support of the certification. Objective evidence may include such items as spectrographs, radiographs, material sampling, analysis, inspection and testing reports, or any other necessary documentation.

10.2.2 Certification of Personnel. Certifications that personnel have specific qualifications shall be supported by licenses, permits, tests, statements of competency, or other documentation. The specific capabilities to perform an assignment, inspection, or other operations shall be stated in the certification.

10.2.3 Certification of Data Reviews. Certifications that documentation/data has been reviewed shall contain a statement of the "depth" of the examination and the results thereof. If the documentation being reviewed cannot be certified, the report shall so state and shall list the reasons, i.e., deficiencies, conflicting data, etc.

10.2.4 Certification of Compliance. Certificatiopn of compliance to specific specification requirements shall be a statement to the effect that the contractor has complied.

10.3 Technical Content.

10.3.1 The technical content shall be in accordance with the appendix entitled "Certification Data/Report Technical Content Requirements," contained in the applicable military specification as stated in the DD Form 1423, Contract Data Requirements List.

10.3.2 The technical content shall be as specified on the DD Form 1423, Contract Data Requirements List.

10.4 Supplemental Information. Additional specific material, drawings, sketches, photographs, etc., in support of these certifications shall be as defined in the DD Form 1423.

10.5 Signature. The certification report shall be signed by the contractor's authorized representative responsible for insuring that the equipment being delivered/service being performed is in accordance with contract requirements.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Computer Software Product End Items	DI-MCCR-80700

3. DESCRIPTION/PURPOSE

3.1 The Computer Software Product End Item provides data formatted for review or maintenance to assure significant milestones are met.

3.2 Data produced under this requirement will be used during the life cycle for development, operation, and maintenance.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
881026	A/MICOM		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 These requirements apply to all software product end items which are acquired for Department of Defense use.

7.3 This data item description supersedes DI-E-1125.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		AMSC A4561

10. PREPARATION INSTRUCTIONS

10.1 Content. The specific documentation/software required and the form in which they shall be furnished (documentation/source/object/executable) shall be delineated on the Contract Data Requirements List ((CDRL), DD Form 1423).

10.2 Media. The specific media on which the documentation/software shall be furnished (e.g., 9 track magnetic tape, tape casette, floppy disk) shall be as specified on the CDRL.

10.3 Format. The format and method used to store and retrieve the documentation/software using the above media and all specific computer compatability requirements shall be as specified on the CDRL.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Test/Inspection Report	DI-NDTI-80809B

3. DESCRIPTION/PURPOSE

3.1 The test/inspection report is used to document test/inspection results, findings, and analyses that will enable the government or contracting agency to evaluate complaince with system requirements, performance objectives, specifications, and test/inspection plans.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
970124	F/AFMC-DOP		

7. APPLICATION/INTERRELATIONSHIP

7.1 This data item description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 This DID is applicable to engineering (developmental), preliminary qualification, and acceptance training.

7.3 This DID supersedes DI-NDTI-80809A and DI-MISC-80653.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		F7231

10. PREPARATION INSTRUCTIONS

10.1 Format. Contractor format is acceptable. Organize the information required by paragraph 10.2 and its subparagraphs in a manner that facilitates presentation and understanding.

10.2 Content. The test/inspection report shall contain the following information, as applicable.

10.2.1 Cover and Title Page. The following information shall appear on the outside front cover and title page:

a. Report date.

b. Report number {contractor or government}

c. Contractor's name, address, and commercial and government entity code.

d. Contract number and contract line item number or sequence number (if applicable)

e. Type of test/inspection (for example, first article acceptance test, quality conformance inspection, developmental test, qualification test, environmental test).

f. Identification of item tested/inspected.

g. Date or period of test/inspection.

h. Name and address of requiring government activity.

i. Security classification, downgrading and declassifying information if applicable.

10.2.2 Table of Contents. The table of contents shall identify the following:

a. The title and starting page of each major section, paragraph, and appendix of the report.

b. The page, identifying number, and title of each illustration (for example: figure, table, photograph, chart, and drawing).

