

# SPADEWORK

## ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND



### A VIEW FROM HQ

John McLaren, P.E., Code CI51

I'd like to spend a little time emphasizing the need to ensure that all contracts are partnered at the A, B, or C level within LANTDIV. Partnering has proven to lower our risk for claims, enhance our ability to deliver our contracts faster and to save the taxpayers money in lower change order and claims costs. In addition, partnering brings our dealings with our construction partners and customers to a new level. This new level is one that respects the opinions and the outlook of the contractor and customer. If you are unsure about the requirements for partnering of our contracts please read your contract, the ROICC HANDBOOK, or talk to your Supervisory General Engineer.

Things are changing fast at the Headquarters. As most of you saw in RDML Phillips' last email to the Command, MIDLANT is now a thing of the past – sort of. The Board of Directors at LANTDIV has been working long and hard to reshape the Command and I expect there will be some changes in the days to come. THE CHANGES YOU WILL SEE IN THIS RESHAPING OF THE COMMAND ARE NOT ANOTHER REORGANIZATION OR RESTRUCTURING OF LANTDIV, but rather a tweaking of our existing organization.

CPM schedule training is moving to the second phase at a rapid pace. Anyone who has not been trained in phase one, SureTrak, should contact Brenda Norton, at (757) 322-8411, to ensure that you are signed up for one of our "clean-up" classes. Although not mandatory, SureTrak training is very beneficial in order to maximize your understanding of the

material taught in the advanced course. I encourage you to become trained at the earliest opportunity.

### WIP EXECUTION

John P. McLaren, P.E. – CI51

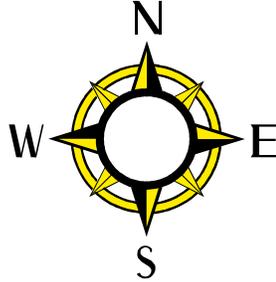
As we near the end of the fiscal year we all need to pay attention to WIP execution more than we have before. This year, more than any recent year, our Command over estimated the work we would place. The result of the overestimation was a \$500,000 pull back from NAVFAC in March. The most recent WIP numbers, as of 30 June, show us being \$61M behind in income WIP and \$38M ahead in non-income WIP. Overall, with all WIP Categories taken into account, we are \$6M behind. Please scrub your contracts, paying particular attention to income bearing contracts and report your totals accurately for the remainder of the year. During recent Field Office Assistance Visit's we have found some offices are reporting their WIP based upon invoices – this is NOT the way WIP is reported. If the job is 50% complete based on WIP and materials delivered to the job but the contractors invoice only shows 45% complete, the job is reported in the R-26 as 50% complete.

**You must report WIP on the R-26 based upon the completion of the job and the material on-site.**

#### CONTENTS

- |   |   |
|---|---|
| 1 | A view from HQ<br>WIP Execution   |
| 2 | CPM Schedule Training – SureTrak and Advanced Training Course               |
| 3 | Partnering<br>Safety Corner   |
| 4 | Safety Corner – continued   |
| 5 | Safety Corner – continued<br>Old/New P-445                                  |
| 6 | QC Review procedures and checklist<br>Personnel Moves<br>Closing Thought... |

## Off and running . . .



The first wave of **SureTrak CPM Schedule training** is almost complete. From Iceland to the north, Italy to the east, Puerto Rico to the south, and EFA CHES to the west, not to mention all the local Norfolk classes, I have traveled the world teaching many of you how to work Primavera's SureTrak CPM schedule software. I have held approximately 22 classes and trained about 175 people. I hope all of you learned something from the SureTrak training and are putting this knowledge to use on any projects you have that require CPM schedules.

While the course content did not change the location and the people did. I keep thinking how I can manage to teach the same old stuff yet again, but each new place presented separate challenges and the personality changes made the trips an adventure. All of the offices and the individuals in the classes were very hospitable to me, which made the trips both successful and interesting. I had the most beautiful week in February that anyone could ask for in Iceland and Mount Etna did not erupt while I was in Sigonella (but it was covered with snow in April!!). Just learning how to travel around in foreign countries unaccompanied was quite an adventure having never been across the big pond. Driving in Naples did not help my driving habits at all!

