Current Cost for New MILCON $23.0M

Space requirements

<table>
<thead>
<tr>
<th>Space Requirement</th>
<th>Current Space (ft²)</th>
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<tbody>
<tr>
<td>Warfare Analysis</td>
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<tr>
<td>Data Processing</td>
<td>7,740</td>
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<td>Project Support</td>
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<tr>
<td>Other Ops Support</td>
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<tr>
<td>Total (Net)</td>
<td>35,295</td>
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<tr>
<td>Other</td>
<td>12,705</td>
</tr>
<tr>
<td>Total (Gross)</td>
<td>48,000</td>
</tr>
</tbody>
</table>

JWAL Capabilities

- Sole site for comprehensive battle group equipment, training, and tactics assessment.
- Theatre provides unique environment for direct contact between analysts performing collaborative analysis of Test & Evaluation and Fleet test events.
- Consolidated site for joint service and industry with the resources and capability, using an onsite server, to store large classified data files and, using the classified network, distribute data to analysis support teams and the Analysis Control Board (ACB) for review.
- Data collected from test events can be transmitted from ships and ranges to the JWAL using APAN, LOS, or SIPRNET.
- Secure project rooms with spin lock combination locks and card swipe readers for access for classified activities.
- Two hundred Person Theater with 12 large-screen displays for group presentations, and data displays. The theater is equipped with access to the Internet as well as connectivity to commercial media outlets.
- Designed to allow storage and processing of classified data to the Top Secret level using large vault doors with combination spin locks and the use of an access list and security personnel.
- Includes a Sensitive Compartmented Information Facility (SCIF) for project development requiring special handling.
- Unique West Coast facility for secure homeland security operations.

Additional Issues

- Direct communication in a classified environment between analysts and ACB that is only possible within JWAL permits immediate resolution of issues and avoidance of delays.
- Direct interaction between analysts possible within JWAL permits immediate changes in scenarios in response to changing threat information.
- Prior to JWAL, physical separation between analysts resulted in miscommunication and flawed and/or incomplete analysis of weapon system performance data.
- Physical isolation of analysts provides opportunities for security breakdowns.
- Capability for analysts to directly communicate indispensable.
- Costs to convert existing facilities to completely replicate JWAL's physical capabilities could easily exceed new construction costs.
- Cost for new facility to replace JWAL could exceed $23 mil. (Assumptions – original MILCON in 1990 was for $8.9 mil. 5%/year increase in construction from 1990 to 2010)
Current Cost for New MILCON $12-14M

Space requirements
Current space
- Lab space (tightly environmentally controlled) 21,000 ft²
- Warehouse, shipping/receiving, machine shop (normal environment, currently no special controls) 16,000 ft²
- Admin space (normal environment, no special controls) 1,500 ft²
- Miscellaneous 500 ft²
- Total Space (Bldg 575) 39,000 ft²
- Additional gage storage (Bldg 542, metal building, currently uncontrolled environment) 3,900 ft²

Examples of MSTL Capabilities
- Dimensional measurements (gage block calibration): accuracies of 0.1 millionth of an inch (0.000,000,1")
- CMM: accuracy of 94 millionths of an inch (0.000,094") – Most accurate in Western US
- Force: ± 0.01% of load to 102K Lbs – Highest capacity with this accuracy in Western US

Relocation from Pomona to Corona in 2002:
- Cost $1.2 - $1.5 mil (moving costs only)
- Consolidated from 3 sites (Pomona lab, Pomona warehouse, Seal Beach)
- 85% operational in 3 months, 100% operational in 8 months.

Additional Issues
- NBVC personnel acknowledge that no existing facilities at Pt Mugu are suitable for conversion to meet the mission requirements of the MSTL. Lab foundation must be secured to bedrock. NBVC personnel proposed vacant land at Pt Mugu for a new laboratory. MILCON required.
- Contractor that built MSTL stated that structure was designed with end mission in mind and that rehabilitation of existing structures is not cost effective and would cost more than building new.
- Attempts to rehabilitate existing space for lab use were unsuccessful. Attempted to use Bldg 517 for calibration support prior to MSTL. Lost JNACT accreditation (i.e. shut down calibration lab) due to: (1) inability to maintain required environment for optical/dimensional calibration, and (2) mixing electrical/electronic calibration and engineering activities. In order to solve environmental control problem and regain accreditation, a $100K Control Solutions 20’x20’ module was installed.
- Proximity to ocean poses significant challenges to maintain required measurement accuracy and prevent deterioration due to corrosion. Costs unknown.
- Tidal activity (vibration and ground movement), aircraft operations (vibration), and EMF due to range operations encountered at Pt Mugu would negatively impact precision measurement.
- Current facility requirements (FR-06) are more stringent than those applied to existing facility; therefore, cost to replace MSTL will be higher.
- Due to arid conditions, gages and other equipment can be stored at Corona without extraordinary environmental control. More extensive and costly environmental control would be required for storage areas at Pt. Mugu due to higher humidity and salt conditions.
- Regarding security level for the MSTL; classified gages exist, however, none have been inspected at Pomona or Corona since 1996. No work done by the standards lab is classified.
A Design/Build Contest

The field of contractors was narrowed to four general contractors who were asked to put their best ideas forward. The four generals and their teams were then asked to come up with the preliminary designs, with the winner being the team that provided the best design as well as the best value, including building size, amenities, and cost.