10.2.3 Introduction. The introduction shall include the following information:

10.2.3.1 Test/Inspection Objective(s). The specific test/inspection objective(s) as specified in the contract tasking document.

10.2.3.2 Item(s) Tested/Inspected. Complete identification of the item(s) tested/inspected including the following:

a. Nomenclature.

b. National stock number.

c. Model number, part number, and serial number.

d. Type of item (for example: prototype, production item, laboratory model).

e. Serial or lot number.

f. Applicable engineering changes.

g. Production item specification, if applicable.

h. Date of manufacture.

10.2.3.3 Test/Inspection Requirements. Complete identification of the test/inspection requirements correlated to contractual requirements including the following:

a. Required test/inspection parameters.

b. Performance requirements, acceptance or compliance limits, and environmental criteria.

10.2.4 Summary. Complete test/inspection report summary including the following:

a. A brief discussion of the significant test/inspection results, observations, conclusions, and recommendations covered in greater detail elsewhere in the report.

b. Proposed corrective actions and schedules for failures or problems encountered.

c. Identification of deviations, departures, or limitations encountered, referenced to the contract requirements.

d. Tables, graphs, illustrations, or charts as appropriate to simplify the summary data.

10.2.5 Reference Documents. Complete identification of all documents referenced in the test/inspection report including the following, as applicable:

a. Prior test/inspection reports on the same item.

b. Test/inspection plans and procedure documents.

c. Prior certifications of compliance.

d. Contractor's file designation where test/inspection records are maintained.

e. Input parameters used.

The applicable issue of the documents cited therein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be specified in the contract.

10.2.6 Body of Report. The body of the test/inspection report shall be as follows:

10.2.6.1 Test Equipment Identification. Complete identification of each item of test equipment used in the test/inspection including the following:

a. Nomenclature.

b. Model number.

c. Serial number.

d. Manufacturer.

e. Calibration status.

f. Accuracy data.

g. Comments, if applicable.

10.2.6.2 Test/Inspection Facility Installation and Set-Up. Complete description of the physical set-up used in conducting the test/inspection to include the following:

a. Location or orientation of the item.

b. Location, orientation, or settings of test equipment and instrumentation.

c. Location, orientation, or settings of sensors and probes.

d. Location or orientation of interconnections, cables, and hoop-ups.

e. Electrical power, pneumatic, fluidic, and hydraulic requirements.

Drawings, illustrations, and photographs may be used for clarification.

10.2.6.3 Test/Inspection Procedures. Complete description of the procedures used in conducting the test/inspection to include the following:

a. Item selection and inspection that verified suitability for test/inspection.

b. Summarized sequence of testing/inspection steps, including a description of how the item was operated during the test/inspection, and any control conditions imposed.

10.2.6.4 Test/Inspection Results and Analysis. A copy of all test/inspection results and analysis to include the following:

10.2.6.4.1 Recorded Data. The actual recorded data (for example: log book entries, oscillographs, instrument readings, plotter graphs). If the recorded data is extensive, provide it in an appendix.

10.2.6.4.2 Test/Inspection Results. Identification of all test/inspection results to include the following:

a. Matrices comparing results achieved against test/inspection objectives or requirements.

b. A discussion of these matrices as to their significance, and how they compare to any prior tests/inspections.

c. Calculation examples.

d. Discussion of anomalies, deviations, discrepancies, or failures, including their impact, causes, and proposed corrective actions. The discussion shall address discrepancies between design requirements and the tested/inspected configuration.

10.2.6.5 Conclusions. Test/inspection conclusions distinguished between objective and subjective to include the following:

a. The effectiveness of the test/inspection procedures in measuring item performance.

b. The success or failure of the item to meet required test/inspection objectives.

c. The need for repeat, additional, or alternative tests/inspections.

d. The need for item redesign or further development.

e. The need for improved test/inspection procedures, techniques, or facilities.

f. The adequacy and completeness of the test/inspection requirements.