Now that I am back in the office for a while, I have had time to focus on future courses for SureTrak and the advanced CPM schedule training. Here is the current information for future SureTrak training and the initial deployment of the advanced schedule training.

### **FUTURE SureTrak TRAINING**

I will continue to have periodic SureTrak training classes in Norfolk. The next one-day class is 14 August and the next two-day class is 15-16 August. There are still a few slots available for each of these classes if you want to attend. I have scheduled a one-day class for 23 October and a two-day class for 24-25 October. Please send me an email if you wish to sign up for any of these classes.

SureTrak training for new AROICC's (military) will be conducted yearly when Headquarters holds the new AROICC Orientation class. Civilian engineers/QAR's, etc, training in remote locations will be scheduled as needed since turnover is less significant than with the military. **Thanks to LT Cliff Smith from ROICC Cherry Point for this suggestion.**

### **ADVANCED CPM SCHEDULE TRAINING**

To deploy the advanced training in a timely manner, LANTDIV has been fortunate to have Steven D. Madsen from EFANW (yes, that is NW not NE) assist us with this initial training. Steve is the author of the advanced training manual, is the NAVFAC person in charge of the 01321, CPM Schedule guide specification, is very knowledgeable of CPM schedules, and performs all the technical reviews of contractor claims for EFANW. Steve has a wealth of knowledge and is a great teacher besides. You will really enjoy his advanced training class. Steve enjoys traveling and is looking forward to visiting all of your offices. I do not have a final schedule for all offices at this time but I am working on it. The following advanced training has been scheduled so far:

11-12 September - EFANE – Chester, PA  
 13-14 September - EFANE – Chester, PA  
 17-18 September – EFANE – New London, CT  
 19-20 September – EFANE – Newport, RI  
 Week of 5 November – ROICC Aviano  
 Week of 13 November – ROICC Sigonella  
 15-16 January 2002 – LANTDIV Headquarters

The following people are assisting me in finalizing the advanced training schedule for employees requiring it:

EFA MED – Mike Bellamy  
 EFA CHES – Mario Tama  
 EFA NE – George Morton

I would like to have at least one key person from each of the LANT Headquarters ROICC offices at the January 2002 class. After the January class at LANT Headquarters, Steve Madsen will be staying an additional day for a train-the-trainer session for those of us from each EFA and HQ that will be tasked with conducting future advanced training classes. I will be sending out further information on this session to the team noted above.

The course outline for the advanced training is as follows:

- Introduction to UFGS 01321N
- Digger comparison software
- Reviewing and Analyzing Schedules
- P-445, Appendix O, CPM schedule review checklists
- Time Impact Analysis

Remember, I am available to assist with any schedule review and claim or potential claim reviews/problems you may have.

**Brenda R. Norton, P.E.**  
**LANTDIV, Code CI51**

## PARTNERING – Dead or Alive?



Partnering has been a concept of operations in NAVFAC and throughout the contracting community for at least ten years. No longer can an individual “lead the way” in partnering. Since it is no longer a new, hot fad, has partnering lost its luster? Do we have the “been there, done that” mentality?

Not only has partnering lost its luster, but there is an even deeper cancer. Those “formal” sessions that were done with an outside facilitator have become mundane. Partnering sessions are no longer a “significant emotional event”; there is no heart to heart communication, and no excitement. So the term “informal partnering” has become the standard approach to doing business. But is it working? Are the old ways of adversarial relationships with contractors re-emerging?

It is time for partnering to either become institutionalized or die. If, after a decade, it is not a routine, normal course of business, partnering will not survive. If you have not committed to the partnering process you may need more than just another partnering session; you probably need a cultural change. LANTDIV really needs to revitalize the partnering process. We also need to re-energize the contractors who have been through the partnering process many times and have begun to think that the same old same old was beginning to be nothing more than another unwelcome demand on their time.

For a session to really effect a change in the participants, there needs to be a degree of emotional investment – a serious voicing of obstacles to trust. This open exchange then becomes a foundation for relationship building. One we get to know each other and the personality types involved, then we can have frank discussions about issues, concerns and values, and develop action plans to address these concerns. To document these values and commitments, a partnering agreement is signed. Regularly scheduled follow up sessions must be held to keep the partnering spirit alive.