One of the general contractors, Erickson-Hall Construction Co., decided the mechanical system would best be designed by a local San Diego contracting firm, with which they'd done business in the past — A.O. Reed and Co.

A.O. Reed, which was founded in 1914, targets the HVAC and plumbing/process piping needs in the commercial, industrial, and institutional marketplace. Vice President of Project Planning and Business Development, Les Osterberger headed up the A.O. Reed mechanical system design team and was responsible for ensuring that the U.S. Navy and Erickson-Hall's expectations were realized.

Osterberger explains that A.O. Reed had a great foundation with which to work. "We've worked closely with Erickson-Hall on many laboratory jobs, mostly in the healthcare industry."

Because the measurement lab was somewhat different, Osterberger says that the owner (the U.S. Navy) developed a very detailed project program, which was used by the team in the project design and construction process.

"A.O. Reed has a complete in-house engineering capability," he says, "but this particular project required a design consultant with previous Measurement Laboratory experience. For that reason, we hired San Diego-based LSW Engineers to help us."

Another member of A.O. Reed's team was a company called Control Solutions; a company that Osterberger says is internationally recognized for designing and building laboratories for metrology. He adds that Control Solutions brought the experience needed to properly commission this technically challenging project.

"Traditional comfort heating and cooling weren't the main objective," he explains. "Precise temperature control to within ±0.5°F and humidity control of ±5% were required by the laboratory equipment," he says.

Control Strategies

LSW Engineers developed control strategies for the research facility. LSW Project Manager Larry Brooks says he felt that by using computer-based direct digital controls, and precision sensing and monitoring equipment, the ±0.5°F temperature and ±0.5°F humidity criteria could be easily met.

He adds, "There was a need for staging the cooling and heating for in-

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### CATEGORY D
New Construction More than $500,000

**WINNER AT A GLANCE**

**Project Name/Location**

**U.S. Navy Measurement Lab,** San Diego, CA

**Key Customer Contact:**

**Jennifer Llamas-Rubio, project manager**

**David Marcroft, Laboratory Manager**

**Nomination Submitted by:**

**Les Osterberger, vice president, A.O. Reed & Co., San Diego, CA**

**THE PROJECT TEAM:**

**At U.S. Navy Measurement Laboratory**

- Jennifer Llamas-Rubio, project manager
- David Marcroft, Laboratory Manager

**At A.O. Reed & Co.:**

- Les Osterberger, vp project planning/business development
- Thomas Schodorf, project manager
- Don Williams, piping superintendent
- John Statz, piping foreman
- Dennis Murphy, sheet metal superintendent
- Dan White, sheet metal foreman
- Jim Henderson, project estimator

**At Erickson-Hall Construction (general contractor):**

- Michael Hall, project executive
- Randy Hinkle, project manager
- Architects Larson-Carpenter:
  - Chris Gedrose, project architect

**At LSW Engineers (mechanical engineers):**

- John Littrell, principal
- Larry Brooks, project manager

**At Control Solutions (Controls contractor):**

- Doug Cooper, project manager

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A key issue for the customer was the distribution of sensible heat load-producing equipment in the lab. A.O. Reed's solution: to locate this equipment around the exterior wall so some heat went directly to the low wall returns.
An additional issue A.O. Reed faced was the distribution of the sensible heat load-producing equipment in the lab. This equipment was located around the exterior wall, allowing a portion of the heat to go directly to the low wall returns and not affecting the space sensible control load. Osterberger explains that a sophisticated psychometric analysis was developed to ensure that all conditions were met.

The Metrology of Commissioning

One of the main requirements of the project was the thorough commissioning of the mechanical system. “Commissioning a system of this size and nature requires some serious metrology of our own,” Osterberger explains.

With this in mind, the system design was based on achieving the certification objectives. Control Solutions was responsible for the control system design/installation and certification process. A.O. Reed and Control Solutions coordinated with the general contractor to ensure proper wall and roof system design because the walls and roof were integral to the environmental system.

According to Control Solutions Project Manager Doug Cooper, commissioning consisted of seven tests conducted on each lab for a duration of three days per lab.

“The most comprehensive testing was the temperature test,” he says. “We used instrumentation that’s calibrated in a NIST traceable procedure that includes a temperature bath, electronic super thermometer, data logging instrumentation, and a NIST calibrated super platinum resistance thermometer (SPRT).

“The total expanded uncertainty of the temperature test gear was ±0.0005C,” Cooper says. He explains that the test gear consisted of a calibrated data logger and sensor array. At least 12 sensors were installed at various elevations and locations in each lab. In essence, the entire lab environment was “mapped” to verify compliance with the temperature specification. After the temperature test, the remaining six tests were conducted with instrumentation traceable to NIST.

“We then produced a comprehensive report detailing all tests and their results, which was delivered to the Navy. The test results exceeded their expectations and specifications, and they accepted the metrology lab without further testing.”