10.2.6.6 Recommendations. Recommendations appropriate to the test/inspection results and conclusions including the following:

a. Acceptability of the item tested/inspected (pass or fail).

b. Additional testing/inspection required.

c. Redesign required.

d. Problem resolution.

e. Test/inspection procedure or facility improvements.

f. Disposition changes required.

g. Documentation changes required.

h. Testing/inspection improvements.

10.2.7 Authentication. The following certifications shall be included as applicable:

10.2.7.1 Authentication of test/inspection results. A statement that the test/inspection was performed in accordance with applicable test/inspection plans and procedures, and that the results are true and accurate. The authentication shall include the signature of the contractor personnel that performed the test(s)/inspection(s), a contractor representative authorized to make such certification, and any government witnesses.

10.2.7.2 Authentication of prior validation. A statement identifying those requirements not tested/inspected or measured that were previously validated. Include identification of the data and method employed for such validation

(for example: prior test/inspection, analytical verification, equivalent item, and so on). The authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.

10.2.7.3 Authentication of acceptability. A statement that the item tested/inspected either passed or failed item acceptability requirements. This authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.

10.2.8 Appendicies. Appendicies shall be used to append detailed test/inspection data, drawings, photographs, or other documentation too voluminous to include in the main body of the report. This includes referenced documentation not previously provided by the government, and test/inspection reports from any associated test/inspection activity that may have performed some of the testing/inspecting requirements.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
TRAINING COURSE CONTROL DOCUMENT	DI-ILSS-81075 Note: Modified by NCC

3. DESCRIPTION/PURPOSE

3.1 Describes the training content (subject, topics, tasks), training material, types and durations of instruction and resources required to conduct equipment operation training in classroom and on-site settings.

4. APPL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
901205	SH		

7. APPLICATION/INTERRELATIONSHIP

7.1 Contains the preparation instructions for the content and format of the training course outline, resulting from the work task specified in Task 106.4.1 of MIL-STD-1379.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		N5046

10. PREPARATION INSTRUCTIONS

10.1 Reference Documents. The applicable issue of the documents specified herein, including their approval dates and dates of any applicable amendments, notices and revisions, shall be as specified in the contract.

10.2 Style and Format. The style and format of the Training Course Control Document shall be in accordance with Appendix C of MIL-STD-1379.

10.3 Content. The Training Course Control Document shall contain the following elements:

a. Front Matter.
b. Introduction.
c. Course Descriptive Data.
d. Outline of Instruction Summary.
e. Curriculum Outline of Instruction.
f. Required Resources.

10.3.1 Front Matter. The content shall be in accordance with Appendix C of MIL-STD-1379.

10.3.2 Introduction. This section shall provide a breif overview of the purpose and expected application of the Course Control Document. This section shall cite supporting documents, supersession information, and approval dates.

10.3.3 Training Course Descriptive Data. This section shall provide an overview of the training course and shall include the following information:

a. Course title
b. Location of training
c. Course instructors, their occupational fields and qualifications

d. Course data, consisting of:
   (1) course length
   (2) academic hours
   (3) class start date
   (4) breakdown of classroom/practical application hours
   (5) class size
e. Specialty (occupational skill areas)
f. Purpose (a concise statement of the goals of the training)
g. Course prerequisites (the target audience for which the course is designed and the course's entry prerequisites)

10.3.4 Outline of Instruction Summary. Consists of an outline of each major section or topic of instruction, containing:

a. Classroom and practical application time
b. Time allocated for each topic of discussion
c. Duration in hours
d. Separate schedule listing for classroom and hands-on training

10.3.5 Outline of Instruction. The curriculum training outline shall provide detailed training data for each individual section of the course. The outline shall provide the sequence in which the instruction is to be presented. It shall provide planned time allotments, in hours, for each section, topic of instruction, specific lesson or module. The outline shall contain the following:

a. Purpose. A brief statement of the purpose of the lesson.
b. Hours. Academic hours by type of instruction (i.e., lecture, practical exercise, demonstration, etc.).
c. Tasks and Subjects.
d. Learning Objectives.

