

Inspector General

United States
Department of Defense



Small Business Contracting Under the
Navy DDG-1000 Program

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Acronyms and Abbreviations

BAE	British Aerospace Systems, Limited
BIW	Bath Iron Works
CSP	Comprehensive Subcontracting Plan
FAR	Federal Acquisition Regulation
HUBZone	Habitually Underutilized Business Zone
NAVSEA	Naval Sea Systems Command
NGSS	Northrop Grumman Ship Systems
TWT	Trans World Technologies, Inc.



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

November 26, 2008

MEMORANDUM FOR NAVAL INSPECTOR GENERAL
COMMANDER, NAVAL SEA SYSTEMS COMMAND

SUBJECT: Small Business Contracting Under the Navy DDG-1000 Program
(Report No. D-2009-026)

We are providing this report for your information and use. We performed the audit in response to a congressional request. We considered management comments on a draft of the report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, we do not require any additional comments.

We appreciate the courtesies extended to the staff. Please direct questions to Mr. Benjamin A. Mehlman at (703) 604-9291 (DSN 664-9291) or Mr. Rudolf Noordhuizen at (703) 604-8959 (DSN 664-8959).

A handwritten signature in black ink, reading "Richard B. Jolliffe", is positioned above the typed name.

Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management



Results in Brief: Small Business Contracting Under the Navy DDG-1000 Program

The Navy DDG-1000 *Zumwalt*-class guided missile destroyer is designed as a multimission ship with a focus on land attack. The Navy used a four-phased approach in the development and construction of the DDG-1000.

What We Did

This audit was requested by five Members of Congress. Our overall objective was to determine whether the Navy followed Federal Acquisition Regulation requirements for competition in subcontracting. Specifically, we determined whether small business contractors that participated in the DDG-1000 Risk Mitigation Phase (Phase III) were given the opportunity to bid on subcontracts awarded for the DDG-1000 Detailed Design and Integration Phase (Phase IV).

What We Found

The Navy followed Federal Acquisition Regulation requirements for competition in DDG-1000 program subcontracting and allowed small business contractors to participate in Phase IV of the DDG-1000 program. Moreover, the Navy and its four DDG-1000 prime contractors integrated small businesses into DDG-1000 program subcontracting plans and encouraged small business involvement in DDG-1000 Phase IV. DDG-1000 prime contractors increased the number of small businesses awarded contracts valued at more than \$100,000 from 88 small businesses in Phase III to 105 small businesses in Phase IV. The value of contracts that prime contractors awarded to small businesses also increased,

from \$94.8 million in Phase III to \$97.4 million in Phase IV.

Of 71 small businesses that participated in Phase III but did not participate in Phase IV, one small business claimed it was denied the opportunity to participate in Phase IV. That small business received \$548,619 in equitable adjustments from a DDG-1000 Phase III prime contractor for costs incurred in anticipation of Phase IV work. The Phase III prime contractor apparently billed and inappropriately received reimbursement from the Navy for the \$548,619. We called the remaining 70 small businesses and reached 56, none of which reported being denied the opportunity to participate in Phase IV.

What We Recommend

The Navy should verify the prime contractor's statement that the \$548,619 payments were subsequently billed to the Navy through a direct charge to contract N00024-02-C-2302. If the Navy made payments to the prime contractor for the subcontractor costs, the Navy should instruct the contracting officer to recover the payments.

Client Comments and Our Response

Navy management comments were responsive to the recommendations. See recommendations table on page ii.



DDG-1000 *Zumwalt*-class Destroyer

Recommendations Table

Client	Recommendations Requiring Comment	No Additional Comments Required
Naval Sea Systems Command		1., 2.

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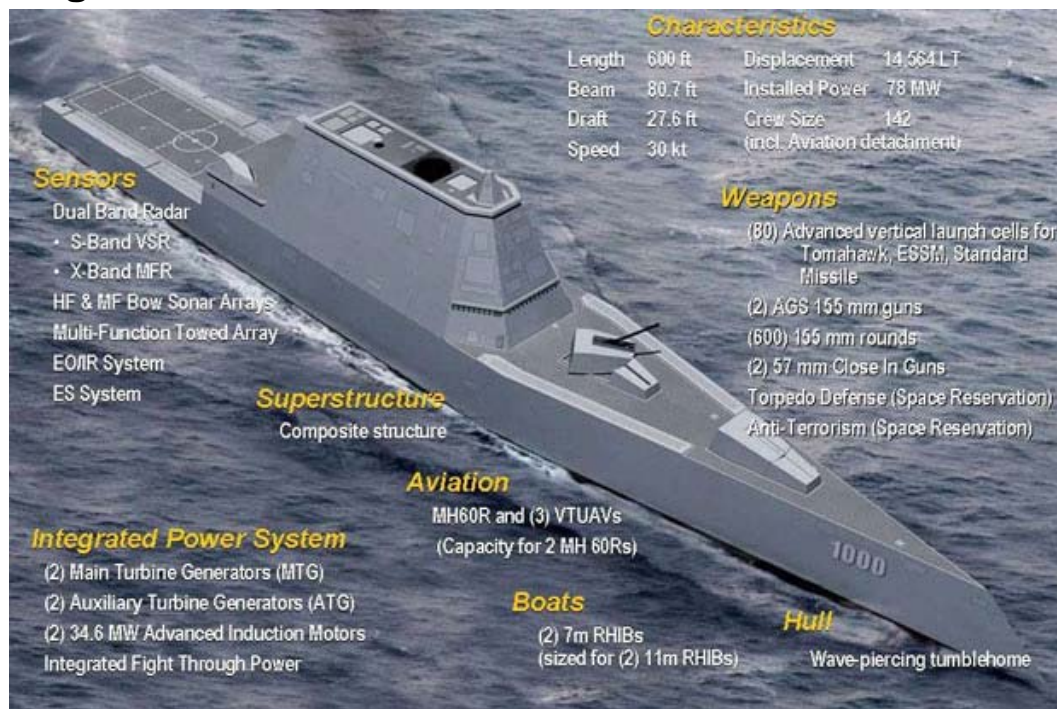
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Introduction

Objective

The overall objective of the audit was to determine whether the Navy followed Federal Acquisition Regulation (FAR) requirements for competition in subcontracting. Specifically, we determined whether small business contractors that participated in the earlier DDG-1000 Risk Mitigation Phase were given the opportunity to bid on subcontracts awarded for the Detailed Design and Integration Phase. See Appendix A for a discussion of the scope and methodology, our review of internal controls, and prior coverage related to the objective.