LANTDIV needs to revitalize partnering in general, much like a project gone awry which needs an intervention partnering session. We need to rekindle the

excitement. It begins with a top down commitment. RADM Johnson and RDML Phillips both have mandated we renew our focus on partnering agreements between contractors and our ROICC's. With the FY02/03 program 55-65% DSGN/BLD projects, partnering needs to work on this side of the contracting chain as well as our fixed price work. With top management talking the talk of partnering, our field level people must walk the partnering walk. Commitment to partnering must be lived by the field personnel on the jobsites on a day-to-day basis. We must seek ways to develop harmonious relationships with our contractors and to change the old notion that in order for someone to win – someone must lose. We must develop a relationship that creates a win/win attitude among all stakeholders in the partnering process. The alternative, litigation, is expensive and counterproductive to everyone's efforts to produce quality projects on time and within budget. Take advantage of the opportunities available to not only achieve sensible resolutions of disputes but also to avoid the conflicts in the first place. This is the essence of what partnering is all about.

Make a choice to be a leader in the partnering process. My personal philosophy is the Golden Rule . . . “do unto others as you would have them do unto you”. Put yourself in the other person's (contractor's) shoes. This philosophy has never let me down. Do it daily, do it weekly and do it at the partnering sessions. Do it until it becomes part of your everyday way of doing business, both at the office and at home.

**John P. McLaren, P.E.**  
LANTDIV, Code CI51

*\*Some portions of this article were paraphrased from an article by Leo Phillips and Dan Fordice, USACE, by permission.*

## SAFETY CORNER

By Bill Garrett, CI52

Congratulations to two MIDLANT folks, Mr. Steve Taraba and Mr. Jim Dinsmore on receiving recent on the spot safety awards for their efforts in safety quality assurance at construction sites located at the ROICC NNSY and ROICC OCEANA.

Thanks to all of those who contributed comments for the next version of USACE EM 385-1-1 to be distributed in August 2001. Special thanks for assistance from Safety Engineering Technicians, Walt Baer (ROICC Cherry Point) and Roni Nix (ROICC Camp Lejuene).

## SAFETY CORNER

By Bill Garrett, CI52

CONTINUED

### CRANE RIGGING TERMINOLOGY FOR A CRITICAL LIFT FROM EM 385-1-1 DEFINED

The term "technically difficult rigging" is included in the list of what constitutes a critical lift in EM 385-1-1 promulgating the requirement for a critical lift plan from your contractor for review. The following has been interpreted by our Navy Crane Center and should be used to aide in determining if your contractors' lift is technically difficult. A "technically difficult rigging" arrangement is defined as a situation where any of the following conditions are present:

- The location of the center of gravity is questionable.
- The structural integrity of the load is questionable (i.e., a load that lacks the structural soundness to support its own weight when lifted).
- The attachment points on the load are not clearly evident (i.e., the load is not designed with attachment points for lifting and the shape of the load does not readily lend itself to common sling configurations such as choker or basket hitches).
- A satisfactory rigging configuration is difficult to determine (i.e., the shape or complexity of the load to be lifted prevents the use of standard rigging configurations).
- The forces generated in and by the rigging configuration are difficult to determine (i.e., additional forces due to multiple lift angles, compressive forces in the load, etc.).
- A disassembled rigging configuration, (slings, shackles, spreaders, etc.) has to be reassembled for a particular lift and the possibility exists for it to be reassembled incorrectly or for required pieces to be left out.
- A crane lift involving submerged objects.
- Crane lifts without the use of outriggers using on rubber load charts.
- Lifts where the center of gravity of the object being lifted is not known or a change could be anticipated.
- Lifts involving the use of more than one hoist.

### WATERFRONT WORK AT ROICC SEWELLS POINT

The QA staff at ROICC Sewells Point has implemented a procedure for performing weekly safety audits for their waterfront



contracts. The initiative, in place since April 00, has helped put a handle on an upward trend that had been identified in losses for waterfront

work. A team inspection (Audit) is performed each Friday morning. The ROICC team changes periodically and provides a valuable fresh set of eyes for safety. QA personnel who are assigned to the projects value the extra help from the audits on the ever-changing sites.