10.3.6 Required Resources. A list of items of equipment, publications,

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Accident Prevention Plan (APP)	OT-24206

3. DESCRIPTION/PURPOSE

3.1 This plan identifies steps to be taken by the contractor to assure that no contractor or subcontractor employee employed for any part of the contract will work in unsanitary, hazardous or dangerous working conditions.

3.2 The purpose of this plan is to provide details on the contractor's safety and health policy and program.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
970919	N/NCCNAVFACENGCOM		

7. APPLICATION/INTERRELATIONSHIP

7.1 This data item description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement for this data as delineated in the contract.

7.2 This DID is applicable because contractors are responsible for the development and implementation of a safety and health program.

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER

10. PREPARATION INSTRUCTIONS

10.1 Reference documents. The applicable issue of the documents cited herein, including their submission dates, shall be as as specified in the contract.

10.2 Format. The APP shall be in contractor's format.

10.3 Content. The APP shall be site specific and shall include the following sections.

10.3.1 Cover Sheet. Shall contain the names, titles, phone numbers and signatures of the plan preparer, the plan approver, and (to show concurrence) an officer of the firm, the on-site safety representaive, the project engineer, superintendent, and subcontractors.

10.3.2 Responsibilities and Lines of Authority. On-site and off-site contractor personal responsible for job-site safety and who they report to in the company's chain of command shall be identified by name and title.

10.3.3 Subcontractors and Suppliers. The safety responsibilities of subcontractors and suppliers shall be identified.

10.3.4 Medical Support. Describe off-site medical arrangements, and on-site medical support including location of first aid kits.

10.3.5 Physical Qualifications. Describe work assignment procedures used to ensure that contractor personnel are physically, medically and emotionally qualified for performing the duties to which they are assigned.

10.3.6 Personal Protective Equipment (PPE). Include in the APP written instructions to be followed to assure the proper use, selection, and maintenance of PPE (e.g. protective footwear, protective gloves, hard hats, safety glasses, hearing protection, body harnesses, lanyards, respirators, electrical protective equipment) along with any training required for their use.

10.3.7 Safety Inspections. The APP shall state who will conduct safety inspections, when inspections will be conducted, how the inspections will be recorded, the deficiency tracking system being used, follow-up procedures, and any certifications which may be required (e.g. certificate of compliance to be posted on each crane stating that the crane and rigging gear meet applicable OSHA regulations, and that the crane operator is qualified and trained for the operation of the crane to be used).

10.3.8 Equipment Inspection Records. List of major pieces of equipment that will be used on the work site and a list of the safety and certification requirements applicable to them as per the manufacturer's recommendations and the Code of Federal Regulations. List the certification time periods (e.g. annual certification).

(Continued on Page 2)

11. DISTRIBUTION

DISTRIBUTION STATEMENT A: Approved for public release, distribution is unlimited.

Block 10. PREPARATION INSTRUCTIONS (Continued)

10.3.9 Accident Reporting (Mishap Reporting). Identify in the APP by name and title the individual responsible for the following.

a. Accident investigations, reports and logs,

b. Timely notification of any mishaps that result in injury to personnel or damage to material/equipment, and

c. Immediate notification of serious accidents.

10.3.10 Training. The APP shall list the mandatory training and certifications which are applicable to this project (e.g. explosive actuated tools, confined space entry, fall protection, crane operation, vehicle operator, personal protective equipment, welding); list requirements for periodic retraining/certification; outline requirements for supervisory and employee safety meetings; and provide documentation substantiating that equipment operators are properly qualified and state that equipment will be operated only by a qualified operator who has passed a practical examination for that specific type of equipment.