Background



DDG-1000 Zumwalt

The mission of the Navy's next generation destroyer is to perform surface warfare, anti-aircraft, and naval fire support functions. The Navy originally designated its next-generation destroyer as the DD-21 program. In November 2001, the DoD renamed the DD-21 program as the DD(X) destroyer program. In April 2006, the Navy announced the first ship of this class would be designated as the DDG-1000 *Zumwalt*-class destroyer. The Navy has used a four-phase approach in the development and construction of the DDG-1000. See Appendix C for a diagram of the four phases and the DDG-1000 program prime contractors for each phase.

Phases I and II: System Concept Phase and Initial System Design Phase

The Navy's strategy for acquiring the destroyer consisted of a phased competitive development process. Phase I (System Concept Design) and Phase II (Initial Systems Design) were executed under one agreement involving two competing teams: the blue team, led by prime contractor General Dynamic's Bath Iron Works (BIW) of Bath, Maine, teamed with Lockheed Martin Corporation as the systems integrator; and the gold team, led by prime contractor Northrop Grumman Ship Systems (NGSS) at Ingalls Shipyard, Pascagoula, Mississippi, teamed with Raytheon Integrated Defense Systems (Raytheon) as the systems integrator. The Navy entered into an agreement with BIW during Phases I and II of the program. The agreement was to be followed by a competition between the two DD-21 teams (gold and blue teams). In November 2001, following Phase II, the solicitation was cancelled and the program was restructured.

Phase III: Risk Mitigation Phase

The Navy awarded a prime contract to NGSS (N00024-02-C-2302) in the Risk Mitigation Phase of the DDG-1000 program. In April 2002, the Navy selected the gold team, led by NGSS, as the prime contractor for the DDG-1000 Risk Mitigation Phase responsible for system design, engineering prototype development, and testing. Raytheon continued as an NGSS subcontractor for mission systems integration. The Risk Mitigation Phase involved more than 30 engineering and maritime industrial companies. The completion of the DDG-1000 system critical design review in September 2005 marked the end of the Risk Mitigation Phase.

Phase IV: Detailed Design and Integration Phase

On November 23, 2005, the Under Secretary of Defense for Acquisition, Technology, and Logistics granted Milestone B approval, authorizing entrance into DDG-1000 program Phase IV for detailed design and simultaneous construction of one ship at NGSS's Ingalls Shipyard and one ship at General Dynamic's BIW. There was to be an initial production of eight ships. As a result, the Navy is using four DDG-1000 Phase IV prime contractors: Raytheon as the principal ship integrator, British Aerospace Systems, Limited (BAE) to develop and manufacture an advanced gun system, and NGSS and BIW for ship construction. The Navy awarded four prime contracts during the Detailed Design and Integration Phase to NGSS (N00024-06-C-2304), BIW (N00024-06-C-2303), Raytheon (N00024-05-C-5346), and BAE (N00024-05-C-5117). Public Law 109-13, "The Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005," May 11, 2006, prohibited the implementation of a winner-take-all strategy for the DDG-1000.

Concerns Regarding DDG-1000 Subcontract Award

From May 8, 2006, through December 21, 2006, DDG-1000 program subcontracting issues were the subject of correspondence between Members of Congress¹ and Navy officials.

Congressional Concerns

Members of Congress were concerned that small high-technology businesses that participated in earlier phases of the DDG-1000 program were denied the opportunity to bid on DDG-1000 Phase IV subcontracts. The congressional correspondence alleged that Raytheon subcontracted Phase IV work to Lockheed Martin on a sole-source basis at the Navy's direction, resulting in small businesses' being denied the opportunity to compete for work they had previously performed during Phases I, II, and III, and after the businesses had made substantial investments in facilities and personnel to support the program. Congressional correspondence specifically noted that one small business, Trans World Technologies, Inc. (TWT) participated in the design of the ship control system during the first three phases of the DDG-1000 program but was denied the opportunity to bid on Phase IV ship control system work. The Members of Congress requested that the Navy grant TWT and other small businesses the opportunity to submit termination-for-convenience claims or an equivalent form of equitable adjustment based on the impact of the Navy's reorganization of the DDG-1000 program.

Department of the Navy Responses

In an August 22, 2006, response to Senators Specter and Santorum and Representative Schwartz, the Assistant Secretary of the Navy (Research, Development, and Acquisition) stated that Lockheed Martin, based on the results of a trade study, selected an already developed Government-furnished product to meet the requirements for ship control system software. The Assistant Secretary noted that, as a result, Lockheed Martin required no additional procurement for a ship control system from TWT. On November 20, 2006, the Secretary of the Navy responded to Senators Specter and Santorum, stating that Lockheed Martin had unique capabilities in radar and software development that were applied in prior phases of the DDG-1000 program. As a result, Lockheed Martin was the only entity that could maintain the program schedule and deliver the required products to Raytheon. The Secretary also stated that (1) the Navy did not encourage any company involved in the program to make investments for the promise of work, (2) the Navy satisfied all obligations covered by the Phase III contract, and (3) TWT was given adequate notice of the Navy's plans for Phase IV. The Secretary noted that recovery of any contractor costs outside of these investments was neither expressed nor implied and that the Navy had no requirement or mechanism to provide further compensation.

¹ Members of Congress included five Senators—Arlen Specter; Robert P. Casey, Jr.; Joseph R. Biden, Jr.; Rick Santorum; and Thomas R. Carper—and Representative Allyson Y. Schwartz.

Congressional Request for Inspector General Audit

On May 29, 2007, Senators Specter, Casey, Biden, and Carper and Representative Schwartz requested that the DoD Office of Inspector General perform an audit of the DDG-1000 program. See Appendix B for a copy of the congressional request and Appendix D for three specific questions posed by the Members of Congress for Office of Inspector General response.

Finding. Small Business Participation in the Detailed Design and Integration Phase of the DDG-1000 Program

The Navy and its prime contractors adhered to small business subcontracting laws and regulations and allowed small business contractors to participate in Phase IV of the DDG-1000 program. Only 1 of 71 small businesses that participated in Phase III but did not participate in Phase IV believed it was denied the opportunity to participate.² This level of satisfaction occurred because the Navy and its DDG-1000 prime contractors integrated small businesses into DDG-1000 program subcontracting plans and encouraged small business involvement in Phase IV of the DDG-1000 program. As a result, DDG-1000 prime contractors increased the number of small businesses awarded contracts valued at more than \$100,000 from 88 small businesses in Phase III to 105 small businesses in Phase IV. The value of contracts that prime contractors awarded to small businesses also increased 2.8 percent, from \$94.8 million in Phase III to \$97.4 million in Phase IV.

Small Business Subcontracting Laws and Regulations

Federal prime contractors are required by law and regulation to subcontract with small businesses whenever possible. Prime contractors awarded contracts over \$550,000 are required to submit small business subcontracting plans or suffer disqualification. These small business subcontracting plans greatly multiply the opportunities otherwise available to small business contractors.