### A LIFE SAVING CONTRACT REQUIREMENT FOR HIGH VOLTAGE

A certified high voltage cable splicer cut an energized high voltage cable in preparation of cable splice work causing an arc and an unplanned electrical outage for several facilities but fortunately did not result in property damage or personnel injury. An electrical system outage procedure was followed which included an advanced outage coordination meeting with station utilities to review the work, outage procedures, and contractor hazardous energy control methods. The cable identification was verified and a test instrument used to verify it was deenergized by two sources including PWC. The instrument, after showing the cable to be cut was deenergized, was checked to verify instrument reliability on a known energized cable and was working properly. The contractor (high voltage

mechanic) then cut the cable using a remote hydraulic cutter located outside the manhole as required by the **safety guide specification 01525** with appropriate PPE. Following this specification requirement, inserted into our contracts within the last two years, may have saved the individual's life. The hydraulic cutter has become a standard tool for high voltage mechanics largely due to the requirement in our specification. Many cable test instruments are not able to identify the presence of current in all cables. The age of existing utility systems, the potential lack of cable test instrument reliability, and the possibility of human mistakes for which there is no forgiveness when it comes to high voltage electrical work, makes the use of the remote cutter necessary. Make sure everyone on your ROICC staff is aware of this requirement for cutting cables.

### CONSTRUCTION SAFETY WEB RESOURCE

Don't forget to use the "Safety Shack" web site at:

[http://www.efdlant.navfac.navy.mil/lantops\\_05/home.htm](http://www.efdlant.navfac.navy.mil/lantops_05/home.htm)

### OLD/NEW P-445

For your information, a chart showing the differences between the old and the new P-445 is attached to this issue of Spadework.

Articles or suggestions for articles for future editions of SPADEWORK are welcome from all employees. Please forward them to Brenda R. Norton, P.E., LANTDIV C151, e-mail [nortonbr@efdlant.navfac.navy.mil](mailto:nortonbr@efdlant.navfac.navy.mil)



### WARNING FOR IMPROPER ORIENTATION OF WEDGE SOCKETS IN CRANE RIGGING

Some mobile cranes require the wedge socket at the wire rope termination at the boom be orientated in a particular manner. For example, some Grove hydraulic cranes require that the wedge socket be installed with the flat edge toward the boom. If the wedge socket is installed with the wire rope dead-end toward the boom on these cranes, the wedge socket can hit the boom when the boom is raised to minimum radius. On some Link Belt hydraulic cranes when attaching the socket to the boom head, the flat edge of the socket must be installed facing away from the boom. If the wedge socket is installed with the wire rope dead-end away from the boom on these cranes, structural damage to the boom head may occur when the boom is lowered to maximum radius. The proper installation of the wedge socket at the boom head may vary from one manufacturer to another, and from model to model. Be sure to check the operations manual for each crane you are using.

## Contractor's Quality Control Assessment Reviews

By Sean Sweeney, P.E., ROICC NNSY

A contractor inspection system is required by the Federal Acquisition Regulation (FAR), Clause 52.246-12 "Inspection of Construction." This clause is included in all NAVFACENGCOM construction contracts over the Simplified Acquisition Threshold. Incorporation of NAVFAC's specific requirements into the contract is generally accomplished through the Guide Specification NFGS-01450, Quality Control.

In addition to these requirements, the P-445 stipulates that NAVFAC quality assurance is independent of any quality control effort of the contractor. Government QA efforts are to focus on evaluating the contractor's QC system rather than inspection of specific items of work. As a result, Jim Baldwin, LANTDIV QA Engineer, has put together an in depth assessment checklist that provides a detailed review of the contractor's QC program. Recently, Jim's team reviewed a \$40 million project at NNSY. This review took several days and included several people to extract all of the information needed. This review provided a significant amount of information and it helped the ROICC office as well as the contractor determine areas where improvement is needed.