10.3.11 Emergency Response Plan. The APP shall contain the following procedures, duties, maps, names and plans.

a. Emergency escape procedures and emergency escape route assignments (e.g. from buildings, floating cranes).

b. Emergency rescue procedures (e.g. for employees working at heights or in confined spaces).

c. Rescue and medical duties for those employees who are to perform them including the names of on-site contractor personnel trained in first aid and cardiopulmonary resuscitation (CPR).

d. The means of reporting fires and other emergencies (e.g. phone in contractor's on-site trailer to call 911)

e. Sketch or map that will be posted at the job-site indicating the route to the nearest medical facility and hospital.

f. Names and job title of persons who can be contacted for further information of duties under the plan.

g. Spill Containment Plan to contain and isolate the entire volume of a spilled hazardous substance.

h. Person Overboard Plan for work over or immediately adjacent to water, including the wearing of approved life jackets.

10.3.12 Activity Hazard Analysis. Where there is an actual or potential hazard associated with a work activity, define the activity being performed, identify the sequence of work, identify the specific hazard(s) anticipated, and list the control measures to be implemented to eliminate or reduce each hazard to an acceptable level.

10.3.13 Critical Lift Plan. If a lift involves a moderate to high level of risk requiring detail planning and/or special safety precautions.

10.3.14 Hazard Communication Plan. Plan that addresses training (include potential safety and health effects from exposure), labeling, current inventory of hazardous chemicals on site including quantities, and the location and use of Material Safety Data Sheets (MSDS).

10.3.15 Hazardous Energy Control Plan. Outline the procedures used to isolate a system where unexpected energizing, start-up, or release of kinetic or stored energy could occur and cause injury or damage, including use of lockout and tagout devices.

10.3.16 Fall Protection and Prevention Plan. List the fall protection system(s) (guardrail, personal fall arrest, safety net) to be used on the job, and the steps taken to assure that the fall protection system(s) and their anchorage is designed and installed under the supervision of a qualified person, and have the sufficient strength and structural integrity to withstand the potential potential impact energy of an employee free falling the distance permitted by the system.

10.3.17 Fire Protection and Prevention Plan. Outline the contractor's fire prevention program and steps taken to ensure the availability of fire protection and suppression equipment at the job site.

10.3.18 Severe Weather Plan. Procedures for ceasing on-site outdoor operations during lightning, high winds or other severe weather.

10.3.19 Emergency Lighting Plan. Plan to assure that the egress routes from work areas have adequate light during a power failure.

10.3.20 Work Site Lighting Plan. Provide plan for providing adequate illumination of the work areas (e.g. nighttime work).

10.3.21 Drug and Alcohol Prevention Plan. Plan for prevention of alcohol and drug abuse by contractor/subcontractor employees.

10.3.22 Site Sanitation Plan. Plan for supplying adequate drinking water, toilet facilities, washing facilities and waste disposal, and steps taken to ensure all debris is kept cleared from work areas, passageways and stairs, in and around work structures.

10.3.23 Jacking Operations Plan (if applicable). Provide plan assuring safe set-up and use of jacks and/or lifting units at the job-site.

10.3.24 Asbestos Hazard Abatement Plan (if applicable). Submit a detailed plan of the safety precautions to be taken, equipment to be used, and work procedures to be followed in the encapusulation, removal, and proper disposal of materials containing asbestos.

10.3.25 Material Containing Lead Removal Plan (if applicable). Submit a detailed job-specific plan of the work procedures to be used in the removal of material containing lead including environmental sampling and a description of the method of containment.

DATA ITEM DESCRIPTION

Form Approved
OMB No 0704 0188

1. TITLE	2. IDENTIFICATION NUMBER
Conference Minutes	DI-ADMIN-81250A

3. DESCRIPTION/PURPOSE

3.1 Conference minutes provide documentation of technical information provided, and decisions and agreements reached, at meetings.