Opportunities for Small Businesses

Chapter 14a of section 631a, title 15, United States Code (15 U.S.C. 631a) states in part that the policy of the Federal Government is to:

- foster and promote the economic interests of small businesses;
- insure a competitive economic climate conducive to the development, growth, and expansion of small businesses; and
- provide an opportunity for small business entrepreneurship and inventiveness.

FAR Subpart 19.2, “Policies,” states that it is Government policy to provide maximum practicable opportunities for acquisitions to small business, veteran-owned small business, service-disabled veteran-owned small business, Habitually Underutilized Business Zone (HUBZone) small business, small disadvantaged business,

² Congressional correspondence to the Navy and to us alleged that 1 of the 71 small businesses, TWT, was denied the opportunity to bid on Phase IV ship control system work. We called the remaining 70 small businesses and reached 56. None of the 56 small businesses that responded to us believed they were denied the opportunity to participate.

and women-owned small business concerns. Such concerns must also have the maximum practicable opportunity to participate as subcontractors in the contracts awarded by any executive agency, consistent with efficient contract performance. The Small Business Administration counsels and assists small business concerns and assists contracting personnel to ensure that a fair proportion of contracts for supplies and services are placed with small businesses.

Subcontracting Plan Requirement

For negotiated acquisitions expected to exceed \$550,000, FAR Subpart 19.7, “Small Business Subcontracting Program,” mandates that the Government require the successful offeror to submit an acceptable subcontracting plan. If the apparently successful offeror fails to negotiate a subcontracting plan acceptable to the contracting officer within the time limit prescribed by the contracting officer, the offeror becomes ineligible for award. Prime contractors must comply in good faith with the subcontract plan requirements or be subject to Government imposition of liquidated damages.

Contracting Officer Subcontracting Responsibilities

The FAR permits the contracting officer to direct prime contractor award of subcontracts without competition when doing so would be in the best interest of the Government. For example, FAR 44.201, “Consent and Advance Notification Requirements,” and FAR 44.202, “Contracting Officer’s Evaluation,” describe the contracting officer requirement to consent to prime contractor selection of subcontracts. FAR 2.101, “Definitions,” defines “Consent to subcontract” as the contracting officer’s written consent for the prime contractor to enter into a particular subcontract. The contracting officer’s consent to a subcontract may be required if the contracting officer has determined that it is necessary to protect the Government because of the subcontract type, complexity, or value, or because the subcontract needs special surveillance. The contracting officer must, at a minimum, review the request and supporting data and consider factors such as whether the prime contractor (1) obtained adequate price competition or properly justified its absence and (2) performed adequate cost or price analysis or price comparisons and obtained accurate, complete, and current cost or pricing data, including any required certifications. However, the FAR does not require a justification, approval, or file document regarding Government direction to a prime contractor to make a subcontract award to a specific subcontractor.

Prime Contractor Subcontracting Responsibilities

FAR 42.202(e)(2), “Secondary Delegations of Contract Administration,” states that the prime contractor has the responsibility to select and manage a subcontractor. FAR 52.244-5, “Competition in Subcontracting,” states that the contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

Subcontractor Responsibilities

When a subcontractor believes it has been denied the opportunity to bid on or compete for work, the subcontractor must negotiate with or sue the prime contractor directly.

There is no “privity of contract” between the Government and a subcontractor and, usually, the Government may not intervene in a dispute between a prime contractor and a subcontractor.

DDG-1000 Program Subcontracting Plans

The Navy and its DDG-1000 prime contractors integrated small businesses into DDG-1000 program subcontracting plans and encouraged small business involvement in Phase IV of the DDG-1000 program. Small business subcontracting played a major role in the business decisions of the four prime contractors and was supported at the highest levels of management. All four DDG-1000 Phase IV prime contractors (BAE, NGSS, BIW, and Raytheon) had valid subcontracting plans that contained the elements required by the FAR. All four prime contractor plans also described prime contractor efforts to ensure small businesses received an equitable opportunity to compete for subcontracts.

BAE Plan

The BAE small business plan goal of 47 percent exceeded the Small Business Administration goal of 39 percent. However BAE received a waiver from the Defense Contract Management Agency to allow the BAE small disadvantaged business goal to be lower than the congressionally recommended 5 percent because of BAE difficulties in finding technically qualified, Small Business Administration-certified, small disadvantaged suppliers. Specifically, BAE noted that the goal could not be met because of the size of DDG-1000 ship components and the stringent technical requirements.

BIW Plan

The BIW subcontracting plan noted the company’s program fell under the responsibility of the BIW Director of Procurement. BIW also noted that its current small business subcontracting goal is 26 percent of contracting funds.

NGSS Plan

The NGSS subcontracting plan stated that NGSS “policy requires buyers to find, encourage and solicit the maximum number of small businesses for potential award.” Accordingly, buyers screen for inclusion of small businesses all requests for proposal with a potential total of \$25,000 or more. The NGSS plan also noted that the company small business liaison officer makes management and buyers aware of small business procurement opportunities and the necessity to give small businesses equitable bidding opportunity. The NGSS 2008 small business subcontracting goal was 22 percent of contracting funds.

Raytheon Plan

Raytheon Corporation, as a participant in the Comprehensive Subcontracting Plan (CSP) Test Program,³ was exempt from submission of an individual DDG-1000 small business subcontracting plan. Raytheon and other CSP program participants are required to negotiate a CSP each fiscal year on a corporate, division, or plant-wide basis that offers a broad range of subcontracting opportunities for small businesses and includes a small disadvantaged business goal of not less than 5 percent (or agree to a detailed plan to achieve 5 percent within a certain period). During Phase III of the DDG-1000 program, Raytheon, as NGSS subcontractor, used 698 second-tier subcontractors at a cost of \$169 million.

DDG-1000 Phase IV Subcontracting

The four DDG-1000 prime contractors did not exclude small businesses from participation in detailed design and integration tasks performed in Phase IV. Three of the four DDG-1000 prime contractors increased both the number of small businesses and the dollar amount of work subcontracted from Phase III to Phase IV. For example, during Phase III, Raytheon used 462 second-tier small business subcontractors at a cost of \$18.1 million. During Phase IV, Raytheon used a total of 491 subcontractors at a cost of \$70.9 million. Table 1 shows the increase in the number of subcontractors used and the value of work subcontracted to small businesses between Phases III and IV.

Table 1. Small Business Subcontractors and Awards, by Prime Contractor

Prime Contractor	Phase III		Phase IV	
	Subcontractors	Amount* (in millions)	Subcontractors	Amount (in millions)
BAE	9	\$3.8	29	20.4
BIW	8	10.0	13	15.2
NGSS	169	75.8	28	12.2
Raytheon	462	18.1	491	70.9

* During Phase III, BAE, BIW, and Raytheon were subcontractors to NGSS. Thus, Phase III amounts represent BAE, BIW, and Raytheon second-tier subcontractors.