Says Osterberger, “The success of this project is attributable to an excellent team of highly experienced members consisting of the owner, general contractor, architect, and mechanical consultant. Each team member is well-versed in the Design/Build project delivery method and this project demonstrates how that method works best.”
Statement by Mike Hall, President Erickson-Hall Construction Company on Requirements of State of the Art Measurement Science Technology Laboratory

The Corona measurements lab is a custom facility designed and constructed for a specific use. It consolidated numerous outdated facilities into a single, modern, "state of the art" facility. Many of the outdated facilities were "make-shift", converted spaces incapable of providing the precise temperature and humidity control that is now provided in the Corona facility. Much of the testing is performed over an extended period of time. If the test environment does not remain constant, the testing has to be restarted. I was advised that this was one of the problems encountered in the previous "make-shift" test facilities.

Replacement construction cost would range from $300 to $350 per SF. As I remember, the facility is approximately 40,000 SF putting construction costs at $12 to $14,000,000 for a new facility. Soft costs including the design effort can be budgeted at 20% ($2.6 mil). Additionally, moving costs need to be considered. Special equipment was utilized to relocate extremely large slabs of granite and equipment. The floor slabs were engineered to handle heavier equipment and rolling loads because of the specific nature of this facility.

The lab has approximately 26 individually controlled temperature zones. Some of these zones provide temperature controlled environment of ±0.5 degree temperature and humidity control. Drywall partitions between labs are double framed, include interior wall liners and function as air returns. Perforated ceiling panels and specially design supply air ductwork provide laminar air flow for constant room temperatures from the ceiling to the floor. Walls are insulated and sealed to isolate each space from adjacent spaces.

The facility includes several high capacity overhead cranes to move materials for testing. Other special features include two pits to accommodate test equipment. One of these pits is 21' deep with access ladders and staging to monitor equipment below grade.

Conversion of existing spaces is difficult. On a room by room basis, conversions typically involve the construction of a new isolated lab facility with-in an existing space. New walls, ceiling, mechanical, electrical, etc. are required. Power requirements are also extensive to run mechanical equipment and the lab test equipment.

Good luck on your efforts to save the facility. The construction industry recognized the complexity of the facility as it received an award for the mechanical design and construction.

Mike Hall
Erickson-Hall Construction Co.
July 5, 2005
Excerpted Quotes

Report of IEG Deliberations

Ms. Davis advised the IEG that COBRA data for this scenario has been substantially revised from that presented to the DAG due to an adjustment in the SRM rate, leading to a significant reduction in steady-state savings and 20-year NPV savings. The scenario now shows Payback in 15 years vice six years... IAT is continuing to refine data for this scenario... it is thought likely that additional billet elimination can be found, leading to increased savings.

IEG Deliberations, April 14, 2005

The IEG noted that relocating NSWC Division Corona assets to NAS Pt. Mugu would maximize synergies by locating these assets on a Navy installation in proximity to a sea range and a Fleet concentration area. The IEG also noted that relocation to NAS Pt. Mugu would allow NSWC Division Corona assets to maximize efficiencies and synergies by collocating available capacity (i.e., an available building complex vice scatter buildings at NSA Corona or new MILCON at March ARB).

IEG Deliberations, March 31, 2005

Synergy with Port Hueneme technical functions and Fleet operational units

Slide 6, April 14, 2005

Col. Kennedy advised the DAG that the Technical JCSG will meet this week to decide whether to recommend relocation of NSWC Corona assets to NAS Pt. Mugu or March AFB. The JCSG is reported to favor the March AFB option as a shorter distance move that would allow civilian employees to continue to work at the receiving site, thus preserving intellectual capital. The DAG noted that the position stated at the Technical JCSG probably places excessive emphasis on preservation of intellectual capital at, and relatively moderate distance to, NAS Pt. Mugu, and because this emphasis on intellectual capital has not been used consistent to evaluate other Technical scenarios.

IEG Deliberations, March 29, 2005
According to Navy testimony, MCRD (Marine Corp Recruit Depot) San Diego was spared because of the cost of single siting recruit training despite the synergies/efficiencies that would be gained. (Note: USMC, the smallest of all the services, is the only branch with two recruit training bases.) In defending the Corona closure, Secretary Gordon England stated that military value is the first criteria. Clearly, the Navy switches between military value and cost arguments as it best suits their case.

In response to a question by BRAC Commissioner Hill, DASN Davis stated that they paid close attention to the possible effects of brain drain, especially in recommendations dealing with technical areas. Specifically, she stated that “[loss of critical skills] became a key aspect of the JCSG deliberations on what recommendations to move forward to the IEC [Infrastructure Executive Committee] to make sure that if moves were contemplated that they had looked hard to make sure that there were folks either willing to move or that there was sufficient potential on the other end for the right skill sets to be employed.”

Secretary Mike Wynne who headed up the Defense Department’s BRAC effort testified that he felt that the careers of the Corona folks would be enhanced by moving to Pt. Mugu. He stated further that “It’s not that far [from Corona to Mugu]. It’s a reasonable distance. And we [DoD] felt like that in moving them to Point Mugu, we would actually preserve some of them, and reduce some of the commute for some people.”
Median price of a home in California at $522,590 in May, up 1 percent from year ago; sales decline 2.1 percent

LOS ANGELES (June 23) - The median price of an existing home in California in May percent and sales decreased 2.1 percent compared with the same period a year ago, the Association of REALTORS® (C.A.R.) reported today.

"The California housing market passed an important threshold in April, when the median price of a home approached $525,000. At these prices, eroding affordability and concern about interest rates are constraining sales."

Closed escrow sales of existing, single-family detached homes in California totaled 61,532,380 sales pace recorded in May 2004.