4. APPL DATE YYMMDD	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6.a. DTIC REQUIRED	6.b. GIDEP REQUIRED
931001	F/ESC/EN-4		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 This DID supercedes DI-ADMN-81250

8. APPROVAL LIMITATION	9.a. APPLICABLE FORMS	9.b. AMSC NUMBER
		F6969

10. PREPARATION INSTRUCTIONS

10.1 Format. Contractor format is acceptable.

10.2 Content. The minutes shall include the following information:

a. A title page containing the following:
   (1) Title-type of meeting and date
   (2) Identification of the acquisition (system, equipment, contract number) for which the meeting was held.
   (3) Space for signatures of the designated representatives of the contractor and acquistion activity.
   (4) The name of the contractor and address to which the acquistion activity should acknowledge receipt of comments.

b. The purpose and objective of the conference.

c. The conference location

d. A summary of the discussions, decisions, agreements reached, and directions of the conference or individual subcommittees thereof.

e. A list of attendees by name, rank, rate, grade or position, activity represented, activity code, and phone numbers as appropriate.

f. Action items resulting from the conference.

11. DISTRIBUTION STATEMENT

STATEMENT A. Approved for public release; distribution is unlimited.

ATTACHMENT

JH-1

Contractor WHE/MHE Non-Operational Permit (Category 4 Cranes)

CONTRACTOR WHE/MHE NON-OPERATION PERMIT (CATEGORY 4 CRANES) POST IN A CONSPICUOUS LOCATION ON THE CRANE OR IN THE VEHICLE CAB	
Company:	*Point of Contact (Name / Phone)*
Crane Manufacture:	Vehicle ID / Serial Number:
Contracting Official:	Phone:
Work Location:	
I certify that this vehicle will be used for the transportation of personnel and materials only. At no time will the crane be operated while on Navy property.	
Company Official / Title: (print) Signature: Date:	

ATTACHMENT

JH-2

Security Department, United States Naval Submarine Base,

Kings By, Georgia, Consent Form

Security Department
United States Naval Submarine Base
Kings Bay, Georgia 31547

Consent Form

I hereby authorize SUBASE Security Department to receive any criminal history record information pertaining to me, which may be in the files of any federal, state or local criminal justice agencies. **PRINT CLEARLY OR WILL NOT BE PROCESSED IN A TIMELY MANNER**

Full Name: (Print) _____
Last First Middle

SSN:_____ RACE:_____ DOB:_____ SEX:_____

Place of Birth: CITY: _____ STATE_____

Contractor Name/Address:_____

_____ _____
Signature of Applicant / Date Witness / Date

NOTE: In the event that an access decision is made adverse to a person whose record was obtained pursuant to Code section, (35-3-4) the person will be informed by the business, agency, or person making the adverse access decision of all information that a record was obtained from the Navy Security Department Kings Bay, Georgia, the specific contents of the record, and the effect the record had upon the decision. Failure to provide all such information to the person subject to the adverse decision shall be a misdemeanor.

****REQUESTING DEPARTMENT POC**:_____

FIRST ENDORSEMENT

From: Terminal Agency Coordinator, Naval Submarine Base
To:

1. _____ Crime Information Center checks were performed on the above named individual. Federal/State Criminal History Repositories (SCHR) results have been reviewed and did/did not reveal any adverse or derogatory information.

_____ _____
Signature Date

PRIVACY ACT STATEMENT

AUTHORITY: 5 U.S.C. section 552a

PRINCIPAL PURPOSE: To control access to and movement in or on DOD installations, buildings, or facilities.

DISCLOSURE: Voluntary; however, failure to provide information may result in refusal to grant access to DoD installations, buildings, facilities.

ATTACHMENT

JH-3

Restricted Area Vehicle Access Request

For vendor deliveries, fax completed forms to TRIDENT Refit Facility at 9912) 573-3784 at least 24 hours prior to the scheduled arrival of the vendor.

Permit #_____

Restricted Area Vehicle Access Request

The following information must be provided to SPK50 in order to obtain a vehicle access permit for SWFLANT/TRF/SUBASE restricted areas. Permits must be displayed in the lower left corner of the front windshield. **Permits will not be issued to operate privately owned, leased or borrowed vehicles.** Requests must be forwarded through the resident contractor security office. Permits will be issued by SWFLANT SECURITY (SPK50).