³ Section 834, Public Law 101-189, “National Defense Authorization Act for Fiscal Year (FY) 1990 and 1991,” November 29, 1989, established the DoD Comprehensive Subcontracting Plan (CSP) Test Program. The DoD Office of Small Business Programs provided policy and guidance for the CSP program; the Defense Contract Management Agency manages the program.

However, NGSS showed a marked decrease in both the number of Phase IV small businesses used and the amount paid to small businesses. This decrease occurred because of the change of status of NGSS from the sole Phase III prime contractor to one of four prime contractors during Phase IV as explained above.

Increase in DDG-1000 Small Business Participation

The number of small businesses receiving awards valued at over \$100,000 increased by 19 percent from Phase III to Phase IV. As shown in Table 2, 88 small businesses received awards valued at \$94.8 million in Phase III, while 105 small businesses received awards valued at \$97.4 million in Phase IV.⁴

Three of the four DDG-1000 Phase IV prime contractors—Raytheon, BIW, and BAE—increased the number of small businesses and the total dollar amount of subcontracts awarded from Phase III to Phase IV. NGSS was the only prime contractor to show a decrease in the number of small businesses used in Phase IV.

Table 2. Small Business Subcontractors and Awards Over \$100,000, by Type of Business

Type of Business	Phase III		Phase IV	
	Businesses	Amount (in millions)	Businesses	Amount (in millions)
Small (Other)	72	\$79.5	87	\$87.3
Disadvantaged	1	2.6	1	0.6
Women Owned	5	6.6	7	3.3
Veteran Owned	4	1.2	8	5.4
HUBZone	6	4.8	2	0.9
Total	88	\$94.8	105	\$97.4

Phase IV Small Business Contracts

The Navy and its four Phase IV prime contractors adhered to small business subcontracting laws and regulations and allowed small business contractors to participate in Phase IV of the DDG-1000 program. Only 1 of 71 small businesses that participated in Phase III but did not participate in Phase IV believed it was denied the opportunity to participate.

⁴ The final number and amounts of awards to DDG-1000 small businesses for the detailed design and integration work were not determined at the time of the audit; the Detailed Design and Integration Phase was in progress.

Phase IV Small Business Follow-on Subcontracts

The DDG-1000 program prime contractors used 88 small business subcontractors during Phase III. Of the 88 subcontractors, 17 (19 percent) received follow-on contracts valued at \$24.1 million for Phase IV. Thus, of the 88 small businesses that participated in Phase III, 71 small businesses (with Phase III work valued at \$71.1 million) did not participate in Phase IV.

We called Phase IV nonparticipating small businesses other than TWT to determine whether they perceived any hindrance in competing in Phase IV. The small businesses included 48 NGSS Phase III small business subcontractors, and 22 small businesses with Phase III second-tier subcontracts with Raytheon, BAE, and BIW.⁵ We were able to reach 38 of the 48 NGSS Phase III small business subcontractors, and 18 of the 22 Raytheon, BAE, and BIW second-tier Phase III small business subcontractors. With the TWT exception, we did not find any small business that participated in Phase III that perceived it was denied the opportunity to participate in Phase IV. The subcontractors generally noted that they completed their Phase III work and did not seek follow-on work in Phase IV.

Ship Control System Subcontracting

The DDG-1000 ship control system provides supervisory control of resources and actions that support rapid response to fire or smoke, flooding, stability, and hull stress casualties to help maintain the overall integrity and survivability of the ship. Seventy-one small businesses participated in Phase III but not in Phase IV. Only one small business, TWT, believed it was denied the opportunity to participate in Phase IV. TWT was a subcontractor to prime contractor NGSS during Phase III. TWT performed development of the damage decision and assessment component of the DDG-1000 ship control system. TWT completed subcontract performance on September 30, 2005. TWT contended that its Phase III participation included a requirement to present to the Navy and NGSS TWT's Phase IV preparations.

Raytheon Phase IV Ship Control System Subcontract to Lockheed Martin

Navy contract N00024-05-C-5346, May 25, 2005, directed Raytheon to subcontract with Lockheed Martin for the Phase IV continuation of previously established DDG-1000 responsibilities, including software development for the ship control system. Raytheon awarded Lockheed Martin a Phase IV subcontract on March 30, 2007, valued at \$669.6 million to perform systems engineering management for DDG-1000 command, control, and intelligence components including the damage decision and assessment software. The damage decision and assessment software was one of six components of the DDG-1000 ship control system.

The FAR permits the contracting officer to direct prime contractor award of subcontracts without competition when doing so would be in the best interest of the Government. We

⁵ Raytheon, BAE, and BIW served as NGSS Phase III subcontractors.

could not determine whether the Navy-directed Raytheon award was justified because the Navy could not provide any analysis, justification or approval, or other documentation to support the contracting officer's direction. However, the FAR does not require a justification, approval, or file document regarding Government direction to a prime to make award to a particular subcontractor.

Lockheed Martin Phase IV Second-Tier Subcontracts

Lockheed Martin did not produce the Phase IV damage decision and assessment software. Instead, Lockheed Martin received a substitute software package from Raytheon as customer-furnished information.⁶ Lockheed Martin Maritime Systems & Sensors conducted a trade study to determine the viability and affordability of developing a fully functional damage decision and assessment component. The trade study concluded that the customer-furnished information software had several prior shipboard installations and met nearly all functional requirements for stability and hull stress. Subsequently, on March 30, 2007, Raytheon prepared a detailed design and integration activities statement of work for the Lockheed Martin subcontract. The statement of work directed Lockheed Martin to establish second-tier subcontracts with a Raytheon subsidiary, Raytheon Network Centric Systems, to develop DDG-1000 ship control system components, including software for damage decision and assessment, situational awareness, and operation and mission planning. Phase IV damage decision and assessment software work was directed to be performed at Raytheon Network Centric Systems in Fort Wayne, Indiana.

We asked Raytheon and Lockheed Martin program officials whether they considered competing first- and second-tier subcontracts for the damage decision and assessment component of the DDG-1000 ship control system. Lockheed Martin officials stated that the Navy directed the Raytheon subcontract award to Lockheed Martin. The Lockheed Martin officials also stated that the Navy had directed Raytheon to direct Lockheed Martin to award three second-tier subcontracts to large businesses, including two second-tier subcontracts to Raytheon subsidiaries. In a May 29, 2008, written response to our questions, Raytheon stated that its direction to Lockheed Martin to use the Raytheon Network subsidiaries was based on an agreement between Raytheon and Lockheed Martin to allow Lockheed Martin to maintain lead status for Phase IV DDG-1000 detailed design and integration activities while at the same time allowing Raytheon Network Centric Systems to continue work performed under Phase III for damage decision and assessment, situational awareness, and operation and mission planning. Raytheon officials stated that they were not sure about the Navy's direction of second-tier subcontracts. We found no Navy documentation to support the Lockheed Martin claim of Navy direction of the second-tier subcontracts.

⁶ The Raytheon software, referred to as Flooding Causality Control Software, was based on source code developed by the Naval Surface Warfare Center, Carderock, Maryland. Raytheon provided the software to Lockheed Martin on January 31, 2007.

NGSS Compensation to TWT

NGSS has reimbursed TWT for \$548,619 in response to two TWT equitable adjustment claims that TWT incurred costs in anticipation of receiving ship control system work through Phase IV. On August 3, 2005, TWT presented NGSS with an initial request for equitable adjustment for \$172,888. In a December 2, 2005, NGSS memorandum to TWT, NGSS noted that TWT was entitled to an equitable adjustment. On January 24, 2006, NGSS increased its TWT subcontract by \$162,110 to pay TWT for “costs incurred due to NGSS scope reduction” and noted that “a partial termination for convenience was the end result of the reduction of the scope of the TWT subcontract.” On July 18, 2006, TWT filed an additional \$434,851 request for equitable adjustment with NGSS for leasing costs entered into in anticipation of doing work through Phase IV. On March 28, 2007, NGSS increased its TWT subcontract by an additional \$386,509 to settle the second TWT claim.

NGSS Equitable Adjustment Expense

Navy prime contract N00024-02-C-2302 with NGSS for Phase III risk mitigation was a cost-plus-base-and-award-fee contract. NGSS officials stated that the \$548,619 in NGSS equitable adjustment payments to TWT was subsequently billed to the Navy through a direct charge to contract N00024-02-C-2302.⁷

The NGSS billing appeared to foster and encourage out-of-scope and precontract expenses by its subcontractors at the cost of the Government. The Navy was not responsive to our requests to determine whether the charges were passed through to the Navy and whether the Navy paid the charges. If the Navy paid the charges, we believe that the Naval Sea Systems Command (NAVSEA) contracting officer should recover the \$548,619 in Navy payments made to NGSS for subcontractor costs directly charged to the Navy through contract N00024-02-C-2302.

TWT Federal Court Suit

On October 25, 2006, Raytheon notified the Navy that TWT had filed suit against Raytheon and Lockheed Martin in the United States District Court for the District of New Jersey. TWT alleged that the conduct of Raytheon and Lockheed Martin resulted in TWT’s inability to compete for the damage assessment component of the DDG-1000 ship control system. TWT also alleged that Raytheon and Lockheed Martin conspired to take TWT proprietary information regarding the damage assessment component for their own use to perform DDG-1000 Phase IV work. In November 9, 2006, correspondence to Senators Joseph Biden and Thomas Carper, the Assistant Secretary of the Navy (Research, Development, and Acquisition) stated that the Navy did not intend to take further action on the matter unless and until warranted by results of any legal adjudication obtained by TWT. On January 23, 2008, the United States District Court dismissed the

⁷ On March 25, 2008, we notified and provided documentation of NGSS payments to TWT to the Defense Contract Audit Agency. Defense Contract Audit Agency officials stated that they were performing an audit of NGSS FY 2006 incurred costs and expected to complete the audit by December 30, 2008.

TWT lawsuit “with prejudice and without costs.” Raytheon notified the Navy of the dismissal on February 6, 2008.

Conclusion

The Navy and its prime contractors actively sought out small businesses to participate in Phase IV of the DDG-1000 program. We did not find evidence that large businesses hindered small business participation in Phase IV of the DDG-1000 program through the use of sole-source contract awards. A total of 71 small businesses with Phase III work valued at \$71.1 million did not participate in Phase IV. Of the 71 small businesses that participated in Phase III but did not participate in Phase IV, 1 small business (TWT) stated that it was denied the opportunity to bid on Phase IV. The United States District Court for the District of New Jersey dismissed a TWT suit against Raytheon and Lockheed Martin alleging restriction of competition for Phase IV. NGSS paid TWT equitable adjustments totaling \$548,619 for costs TWT incurred in anticipation of Phase IV work. NGSS officials stated that they charged the Navy’s NGSS DDG-1000 prime contract for the TWT equitable adjustments.

Recommendations, Client Comments, and Our Response

We recommend that the Commander, Naval Sea Systems Command:

1. Verify the Northrop Grumman Ship Systems’ statement that the \$548,619 in equitable adjustment payments to TWT were subsequently billed to the Navy through a direct charge to contract N00024-02-C-2302.

Navy Comments

The Director, Program Analysis and Business Transformation, Office of the Assistant Secretary of the Navy (Research, Development, and Acquisition) endorsed and forwarded comments from the Commander, NAVSEA. The Commander, NAVSEA concurred with the recommendation and noted that it appeared that NGSS charges associated with TWT were billed to the Navy under contract N00024-02-C-2302. The Commander noted that full verification of the amount in question was being sought by the Supervisor of Shipbuilding Gulf Coast and that the Defense Contract Audit Agency was reviewing what charges were actually billed and allowable. The Commander also stated that by October 30, 2008, the Defense Contract Audit Agency would provide preliminary results to NGSS for comment.⁸ The Commander noted a target completion date of December 31, 2008. However, the Director, Program Analysis and Business Transformation, Office of the Assistant Secretary of the Navy, subsequently revised the completion date to January 30, 2009, due to delays in receipt of DCAA audit results.

⁸ As of November 17, 2008, the Defense Contract Audit Agency had not finalized its report to the Navy.

Our Response

The comments of the Commander, NAVSEA were responsive and conformed to requirements; no additional comments are needed.

2. If the Navy made payments to Northrop Grumman Ship Systems for subcontractor costs directly charged to the Navy through contract N00024-02-C-2302, instruct the contracting officer to recover the total of these payments, \$548,619.

Navy Comments

The Commander, NAVSEA concurred with the recommendation and stated that if charges are found to be unallowable, the Supervisor of Shipbuilding Gulf Coast would request recovery of any unallowable funds by January 31, 2009. However, the Director, Program Analysis and Business Transformation, Office of the Assistant Secretary of the Navy, subsequently revised the completion date to March 3, 2009, due to delays in receipt of DCAA audit results.

Our Response

The comments of the Commander, NAVSEA were responsive and conformed to requirements; no additional comments are needed.

Appendix A. Scope and Methodology

We conducted this performance audit from August 2007 through September 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence dated from June 1998 through August 2008 , to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We reviewed DDG-1000 program small business subcontracting for program Phases III and IV as implemented by the NAVSEA. We obtained the names and associated subcontract award information for all small businesses used by the DDG-1000 program's four prime contractors: Raytheon, BAE, BIW, and NGSS.

To gather information pertaining to the small business subcontractors and DDG-1000 background information, we visited NAVSEA in Washington, D.C.; NGSS in Pascagoula, Mississippi; and Raytheon in Tewksbury, Massachusetts. We reviewed and analyzed Raytheon, BAE, BIW, NGSS, and Lockheed Martin compliance with small business subcontracting procedures. We also determined whether Raytheon awarded a specific Phase IV subcontract to Lockheed Martin at Navy direction. We visited Lockheed Martin offices in Moorestown, New Jersey, to determine whether Lockheed Martin directed second-tier subcontracts to other large businesses at the direction of the Navy or Raytheon and whether the practice was acceptable under existing regulations. . We reviewed United States Code, the FAR, the Defense FAR Supplement, the Navy Marine Corps Acquisition Regulation Supplement, and corporate small business subcontracting procedures of Raytheon, BAE, BIW, NGSS, and Lockheed Martin.

In all, 1,029 small businesses participated in Phases III and IV of the DDG-1000 program. We limited our evaluation of subcontract awards in Phases III and IV to 176 Phase III and IV subcontract awards greater than \$100,000 distributed among the four Phase IV DDG-1000 prime contractors.

Review of Internal Controls

The Navy's internal controls over DDG-1000 subcontracting were adequate; we identified no material internal control weaknesses as defined by DoD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4, 2006.

Use of Computer-Processed Data

To achieve the audit objectives, we relied on computer-processed data obtained from the Navy's four prime contractors. We did not perform a formal reliability assessment of the

computer-processed data. However, we did not find significant irregularities in the information that would preclude the use of the computer-processed data to meet the audit objective or that would change the conclusions in this report.

Prior Coverage

During the last 5 years, the Government Accountability Office (GAO) issued one report on the DDG-1000 program and one report discussing small business subcontracting program for major acquisitions. Unrestricted GAO reports can be accessed over the Internet at <http://www.gao.gov>.

GAO

GAO Report No. GAO-08-804, "Cost to Deliver Zumwalt-Class Destroyers Likely to Exceed Budget," July 31, 2008

GAO Report No. GAO-04-381, "DoD Needs Measures for Small Business Subcontracting Program and Better Data on Foreign Subcontracts," April 5, 2004

Appendix B. Congressional Request

United States Senate

WASHINGTON, DC 20510

May 29, 2007

The Honorable Claude M. Kicklighter
Inspector General
Department of Defense
Washington, DC 20301-1000

Dear General Kicklighter:

Over the last six months, our offices have corresponded with the Navy at various levels concerning the Navy's award of a \$3 billion non-competitive contract to Raytheon Company's Integrated Defense Systems Division for design, development and integration during DDG-1000 Phase IV and the subsequent award of non-competitive contracts to Lockheed Martin. The Navy's responses to our inquiries have been unsatisfactory. In fact, to date, a letter from Senators Biden and Carper to the Secretary of the Navy dated September 12, 2006 has not been answered. Enclosed is a list of the aforementioned correspondence. We would be happy to provide copies as well.

We are concerned that several small high technology businesses that participated successfully in early phases of the DDG-1000 program were denied the opportunity to bid on DDG-1000 Phase IV work. For example, Trans World Technologies, Inc. (TWT) participated in the first three phases of the DDG-1000 program but was denied the opportunity to bid on the follow-on Phase IV work.

It is our understanding that the follow-on work of these small businesses was awarded to Lockheed Martin on a sole source basis. As a result of this non-competitive award to Lockheed Martin, small businesses were denied the opportunity to compete and were terminated from the DDG-1000 program after making substantial investments in facilities and personnel to support the program.

We are also concerned because Raytheon personnel communicated to one of our colleagues that the Navy directed Raytheon to award these small business follow-on contracts to Lockheed Martin. It is our understanding that statements of this nature by the Navy may violate federal procurement laws, regulations, and/or ethical guidelines.

Additionally, our offices have been provided documentation which indicates that Raytheon's sole source contract contains FAR clause 52.244-5, Competition in Subcontracting, which requires prime contractors to select subcontractors on a competitive basis as much as possible. The sole source award of the subcontract to Lockheed Martin by Raytheon appears to be inconsistent with this contract provision.

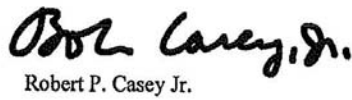
If true, actions of this nature undermine the presumption, under federal law, of competition in contracting, and raise issues concerning the integrity of the Navy's procurement process. As a result, we request that your office thoroughly investigate this matter and provide our offices with the results of your investigation. Specifically, we would appreciate the answers to the following questions:

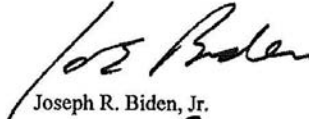
1. How many small businesses that participated in DDG-1000 Phase III were denied the opportunity to bid on DDG-1000 Phase IV because their follow-on work was awarded to Lockheed Martin, or other large defense contractors, on a sole source non-competitive basis?
2. What was the total dollar value of the Phase IV follow-on contracts that were originally supposed to go to small businesses?
3. With the exception of legislatively mandated sole source awards, such as those for small businesses or minority set-asides, what Department of Defense policies, regulations and oversight safeguards are in place to prevent the direction of subcontracts by DoD personnel without full and open competition?

We appreciate your assistance in investigating this matter. If you have any questions, please contact us or have your staff contact Christopher Bradish (with Senator Specter), Erin Logan (with Senator Biden), Sean Barney (with Senator Carper), Alex Davis (with Senator Casey), or Kirk Freeman (with Representative Schwartz).

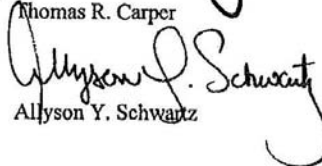
Sincerely,


Arlen Specter


Robert P. Casey Jr.


Joseph R. Biden, Jr.

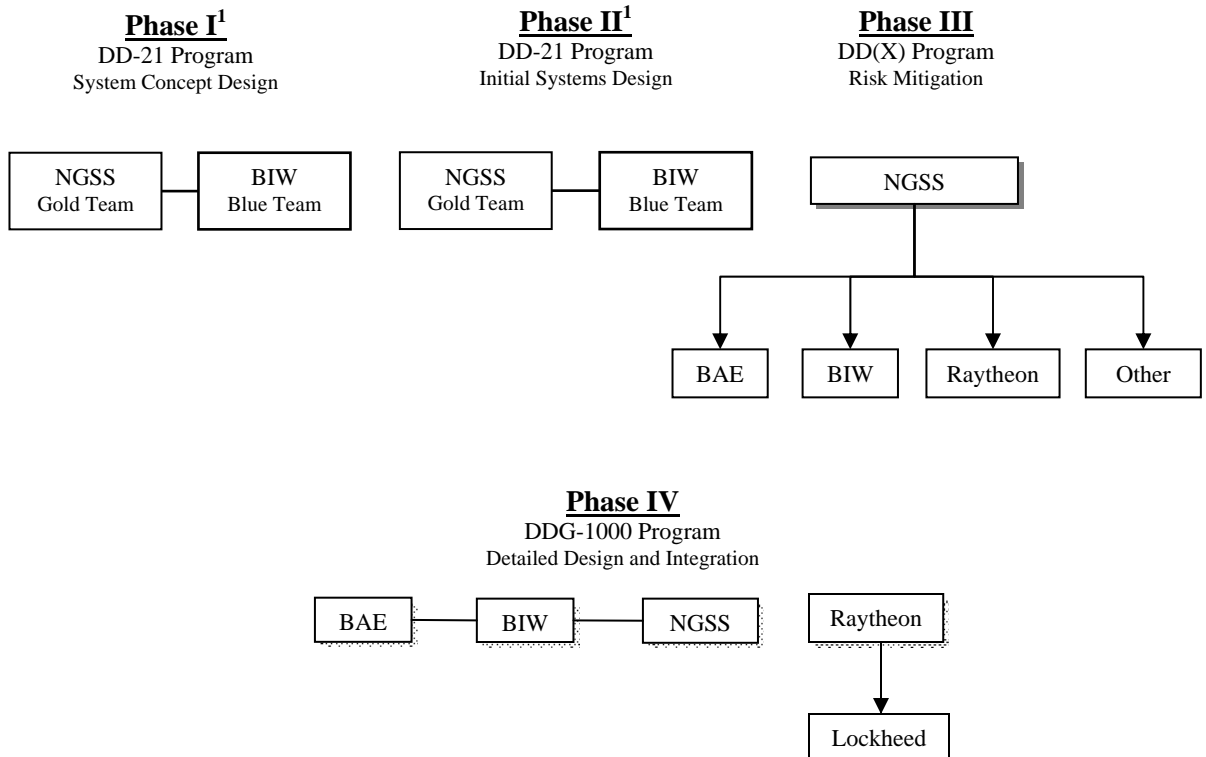

Thomas R. Carper


Allyson Y. Schwartz

cc: The Honorable Donald C. Winter, Secretary of the Navy
Vice Admiral Ronald A. Route, Naval Inspector General

Appendix C. Diagram of the Phases of the DDG-1000 Program, Showing Contractors

The following is a diagram of the four phases of the DDG-1000 program and the major contractors who are participating in building the *Zumwalt*-class destroyer.



¹. Competition between the Blue Team led by Bath Iron Works with Lockheed Martin Corp. as the Combat Systems Integrator and the Gold Team led by NGSS with Raytheon Systems Co. as the Combat Systems Integrator.

Appendix D. Congressional Questions and Audit Responses

On May 29, 2007, four Senators—Arlen Specter; Robert P. Casey, Jr.; Joseph R. Biden, Jr.; and Thomas R. Carper—and Representative Allyson Y. Schwartz requested that the DoD Office of Inspector General perform an audit of the DDG-1000 program. The congressional request posed three specific questions for Office of Inspector General response.

Question 1: How many small businesses that participated in DDG-1000 Risk Mitigation Phase [Phase III] were denied the opportunity to bid on DDG-1000 program Detailed Design and Integration Phase [Phase IV] because follow-on work was awarded to Lockheed Martin, or other large defense contractors, on a sole-source, noncompetitive basis?

Audit Response

We found no indication that the Navy denied any small business that participated in DDG-1000 program Phase III the opportunity to bid on Phase IV. During phase III, 71 small businesses participated but did not participate in Phase IV, only one (TWT) believed it was denied the opportunity to participate in Phase IV. As noted in the finding, the Navy and its prime contractors adhered to small business subcontracting laws and regulations and integrated small businesses into their overall DDG-1000 program small business plans.

As also noted in the finding discussion, one small business subcontractor, TWT, perceived that it had been denied the opportunity to bid on Phase IV. TWT claimed that it had been prevented by Raytheon and Lockheed Martin from participating in Phase IV work on the damage assessment component of the DDG-1000 ship control system after performing related work during the first three phases of the DDG-1000 program. TWT complaints were the subject of a lawsuit filed by TWT against Raytheon and Lockheed Martin in the United States District Court for the District of New Jersey. On January 23, 2008, the District Court dismissed the TWT lawsuit “with prejudice and without costs.”

On August 5, 2005, and July 18, 2006, TWT filed requests for equitable adjustment with NGSS, its Phase III prime contractor. The requests for \$172,888 and \$434,851, respectively, were for costs TWT incurred in anticipation of doing work through Phase IV. NGSS reimbursed TWT a total of \$548,619 against the two equitable adjustment claims. The Navy was not responsive to our requests to determine whether the charges were passed through to the Navy and whether the Navy paid the charges. If NGSS billed and inappropriately received reimbursement from the Navy for the \$548,619, we recommend that the Navy DDG-1000 contracting officer recover the \$548,619 paid to NGSS for subcontractor costs.

Question 2: What was the total dollar value of the Detailed Design and Integration Phase [Phase IV] follow-on [sub]contracts that were originally supposed to go to small business?

Audit Response

As noted above, we found no indication that the Navy denied any small business that participated in DDG-1000 program Phase III the opportunity to bid on Phase IV. Thus, we could not identify any DDG-1000 Phase IV small business subcontracts that fell within the parameters of the question.

Question 3: With the exception of legislatively mandated sole-source awards, such as those for small business or minority set-asides, what Department of Defense policies, regulations, and oversight safeguards are in place to prevent the direction of subcontracts by DoD personnel without full and open competition?

Audit Response

On July 12, 2004, the Acting Under Secretary of Defense for Acquisition, Technology, and Logistics issued guidance on “Selection of Contractors for Subsystems and Components,” stating that the Government benefits from competition among prime contractors and subcontractors and that Government insight into the subcontractor selection process may be necessary to ensure fairness and the best value for DoD. The Acting Under Secretary noted that, in developing acquisition strategies, program managers and contracting officers should establish insight into a prime contractor’s plan for assembling a team to deliver the required system capability, as well as for fostering competition. The Acting Under Secretary also noted that solicitations should ask offerors to submit a plan explaining how they will ensure that the subcontractor competition will be conducted fairly and result in the best value for DoD. The Acting Under Secretary noted that Government personnel should review these plans to determine whether the offeror has taken adequate steps to ensure that a fair competition will be conducted for a specified subsystem, and seek appropriate revision of the plan if the Government concludes that it is likely that the offeror will show bias in the selection of a subcontractor. The Acting Under Secretary noted that, as a last resort, Government personnel should consider directly procuring the subsystem or component and furnishing it as Government furnished equipment.

A November 7, 2007, memorandum from the Director, Defense Procurement and Acquisition Policy on “Small Business Subcontracting Plans” states that Government personnel should ensure that small business subcontracting plan compliance is included as a special interest item in all future procurement management reviews. The Director also required that when a contracting officer determines that no small business subcontracting possibilities exist, the determination must be approved at a level above the contracting officer and included in the official contract file in accordance with FAR 19.705-2.

However, the FAR also permits the contracting officer to direct prime contractor award of subcontracts without competition when doing so would be in the best interest of the

Government. For example, FAR 44.201, “Consent and Advance Notification Requirements,” and FAR 44.202, “Contracting Officer’s Evaluation,” describe the contracting officer requirement to consent to prime contract selection of subcontracts. The contracting officer’s consent to a subcontract may be required if the contracting officer determines it is necessary to protect the Government because of the subcontract type, complexity, or value, or because the subcontract needs special surveillance.

As discussed in the finding, the Navy directed Raytheon to award a DDG-1000 program Phase IV subcontract to Lockheed Martin without the benefit of full and open competition. The FAR permits the contracting officer to direct prime contractor award of subcontracts without competition when doing so would be in the best interest of the Government. We could not determine whether the Navy directed Raytheon award was justified because the Navy could not provide any analysis, justification, or approval documentation to support the contracting officer’s direction. However, the FAR does not require a justification, approval, or file document regarding Government direction to make award to a particular subcontractor.

Department of the Navy Comments

Final Report
Reference



DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

17 November 2008

MEMORANDUM FOR DEPARTMENT OF DEFENSE - INSPECTOR GENERAL
ARLINGTON, VIRGINIA

SUBJECT: Department Of Defense Inspector General Draft Report
Small Business Contracting Under the Navy DDG-1000 Program
(Project No. D2007-D000AB-0222.000)

- Ref: (a) OASN RDA, DASN A&LM Memorandum for Department of Defense –
Inspector General, dated 29 October 2008
- (b) DODIG email, same subject, to DoN and DCAA regarding status of DCAA
Audit Report, dated 10 November 2008 1:39 PM.
- (c) DASN A&LM (Weaver) email, same subject, to DODIG regarding status of
DCAA Audit Report, dated 12 November 2008 2:48 PM.

Ref. (b) and (c)
omitted as
duplicative of
the Navy
memorandum.

Reference (a) endorsed and forwarded the Naval Sea Systems Command response to subject draft report. Reference (a) included detailed comments regarding the findings and recommendations contained in the subject draft report, including target completion dates for actions to be taken in response to DODIG's two recommendations. Completion of the necessary actions in response to these recommendations is contingent upon receipt of audit findings and report(s) from DCAA.

Through continued communication between DODIG, DCAA and this office (reference (b) and (c)) it has come to light that receipt of DCAA's audit results will be delayed. Based on DCAA's response (copied in reference (c)) the DoN projected target completion date for Recommendation 1 is revised from 31 December 2008 to 30 January 2009; and, the DoN projected target completion date for Recommendation 2 is revised from 31 January 2009 to 03 March 2009.

If you have any questions pertaining to this memo or its attachments, please refer them to Mr. Dwayne Weaver at Dwayne.Weaver@navy.mil or at 703-693-4073.

Bruce A. Sharp
Director, Program Analysis and
Business Transformation
Deputy Assistant Secretary of the Navy
(Acquisition and Logistics Management)



DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

OCT 29 2008

MEMORANDUM FOR DEPARTMENT OF DEFENSE - INSPECTOR GENERAL
ARLINGTON, VIRGINIA

SUBJECT: Department Of Defense Inspector General Draft Report
Small Business Contracting Under the Navy DDG-1000 Program
(Project No. D2007-D000AB-0222.000)

The Department of the Navy (DoN) hereby endorses and forwards the attached Naval Sea Systems Command response to subject draft report. The response provides detailed comments regarding the findings and recommendations contained in the subject draft report. The Navy's response should be incorporated into the final DODIG report.

If you have any questions pertaining to this memo or its attachments, please refer them to Mr. Dwayne Weaver at Dwayne.Weaver@navy.mil or at 703-693-4073.

A handwritten signature in cursive script, appearing to read "Bruce A. Sharp".

Bruce A. Sharp
Director, Program Analysis and
Business Transformation
Deputy Assistant Secretary of the Navy
(Acquisition and Logistics Management)

Attachments:
As stated

**COMMANDER, NAVAL SEA SYSTEMS COMMAND
COMMENTS ON
DODIG DRAFT AUDIT REPORT ON
SMALL BUSINESS CONTRACTING UNDER THE NAVY DDG-1000 PROGRAM
(PROJECT NO. D2007-D000AB-0222.000)**

We recommend that the Commander, Naval Sea Systems Command:

Recommendation 1. Verify the Northrop Grumman Ship Systems' statement that the \$548,619 in equitable adjustment payments to Trans World Technologies, Inc. (TWT) were subsequently billed to the Navy through a direct charge to contract N00024-02-C-2302.

NAVSEA Response: Concur. It appears, from the information presented thus far, that the Northrop Grumman Ship Systems' charges associated with TWT were billed to the Navy under Contract N00024-02-C-2302. The Defense Contract Audit Agency (DCAA) is currently investigating what charges were actually billed and the allowability of those charges. DCAA intends to provide the preliminary results of this analysis to Northrop Grumman by 30 October 2008 for comment. The final DCAA report will be issued after the comment period. Full verification of this issue, and of the amount in question, is being sought by the Supervisor of Shipbuilding (SUPSHIP) Gulf Coast.

Target completion date: 31 December 2008.

Recommendation 2. If the Navy made payments to Northrop Grumman Ship Systems for subcontractor costs directly charged to the Navy through contract N00024-02-C-2302, instruct the contracting officer to recover the total of these payments, \$548,619.

NAVSEA Response: Concur, if charges are found to be unallowable, SUPSHIP Gulf Coast will request recovery of any unallowable funds.

Target completion date: 31 January 2009.

Enclosure (1)

Team Members

The Department of Defense Office of the Deputy Inspector General for Auditing, Acquisition and Contract Management prepared this report. Personnel of the Department of Defense Office of Inspector General who contributed to the report are listed below.

Richard B. Jolliffe
Bruce A. Burton
Benjamin A. Mehlman
Rudolf Noordhuizen
George A. Ford
Cecil B. Tucker
Ryan D. Berkheimer
Allison Tarmann



Inspector General Department of Defense