The statewide sales figure represents what the total number of homes sold during 2005 maintained the May pace throughout the year. It is adjusted to account for seasonal factors that influence home sales.

The median price of an existing, single-family detached home in California during May was $522,590, a 12.8 percent increase over the revised $463,320 median for May 2004, C.A.R. reported.

"Inventory levels, which have been at or above three months since July 2004, fell below two months in the earliest two months of 2005, and have ranged between 2.6 and 2.8 months since that time," said C.A.R. President Jim Hamilton. "While not at the record low levels earlier last year, the tight inventory of homes for sale has impacted sales over the past few months.

Regional MLS sales and price information is contained in the tables that accompany this report.

Regional sales data are not adjusted to account for seasonal factors that can influence home sales.

http://www.car.org/index.php?id=MzUxNTg= 7/13/2005
MLS median price and sales data for detached homes are generated from a survey of associations of REALTORS® throughout the state. MLS median price and sales data are based on a survey of more than 60 associations. The median price for both detached condominiums represents closed escrow sales.

In a separate report covering more localized statistics generated by C.A.R. and DataQ Systems, 97.5 percent or 396 of 406 cities and communities showed an increase in home prices from a year ago. DataQuick statistics are based on county records data and information. DataQuick Information Systems is a subsidiary of Vancouver-based MacEAssociates. (The top 10 lists are generated for incorporated cities with a minimum of 3 the month.)

Note: Large changes in local median home prices typically indicate both local home prices and often, large shifts in the composition of housing market activity. Some of the variation in home prices may be exaggerated due to compositional changes in housing demand. The David median home prices in California cities and counties are accessible through C.A.R. Or at http://www.car.org/index.php?id=MzUxNTA.

Statewide, the 10 cities and communities with the highest median home prices in Cal 2005 were: Los Altos, $1,620,000; Beverly Hills, $1,450,000; Saratoga, $1,428,500; M $1,375,000; Laguna Beach, $1,302,500; Newport Beach, $1,300,000; Burlingame, $1, $1,225,000; Santa Barbara, $1,188,000; Palos Verdes, $1,147,500.

...Statewide, the 10 cities and communities with the greatest median home price increa compared with the same period a year ago were: Desert Hot Springs, 67.4 percent; Cst Laguna Hills, 58.9 percent; California City, 57 percent; Taft, 55.4 percent; Visalia, 49.4 Palms, 47.2 percent; Barstow, 45.9 percent; Victorville, 45.8 percent; Montebello, 45.5

Leading the Way...® in California real estate for 100 years, the California Association (www.car.org) is one of the largest state trade organizations in the United States, with members dedicated to the advancement of professionalism in real estate. C.A.R. is the Angeles.

May 2005 Regional Sales and Price Activity*
Regional and Condo Sales Data Not Seasonally Adjusted

<table>
<thead>
<tr>
<th>Region</th>
<th>Median Price</th>
<th>Percent Change in Price from Prior Month</th>
<th>Percent Change in Price from Prior Year</th>
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</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>May-05</td>
<td>Apr-05</td>
<td>May-04</td>
</tr>
<tr>
<td>Calif. (sf)</td>
<td>$522,590</td>
<td>2.5%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Calif. (condo)</td>
<td>$420,740</td>
<td>3.1%</td>
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<tr>
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http://www.car.org/index.php?id=MzUxNTg= 7/13/2005
**May 05 sales/price report**

**DCN: 5033**

na – not available

*Based on closed escrow sales of single-family, detached homes only (no condos). R month-to-month changes in sales activity may overstate actual changes because of the individual regional samples. Movements in sales prices should not be interpreted as the cost of a standard home. Prices are influenced by changes in cost and changes in size of homes actually sold.

sf = single-family, detached home

Source: California Association of REALTORS®

<table>
<thead>
<tr>
<th>Median Prices By Region - Current Month vs. Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
</tr>
<tr>
<td>Calif. (sf)</td>
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Source: California Association of REALTORS®
Engineering, Technical, Ancillary, and Operational Support Services Contract
In Support of
Naval Surface Warfare Center, Corona Division

Presentation to
BRAC Staff
6 July 2005
Cost Issues

- On-site contractor space/costs not included
- Office Space 52,000 sq/ft
  - Dramatically Higher at NBVC
- GFE Moving Costs Not Included

Workforce is about 300 people

- Ninety percent dedicated to support of NSWC Corona
  - 135 personnel on-site at NSWC Corona
- Nearly 40 Years of Support
- About 15 percent provide SME support
- Average Salary is $54K per year
Contractor Issues

- Impact on Workforce
  - Unable to Commute due to 5 hour daily round trip
  - No PCS for contractors
  - Unable to relocate due to high cost of housing at NBVC
  - Loss of SME support in all areas
  - Workforce Survey indicates ninety percent unwilling to relocate
60 Percent of Project Personnel have More Than a Decade of Direct NSWC Corona Experience
Total Years Experience with Specific Systems and Processes Directly Related To NSWC Corona Mission Areas

Information Technology: 7
Range Support: 802
Missile Systems: 752
Metrology Support: 338

Combat Systems: 1,293
Fleet Exercise Support: 1,379

40 YEARS OF DEDICATED SUPPORT GIVES OUR TEAM INTIMATE KNOWLEDGE OF NSWC CORONA'S ENVIRONMENT, SYSTEMS, AND PROCESSES
Robert Everly, Managing Director
NSWC Corona Experience
- USN veteran
- Twenty-nine years supporting all NSWC Corona Departments, 25 years as manager
- Projects at NSWC Corona support NAVSEA, NAVAIR, OPNAV, Program Executive Offices, Joint Forces Programs, Coalition Interoperability, COMNAVSURFLANT, SECONDFLT, THIRDFLT, SEVENTHFLT, OPTEVFOR, US ARMY and FMS

Qualifications
- Providing technical management for multiple projects in support of NSWC Corona engineering and technical services at multiple sites. Conducts program, budget and status reviews at the corporate executive level
- NSWC Corona project disciplines support missile flight analysis, cooperative engagement capability, systems integration testing, reliability engineering, missile telemetry, weapons impact scoring, certification of electronic hardware, metrology and gage engineering
- Thirty-eight years experience in Combat Systems Environment
- Bachelor of Arts, Business Administration

Ken Gunn, Contracts Administrator
NSWC Corona Experience
- Retired career USAF officer
- Eleven years at NSWC Corona
- Six years as manager of Logistics in TOR C.3.1.1.2

Qualifications
- Administer four major federal contracts valued more than $1 billion, and 46 subcontractors
- Write SOPS, proposals, subcontracts, and legal agreements
- Twenty-nine years federal procurement experience
- Five years as a federal contracting officer
- Sixteen years working with federal contracting officers
- Master of Business Administration
- Master of Arts, International Relations

Denis Plambeck, Controller
NSWC Corona Experience
- Five years at NSWC Corona
- Organized and established cost reporting scheme in Attachment E format
- Established a regular reporting cycle for accrual input into NSWC Corona Accounting System

Qualifications
- Extensive Financial Management System management, including Subcontractors
- Experience with numerous finance and accounting systems, including Dynamic and DIFMS
- More than 15 years of financial management of CPFF and cost-reimbursable contracts
- Extensive experience in a multiple charge number environment.
- Bachelor of Arts, Finance
Fred Brayton, Information Technology Manager

NSWC Corona Experience
- USAF veteran
- Twenty-five years supporting NSWC Corona providing data communications, computer resources and software development projects
- Twenty years as manager providing Information Technology (IT) support
- Working to establish NSWC Corona as an Emergency Operations Center in Southern California for Homeland Security
- Twelve years managing projects identical to Tasks 22-24, 28

Qualifications
- Skilled at database design and normalization; system design and implementation; and configuration management
- Experience using project management tools for planning, scheduling, monitoring, and controlling software development
- Experience providing NSWC computer hardware/software and network support
- Bachelor of Science, Computer Information Systems

Sheryel Eberwein, Senior Process Engineer

NSWC Corona Experience
- Sixteen years providing support to NSWC Corona as a government and CSC employee
- Twelve years in support of Quality Program including 5 years as CSC’s ITS Quality Manager
- Ten years as information and quality systems manager
- Responsible for oversight of more than 140 NSWC Corona-specific documented processes

Qualifications
- Achieved ISO 9001:2000 Registration of two CSC contracts in the last two years
- Director of Regional Councils for the State Baldrige Program
- Board member, American Society for Quality and California Council for Excellence
- Audit guide and lead auditor
- Manage, direct, plan, schedule, monitor and control entire Quality Program at CSC Information Technology Solutions (ITS)
- Bachelor of Science, Workforce Education and Development

William Schwab, Security and Safety Manager

NSWC Corona Experience
- Retired USMC Aviator
- Twenty-one years supporting all NSWC Corona Departments
- Twenty-one years at CSC managing projects identical to Tasks 1, 26, and 28

Qualifications
- Demonstrated Security and Safety Management experience at NSWC Corona
- DSS Trained FSO. NSA-Trained COMSEC
- Course Completion; “Essentials of Industrial Security Management” and “Protecting Secret and Confidential Documents” through AIPD
- Master of Business Administration, Financial Management
Dave Scott, Trouble Systems Process, Information Technology Manager
NSWC Corona Experience
- Retired USN officer
- Ten years at NSWC Corona
- Supported Command Staff and Chief Scientist
- Seven years as a CSC Group Manager supporting Combat Systems and Joint Force Assessment
- Member of NSWC Corona Innovation Team

Qualifications
- Thirty-three years Navy Combat Systems experience
- Twenty-seven years Fleet exercise experience
- Conducts project reviews and briefs customers on a regular basis

Sandy Flores, AEGIS Combat Systems Support Information Technology Manager
NSWC Corona Experience
- Twenty-eight years at NSWC Corona
- Eleven years CSC AEGIS Performance Assessment data group
- Three years AEGIS Test Team data processing group supervisor

Qualifications
- Twenty-eight years data management experience
- Communicates with customers and employees coordinating various phases of data management
- Trained in computer hardware systems including UNIX, SGI, Linux, and Windows workstations
- APAN-trained for data transmissions and telecommunications
- Manages network user accounts and permissions
- Eleven years AEGIS Combat System experience
- Associate of Science, Computer Information Systems

Willis Bay, Trouble Systems Process Systems Engineer
NSWC Corona Experience
- Retired USN Master Chief Petty Officer
- Supported TSP for past year as manager
- Provides formal training
- Current services to C2F, C3F
- Nine years supporting NSWC Corona

Qualifications
- Plans, organizes, executes and assists CNSL inspections for Troubled Systems Program
- Thirty years experience in combat and communications systems
- Master of Business Administration

Russ Cryder, Subject Matter Expert
NSWC Corona Experience
- 40 yrs experience as a missile telemetry expert

Qualifications
- Develops the firing data from telemetry collected and assisted the analysts developing the true performance of the weapon. This firing data analysis has kept the Navy on the leading edge of threat elimination and protection to the Fleet.
Richard Domine, Subject Matter Expert
NSWC Corona Experience
- 18 Years supporting NSWC Corona as database systems administrator and developer with a Master’s Degree in the field
- A Lotus Notes database developer for the critical AEGIS performance data.
- As administrator, installed and configured software on both the server and client machines, and establish LAN/dial-up communication between them.

Qualifications
- Over Twenty-one years of database systems administration and development experience, using a variety of DBMS/languages.
- Masters degree from Purdue University in Information Systems.
- Masters degree from Purdue University in Mathematical Psychology.
- Bachelor’s degree in Mathematics.
- Installed and configured the server and clients for the Oracle and Notes databases and their supporting processes.

Jerry Pitts, Technician III
NSWC Corona Experience
- A network expert for the AEGIS Performance Assessment Network (APAN).

Qualifications
- Provides operation support to this network during test events to ensure all the data is distributed in a timely manner.
- He has assisted remotely with the setup and operation both in CONUS and overseas. His Network IT expertise is excellent.

Yancy Bradford, Technician III
NSWC Corona Experience
- A network expert for SIPRNET and classified LAN systems.

Qualifications
- Provides operational support to NSWC Corona SIPRNET. He maintains all the connections in both the JWAL and external support buildings.

Gary Smith, Metrology Program Support Information Technology Manager
NSWC Corona Experience
- Twenty-nine years supporting NSWC Corona Division metrology, calibration, inspection, product engineering, and test programs
- Twenty-five years managing NSWC Corona projects
- Thirteen years at CSC managing projects identical to Tasks 5, 17, 18, 19, 20, and 21

Qualifications
- Proven leadership experience managing CSC Measurement Science and Product Engineering Assessment Support Group for seven years
- Proven experience working with Measurement Science Dept, Product Engineering Assessment Dept, and NSWC Corona Command senior staff
- More than 35 years directly related experience in metrology, calibration, interface assessment, product engineering, and test certification
- Skilled at calibration requirements analysis; documentation development; and technical training program development, presentation, and administration
- Bachelor of Arts, Psychology
Peter Nemeth, Engineering Technician VI
NSWC Corona Experience
- 30 years direct experience with the U.S. Navy METCAL (Metrology and Calibration) Program.
- Considered an expert in the Navy's Metrology Program

Qualifications
- Responsible for providing Quality Assurance support for the Navy's Metrology Calibration (METCAL) Program.
- Serves as permanent member of the METCAL Users Group to provide guidance on program requirements.
-Reviews and tests new software. Provides feedback on problems and provides recommendations for fixes.
- Writes guidelines and business rules for METRL, NCE and NCA.

Roy LaParry, Engineering Technician V
NSWC Corona Experience
- 40 years of aircraft related metrology, calibration, and logistics support experience as an Air Force technician;
- A civilian employee of the NSWC Corona Division, Measurement Science Department (MSD);
- Considered by the NSWC MS Dept to be the recognized expert on metrology and calibration support issues for Navy F/A-18E/F Aircraft.

Qualifications
- Develops Calibration Support Plans
- Reviews Calibration Measurement Requirements Summaries
- Provides engineering technical expertise to identify calibration support requirements for NAVAIR support equipment, by performing Calibration Requirements Analysis (CRAs). He is considered by the NSWC MS Dept to be the recognized expert on metrology and calibration support issues for Navy F/A-18E/F Aircraft.

Chester Franklin, Systems Engineer
NSWC Corona Experience
- Responsible for providing technical support for CSC’s Measurement Science Department (MSD) metrology R&D tasking.

Qualifications
- Provides direct support to the MSD Department Head and the Product Engineering Assessment Department Head by serving as a working member of key US, foreign, and industry associations (e.g. MSC, IMEKO, NCSLI, NACLA) critical to the present and future success of the Navy’s metrology program.
- Provides support to the MSD R&D Program Manager. Metrology R&D program support includes liaison with program sponsors, and advising the R&D Program Manager on processes and procedures for program planning and implementation.

Lloyd Boyde, Engineering Technician V
NSWC Corona Experience
- Over thirty years of experience in Navy metrology and calibration, twenty years of which have been focused on engineering policy definition and strategic planning for U.S. Navy surface ship and submarine main and auxiliary propulsion systems, hull and mechanical (H&ME) systems, radar equipment, and sonar systems.
Qualifications

- Employee is considered by our Navy customer to be the definitive expert on metrology and calibration requirements for the US/UK TRIDENT Missile Program.
- He has extensive experience with the development and implementation of critical US/UK TRIDENT Missile Program metrology and calibration related policies and procedures is well recognized by CSC's local Navy customer, the Strategic Systems Program's (SSP) Office, and key personnel with the UK TRIDENT Missile Program.
- He is co-chairman of the US/UK annual calibration technical exchange meeting and coordinates and participates in the annual audit of UK TRIDENT II support facilities.

Harvey Dilulo, Engineering Technician V
NSWC Corona Experience
- 30 years (Military, Contractor) experience with various Navy surface launch missile systems.

Qualifications
- His knowledge and experience is added value to the CSC contract because he provides missile systems analysis to improve systems performance, efficiency, and reliability while using best business practices to be cost effective.
- Harvey is contracted to provide technical assistance on special projects for NSWC Corona Division, PE30

Wendy Lara, Computer Programmer III
NSWC Corona Experience
- 25 years contractor experience with Standard Missile System. With her extensive knowledge, experience and comprehensive computer skills, she is able to perform and provide detail missile system and database analysis.

Qualifications
- She communicates well, provides technical assistance and workable solutions to resolve data issues. Wendy is sought out by our customers and peers to assist in resolving technical data issues.

Debora Rasch, Computer Systems Analyst I
NSWC Corona Experience
- Performs several diverse, complex tasks on the Surface Missile Engineering Process System (SMEPS), Envovled SeaSparrow, and RAM missile systems.

Qualifications
- Her task requires a wide program knowledge base, that includes Web design, graphic layouts, database administration using specific software applications, on-line help support, and documentation for all aspects of the SMEPS project. Debora is a highly respected member of the SMEPS task.

Earl Clifford, Government Industry Data Exchange Program Information Technology Manager
NSWC Corona Experience
- Nineteen years combined CSC support to NSWC Corona
- USN veteran, active Naval service at NSWC Corona
- Supported Combat Systems, Quality Assessment, Force Training, and Product Engineering

Qualifications
- D20 Group Manager
- Management experience more than 30 years
- GIDEP Project Manager
- Bachelor of Science, Business Administration

DCN: 5033
Sal Hernandez, Analyst
NSWC Corona Experience
- More than 22 years experience with Navy systems

Qualifications
- Install Galaxy GPS tracking hardware on U.S. and Allied Navy ships to obtain ground-truth data for the reconstruction and analysis of Joint Task Force (JTFEX) and Rim of the Pacific (RIMPAC) naval exercises.
- Collect and process data.
- Install/Deinstall data collection hardware, shiprid

Richard Cordova, Engineering Technician
NSWC Corona Experience
- More than 20 years of post Navy experience in engineering, computer operations, data acquisition, processing and analysis, fleet operations, training, technical manual preparation, and program management

Qualifications
- System Operator of the Battle Force Tactical Training (BFTT) Debrief system
- Provide operations analyst providing analytical support for fleet exercises.

John Edmiston, Electronics Technician
NSWC Corona Experience
- Over 12 years of experience in operation, installation and maintenance of Portable Telemetry Data Collection Equipment/Telecommunications Equipment

Qualifications
- Operate, maintain and install Portable Telemetry Data Collection, Telecommunications/Support equipment.
- Project lead of fabrication and installation and modification of various telecommunications equipment.
- Provide logistics support
- Research and process various weapons and media providing telemetry data for analysis

Robert Higelin, Engineering Technician
NSWC Corona Experience
- Over 14 years of experience in operation, installation and maintenance of telemetry, microwave and satellite and project management

Qualifications
- Development, deployment and troubleshooting of telecommunications systems.
- Data acquisition, plan development and execution
- System design, development and implementation

Julie McLaren, Engineering Database Support
NSWC Corona Experience
- More than 20 years experience on the NSWC Contract

Qualifications
- Providing requisition data for the Industrial Logistics Support Management Information SYSTEM (ILSMIS)
Providing support for engineering and maintaining TACTS Financial databases

Supporting TACTS sites creating and maintaining TACTS Range Management databases

Richard Flory, Data Analyst
NSWC Corona Experience
- Retired after 26 years with career in United States Navy
- NSWC OIC from 1976 to 1980
- Two Years as XO of Seal Beach Command
Qualifications
- Two Years as XO of Seal Beach Command
- Created and maintained the Integrated Logistical Support documentation and the TACTS Range Site Directory
- Performed Integrated Logistic support functions including preparing change proposals and support documentation and attending program review.
- Provided analysis and validation of Large Area Tracking range (LATR) and Naval Tactical Training Range (NTTR) data.

Darrick McVay, Lead Engineering Technician
NSWC Corona Experience
- More than 20 years experience on the NSWC Contract
Qualifications
- Design, Install, Test the Weapons Impact Scoring Set (WISS) systems.
- Design, Install, Test the Improved Remote STRAFE Scoring System (IRSSS) systems.
- Certified Tower Climber and Safety Course Trainer (for CSC Contract support)
- Travel to Navy, Air Force, and Army Range sites throughout the world for installations and user training.

Jon-Erik Nelson, Engineering Technician
NSWC Corona Experience
- More than 10 years experience on the NSWC Contract
Qualifications
- Eight years of Weapons System operations support as Scoring Specialist at the Utah Test and Training Range Saylor Creek.
- 3 years at NSWC Designing, Installing, Testing the Weapons Impact Scoring Set (WISS) systems hardware and software.
- Certified Tower Climber.
- Traveled to Navy, Air Force, and Army Range sites throughout the world for installations and user training.

Sudad Al-Wahab, GIDEP, Senior Engineer, Subject Matter Expert
NSWC Corona Experience
- 21 years experience at NSWC Corona
- Three years experience supporting NSWC Corona
- Expert with GIDEP database structure, designed the current GIDEP database
- Expert in process management and measurement of effectiveness
Qualifications
- Designed the current GIDEP Database
- Bachelor of Science, Statistics
- Master of Science, Industrial Engineering
• Subject matter expert in GIDEP metrics and processes
• Combined 13 years experience as supervisor in MRDB & GIDEP
• Database design & project management

Jake Hurse, GIDEP, Subject Matter Expert
NSWC Corona Experience
• Retired USAF Master Sergeant
• Nineteen years at NSWC Corona
• Seventeen years as GIDEP Production Supervisor

Qualifications
• Manage GIDEP Information Management support
• Provide 24/48 hour delivery processing for Failure/Product information
• Develop/implement data base structural changes to GIDEP database
• Forty seven years Government Inventory/Logistics Management experience

Philo Smith, GIDEP, Subject Matter Expert
NSWC Corona Experience
• 15 years experience in support of the Government-Industry Data Exchange Program (GIDEP)
• Responsible for managing MS Windows 50 user Network including server maintenance and upgrades, software installation, anti-virus management and training
• Responsible for overall Program Management of annual GIDEP Information Sharing Conference and Workshop for GIDEP users
• Responsible for supervising, directing and managing personnel efforts related to GIDEP trade show participation, GIDEP newsletters publication, and GIDEP program Utilization data collection and reporting.
• Responsible for supervising, directing and managing GIDEP Customer Technical Support and Help Desk
• Responsible for course development and training in use and application of GIDEP database

Qualifications
• Numerous technical courses in network system engineer certification
• Total Quality Management training for Team Leaders and Managers
• Program Management and leadership training
• Program Manager for 15 years of Depot Level Repair and Overhaul programs and various Logistics Support contracts for US Army, US Navy and NATO (NAMSA)
• Bachelor of Science, Electrical Engineering
• Master of Science, Electrical Engineering

Robert Bordeaux, Senior Systems Engineer Subject Matter Expert
NSWC Corona Experience
• More than 30 years experience in NAVSEA organizations
  - NSWC Corona, Systems Engineering Director
  - NSWC Corona, Deputy Executive Director
• HPO program implementation utilizing aggressive Strategic Planning and Malcolm Baldrige quality principles
• Devised strategies for organizational long-term financial viability

Qualifications
• More than 33 years experience with Navy systems in
  - Acquisition Program Management
-RM&A Assessment 
- Calibration & ATE Certification Programs 
  - Extensive program and enterprise management experience 
  - Organizational assessment and strategic planning expertise 
  - DAWIA-Certified Acquisition Professional 
  - Master of Science, Electrical Engineering

Dennis Casebier, Senior Systems Engineer Subject Matter Expert

NSWC Corona Experience
  - USMC veteran 
  - More than 26 years experience as department head of the Ship Systems Department and combat Systems department with a budget approaching $50M.
  - Management of multitude of Navy programs largely relating to Terrier, Tartar, Talos and AEGIS Combat systems.
  - Member of the Strategic Management Team at NSWC Corona providing advice and analysis to top management

Qualifications
  - More than 40 years experience with Navy systems in
    - Managing technical and engineering projects and programs in DoD environment
    - Organizational assessment, process analysis, process re-engineering, organization development and strategic development
  - Master’s in Management, Business Administration, and Management Science

Pete Young, Senior Systems Engineer Subject Matter Expert

NSWC Corona Experience
  - USN veteran
  - Eight years NSWC Corona experience
  - Strategic business planning and organization assessment for CSC support of NSWC Corona
  - Supported NSWC Corona IRM realignment and wedge savings reporting efforts

Qualifications
  - More than 37 years experience with Navy systems 
  - Extensive project and enterprise management experience
  - Organization assessment and strategic planning expertise
  - Doctorate in Management/Administration

Thomas Kufta, Engineering Technician IV

NSWC Corona Experience
  - Provided programming, database development, and web development support for NSWC Corona Div for over twenty (20) years
  - Develops multi-user software systems in support of the navy METCAL Program as well as other NSWC Corona Div activities
  - Primary software and web developer for the Measurement Science and Product Engineering Assessment Departments

Qualifications
  - Experienced with C, C++, BASIC, Clipper, Power Builder, web development, and all Microsoft applications 
  - BSEE, MSEE, and MBA degrees
Programming and web development skills in conjunction with engineering and metrology experience provide a unique resource.
George Aleman, Senior Systems Engineer  DCN: 5033

NSWC Corona Experience

- Eleven years Active Duty Navy before coming to Corona
- Thirty two years at NSWC Corona
- Twenty four years as Civil Servant, eight years as Contractor

Qualifications

- Bachelor of Science Electronics Engineering
- Thirty two years of Weapon System Performance Analyst experience
- Project Leader during development of several SEASPARROW weapons systems
- Extensive experience in Test Plan development
- Extensive experience in project management
- Extensive experience in shipboard missile launch system and missile flight test and evaluation
- Extensive experience in comprehensive reporting.
- Expert knowledge in AIM-7C series, AIM-7D series, RIM-7E series, RIM-7H series, RIM-7F series, RIM-7M series, and RIM-7P missiles and Japanese versions of these missiles