Driver/Vehicle Information

Driver/Operator(s)	Badge #	Work Phone
Organization/Company	Vehicle Registered to (Must be registered to the company)	
Vehicle Make	Vehicle Model	Year
Tag #	State	Color

Pass/Decal Information

Permanent	Temporary	Vendor Delivery (VDDF)	
Requested Area(s)			
EHW (E)	Port Services (P)	TRF (T)	Entire WRA (W)
CA (C)	LA (L)	Vendor Delivery	All restricted areas (A)

Printed Name of Requestor	Signature of Requestor	Work Phone
Printed Name of Sponsor	Title	Work Phone
Justification (Contract number, contracting organization, job site must be included)		
From:	To:	Extend To:

Approval

Signature	Codes (Circle and initial)	Date Approved
Sponsor	A W E C L P T VDDF	
SUBASE Security	P VDDF	
TRF Security	T VDDF	
Naval Submarine Support Center	T VDDF	
SWFLANT Security	A W E C L P T VDDF	

SWFLANT 5530/57 (Rev. 05/11)

ATTACHMENT

JL-1

Government Pre-award Inquiry Form

Date: _____

GOVERNMENT PRE-AWARD INQUIRY FORM

Company Name: _____

Company Address: _____

Phone Number: _____ FAX Number: _____

Name of POC: _____ E-mail address: _____

Q#	Page #	Section	Para #	QUESTION
1.				
2.				
3.				
4.				

Q#	Page #	Section	Para #	QUESTION
5.				
6.				
7.				
8.				
9.				
10.				

ATTACHMENT

JL-2

SECNAV 5512/1

See separately attached file

ATTACHMENT

JL-3

Letter Visit/Access Request

TRIDENT REFIT FACILITY, KINGS BAY, GA.
VISIT / ACCESS REQUEST

Note: This type of visit request submission DOES NOT apply to individuals that have a government security clearance. If the visitors have a government security clearance, their security office must submit a visit request via JPAS to SMO code 444665.

LETTER VISIT REQUEST

- Visit Requests are required to be on Company Letter Head and will include:
- Individuals Name
- Social Security Number
- Place of birth
- Date of birth
- Purpose of the visit. Include work, contract number and/or project being supported.
- Date (s) of visit. This should be only for the period of time to support this project. One year visits for convenience purposes are discouraged.
- TRF point of contact and phone number. This will not be anyone in the TRF Security Office. It needs to be a TRF employee that is aware of and sponsoring the visit. Failure to indicate a TRF sponsor will prevent the visit request from being processed.
- Citizenship. Visitors must be U.S. citizens. Foreign nationals are rarely granted access unless certain arrangements have been made with SUBASE and TRF.
- Signed by company security manager or individual from the company verifying that all the information provided is true and accurate. This should not be done by the visitor.
- Each individual requesting access will need to complete and sign SECNAV form 5512/1 (DEPARTMENT OF THE NAVY LOCAL POPULATION ID CARD/BASE ACCESS PASS REGISTRATION). This gives SUBASE consent to conduct a criminal background check. An individual's whose background check is determined as "Unfavorable" will be denied access to the base. It is recommended that these forms be submitted at least 48 hours (two working days) in advance to TRF security. This form can be completed at Pass & ID just prior to the visit, however this can significantly delay the visitors access. **ONCE COMPETED, THIS CHECK IS GOOD FOR A YEAR.**
- **VISIT REQUEST LETTERS WILL BE VERIFIED BY THE TRF SPONSOR AND FORWARDED TO TRF SECURITY BY THE TRF SPONSOR. THEY WILL NOT BE FORWARDED DIRECTLY TO TRF SECURITY FROM THE VISITING COMPANY.**
- **ELECTRONIC TRANSMISSION OF PERSONALLY IDENTIFIABLE INFORMATION (PII) MUST BE DIGITALLY SIGNED AND ENCRYPTED**

Should any questions arise in filing out the Visit Request the visitor can contact the TRF Security Office---Monday thru Friday, 0700-1530 @ 912-573-5291/0599/9749 Fax: 912-573-3784