ROICC NNSY has established a contractor's quality control review program, where the team chooses a contract at random once a month to review. The contractor is given very little advanced notice of the visit to ensure the team gets an accurate picture of the contractor's QC program. During the review, the team sits down with the QC Manager and reviews his documentation based on the enclosed checklist (attached to the end of this issue of Spadework). Any deficiencies are noted and proper corrective actions are discussed with the QC manager. The information collected is entered into a

database to provide our office with a set of metrics regarding contractor's quality control.

This program is structured to help all of our contractors gain a better understanding of the QC process, based the requirements outlined in the 01450 Guide Specification. Contractors have indicated that this program has helped them understand some of the details in the guide specification as well as Navy expectations towards the CQC program.

## PERSONNEL MOVES

John L. Adams, recently appointed SGE at ROICC Little Creek, has accepted a position in Germany with the Corps of Engineers. Good luck and Godspeed to you and your family on yet another overseas adventure.

Angel Ho has been reassigned as the new SGE at ROICC Little Creek.

Bill Colden has been reassigned to replace Angel Ho in Dennis Lewin's group, ROICC operations.

Also new to Dennis Lewin's group is Willie Wells from ROICC Souda Bay, Chris Reich from PWD Rota, and Stephanie Leeper from ROICC Sigonella.

For the ConReps, Manny Seoane is the new Supervisory ConRep at ROICC Oceana, Bill Towers to ROICC Oceana, and Hal Ferguson to ROICC NNSY.

For moves within the EFA's please forward any that you would like posted in the next issue of Spadework to Brenda Norton.

## PARTNERING CLOSING THOUGHT...

"Coming together is the beginning.  
Keeping together is progress.  
Working together is success."

- Henry Ford



G.W. Mackey, P.E.  
Deputy Division Operations Officer  
Construction Product Line Leader

## ASSESSMENT WORKSHEET OF CONTRACTOR QUALITY CONTROL PROGRAM

ROICC OFFICE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CONTRACT TITLE: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_ CONTRACT % COMPLETE: \_\_\_\_\_  
 SUPERINTENDENT: \_\_\_\_\_ QC MANAGER: \_\_\_\_\_

CATEGORY	Checklist Items	Yes	No	N/A	Date Corrected
1. CONTRACT QC SPECIFICATION 01450	1. Is the approved QC Plan maintained at the job site?				
	2. Does the QC Manager have a CQM Certificate?				
2. NAMES & QUALIFICATIONS	3. Does QCM's qualifications & past experience meet specifications?				
	4. Is the QCM aware of the requirement to be on site at all times when work / production is in progress?				
3. DUTIES & RESPONSIBILITIES	5. Are the duties, responsibilities and authority of the QC Manager in writing?				
	6. Are the only duties/responsibilities of QCM is manage and implement QC program?				
4. OUTSIDE ORGANIZATIONS	7. Is there a list of Outside Organizations: design agents, consultants, subcontractors that will perform work or services for the prime?				
	8. Does this list indicate the general scope of the work and services to be performed?				
5. APPOINTMENT LETTER (S)	9. Does this letter include the authority to immediately stop any segment of work not complying with plan/spec, and the removal and replacement of any defective work?				
	10. Does this letter provide the authority for the QCM to act as the agent of the contractor?				
6. TESTING LAB INFORMATION	11. Is there a list of all the testing laboratories to be employed by the Prime Contractor, a description of their services, and included in the submittal procedures?				
	12. Is there any indication what accreditation authority certified these testing laboratories?				
7. TESTING PLAN AND LOG	13. Does this plan show all required tests, referenced by specification section, the frequency, and person responsible for each test?				
	14. Is the testing plan maintained by showing status of all tests required by the contract?				
8. REWORK	15. Is there a written internal procedure to document and track Rework Items?				
	16. Does the contractor use the standard "Rework Items List" in QC Plan?				
	17. Does the contractor provide procedures to complete and sign off any deficiencies?				
	18. Does the contractor maintain at the job site up-to-date Non-Compliance Check-Off list log of deficiencies on all non-conforming work?				
9. DOCUMENTATION PROCEDURES	19. Is the Contractor using the Navy standard "Contractor Quality Control Report" forms? If no, does the report he uses contain the same information?				
	20. Is the Contractor using the Navy standard "Contractor Production Report" forms? If no, does the report he uses contain the same information?				
	21. Is the Contractor correctly filled out these forms and turning them in on time?				
10. 3-PHASES OF CONTROL: LIST OF DEFINABLE FEATURES OF WORK	22. Has the Contractor provided his lists of Definable Features of Work (DFOW)?				
	23. Has this list of DFOW's been cross-referenced into the production activity Schedule used by the Superintendent?				
11. PREPARATORY PHASE CHECKLIST	24. Is the QC Manager using the standard "Preparatory Phase Checklist" form provided, when addressing each DFOW ?				
	25. Is the QCM actually holding Preparatory Phase Checklist meetings (planning) for each DFOW and filling out this form correctly?				
	26. Does the QCM maintain at the Job site an active file of preparatory phase meetings conducted for each DFOW, in accordance to the schedule?				
12. INITIAL PHASE CHECKLIST	27. Is the QCM using the standard "Initial Phase Checklist" forms provided, when addressing each DFOW?				
	28. Is the QCM actually holding Initial Phase Checklist meetings (workmanship) for each DFOW and filling out this form correctly?				

	29. Does the QCM maintain at the job site an active file of all initial phase meetings conducted for each DFW, in accordance to the schedule?					
<b>13. COMPLETION INSPECTION PROCEDURES</b>	30. Are the "Completion Inspection" Procedures outlined in the QC Plan?					
	31. Is the QC Manager responsible for the Punch-out Inspection process?					
	32. Does the contractor requests Government to attend the Pre-Final Inspection?					
	33. Does the Contractor requests customer to attend the Final Inspection?					

**SCORING:** Total applicable for each category = X (where X includes responses for category of "Yes" and "No" but does not include N/A)  
Total with "Yes" responses for category = Y

**SCORE FOR EACH CATEGORY:****SCORE RATE EQUATION = Y/X**

- 1. CONTRACT QC SPECIFICATION: \_\_\_\_\_
- 2. NAMES & QUALIFICATIONS: \_\_\_\_\_
- 3. DUTIES & RESPONSIBILITIES: \_\_\_\_\_
- 4. OUTSIDE ORGANIZATIONS: \_\_\_\_\_
- 5. APPOINT LETTER(s): \_\_\_\_\_
- 6. TESTING LAB INFORMATION: \_\_\_\_\_
- 7. TESTING PLAN & LOG: \_\_\_\_\_
- 8. REWORK PROCEDURES \_\_\_\_\_
- 9. DOCUMENT PROCEDURES \_\_\_\_\_
- 10. 3-PHASE CONTROL: DFW \_\_\_\_\_
- 11. PREPARATORY CHECKLIST: \_\_\_\_\_
- 12. INITIAL PHASE CHECKLIST: \_\_\_\_\_
- 13. COMPLETION INSPECT PROCEDURES: \_\_\_\_\_

**OVERALL RATING = TOTAL Y/X:** \_\_\_\_\_

## P-445

# Difference between Old and New

Item	Old	New
Date published	January 1988	June 2000. Shown on NAVFAC Intranet Web Site
Title	Construction Contract Quality Management	Construction Quality Management Program
No. of Chapters and Appendices	4 Chapters and 16 Appendices	5 Chapters and 19 Appendices
Introduction	None	Implements QC and QA Systems. Cancels January 1988.
Foreword	Emphasis on CQC and Contractor Inspection (CI) Systems	P-445 is NAVFAC's QM Doctrine. Expect Integrated Team to have positive, proactive mindset. Expect contractors to build projects right the first time.
Executive Summary	Not shown after Table of Contents	Notes bullets of the CQM Program
<b>Chapter 1</b>	<p><b>NAVFACENCOM CQM Program</b></p> <ul style="list-style-type: none"> <li>• CQM Program includes CQC and CI Systems.</li> <li>• Project of over \$2M incorporate CQC System. Those below use CI System.</li> <li>• Project below \$25K, neither is required.</li> </ul> <ul style="list-style-type: none"> <li>• Cancels March 1975 P-445</li> <li>• Minimal terminology.</li> <li>• CQC and CI System</li> <li>• NFGS-01400 for contracts &gt; \$2M; NFGS-01401 for contracts &lt; \$2M</li> </ul>	<p><b>CQM Program</b></p> <ul style="list-style-type: none"> <li>• Program composed of Contractor's QC System and Government's QA System.</li> <li>• QC System for all projects except those below Simplified Acquisition threshold.</li> <li>• Simplified Acquisition may incorporate CQM procedures.</li> <li>• Applicable to both Type I and Type II work.</li> <li>• Cancels January 1988 P-445</li> <li>• Added new terminology</li> <li>• Definition: CQM = QC + QA</li> <li>• NFGS-01450 and NFGS01450SF for smaller, routine, less complex acquisition.</li> <li>• Emphasis on QC is prevention vice inspection using 3-Phase Control.</li> <li>• Program encourages mutual effort of Government, Contractor &amp; QC Organization</li> </ul>
<u>Chapter 2</u>	<p>NAVFACENCOM Construction Quality Management</p> <p>Chapter outlines CQM procedures for contracts &gt; \$25K. Includes contractor duties and roles of CQC Rep and Gov't Construction Rep.</p>	<p><b>Quality Control (QC) System</b></p> <p>Chapter outlines procedures, requirements and application of <b>Contractor QC</b> System. Chapter deals strictly on Contractor and their QC Manager roles and duties.</p>
<u>Chapter 3</u>	<b>Reporting Requirements and Forms</b>	<b>Quality Assurance (QA) System</b>
<b>Chapter 4</b>	<b>Summary of Key Points</b>	<u>Contract Requirements</u>
<b>Chapter 5</b>	None	<u>Construction Assistance Visits (CAV)</u>
<b>Appendix A</b>	<u>Items to be included and Sample CQC Representative Appointing Letter</u>	<u>QC Manager Duties, Authorities and Sample Letter</u>
<b>Appendix B</b>	<b>Approval of Material Testing Laboratories</b>	<b>Approval of Material Testing Laboratories</b> Labs must be certified by accrediting agency
<b>Appendix C</b>	<b>CQC/CI Plan Check-Off List</b>	<b>QC Plan Review Checklist</b>
<b>Appendix D</b>	<b>Field Administration of Construction Contracts</b> Capt. O'Donnell, 1984 Moreel Award winner of Navy's San Diego hospital complex, philosophy of contract	<b>Sample Contract Completion Checklist</b>

<i>Item</i>	<i>Old</i>	<i>New</i>
	administration.	
Appendix E	CQC Report Form	Daily Production Report Form <i>Revised &amp; show Schedule Activity No.</i>
Appendix F	Daily Report to Inspector Form	Daily QC Report Form <i>Revised &amp; show Schedule Activity No. Separated P, I, and F Phase.</i>
Appendix G	Submittal Status Log Form	Preparatory Phase Checklist  <i>New</i>
Appendix H	Testing Plan Form	Initial Phase Checklist  <i>New</i>
Appendix I	Non-Compliance Check-Off List	Quality Assurance Report Form <i>Revised &amp; show Schedule Activity No.</i>
Appendix J	Construction Contracts Performance Evaluation	Testing Plan and Log Format <i>Revised &amp; show Schedule Activity No.</i>
Appendix K	Quality Assurance Plans (Concise) Areas to Consider	Rework Items List <i>Revised Old Appendix I</i>
Appendix L	Training Requirements Construction Quality Assurance Personnel	NAVFAC Letter dated 31 December 1998  <i>Field Office Model</i>
Appendix M	Construction Representative's Report (CRR) Form and Instructions	Sample QA Plan Format
Appendix N	Construction Contract Non-Compliance Notice	Training Requirements for NAVFAC QA Personnel <i>Additional training including Hazard Awareness, Project Scheduling, Hazardous Waste Operations</i>
Appendix O	Organizational Models for Construction Contract Administration	Initial/Update Schedule Review/Analysis
Appendix P	Testing Instruments/Equipment	Construction Contract Non-Compliance Notice
Appendix Q		<u>Construction Assistance Visit (CAV) Enclosures</u>
Appendix R		<u>Requests for Information (RFI)</u>
Appendix S		Constructibility Review Checklist