ATTACHMENT

JM-1

Past Performance Questionnaire

1. The NAVFAC Form PPQ shall be utilized for all evaluations that require a Past Performance Questionnaire (PPQ).

2. The current NAVFAC Form PPQ-0 dated 7 December 2011 is available at *https://portal.navfac.navy.mil/portal/page/portal/aq/pdffiles/ppq%20rev%20dec%202011.doc*

"Solicitation Submittal Requirements: IF A COMPLETED CPARS EVALUATION IS AVAILABLE, IT SHALL BE SUBMITTED WITH THE PROPOSAL. IF THERE IS NOT A COMPLETED CPARS EVALUATION, the Past Performance Questionnaire (PPQ) included in the solicitation is provided for the offeror or its team members to submit to the client for each project the offeror includes in its proposal for Factor (insert applicable factor number, usually Factor 1, and insert factor title, usually Corporate Experience). AN OFFEROR SHALL NOT SUBMIT A PPQ WHEN A COMPLETED CPARS IS AVAILABLE.

IF A CPARS EVALUATION IS NOT AVAILABLE, ensure correct phone numbers and email addresses are provided for the client point of contact. Completed PPQs should be submitted with your proposal. If the offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the offeror should complete and submit with the proposal the first page of the PPQ (Attachment JM-1), which will provide contract and client information for the respective project(s). Offerors should follow-up with clients/references to ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact, Luke Clay, via email at luke.clay@navy.mil prior to proposal closing date. Offerors shall not incorporate by reference into their proposal PPQs or CPARS previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation."

ATTACHMENT JM-1

NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

1. Contractor Information

Firm Name: CAGE Code:
Address: DUNs Number:
Phone Number:
Email Address:
Point of Contact: Contact Phone Number:

2. Work Performed as: ☐ Prime Contractor ☐ Sub Contractor ☐ Joint Venture ☐ Other (Explain)
Percent of project work performed:
If subcontractor, who was the prime (Name/Phone #):

3. Contract Information

Contract Number:
Delivery/Task Order Number (if applicable):
Contract Type: ☐ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):
Contract Title:
Contract Location:

Award Date (mm/dd/yy):
Contract Completion Date (mm/dd/yy):
Actual Completion Date (mm/dd/yy):
Explain Differences:

Original Contract Price (Award Amount):
Final Contract Price (*to include all modifications, if applicable*):
Explain Differences:

4. Project Description:

Complexity of Work ☐ High ☐ Med ☐ Routine
How is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information

Name:
Title:
Phone Number:
Email Address:

6. Describe the client's role in the project:

7. Date Questionnaire was completed (mm/dd/yy)**:**

8. Client's Signature:

NOTE: NAVFAC REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO NAVFAC WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON NAVFAC SOLICITATIONS. CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO NAVFAC. PLEASE CONTACT THE OFFEROR FOR NAVFAC POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

RATING	DEFINITION	NOTE
(E) Exceptional	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
(VG) Very Good	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
(S) Satisfactory	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
(M) Marginal	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
(U) Unsatisfactory	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
(N) Not Applicable	No information or did not apply to your contract	Rating will be neither positive nor negative.

Contractor Information (Firm Name): _____
Client Information (Name): _____

TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING WHICH BEST REFLECTS YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with the project?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel	E	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	VG	S	M	U	N
5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E	VG	S	M	U	N

Contractor Information (Firm Name): _____
Client Information (Name): _____

b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	E	VG	S	M	U	N
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain in Remarks section.*		Yes			No	
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? *Indicate if show cause or cure notices were issued, or any default action in comment section below.*		Yes			No	
f) Have there been any indications that the contractor has had any financial problems? *If yes, please explain below.*		Yes			No	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E	VG	S	M	U	N
b) Compliance with contractual terms/provisions *(explain if specific issues)*	E	VG	S	M	U	N
c) Would you hire or work with this firm again? *(If no, please explain below)*		Yes			No	
d) In summary, provide an overall rating for the work performed by this contractor.	E	VG	S	M	U	N

Please provide responses to the questions above (*if applicable*) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist our office in evaluating performance risk *(please attach additional pages if necessary)*: