

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

UNITED STATES OF AMERICA)
ex rel. Paul J. Solomon,)
Plaintiffs,)
) CIVIL ACTION NO. 3:12-CV-4495-D
)
)
LOCKHEED MARTIN CORP. and)
NORTHROP GRUMMAN SYSTEMS)
CORP.,) FALSE CLAIMS ACT COMPLAINT
Defendants.) JURY TRIAL REQUESTED

RELATOR'S FIRST AMENDED COMPLAINT

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PAUL J. SOLOMON

Plaintiff Paul J. Solomon (“Solomon” or “Relator”), by and through the undersigned attorneys, on behalf of the United States of America, files this First Amended Complaint pursuant to Federal Rule of Civil Procedure 15(a)(1), and complains of the above named Defendants and each of them as follows:

I. STATEMENT OF THE CASE

1. This is a case of fraud by two major defense contractors, who wrongfully obtained lucrative defense contracts and contract payments by submitting grossly understated cost estimates and using improper accounting to conceal their cost overruns, resulting in a loss to the United States government in the hundreds of millions of dollars. Defendants Lockheed Martin Corp. and Northrop Grumman Systems Corp., the prime contractor and a leading subcontractor on the F-35 Joint Strike Fighter program, conspired to defraud the government in at least three ways.

2. First, Defendants obtained a contract modification and increased funding for the F-35 program in 2005 by knowingly submitting grossly understated cost estimates, misleading the government into believing the F-35 program was more affordable than it actually was. Lockheed knowingly understated costs across the whole F-35 program by as much as \$2.1 billion, which included a \$233 million understatement on Northrop’s portion of the program. One part of Defendants’ scheme to understate their costs is documented in a May 9, 2005 “Memorandum of Agreement” between Lockheed and Northrop, which the Relator, Paul Solomon, discovered in the course of his duties as a compliance auditor at Northrop. Based on these misleading cost estimates—which Defendants made at a time when they knew the government was keenly focused on the affordability of the F-35 program—Defendants fraudulently induced the government to approve a contract modification that authorized billions

of dollars in additional funding for the F-35 Program. Because the contract modification was obtained by fraud, Defendants' subsequent claims for payment under that contract constitute actionable false claims. And because of this fraud, the United States was deprived of the benefit of its bargain to the tune of hundreds of millions of dollars. Second, after securing the contract modification, Defendants incurred substantial and foreseeable cost overruns. Lockheed and Northrop concealed these overruns by improperly diverting funds from "Management Reserve," a budget reserve that is set aside for unanticipated future needs and is specifically prohibited from being used to cover cost overruns. Defendants' improper depletion of Management Reserve funds endangered the financial viability of the F-35 program, forcing the government to make steep cuts in testing and development resources with expensive and detrimental long-term consequences. Third, by covering up their cost overruns, presenting a misleadingly rosy picture of their performance on measures of cost control, and setting performance goals which they knew all along they would not be able to meet, Lockheed and Northrop were able to secure larger profits in the form of higher performance-based Award Fees than were warranted based on their actual contract performance.

3. This action is brought on behalf of the United States government by Plaintiff/Relator Paul J. Solomon, pursuant to the False Claims Act, 31 U.S.C. §§ 3729–3732. Relator Solomon was a longtime employee of Northrop, and his responsibilities included performing "surveillance audits" of Northrop's Earned Value Management System ("EVMS") in order to maintain oversight and compliance on the F-35 Program. Solomon has many years of experience performing surveillance audits at Northrop. Solomon is also a recognized expert on EVMS, and served on the committee that initially developed the same EVMS standards at issue in this case. During the course of his surveillance audits at Northrop between December 2005

and August 2007, Solomon discovered numerous violations of EVMS standards and improper Management Reserve transactions by both Northrop and Lockheed. Solomon is an original source of the information that forms the basis of this action, which is based on his direct and independent knowledge.

II. INTRODUCTION

4. The F-35 program has the dubious distinction of being the most expensive defense program in history, at a total national investment approaching \$1.5 trillion, though it was originally slated to cost \$233 billion. After more than fifteen years of design, development, testing, and production, the F-35 Joint Strike Fighter remains years away from operational and combat readiness. Senator John McCain has called the F-35 cost overruns “worse than a disgrace . . . one of the great national scandals.”¹

5. The F-35 Joint Strike Fighter (“JSF”) is a family of single-seat, multirole fighters with a variety of capabilities designed to meet the needs of the Air Force, Navy, and Marines. Lockheed is the prime contractor. Northrop is a principal subcontractor, producing the center fuselage and key avionics systems. The government administers the contract for the F-35 Program through a Joint Program Office (“JPO”) staffed by the Air Force, Navy, and Marines. Lockheed and the government entered into a “Systems Design and Development” (“SDD”) contract in 2001. The SDD Contract was a “Cost Plus Award Fee” contract, under which Lockheed billed the JPO for its costs on a monthly basis, and Lockheed also was eligible to receive a performance-based Award Fee every six months, which constituted its profit on the program. Lockheed shared billings and profits with Northrop and its other subcontractors. The

¹ Senate Armed Services Committee Hearing, Sept. 19, 2013.

amount of the Award Fee was heavily dependent on Lockheed's performance on various measures relating to efficiency and cost control.

6. The Defense Department's procurement regulations, which are incorporated into the SDD Contract, required Lockheed and its subcontractors, including Northrop, to use an Earned Value Management ("EVM") accounting system on the F-35 program. EVM compliance was also required under Lockheed and Northrop's own internal operating procedures. The primary purpose of an EVM system is to establish an initial budget and schedule, and then determine whether the program's cost and schedule are on track. EVM systems are meant to guide a company's management control system and serve as an early warning tool, to allow program/project management to identify and control cost and schedule problems before they become insurmountable.

7. One of the primary EVMS metrics Lockheed was required to provide to the government was a periodic "Estimate At Completion" ("EAC"), which is the estimated cost of the project at its completion. Northrop prepared a separate EAC for its own portion of the F-35 program, which Lockheed incorporated into the overall EAC it presented to the government. The EAC is supposed to represent the contractor's "most likely" cost estimate. However, Lockheed and Northrop conspired to conceal their "most likely" estimates and instead reported unrealistically low cost estimates to the government, in order to obtain government approval for the 2005 contract modification. This conspiracy is evidenced in a May 2005 "Memorandum of Agreement" between Lockheed and Northrop, which Relator Solomon discovered during the course of his surveillance monitoring at Northrop.

8. Consistent with EVMS guidelines, as well as the SDD Contract, Lockheed maintained a "Management Reserve" budget as part of the JSF Project's total budget.

Management Reserve budget is an unallocated portion of a contractor's overall budget, designed to provide budget for unanticipated work on a contract. Management Reserve budget is not to be used to cover cost overruns on a project.² However, in their 2005 Memorandum of Agreement, Defendants agreed that Lockheed would divert funds from Management Reserve to cover the unreported cost overruns Northrop expected to incur. In other words, the Management Reserve budget would be used to alter cost variance data and thereby conceal cost overruns. During his surveillance audits at Northrop, Relator Solomon discovered numerous instances in which both Northrop and Lockheed improperly diverted Management Reserve to conceal cost overruns.

9. By submitting misleadingly low cost estimates and cost performance data, and by improperly using Management Reserve to cover up their cost overruns, Lockheed and Northrop knowingly misled the government into believing that their performance at controlling costs was substantially better than it actually was. This allowed Defendants to receive higher scores on measures of cost performance and to improperly collect higher Award Fees. Defendants had a strong incentive to falsify cost information in order to boost their performance scores, because the Award Fees represented Defendants' main source of profit on the F-35 project.

10. Lockheed and Northrop's violations of EVMS standards and contractual requirements did tangible harm to the F-35 program and to taxpayers by increasing overall costs and reducing the effectiveness of the program. As a result of Defendants' fraudulent agreement to understate their costs, the government received substantially less than what it had bargained for when it agreed to the 2005 modification of the SDD Contract. Defendants promised the

² For example, if a contractor has budgeted \$100 to produce a Widget, but due to unanticipated design changes which arise after completion of the initial design, it costs \$120 to produce the Widget, the contractor can allocate \$20 from the Management Reserve budget to cover the unanticipated increase in budget to build the Widget. If the contractor then produces the Widget at \$120, there is no cost variance from budget. If however, there are no unanticipated design changes, but there are cost overruns so that the Widget costs \$120 to produce, there should be no allocation of Management Reserve budget. Instead, the contractor should report the cost overruns in the form of a negative cost variance of \$20.

government that they could deliver the F-35 at a cost they knew they would not be able to meet and did not intend to meet. By deliberately understating cost estimates and concealing cost overruns, Defendants deprived the Department of Defense and Congress of the accurate information they needed to make informed spending and procurement decisions. By diverting Management Reserve to cover cost overruns, Defendants effectively shifted cost problems into the later stages of the program, where they would cost more to address and have a more disruptive effect. And by depleting the funds allocated to Management Reserve, Defendants endangered the long-term financial viability of the program. Tellingly, by late 2007, Management Reserve had been drained by about \$1.4 billion, forcing the Department of Defense to fill the budgetary hole by cutting between \$470 million and \$650 million from resources allocated to testing and development. Those cuts, which resulted in substantial part from Defendants' prior misuse of Management Reserve, harmed the government by incurring greater long-run costs and damaging the effectiveness of the F-35 program.

III. JURISDICTION AND VENUE

11. The Court has jurisdiction over the subject matter of the False Claims Act claims pursuant to 31 U.S.C. § 3732(a), which specifically confers jurisdiction on this Court for actions brought pursuant to §§ 3729 and 3730 of Title 31; pursuant to 28 U.S.C. § 1331, which confers federal subject matter jurisdiction for federal questions; and pursuant to 28 U.S.C. § 1345, which confers federal subject matter jurisdiction over actions where the United States is plaintiff.

12. Contemporaneous with the filing of this Complaint, Solomon provided the Attorney General of the United States a statement of material evidence and information regarding the allegations herein of which Solomon is aware, together with a copy of the Complaint, in accordance with the provisions of 31 U.S.C. § 3730(b)(2).

13. This Court has personal jurisdiction over each Defendant herein pursuant to 31 U.S.C. § 3732(a) because each submitted or caused to be submitted false claims directly or indirectly to the Government and because each has made, used, submitted or caused to be made or used, false or fraudulent records and conspired in this District to get false claims paid or approved.

14. Venue is proper in this District under 31 U.S.C. § 3732(a) and 28 U.S.C. §§ 1391(b) and (c). All Defendants either currently transact business within this District, and/or did so during the time period relevant to this action, and acts proscribed by 31 U.S.C. § 3729 occurred in this District.

15. This suit is not based upon the public disclosure of allegations or transactions in a criminal, civil or administrative hearing, in a congressional, administrative, or Government Accounting Office report, hearing, audit, or investigation, or from the news media. To the extent that some allegations or transactions alleged herein have been publicly disclosed, Solomon is an “original source” of same within the meaning of the False Claims Act, and voluntarily disclosed such information to the government before filing this action. Solomon gained direct and independent knowledge of the fraud alleged herein through his observation and participation in the JSF Program while employed with defendant Northrop.

IV. THE PARTIES

A. The Plaintiff-Relator.

16. This action is brought by Relator Paul J. Solomon on his own behalf and on behalf of the United States of America. Solomon brings this action based on his direct, independent, and personal knowledge, and also on information and belief. He brings this action against Defendants for violations of the federal False Claims Act, 31 U.S.C. § 3729 *et seq.*, for

the United States and for himself, pursuant to the authority granted by 31 U.S.C. § 3730(b). Solomon is an original source of the information underlying this Complaint and provided to the United States, and has direct and independent knowledge of the information on which the allegations are based.

17. Solomon is a citizen of California and was employed by Defendant Northrop for approximately 32 years, from 1976 through 2008.

18. In 1990, Solomon graduated with honors from the Air Force Institute of Technology Cost/Schedule Control Systems Criteria course. The completion of the course provided certification that he was qualified to perform Earned Value Management System certification and compliance reviews.

19. During 1993–1998, Solomon was Northrop’s representative on the National Defense Industrial Association – Program Management System team which created the NDIA ANSI EIA 748-A Standard for EVM Systems. In that capacity, Solomon participated in the development of the same EVMS standards which were eventually incorporated into Lockheed and Northrop’s contracts with the government, and which are at issue in this case.

20. In recognition of his work on the NDIA ANSI EIA 748-A standard, Solomon received the David Packard Excellence in Acquisition Award for that effort. The Award is given to Department of Defense civilian and/or military organizations, groups, and teams who have demonstrated exemplary innovations and best practices in the defense acquisition process.

21. From December 2005 through August 2007, Solomon was Northrop’s EVMS Surveillance Monitor on the F-35 Program. In that capacity, he monitored Northrop’s compliance with EVMS standards, conducted audits, and reported his findings and recommendations in numerous “Surveillance” memoranda which he addressed to Northrop’s

senior management. Prior to the filing of this lawsuit, Solomon also sent his surveillance memos to local resident monitors employed by the Defense Contract Management Agency (DCMA), the Defense Department agency responsible for monitoring contractors' performance and management systems and ensuring their compliance with contract terms.

B. The Defendants.

22. Defendant Lockheed Martin Corp. ("Lockheed") is a Maryland corporation, headquartered in Bethesda, Maryland, which does business in the State of Texas.

23. Defendant Lockheed has been served with process through its registered agent, Corporation Service Company d/b/a CSC-Lawyers Incorporating Service Company, 211 E. 7th Street, Suite 620, Austin, Texas 78701.

24. At all times relevant to this Complaint, Defendant Lockheed acted through its Lockheed Martin Aeronautics Company business division, which has an office and place of business in Fort Worth, Texas.

25. Defendant Northrop Grumman Systems Corporation ("Northrop") is a wholly owned subsidiary of Northrop Grumman Corporation, has its principal headquarters in Los Angeles, California, and does business in the State of Texas.

26. Defendant Northrop has been served with process through its registered agent, CT Corp. Systems, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

27. At all times relevant to this Complaint, Defendant Northrop acted through its Integrated Systems sector, Air Combat Systems ("ACS") business area, having an office and place of business in El Segundo, California.

28. The Joint Strike Fighter F-35 Lightning II (the "JSF Program"), is a family of single-seat, single-engine, fifth generation multirole fighters intended to perform ground attack,

reconnaissance, and air defense missions with stealth capability. The F-35 is being developed for use by the U.S. Air Force, Marine Corps, and Navy, as well as U.S. allies, including the United Kingdom, Italy, Netherlands, Australia, Canada, Norway, Denmark, Turkey, Israel and Japan.

29. Between 1997 and 2001, Defendant Lockheed Martin competed against The Boeing Company to develop prototypes for the JSF Program concept demonstration phase.

30. Lockheed and Northrop signed a Teaming Agreement relating to the JSF Program on April 15, 1999.

31. On September 17, 1999 Lockheed and Northrop executed a Memorandum of Agreement for Work Content on the JSF Program. Under this agreement, Northrop would act as a subcontractor to Lockheed.

32. In October 2001, the United States government selected Lockheed's design over the alternative proposed by Boeing. On October 21, 2001, the Defense Department's Joint Strike Fighter Program Office ("JSFPO") entered into the "Joint Strike Fighter Systems Design and Development Program Conformal Contract, contract N00019-02-C-3002 through P00012" with Lockheed. The SDD Contract was the prime contract that would govern Lockheed's participation in the development and production of the F-35.

33. Pursuant to the Teaming Agreement, Lockheed awarded an Implementing Subcontract to Northrop under Purchase Order Number M4383 dated July 29, 2002.

34. Lockheed acts as the prime contractor on the JSF Program. Lockheed's primary responsibilities on the JSF Program also include, but are not limited to performance of aircraft final assembly, overall system integration, mission system, and providing forward fuselage, wings and flight controls systems.

35. Northrop's primary responsibilities on the JSF Program include, but are not limited to providing, electro-optical Distributed Aperture System (DAS), Communications, Navigation, Identification (CNI), center fuselage, weapons bay, and arrestor gear.

V. DEFENDANTS' SCHEME TO DEFRAUD THE GOVERNMENT

A. The SDD Contract Requirements.

36. The SDD Contract was a "Cost Plus Award Fee" contract, under which Lockheed would bill the government for its costs and would make an additional profit in the form of performance-based "Award Fees" that were awarded by JSFPO every six months, if certain requirements were met.

37. Upon receipt of an Award Fee, the prime contractor Lockheed would distribute a portion of the Fee to the subcontractors on the Project. Lockheed shared its Award Fees with Northrop based on a formula set forth in an April 23, 2002 Memorandum of Agreement between the companies.

38. At the time the SDD Contract was signed in October 2001, the total estimated cost for the F-35 program was more than \$16.5 billion, with a maximum Award Fee available of nearly \$2.5 billion, for a total estimated cost plus award fee of over \$19 billion.

1. Defendants were Required to Use a Compliant "Earned Value Management System."

39. Under governing federal regulations, the terms of the SDD Contract, and Defendants' own internal policies, Defendants were required to use a compliant Earned Value Management System in performing the SDD Contract for the F-35 program, including procedures for the application of Management Reserve.

40. Part II, Section I of the SDD Contract incorporates various federal regulations governing defense procurement contracts, which Lockheed was required to follow in performing

its obligations under the SDD Contract. Defense Federal Acquisition Regulation Supplement (DFARS) 252.234-7001 requires Lockheed to maintain a compliant Earned Value Management System. The Supplement states in pertinent part:

In the performance of this contract, the Contractor shall use an earned value management system (EVMS) that has been recognized by the cognizant Administrative Contracting Officer (ACO) as complying with the criteria provided in DoD 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs.

41. In addition, section 252.242-7005 of title 48 of the Code of Federal Regulations (“CFR”) relates to Cost/Schedule Status Reports, and requires Lockheed to, among other things, maintain procedures for the application of Management Reserve as well as a compliant EVM System. The Regulation provides in pertinent part:

- The Contractor shall use management procedures in the performance of this contract that provide for-
 1. Planning and control of costs;
 2. Measurement of performance (value for completed tasks); and
 3. Generation of timely and reliable information for the cost/schedule status report (C/SSR).
- As a minimum these procedures must provide for –

* * *

(2) Applying all direct and indirect costs and provisions for use and control of management reserve and undistributed budget;

* * *

c) The Contractor may use a cost/schedule control system that has been recognized by the cognizant Administrative Contracting Officer (ACO) as complying with the earned value management system criteria provided in DoD 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs.

42. The SDD Contract also required key subcontractors on the project, including Northrop, to utilize a compliant EVM System. DFARS 252.234-7001(f).

2. EVMS Standards Required Defendants to Use “Most Likely” Estimates of Costs in Submitting Estimates at Completion to the Government.

43. The American National Standards Institute (ANSI)/Electronic Industries Association (EIA) Earned Value Management System standard (ANSI/EIA-748-98) requires contractors to periodically develop comprehensive estimates of “costs at contract completion” in submitting estimates to the United States Government. As discussed above, Relator Solomon participated in the development of this standard during the 1990s. Subsection 3.9.2 of ANSI/EIA-748-98 specifically provides that “The EAC should be the *most likely estimate of the total costs* for all authorized program efforts....” (emphasis added). A “most likely” estimate means that there is equal probability that the actual cost will be either higher or lower than the estimate. The purpose of the “most likely” standard is to produce estimates that are neither “worst case” nor “best case,” but realistic.

44. Additionally, the SDD Contract contained a Contract Data Requirements List provision, Data Item No. A002, which required Lockheed to submit monthly Cost Performance Reports (“CPRs”) to the JSFPO. Contract Performance Report Data Item Description DI-MGMT-91466A, Section 2.2.2.3 requires that a contractor’s CPRs contain management’s Estimate at Completion (“EAC”), and instructs the contractor to “Enter in Block 6.c.1 the contractor’s *most likely EAC*. This estimate is the contractor’s official contract EAC.... This EAC is the value that the contractor’s management believes is *the most likely outcome*” (Emphasis added)

45. The SDD Contract also required Lockheed and its subcontractors to follow their own policies and procedures, known as “Command Media,” with regard to cost estimates and use of Management Reserve. Lockheed’s JSF Teammate EVM Process Description Process 8.0

– Comprehensive Estimate at Complete (EAC) states in pertinent part that “[t]he EAC will be the most likely cost assessment (*i.e.*, there is equal chance the actual cost will be lower or higher by the same amount) for the completion of all authorized work....”

46. Likewise, Northrop’s Command Media, EVMS Manual F208, states at Section 3.9b: “The estimate at completion (EAC) for direct costs is developed at the control account level and is the most likely estimate of the total cost for authorized efforts.”

3. Management Reserve Cannot Be Used to Cover Cost Overruns.

47. Management Reserve (“MR”) refers to the portion of a contractor’s budget that is set aside to be saved for unforeseen contingencies that were not anticipated at the time the original budget was prepared. Management Reserve is not to be used for covering up cost overruns, or for improving cost performance numbers on work already completed.

48. In connection with the CPR requirement discussed above, Contract Performance Report Data Item Description DI-MGMT-91466A, Section 2.2.4.6 requires contractors to report “the amount of budget identified as [Management Reserve] as of the end of the current reporting period.” It further provides that “MR is an amount of the overall contract budget withheld for management control purposes and is held for program unknowns (realized risks on authorized work scope). Reserve is held for future needs and *shall not be used to offset cumulative cost variances.*” (Emphasis added).

49. Moreover, Lockheed’s Joint Strike Fighter – EVM Process Description Process 7.0 relating to Management Reserve states in pertinent part:

The purpose of this document is to establish the process for creation, maintenance and distribution of Management Reserve (MR).

* * *

Management Reserve is held for current and future needs and must not be used to offset accumulated overruns and underruns.

Additionally, Process 7.1.2, Uses of MR, states:

- 1) Circumstances that are a candidate for Management Reserve include work scope growth/changes, rate changes and other program unknowns.
- 2) Increases in costs that “do not” qualify for MR should be addressed with EAC recognition including:
 - a. In-scope work evaluated through the EAC Monitoring process described herein
 - b. Rework
 - c. Recovery to schedule

Process 7.1.2(3) further states:

MR will not be used to cover overruns for the mere purpose of improving performance metrics. Doing so masks actual performance metrics and degrades the Team’s ability to effectively manage program performance and adequately predict likely cost and schedule outcomes.

50. Lockheed’s Command Media also states that “The Management Reserve Process is applicable to the total JSF Team ([Northrop], BAE Systems and LM).”

51. Northrop’s own Command Media also provides that Management Reserve is not to be used to cover cost overruns. Northrop’s “Western Region EVMS System Description Manual F208 (“EVMS Manual F208”), Section 3.5.4(a) states in pertinent part that “[Management] Reserve is held for current and future needs and is not used to offset accumulated overruns or underruns.”

52. On the F-35 program, approximately 10% of the total development contract value was budgeted as Management Reserve. In Relator Solomon’s experience, relatively little of this reserve should be spent during the early development years of a program, because expensive unforeseen contingencies are more likely to arise during the later test phase. As discussed below, however, Defendants burned through the F-35 program’s Management Reserve funds at a rate much faster than had been estimated and budgeted. By late 2007, Management Reserve had been depleted by about \$1.4 billion – two-thirds of the total reserve – even though the

development program was less than halfway to completion. Such a high expenditure during the early years of the program was very unusual, and strongly indicates that Management Reserve funds were being used improperly.

4. Defendants' Award Fee Was Substantially Based on Cost Performance Information That Lockheed Reported to the Government.

53. As mentioned above, Lockheed was eligible to receive award fees under the SDD Contract. As a condition to receiving payments, including award fees, under the SDD Contract, Lockheed (and Northrop through Lockheed) was required to submit monthly Cost Performance Reports to the JSFPO, annual Cost Data Summary Reports to the JSFPO, and semi-annual Self-Assessment Briefing to the JSFPO's Award Fee Board at the end of each Award Fee Period (collectively, the "Cost Performance Data").

54. Schedule H-3 of the SDD Contract sets forth the "criteria and procedures" for assessing Lockheed's performance (which was based on the Cost Performance Data) for purposes of determining how much, if anything, it should receive as an award fee during any given six-month Award Fee Period.

55. The SDD Contract identifies four "Categories" by which Lockheed's performance was to be assessed. For each of these four Categories, the SDD Contract also identified "Areas of Emphasis." Attached to the Contract was an "Award Fee Evaluation Criteria Matrix" which set forth "Adjective Definitions and Descriptions" (the "Definitions") which further defined the criteria the government would utilize in assessing award fees. In each of the four categories, JSFPO's Award Fee Board assigned a percentage score (out of a possible 100%) that determined how much of the maximum award fee Lockheed would receive for that period.

56. Three of the four Categories upon which award fees were to be based relate to either the degree to which costs were accurately monitored and reported and/or the adequacy of Lockheed's and Northrop's EVM Systems.

57. The first of the relevant Categories for determining award fees was "Affordability."

- a. One of the Areas of Emphasis for assessing Affordability was Lockheed's "Reduction in Development, Production and Ownership Cost." The Definitions state that this assessment would be based on the extent to which Lockheed provided "incentives to Subcontractors to reduce development, production and sustainment cost."
- b. The second Area of Emphasis for assessing Affordability was Lockheed's "Development of an Affordability Assessment Process." The Definitions state that this assessment would be based on the extent to which Lockheed developed an affordability management process, which includes the establishment of affordability goals, and a recurring assessment of cost performance through the use of jointly established metrics."

58. The second of the three relevant Categories for determining whether Lockheed merited an award fee was "Management."

- a. One Area of Emphasis for assessing Management was "Responsiveness." The Definitions state that this would include an examination of the "[t]imely and effective development of a seamless and automated integrated management information system that interfaces with the JSF Virtual Enterprise and includes . . . Earned Value Management System (EVMS)."
- b. A second Area of Emphasis for evaluation "Management" was "Subcontract Management." The Definitions indicate that this assessment would include an examination of Lockheed's "surveillance and monitoring of the compliance and maintenance of key subcontractors' EVMS."

59. The third Category for determining whether Lockheed merited an award fee was "Development of Cost Control." An Area of Emphasis for assessing this Category focused specifically on "EVMS Implementation." The Definitions indicate that the following factors would be considered in evaluating EVMS Implementation:

- a. The adequacy of Lockheed's "cost control and reporting system;"
- b. The accuracy of "cost performance reports;" and
- c. Evidence regarding the extent to which "EVMS . . . is . . . integrated with other management systems...."

B. Lockheed and Northrop Conspire to Fraudulently Induce Government Approval.

1. The 2004–2005 Replan.

60. By 2004, the F-35 JSF program was already well over budget and significantly behind schedule. As the design of the F-35 progressed and more features were added, Lockheed recognized that weight estimates from early in the design phase were overly optimistic, and that the plane would have to shed 3,000 pounds in order to meet performance parameters. This entailed a massive redesign effort, and a substantial increase in the cost of the program to the United States.

61. In light of these substantial design changes, Congress and the Department of Defense had significant concerns about the affordability of the F-35 Program. Accordingly, the government required Lockheed to prepare a new, accurate cost estimate so that it could determine whether or not the F-35 program was simply too expensive, as measured against other national priorities.

62. Pursuant to the SDD Contract, Lockheed and Northrop were required to conduct, and did conduct, periodic EAC evaluations of actual and expected program costs. These EAC evaluations were presented to the government.

63. In early 2004, Lockheed received approval from the United States government JSF Program Office to plan and implement a comprehensive rebaselining of cost, schedule, associated statement of work, and other JSF program requirements necessary to recover

performance during SDD (the “Replan”). The Replan included a revised comprehensive EAC for the F-35 program, the third such revision to the EAC (“EAC 3”). Northrop prepared a separate EAC cost estimate for its own portion of the program, which Lockheed incorporated into the overall EAC 3 estimate it presented to the government.

64. Over an eighteen-month period between early 2004 and October 2005, Lockheed and Northrop developed the Replan and revised EAC 3 cost estimates to submit to the government. In order to obtain increased funding through a modification of the SDD Contract, Lockheed presented its overall EAC 3 estimates to the government, including to Fred Atwood (Lead, SDD EVM), Tim Trayers (Director of Program Integration) and Mark Mutsshuler (Director of Cost and EVM), between January and May 2005, when it obtained approval from the Defense Acquisitions Board (the Defense Department’s senior advisory board for major acquisition programs). Lockheed presented the EAC 3 estimates again in June 2005, when the Undersecretary of Defense for Acquisition signed off, and again on or before October 6, 2005, when the JSFPO granted Lockheed’s proposed modification of the SDD Contract based on the EAC 3 numbers. As discussed in more detail below, the EAC 3 estimates submitted to the government were false.

2. Lockheed and Northrop Document Their Conspiracy to Defraud the Government.

65. The numbers presented to the government during the Replan period were false because Defendants feared revealing the true cost estimates. Lockheed and Northrop feared that if the government knew the true extent of the cost increases, the government would not approve the contract modification and increased funding, which would lead to further cuts in the program.

66. On information and belief, Lockheed and Northrop also feared that disclosure of the F-35’s true costs might have prompted some of the allied countries who were participating in

the JSF program to scale back and/or cancel their orders, which would have driven up total costs for the U.S. government because fewer planes sold would mean higher unit costs per plane.

67. Further, while the Replan was under consideration by the government, initial funding for long-lead items related to the first production of five aircraft was being sought from Congress. On information and belief, Defendants feared that the greater the estimated cost of the program as stated in the Replan, the less likely Congress was to approve this initial funding for the first production lot.

68. Because they feared the consequences of disclosing their “most likely” realistic cost projections, Lockheed and Northrop conspired to present the government with misleading and unrealistically low cost numbers in connection with the rebaselining of the F-35 program under the Replan. Defendants’ purpose in providing these misleading cost estimates was to induce the government to approve a contract modification and increased funding based on the EAC 3 numbers.

69. According to a December 18, 2004 “Review Summary” presentation uncovered by Relator Solomon, Northrop had initially calculated its Estimate at Completion as \$4.309 billion. On or shortly before December 18, 2004, Lockheed convened an Independent Review Team, which revised Northrop’s cost estimate downward to \$3.954 billion. The \$3.954 billion represented Lockheed’s “most likely” estimate of how much it would cost for Northrop to complete its part of the F-35 program, but Lockheed presented a substantially lower cost estimate to the government in the EAC 3.

70. Indeed, Lockheed and Northrop entered into an agreement to substantially understate the official cost estimates in the EAC 3, and to conceal from the government the anticipated cost overruns through the improper issuance of Management Reserve. This

conspiracy is documented in a Memorandum of Agreement (the “MOA”), dated May 9, 2005. Relator Solomon discovered the MOA while he was a surveillance auditor at Northrop. While Solomon’s copy of the MOA is unsigned, it nevertheless states that “[t]he purpose of this MOA is to document the agreements reached by the Parties on the JSF [Northrop] EAC [3].”

71. The MOA states that Lockheed’s Independent Review Team had developed a “most likely” EAC for Northrop of \$3.954 billion. It further states, however, that Northrop “has agreed to plan and implement its effort at a ‘Should Perform Target’ of \$3.721B in recognition of the *affordability considerations* facing the JSF Program....” In other words, Lockheed and Northrop agreed to address the government’s “affordability concerns” by offering the government an unrealistically low cost estimate of \$3.721 billion (\$233 million below what Lockheed had calculated would be the “most likely” cost) for Northrop’s portion of the F-35 program.

72. More specifically, the MOA states that “On January 17, 2005, the Parties agreed that the value of Northrop’s EAC [3] budget baseline (exclusive of Contributed Management Reserve, Award Fee and California Tax Credit) would be \$3.721 billion.”

73. Tellingly, the MOA also establishes both Defendants’ belief that Northrop was unlikely to perform at the understated EAC cost estimate they intended to report to the government: “The Parties recognize that this value constitutes a significant performance challenge which can be accomplished only by achieving substantial performance efficiencies in a number of areas beyond otherwise normal expectations.”

74. Accordingly, the EAC 3 value of \$3.721 billion for Northrop’s portion of the F-35 program that Defendants agreed to report to the government was not the “most likely” estimate

of what Lockheed and/or Northrop calculated Northrop's estimated costs would be, but was intentionally understated by \$233 million.

75. In recognition of the fact that Northrop was likely to incur substantial cost overruns due to the understated EAC, the MOA reflects an agreement between Lockheed and Northrop to conceal such overruns through the improper issuance of funds from Management Reserve: "In the event [Northrop] is unable to . . . perform to the agreed to [Northrop] EAC [3] value, [Lockheed] agrees to increase [Northrop's] . . . EAC for costs in excess of \$3.721B out of the Program Management Reserve or other budget sources available to [Lockheed]." (*Id.*)

76. Thus, the Defendants knew that Northrop's portion of the F-35 program was likely to incur cost overruns of at least \$233 million, but they agreed to wrongfully apply funds budgeted for Management Reserve to conceal the cost overruns from the government and to increase award fees that would be based on cost performance.

77. The Defendants' agreement violated EVMS standards, defense procurement regulations, their contract obligations to the government, and their own internal "Command Media" procedures, in at least two ways:

- First, they used an optimistic, unrealistic "should cost" number rather than a "most likely" estimate of actual costs.
- Second, they agreed to improperly divert funds from Management Reserve in order to cover Northrop's predictable excess costs.

These improper practices led to significant distortions in Lockheed and Northrop's cost performance data. By their concealment of "most likely" costs, Defendants fraudulently induced the government to approve the 2005 contract modification, which increased funding and set the official budget baseline for the F-35 program at least through 2008. Further, by knowingly submitting inaccurate and misleading cost performance reports, Defendants deprived the

government of the opportunity to make timely and informed funding decisions based on accurate information. In addition, the improper expenditure of Management Reserve weakened the F-35 program's long-term ability to respond to unforeseen future requirements.

3. Defendants Fraudulently Induce the Government to Approve the Replan.

78. On information and belief, per the agreement of the Defendants as reflected in the MOA, Lockheed knowingly presented to the government an overall EAC 3 which included the unrealistic \$3.721 billion figure for Northrop's share of the estimate. On information and belief, Lockheed also presented unrealistic and misleadingly low EAC 3 cost estimates for the rest of the F-35 program. Lockheed used these false and misleading cost estimates to obtain the government's approval for a modification of the SDD Contract to provide increased funding.

79. In May 2005, the Defense Acquisition Board approved a new budget baseline for the F-35 program that incorporated Lockheed and Northrop's understated and false EAC 3 cost estimates. In June 2005, Michael Wynne, the Undersecretary of Defense for Acquisition, Technology and Logistics, signed off on the new baseline. On October 6, 2005, the JSFPO and Lockheed signed a new modification of the SDD Contract, which provided increased funding for the F-35 program.

80. As discussed above, the MOA shows that Defendants agreed to understate the costs on Northrop's part of the F-35 program by about \$233 million. Northrop, a subcontractor to Lockheed, was responsible for only about 11% of the work on the F-35. On information and belief, Lockheed knowingly understated its own projected costs across the rest of the F-35 JSF program, as well as those of other subcontractors, in a similar manner and on a much larger scale, by presenting unrealistically low cost estimates that did not reflect its own calculation of "most likely" costs, and by using Management Reserve to conceal the overruns.

81. When Lockheed presented its revised EAC 3 estimates to the government in early 2005, Lockheed told the government that the total projected cost of the F-35 program was about \$44 billion. This represented an increase in cost of about \$10 billion from the \$34 billion cost initially estimated back in 2001. On information and belief, however, Lockheed knew that the “most likely” program-wide cost estimate had actually risen by as much as \$12.1 billion. In other words, on information and belief, Lockheed knew when it obtained the 2005 contract modification that the program’s true costs would be as much as \$2.1 billion higher than it reported to the government.

82. On information and belief, the government would not have approved the 2005 contract modification if it had known the true extent of Lockheed and Northrop’s cost estimates for the project.

83. At a minimum, as the MOA reveals, the extent of Lockheed and Northrop’s cost underreporting had a natural tendency to influence and/or was capable of influencing the government’s decision to approve continuation of the program as a whole, and award the 2005 contract modification.

84. The Memorandum of Agreement discovered by Relator Solomon shows that Lockheed and Northrop knew they would not be able to stay within the cost estimates they presented to the government in order to obtain the contract modification, and that they had no intention of doing so. Nor did Defendants have realistic, documented corrective action plans to reduce costs.

85. The MOA also shows that Lockheed and Northrop had no intention of adhering to their obligations to the government under the SDD Contract, insofar as they agreed to violate

those obligations by knowingly presenting unrealistic cost estimates that were not “most likely,” and by improperly diverting Management Reserve funds to cover cost overruns.

86. Accordingly, Lockheed and Northrop (through Lockheed) obtained payments from the government under the SDD Contract to which they were not entitled.

87. Because the 2005 modification of the SDD Contract based on Lockheed and Northrop’s misleading EAC 3 numbers was obtained by fraud, each subsequent claim for payment under that contract constitutes an actionable false claim.

88. The official cost estimates from EAC 3 remained relatively unchanged through at least 2008, and the estimated program budgeted funding of \$44 billion that was established by the Replan was carried forward through at least 2008.

89. Indeed, Northrop followed through on its agreement to understate its Estimate at Completion. According to Northrop’s cost data base, which provided the input for the monthly Contract Performance Reports it submitted to the government directly or indirectly through Lockheed, Northrop’s reported EAC for a four month period in 2006 was even less than the understated EAC of \$3.721 billion that was set forth in the MOA. In March 2006, Northrop’s system reflected an EAC of \$3.698 billion; at the end of April it was \$3.707 billion; at the beginning of June it was \$3.710 billion; and at the end of June it was \$3.694 billion. Up through the end of July 2007, Northrop’s reported EAC continued to be lower than the \$3.954 billion “most likely” EAC that Lockheed’s Independent Review Team had calculated.

90. Payments were also made to Lockheed (and then to Northrop through Lockheed) in accordance with that budgeted cost authorization, and therefore, false claims arising from the false Replan and EAC 3 continued through at least 2008.

4. Submission of Claims for Payment Under the SDD Contract.

91. After being awarded a contract modification based on the false EAC 3 cost estimates relating to the Replan, Lockheed sent invoices for its costs (and its subcontractors' costs) on the F-35 program to the government's JSF Program Office on a monthly basis. Under Schedule G, section 6.1 of the SDD Contract, Lockheed's invoices were required to specify, among other things, "costs incurred and allowable under the contract." Lockheed sent its invoices, with supporting documentation, directly to the Defense Department's Defense Finance and Accounting Service (DFAS) payment center in Columbus, Ohio. Lockheed was also required to provide copies to the Administrative Contracting Officer (ACO) for the program; to the local Fort Worth, Texas office of the Defense Contract Audit Agency (DCAA), which was responsible for contract audits, and to the JSF Program Office in Arlington, Virginia.

92. Pursuant to the "Prompt Payment" regulation for government contracts found in 48 C.F.R. 52.223-35, the DFAS payment center paid Lockheed's invoices by electronic funds transfer on the thirtieth day after receiving them.

C. Defendants Misused Management Reserve and Fraudulently Obtained Improper Award Fees as a Result.

93. As mentioned above and discussed more fully below, every six months Lockheed received an Award Fee that was based, in large part, on its success on measures of cost performance, as reported in the Cost Performance Data. Lockheed shared its Award Fee with Northrop based on a predetermined formula. In the course of his duties auditing Northrop's EVM System, Relator Solomon uncovered numerous instances in which Defendants misused Management Reserve to falsely improve their cost performance numbers during three consecutive Award Fee Periods (Periods 10, 11, and 12) between May 2006 and October 2007.

94. Under the SDD Contract, Lockheed (and Northrop through Lockheed) was required to provide the JSF Program Office with detailed reports on its cost performance and cost variance. Northrop provided Lockheed with information from its own cost data base, and Lockheed incorporated Northrop's numbers into the totals it reported for the whole JSF program. As discussed above, JSFPO's Award Fee Board relied heavily on these reports in determining Lockheed's score on measures of cost performance and the size of its Award Fee. Each month, Lockheed's JSF Business Manager submitted a Cost Performance Report (CPR) to JSFPO. Lockheed typically submitted the CPR between three and four weeks after the close of the monthly accounting period. Each CPR included, among other things, cost and budget information, including cost variances, as well as a statement of the amount of increase or decrease in Management Reserve for that month, and of the total amount of Management Reserve funds remaining.

95. Lockheed also was required to submit an annual Cost Data Summary Report (Form DD-1921) to JSFPO, which was due 45 days after the close of the calendar year. The Cost Data Summary Report contained Lockheed's Estimates at Completion (EACs). As discussed below, these EACs were false and misleading because they were not based on "most likely" cost estimates.

96. In addition, Lockheed was required to provide a semi-annual "Self-Assessment Briefing" to JSFPO's Award Fee Board. The Self-Assessment was due no later than 10 days after the close of each six-month Award Fee Period. One of the primary metrics reported by Lockheed in its Self-Assessment was the total cumulative cost variance for the project at the beginning and at the end of each Award Fee period. JSFPO announced Lockheed's score, and the size of the Award Fee, about one month after the close of the period.

97. As discussed more fully below, Relator Solomon discovered evidence of misuse of Management Reserve and false cost performance reporting by Defendants in three consecutive Award Fee Periods:

- Period 10: From May 1, 2006 to October 31, 2006.
- Period 11: From November 1, 2006 to April 30, 2007.
- Period 12: From May 1, 2007 to October 31, 2007.

98. Solomon's EVMS surveillance audit of Award Fee Periods 10, 11, and 12 encompassed only the sampling of a limited number of cost accounts, and it is unlikely that Solomon observed all instances in which Management Reserve was misused to conceal cost overruns during these three periods.

99. On information and belief, Defendants engaged in similar misuse of Management Reserve and fraudulent cost performance reporting in other Award Fee Periods both before and after Periods 10, 11, and 12.

1. Lockheed Improperly Diverts \$97 Million From Management Reserve to Cover Cost Overruns.

100. Consistent with Defendants' MOA, on August 31, 2006, while preparing a new Estimate at Completion (EAC 4),³ Lockheed authorized approximately \$97 million of Management Reserve to increase the budgets of open work packages. Lockheed described this increase in budget as a "Risk Mitigation" strategy. Solomon uncovered a copy of a chart prepared by Lockheed which details the breakdown of how the \$97 million was to be allocated:

³ Under the SDD Contract, Lockheed and Northrop were required to develop periodic "Estimates at Completion" (EACs) which represented their most recent estimate of the total cost of the JSF program. Defendants performed these EAC exercises approximately once a year, developing EAC 4 during the fall of 2006 and completing EAC 5 in the summer of 2007. Unlike the EAC 3 estimate from 2005, which is discussed above, EAC 4 and EAC 5 were not tied to major contract modifications or funding increases, but instead were conducted within the overall budgetary framework established by the 2005 modification of the SDD Contract.

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Non-Technical Data – Releasable to Foreign Nationals



EAC4 RISK MITIGATION AREAS



WBS/TEAM	2006				2007				TOT
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	
1200 AIRFRAME									
LM	3.5	3.0	2.5	2.5	2.0	2.0	1.0	0.5	17.0
NGC	1.5	1.5	1.0	0.5	1.0	0.5	0.5	0.5	7.0
BAE	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	5.0
TOTAL	6.0	5.5	4.0	3.5	3.5	3.0	2.0	1.5	29.0
1300 VEH SYST									
LM	3.0	3.0	2.5	2.0	2.0	1.5	1.0	1.0	16.0
NGC	1.0	-	-	-	1.0	-	-	-	2.0
BAE	-	1.0	-	-	-	1.0	-	-	2.0
TOTAL	4.0	4.0	2.5	2.0	3.0	2.5	1.0	1.0	20.0
1400 MISS SYST									
LM	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	18.0
TOTAL	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	18.0
1700 SD&I									
LM	2.0	2.0	1.5	1.5	1.0	1.0	0.5	0.5	10.0
TOTAL	2.0	2.0	1.5	1.5	1.0	1.0	0.5	0.5	10.0
3100 PROD OPS									
LM	2.0	1.5	1.3	1.0	1.0	1.0	0.5	0.5	8.8
NGC	1.0	0.5	0.5	-	-	-	-	-	2.0
BAE	0.5	0.5	0.5	0.5	-	-	-	-	2.0
TOTAL	3.5	2.5	2.3	1.5	1.0	1.0	0.5	0.5	12.8
8500 CATB									
LM	2.0	1.5	1.0	1.0	0.5	0.5	0.5	-	7.0
TOTAL	2.0	1.5	1.0	1.0	0.5	0.5	0.5	-	7.0
TOTAL									
LM	16.5	14.5	11.8	10.5	8.5	7.5	4.5	3.0	76.8
NGC	3.5	2.0	1.5	0.5	2.0	0.5	0.5	0.5	11.0
BAE	1.5	2.5	1.0	1.0	0.5	1.5	0.5	0.5	9.0
TOTAL	21.5	19.0	14.3	12.0	11.0	9.5	5.5	4.0	96.8

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101. The premeditated “Risk Mitigation” strategy referred to by Lockheed constitutes a blatant misuse of Management Reserve budget by both Defendants in violation of defense procurement requirements, SDD contract requirements, and ANSI/EIA-748 guidelines, as well as their own respective Command Media guidelines.

102. As indicated by Lockheed’s chart, of the approximately \$97 million increase in budget diverted from Management Reserve, \$11 million was allocated to Northrop.

103. During the course of his duties, Solomon also uncovered a document dated October 12, 2006 entitled “JSF Budget/Schedule/EAC Change Request, SDD N00019-02-C-3002.” On or shortly before that date, Northrop formally requested, and Lockheed approved, an allocation of \$9 million from Management Reserve. Upon Lockheed’s approval, the increase in Northrop’s budget became effective.

104. Solomon identified the impropriety of the EAC 4 “Risk Mitigation” tactic in the course of his surveillance audits no later than October 23, 2006 (*see* Finding TD21-EVM-06-93), when he observed that unauthorized revisions to the Performance Measurement Baseline had been made in September 2006, resulting in a false, favorable cost variance of over \$3 million.

105. Defendants’ use of the term “Risk Mitigation” in connection with EAC 4 was designed to deceive the government. Both Defendants had Command Media requiring monthly assessments of performance trends which posed “pressures,” or risks that costs would exceed the EAC. Resources were to be employed to mitigate the risks in the form of corrective action plans, also referred to as “Return-to-Green” plans. If the corrective action plans did not show a high probability of success, the EAC was supposed to be increased. (*See* Lockheed’s JSF Process 5.1.3e., and 8.1.2; and Northrop’s ISWR Business Area Procedure C1-1020 EAC.) Instead of increasing the EAC, and in order to disguise the scheme and make it appear to be legitimate, thereby avoiding potential government scrutiny, Defendants gave the appearance that they were attempting to control costs through the use of the term “risk mitigation.”

106. In reality, EAC 4 Risk Mitigation was a sham, as Defendants were inappropriately tapping Management Reserve funds to give the false appearance of cost control. Lockheed and Northrop did not identify any specific cost pressures or risks. Defendants were incurring cost overruns not due to performance trends, but because they had systematically understated their EAC 3 cost estimates from the beginning. Because there were no developing trends to address, there were no corrective action plans. Defendants simply issued Management Reserve to conceal costs overruns, and utilized the term “Risk Mitigation” in order to create the facade that efforts were being made to control costs.

107. During the course of his EVMS surveillance audits, Solomon determined that \$9 million of the \$11 million in Northrop's Management Reserve budget was improperly utilized by Northrop to falsely diminish cost variance data. One of the Northrop production managers refused to accept and implement \$2 million of the \$11 million budget (as explained in more detail below). The breakdown of the increase in Management Reserve budget that was actually utilized by Northrop is set forth in the following chart. The "decrease in cost variance" represents the amount by which an expenditure from Management Reserve was improperly used to offset and conceal a cost overrun on a particular account (WBS, or "Work Breakdown Structure), thus improving Northrop's apparent performance on cost control:

Multi-Periods Fraud Summary for Northrop				
Contractor	WBS	CPR Months	Budget Increase (\$000)	Decrease in Cost Variance
Northrop	1200	Sept. 2006 - Apr. 2007+	7000	\$7,000,000
Northrop	1300	Same	2000	\$2,000,000
Total Northrop			9000	\$9,000,000

108. As discussed more fully below, Solomon recognized that the EAC 4 "Risk Mitigation" plan constituted a misuse of Management Reserve and advised Northrop's program managers not to participate in the scheme. His advice was not followed, save for the one manager who refused to utilize \$2 million of the Management Reserve.

2. Award Fee Period 10 (May 2006–October 2006):

109. On information and belief, Lockheed received an Award Fee of approximately \$36 million for cost performance in Period 10, which ran from May 1, 2006 to October 31, 2006. Lockheed shared a portion of this award fee with Northrop according to a formula set forth in

their 2002 agreement. This award, particularly in regards to the Cost Control Incentive component, was undeserved in that it was predicated on false statements made by Defendants regarding Defendants' cost performance during that period, as well as misuse of Management Reserve.

110. Specifically, during Award Fee Period 10, Defendants presented false cost performance information to the government in the form of monthly Cost Performance Reports, which Lockheed submitted to JSFPO between three and four weeks after the close of each month during May–October 2006; and in the form of the Self-Assessment Briefing which Lockheed presented to JSFPO's Award Fee Board on or shortly before November 10, 2006.

111. Solomon performed surveillance audits of Northrop's EVM System during Award Fee Period 10 (May–October 2006) by auditing a limited sample of data. The limited sample of data that was audited by Solomon revealed more than \$10 million worth of Northrop's Management Reserve which had been improperly utilized by Defendants to reduce reported cost variances in order to conceal cost overruns. The following chart sets forth the details regarding each instance of such misuse of Management Reserve identified in Solomon's audit sample.

Award Fee Period 10			
Contractor	WBS (1)	CPR Month(2)	Decrease in Cost Variance
Northrop	1622	Sept. 2006	\$2,205,000
Northrop	3130	Sept. 2006	\$3,063,000
Northrop	1412	Sept. 2006	\$865,000
Northrop	1232	Sept. 2006	\$1,716,000
Northrop	1233	Sept. 2006	\$1,657,000
Northrop	1230	Sept. 2006	\$7,236,000
Total Sample			\$16,742,000
(1) WBS: Work Breakdown Structure Number			
(2) CPR: Contract Performance Report Month			

112. On December 1, 2006, Lockheed reported in its “Communications Log” newsletter that it had received a “Very Good” rating and an overall score of 92%:

The F-35 Team took a step forward this week with an improved Award Fee score for Period 10 (May 06 to Oct 06) over the prior six months’ assessment. The SFFPO recognized our joint progress with a “Very Good” rating and an overall score of 92%. We received partial credit for the preparations for first flight, recent BTP progress . . . , and factory ramp-up as well as recent improvements in cost and schedule performance.

113. According to the SDD Contract, a “Very Good” rating and an overall score of 92% meant that Lockheed was entitled to 92% of the money available in the Award Fee pool for Period 10.

114. In the last two months of Award Fee Period 10, however, Lockheed improperly used \$40.5 million of management reserve to offset cost variances. In its cost reporting, Lockheed reported a cost improvement for Period 10, but without the misuse of Management Reserve, Lockheed should have shown a decline in cost performance, not an improvement.

115. Lockheed’s rating of “Very Good” (and subsequent award fee) was clearly unwarranted as a result of Lockheed’s false statements. Of the \$97 million of Management Reserve that was improperly distributed to cover cost overruns as part of the EAC 4 “Risk Management” plan, \$40.5 million was allocated in the last two months of Award Fee Period 10.

3. Award Fee Period 11 (November 2006–April 2007):

116. Lockheed received an Award Fee of \$42 million during Award Fee Period 11 which began in November 1, 2006 and ended on April 30, 2007. This award, particularly in regards to the Cost Control Incentive component, was undeserved in that it was predicated on false statements made by Defendants regarding Defendants’ cost performance during that period, as well as misuse of Management Reserve.

117. Specifically, during Award Fee Period 11, Defendants presented false cost performance information to the government in the form of monthly Cost Performance Reports, which Lockheed submitted to JSFPO between three and four weeks after the close of each month between November 2006 and April 2007; in the form of the annual Cost Data Summary Report which Lockheed submitted to JSFPO on or about February 15, 2007; and in the form of the Self-Assessment Briefing which Lockheed presented to JSFPO's Award Fee Board on or about May 2, 2007.

118. In the course of Solomon's EVMS surveillance audits during Award Fee Period 11, the audit sample revealed more than \$2.9 million worth of Northrop's Management Reserve budget that had been improperly utilized by Defendants to cover cost overruns. The following chart sets forth the details regarding each instance of such misuse of Management Reserve identified in Solomon's audit sample:

Award Fee Period 11			
Contractor	WBS (1)	CPR (2) Month	Decrease in Cost Variance
Northrop	3400	March 2007	\$2,943,000
(1) WBS: Work Breakdown Structure Number			
(2) CPR: Contract Performance Month			

119. Lockheed claimed in its May 2, 2007 Award Fee Self-Assessment Briefing that the program's cost overrun for that six-month period had decreased from \$239 million to \$229 million. However, during the same period, Lockheed improperly issued \$56 million in Management Reserve to offset cost overruns. Thus, rather than showing an improvement in cost variance of \$10 million, Lockheed should have reported a decline of \$46 million.

120. Lockheed received a rating of 100% for “Cost Control (objective) Incentive,” and collected the maximum Award Fee of \$42 million. Lockheed shared a portion of its award fee with Northrop according to the formula set forth in their 2002 agreement.

121. On June 25, 2007, Lockheed Program Manager Dan Crowley, Northrop General Manager Tom Burbage, and Northrop Program Manager Janis Pamiljans announced in a letter to all employees on the F-35 program that the JSFPO had awarded an “exceptional” rating across all categories, and that Lockheed and Northrop would receive more than 95% of the available Award Fee amount. According to the letter, JSFPO had noted Lockheed and Northrop’s “[e]xcellent progress” on “continuously improving cost performance.” On information and belief, however, Crowley, Burbage, and Pamiljans knew that the “exceptional” rating was based on falsified cost performance reporting and that the Award Fee was undeserved.

4. Misuse of Management Reserve spanning both Periods 10 and 11 (May 2006–April 2007):

122. During the course of his EVMS surveillance audits, Solomon identified additional instances in which Northrop misapplied management reserve to conceal cost overruns from the government, but was unable to place the misuse of Management Reserve a specific period. He was, however, able to determine that the misuse of Management Reserve occurred in either Period 10 or Period 11, or, was spread out over the two periods.

123. In the course of Solomon’s EVMS surveillance audit during Award Fee Periods 10 and 11, the audit sample revealed more than \$1.4 million worth of Management Reserve which had been improperly utilized by Defendants to cover cost overruns during one or both of these periods. The following chart sets forth the details regarding each instance of such misuse of Management Reserve identified in Solomon’s audit sample:

Award Fee Periods 10 and 11			
Contractor	WBS (1)	CPR (2) Month	Decrease in Cost Variance
Northrop	1233		\$1,325,000
Northrop	8230A		\$20,000
Total			\$1,345,000
(1) WBS: Work Breakdown Structure Number			
(2) CPR: Contract Performance Month			

5. Award Fee Period 12 (May 2007–October 2007):

124. In Award Fee Period 12, which began on May 1, 2007 and ended on October 31, 2007, Lockheed received an award fee of \$15.55 million for “Cost Control, based on a rating of 45.7%. Lockheed shared a portion of its award fee with Northrop according to the formula set forth in their 2002 agreement. This award, particularly in regards to the Cost Control Incentive component, was undeserved in that it was predicated on false statements regarding Defendants’ cost performance during that period, as well as misuse of Management Reserve.

125. Specifically, during Award Fee Period 12, Defendants presented false cost performance information to the government in the form of monthly Cost Performance Reports, which Lockheed submitted to JSFPO between three and four weeks after the close of each month during May–October 2007; and in the form of the Self-Assessment Briefing which Lockheed presented to JSFPO’s Award Fee Board on or shortly before November 10, 2007.

126. In the course of Solomon’s surveillance audits during Award Fee Period 12, the audit sample revealed more than \$3.3 million worth of Management Reserve which had been improperly utilized by Defendants to cover cost overruns. The following chart sets forth the

details regarding each instance of such misuse of Management Reserve identified in Solomon's audit sample:

Award Fee Period 12			
Contractor	WBS (1)	CPR (2) Month	Decrease in Cost Variance
Northrop	1238		\$850,000
Northrop	1200		\$2,500,000
Total			\$3,350,000
(1) WBS: Work Breakdown Structure Number			
(2) CPR: Contract Performance Month			

6. Misuse of Management Reserve at Lockheed.

127. Of the \$96.8 million of Management Reserve Lockheed allocated under the guise of EAC 4 Risk Mitigation, as set forth above, Lockheed retained \$76.8 million, or approximately 80%, to increase the budgets of open work packages at Lockheed.

128. The breakdown of how the \$76.8 million in Management Reserve budget was to be allocated is as follows:

Multi-Periods Fraud Summary re Lockheed				
Contractor	WBS	CPR Months	Budget Increase (\$000)	Decrease in Cost Variance
Lockheed	1200	Same	17000	\$17,000,000
Lockheed	1300	Same	16000	\$16,000,000
Lockheed	1400	Same	18000	\$18,000,000
Lockheed	1700	Same	10000	\$10,000,000
Lockheed	3100	Same	8800	\$8,800,000
Lockheed	8500	Same	7000	\$7,000,000
Total Lockheed			76800	\$76,800,000

7. Defendants Also Improperly Issue and Conceal Management Reserve Under the Rubric “Failed Enablers” and “Change Curve Sunk Costs.”

129. After Solomon exposed the EAC 4 Risk Mitigation scheme, Defendants continued concealing cost overruns through the issuance of Management Reserve, but had to utilize different terminology to disguise the practice from the government. This new terminology was “Failed Enablers,” and “Change Curve Sunk Costs.”

130. As uncovered and reported by Solomon in his Surveillance Audit TD21-EVM-07-68, dated August 14, 2007, Defendants conceived of the concept “failed enablers” during EAC 4. The process began with the development of a “most likely” EAC by Control Account Managers (CAMs) at Northrop. The CAMs’ number was then reduced by a value for EAC 4 “enablers.” An enabler was another euphemism for “Return to Green” plans to ostensibly avoid cost growth. As with EAC 4 Risk Mitigation, however, Solomon found that there were no discrete plans to attempt to contain costs. Subsequently, the nonexistent enabler would be declared a failure, and Lockheed would issue budget from Management Reserve to conceal the cost overrun.

131. Solomon’s Surveillance Audits were based upon a limited sampling of Earned Value data. In Audit TD21-EVM-07-68, he observed that Lockheed issued \$5.7M of Management Reserve to Northrop in the name of “failed enablers,” under Budget Change Request AV002407, in connection with Work Breakdown Structure (WBS) 1200. Moreover, Solomon’s audit sample represented only 20 percent of the total WBS 1200 budget for failed enablers. Inasmuch as Lockheed issued \$7 million in budget to Northrop in connection with this particular WBS as part of the EAC 4 Risk Mitigation effort, on information and belief, the misuse of Management Reserve for failed enablers was on a similar order of magnitude.

132. As with EAC 4 Risk Mitigation, the issuance of Management Reserve in the name of failed enablers violated defense procurement requirements, SDD Contract requirements, and ANSI/EIA-748 guidelines, as well as their own respective Command Media guidelines.

133. In the course of his Surveillance Audits, Solomon also observed the use of “Change Curve Sunk Costs” as another means of misusing Management Reserve to reduce cumulative cost overruns. “Change Curve” is synonymous with rework. In June 2007, budget for “EAC 4 Change Curve Sunk Costs” was added to work packages, creating a *de facto* retroactive change to budgeted costs for work performed (BCWP). Under this scheme, there was more rework at Northrop than planned, so Defendants applied budget to past tasks. The effect was to create a current month cost underrun, thereby misleadingly reducing the cumulative cost overruns.

134. In the course of his limited audit sampling, Solomon observed the issuance of \$3.174 million of Management Reserve in the name of Change Curve Sunk Costs in June of 2007. *See* TD21-EVM-07-68, Finding 7-16, August 6, 2007.

135. The purpose of this misuse of Management Reserve by Defendants was to make retroactive changes to the budget for work already completed, in order to create positive cost variance which offset cost overruns. This practice violated contract requirements, ANSI/EIA-748 guidelines, and also Defendants’ own respective Command Media guidelines.

136. The numbers stated above are the tip of the iceberg, insofar as they represent only a small sample of improper Management Reserve transactions for which Solomon was able to discover specific evidence, during a single eight-month period. As explained more fully below, Lockheed and its subsidiaries on the JSF program had expended over \$1.4 billion in Management Reserve by September 2007, burning through more than two-thirds of the total

reserve less than halfway through the project, with the more expensive testing phase still in the future. On information and belief, a substantial part of that \$1.4 billion represented improper expenditures similar to the examples discussed above.

8. Defendants Fraudulently Obtain Undeserved Award Fees.

137. Further, by misusing Management Reserve, Defendants falsely represented the amount of earned value (and the extent of cost overruns) to the government, and the government relied on these representations when deciding the amount of award fees.

138. As discussed above, Lockheed received a semi-annual Award Fee which it shared with Northrop. The amount of the Award Fee was based on four criteria: Affordability, Management, Technical, and Developmental Cost Control. Every six months, Lockheed received a score out of 100% in each category. Three of those four categories, representing 75% of the available award pool, were substantially based on Lockheed and Northrop's success in controlling costs.

139. As discussed above, the SDD Contract required the Defendants to submit cost variance data to the government's JSF Program Office, in the form of monthly Cost Performance Reports, annual Cost Data Summary Reports, and semi-annual Self-Assessment Briefings.

140. As discussed above, Lockheed submitted false cost variance data to the government on a monthly basis during Award Fee Periods 10, 11 and 12.

141. As discussed above, Northrop submitted false cost variance data to the government, directly or indirectly through Lockheed, on a monthly basis during Award Fee Periods 10, 11 and 12.

142. As discussed above, Northrop submitted false cost variance data to Lockheed, which was known by Lockheed and Northrop to be false. Nevertheless, Lockheed incorporated Northrop's false cost variance data into its own data which was submitted to the government.

143. The Defendants submitted the false cost variance data, directly and/or indirectly, to the government for the purpose of obtaining award fees during Periods 10, 11 and 12.

144. By intentionally understating cost estimates, and improperly using Management Reserve to cover cost overruns, Lockheed and Northrop presented the government false and misleading cost performance information, which misrepresented their success at controlling costs. As a result, Lockheed and Northrop were able to obtain Award Fees and/or higher Award Fee amounts to which they were not entitled.

145. Upon information and belief, Program Manager Dan Crowley, who acted as Lockheed's chief executive in charge of the F-35 program from May 2005 through May 2010, believed he would be fired if Lockheed's Award Fee ratings fell below 85%.

146. On information and belief, Crowley was aware that Lockheed was falsifying its cost estimates and improperly using Management Reserve to cover cost overruns. According to Lockheed's JSF Command Media Process 8.0 (Comprehensive Estimate At Completion), it was Crowley's responsibility as Program Manager to approve Lockheed's Estimates at Completion (EACs) before their submission to the government (8.1.4). Furthermore, according to Lockheed's Command Media Process 7.0 (Management Reserve Distribution), any change request for issuance of more than \$1 million in Management Reserve funds required the approval of Lockheed's Executive Steering Committee. The Executive Steering Committee received a monthly briefing on any changes in Management Reserve (7.1.4).

147. The award fees that were paid by the government to Lockheed (and shared by Lockheed with Northrop) during Award Fee Periods 10, 11 and 12 were substantially based upon the false cost variance data that had been submitted to it, directly and/or indirectly, by Defendants.

148. Lockheed and Northrop's Cost Performance Reports, Cost Data Summary Reports, and Lockheed's Award Fee Self-Assessment Briefings, were materially false because they were not based on "most likely" cost estimates and because they reflected the improper use of Management Reserve to cover up cost overruns, in violation of EVMS standards, defense procurement regulations, SDD Contract requirements, and Lockheed and Northrop's own internal procedures.

149. By presenting this false cost performance information to JSFPO, Lockheed (and Northrop through Lockheed) knowingly made false statements and engaged in a fraudulent course of conduct with the purpose of obtaining higher Award Fees to which they otherwise would not have been entitled.

150. The government did not know that the cost variance data submitted to it, directly and/or indirectly, by the Defendants during Award Fee Periods 10, 11 and 12 was false. If the government had known the true cost performance numbers, it would have paid no Award Fee or a substantially smaller Award Fee. At a minimum, Lockheed and Northrop's understatement of costs had a natural tendency to influence, and was capable of influencing, the decisions of JSFPO's Award Fee Board as to how much, if any, Award Fee Lockheed would receive.

D. Relator Solomon Discovers and Reports Numerous Violations at Northrop.

151. Relator Solomon discovered numerous examples of misuse of Management Reserve and other violations of EVMS standards on the F-35 program at Northrop. As part of

his regular duties, Solomon conducted “surveillance” audits of the F-35 program to ensure that Northrop was complying with EVMS standards and properly accounting for and reporting its costs and cost performance. Solomon reported his “surveillance findings,” and his recommendations for corrective actions, in numerous memoranda which he sent to several members of Northrop’s senior management, including Ralph Settle, Northrop’s “Cost Manager” and Solomon’s immediate superior, and Janis Pamiljans, Northrop’s Vice President for Tactical Systems and F-35 Program Manager. Solomon’s “surveillance memos” were also copied to the local resident auditors employed by the government’s Defense Contract Management Agency (DCMA).

152. Ralph Settle, Solomon’s immediate superior, was fully aware of Solomon’s findings regarding Northrop’s violations of EVMS standards, because Solomon communicated those findings directly to him in memos, e-mails, and oral conversations. As discussed more fully below, however, Settle repeatedly ignored Solomon’s advice with regard to compliance with EVMS standards. In at least one case, Settle personally ordered an improper negative adjustment of \$3.3 million to future cost, called Estimate to Complete, to conceal a cost overrun.

153. Janis Pamiljans, Northrop’s chief executive in charge of the F-35 program, was aware of Solomon’s findings, but to Relator’s knowledge did not take any corrective action or direct his subordinates to prepare or take any corrective actions to remedy existing violations or to prevent recurrence of new violations. Thus, Pamiljans intentionally ignored Northrop’s command media/internal procedure CO-1012, which requires that the program manager “ensures corrective action occurs for items identified through the surveillance and EVM process.”

154. On December 20, 2005, in his first month on the job conducting EVMS surveillance on Northrop’s F-35 program, Solomon issued Finding TD21-EVM-05-52 in a memo

addressed to Pamiljans. Solomon told Pamiljans that Northrop's cost variance analyses were inadequate, and that the Control Account Managers (CAMs) were not performing the required monthly EAC analyses and were not timely submitting requests to update EAC numbers. These problems, Solomon warned, were pervasive throughout the F-35 program.

155. On June 20, 2006, in Finding TD21-EVM-06-54, Solomon told Pamiljans and Settle that Northrop's Program Manager was not approving EAC change requests from the CAMs on a timely basis. The CAMs prepared analyses showing cost overruns, but their requests for changes to the official EAC estimates were ignored, so they improperly reduced their estimates to fit within the official EAC.

156. In a September 22, 2006 e-mail exchange, Solomon advised Settle not to proceed with a proposed rebaselining of the EAC 4 Estimates to Complete (ETCs) into a new Performance Measurement Baseline (PMB). The proposed rebaselining would have made an unauthorized change in the baseline in order to make the cost variances look smaller than they actually were, and would have led to the reporting of false and misleading cost and schedule variances. Solomon explained that EVMS standards do not allow such revisions to the PMB, and that work cannot be transferred from one department to another without formally transferring budget and updating the schedule.

157. On December 7, 2006, in Finding 6-38, Solomon reported that an unauthorized revision had been made to the Performance Measurement Baseline from the planning package, with no corresponding statement of work; that retroactive changes had been made to budgeted costs for already-completed work; and that earned value of \$3.063 million had been improperly taken for retroactive changes, which created a false, favorable current cost variance. The cost performance for Tube & Weld between EAC 3 and EAC 4 had been better than expected; so the

savings from that account were improperly transferred to cover cost overruns in the Metallic Fabrication and NC Programming accounts.

158. On December 12, 2006, in Findings 06-63 and 06-87, Solomon reported to Settle several examples of Management Reserve being improperly used to cover net cost increases that do not qualify for Management Reserve. Solomon reiterated that this was a program-wide problem.

159. On January 15, 2007, in Finding TD21-EVM-07-04, Solomon told Settle that as part of the EAC 4 budget exercise, Lockheed had recognized an EAC increase of \$11 million for Northrop, to be distributed from Management Reserve over eight months. This money was improperly added without input from the Control Account Managers and was not identified to specific work plans or schedules, as would have been required. Solomon explained that such a top-down allocation of Management Reserve would “usurp” the responsibility of the Control Account Managers to request such distributions in response to unforeseen contingencies.

160. On April 3, 2007, in Finding D21-EVM-07-26, Solomon reported to Pamiljans that the current budget included an improper revision to provide additional budget for work performed in past. This meant that the current earned value, cost variances, and cost performance indices did not reflect true cost performance. Solomon warned that these unauthorized changes would impair the integrity and accuracy of the budget baseline.

161. On April 16, 2007, in Finding TD21-EVM-07-31, Solomon reported to Settle and Pamiljans that he had found more examples of retroactive budgeting from Management Reserve to cover cost overruns for “rework,” or work already performed. Solomon stated that the local DCMA auditor at Northrop would refer this issue to his DCMA counterpart at Lockheed.

162. On April 25, 2007, Solomon e-mailed DCMA auditors John Gamble, Keven Davis, and Robert Snyder. He reported that \$2.94 million from Management Reserve was improperly used on the Materials Fulfillment account (WBS 3400) to mitigate the effect of meeting EAC 4 cost reduction initiatives.

163. On May 21, 2007, in Finding TD-21-EVM-07-41, Solomon reported that one of the Control Account Managers had improperly recorded a negative Estimate To Completion (ETC) of \$3.3 million in order to balance the estimate to the approved Lockheed EAC. Ralph Settle personally directed the CAM to make the \$3.3 million adjustment.

164. On July 25, 2007, in draft finding TD21-EVM-07-60, Solomon noted that the “most likely” EAC for Material Fulfillment was \$8.2M higher than the approved EAC, and the most likely EAC for Offsite Tooling was \$8.6M higher than the approved EAC. These variances were reported to Lockheed’s Program Office, and Lockheed did not timely respond. Solomon reported that Lockheed’s ongoing failure to approve similar EAC change requests on a timely basis was the “root cause” of many inaccurate ETCs. Keven Davis, the resident DCMA monitor at Northrop, concurred in Solomon’s finding and referred it to the DCMA monitor at Lockheed. On information and belief, this report played a role in triggering the DCMA’s decision to conduct a comprehensive EVMS Compliance Review at Lockheed in August 2007.

165. On July 31, 2007, in Finding TD-21-EVM-07-65, Solomon reported that a Control Account Manager had figured a “most likely” EAC that significantly exceeded the approved EAC. However, Northrop’s Program Manager ignored the request to increase the EAC, and did not incorporate these “most likely” numbers into its overall EAC 5 cost estimate.

166. On August, 13, 2007, in Finding TD21-EVM-07-66, Solomon reported to Settle that for some work packages, actual costs already exceeded the approved EAC 5 values only one

month after EAC 5 had been implemented. These cost variances show that the official estimate numbers provided by Lockheed and Northrop to the government were not realistic.

167. On August 15, 2007, in Finding TD-21-EVM-07-69, Solomon told Pamiljans and Settle that several of his previous findings had not been addressed and remained open. Solomon warned that Northrop's portion of the EAC 5 cost estimate (which had been completed in June 2007) may be understated by as much as \$50 million. The EAC 5 estimate was not a "most likely" estimate because it excluded numerous requests from Control Account Managers for budget increases.

168. On the same date, in Finding TD21-EVM-07-70, Solomon stated that in the opinion of the EVMS joint surveillance team, "there are chronic and pervasive problems regarding baseline revisions and the accuracy of the Performance Measurement Baseline (PMB)."

169. On August 22, 2007, shortly before he was transferred away from the F-35 program, Solomon issued Finding TD21-EVM-07-71. In this memorandum, addressed to Pamiljans and Settle, Solomon reiterated numerous findings of systemic problems he had reported going back to 2005, which were never corrected. Among other things, Solomon reported that Northrop's labor costs were understated by \$19.5 million because the official EAC did not use up-to-date "most likely" hourly rates.

170. During the nineteen months that he conducted surveillance of EVMS compliance in Northrop's F-35 program, Solomon uncovered and reported numerous other similar violations.

171. Solomon reported all of the aforementioned findings to the DCMA's resident auditors, who were copied on Solomon's surveillance memos. None of the violations uncovered

and reported to DCMA by Solomon had been the subject of any public disclosure at the time that he reported them.

E. Lockheed's Management Were Aware of Similar Violations.

172. On information and belief, Lockheed's senior management, including but not limited to Program Manager Dan Crowley and Senior JSF Contract Manager Gary Lowe, were aware that Lockheed's own cost estimates were misleading and inaccurate, and that Lockheed was also improperly using Management Reserve to conceal cost overruns in its own work on the F-35 program. As discussed above, Lockheed's Command Media required Crowley to sign off on EAC cost estimates before they were submitted to the government, and required approval from the Executive Steering Committee for Management Reserve expenditures in excess of \$1 million.

173. Lockheed's management knew that they were not permitted to use Management Reserve in this manner, because the government's JSF Program Office specifically told them so. On November 26, 2006, Randall Cohen, Contracting Officer at JSFPO, wrote a letter to Lockheed's Senior Contract Manager Gary Lowe in response to a proposal by Lockheed to relax the criteria for using Management Reserve so that it could be applied to offset cost variances in a broader variety of situations. Cohen rejected the idea, and reminded Lockheed that under the EVMS standards and Lockheed's DCMA-approved EVM system description, "Management Reserve shall not be used to offset unfavorable variances."

174. Two months before Lockheed requested JSFPO's permission to loosen the criteria for use of Management Reserve, Lockheed had already violated the EVMS standards, defense procurement regulations, SDD Contract terms, and its own internal procedures by improperly allocating approximately \$97 million from Management Reserve to cover cost overruns as part

of its EAC4 “Risk Mitigation” Plan, as discussed above. On information and belief, when Cohen sent the aforementioned letter, the JSFPO was not aware that Lockheed had already distributed Management Reserve in this improper manner.

F. Relator Initiates an Ethics Investigation at Northrop.

175. Realizing that the Northrop managers in charge of the F-35 program had no intention of correcting the numerous violations he had reported, Relator Solomon bypassed them and reported the fraud through Northrop’s internal corporate ethics process. On October 9, 2007, Solomon wrote to Darryl Heath, Business Conduct Officer for Aerospace Systems. Solomon reported that Northrop’s F-35 Program Office had violated Northrop’s Standards of Business Conduct in numerous ways, including:

- Submitting monthly Cost Performance Reports that contained “inaccurate, misleading information with regard to earned value, cost performance, and the Estimate at Completion (EAC).”
- Using falsified Cost Performance Reports to obtain undeserved Award Fees from JSFPO.
- Concealing cost overruns through misuse of Management Reserve. Specifically, Lockheed improperly transferred Management Reserve budget to Northrop for work it had already completed; Northrop transferred the additional budget to accounts that had incurred cost overruns, and made retroactive budget changes to improve its apparent cost performance.

176. Relator Solomon does not know what action, if any, Northrop took in response to this report.

177. Upon learning of the 2005 Memorandum of Agreement between Lockheed and Northrop to understate Northrop's EAC, which is discussed in more detail above, Solomon informed Northrop's lead investigator Neal O'Donnell about the Agreement in November 2007. Solomon does not know what action, if any, Northrop took in response to this information.

178. At the end of August 2007, shortly after Solomon issued his final surveillance memo (TD21-EVM-07-71) in which he reiterated his numerous previous findings of systemic EVMS compliance problems, Northrop removed Solomon from his EVMS surveillance position and reassigned him to other duties unrelated to the F-35 JSF program. On information and belief, Northrop transferred Solomon away from the F-35 program because it wanted to prevent him from uncovering and reporting further violations.

G. Solomon Continued to Report the Fraud to the Government.

179. Even after Northrop removed him from his auditing and surveillance duties, Solomon made repeated efforts to bring Lockheed and Northrop's fraud and misconduct on the F-35 program to the attention of the government. On March 10, 2008, Solomon sent a letter to Congressman Henry Waxman, Chairman of the House Committee on Oversight and Government Reform (attached as Exhibit A). In his letter, Solomon informed Congressman Waxman that Lockheed had understated the most likely EAC in its monthly EVM reports to the government, improperly utilized Management Reserve to conceal cost overruns, and received undeserved award fees as a result of the concealed overruns.

180. On October 25, 2011, Solomon sent a letter to Senator John McCain, Ranking Member of the Senate Armed Services Committee, and to the government's General Accounting Office (GAO) (attached as Exhibit B). In his letter, Solomon informed Senator McCain and the GAO of the 2005 Memorandum of Agreement between Lockheed and Northrop, that Lockheed

had deliberately understated the EAC, and that it then issued Management Reserve to conceal the resulting cost overruns.

181. The information discovered by Solomon and voluntarily reported by him to the government was based on his direct and independent knowledge, and not on any public disclosures. To the extent that some of the violations reported by Solomon were subsequently publicly disclosed in the Defense Contract Management Agency's November 2007 Compliance Report and/or the General Accounting Office's March 2008 Report, which are discussed below, Solomon is an original source because he has direct and independent knowledge of the information on which the allegations are based and because he voluntarily disclosed that information to the government before he filed this action.

H. The DCMA's November 2007 Compliance Report.

182. The DCMA conducted a comprehensive EVMS compliance review at the Lockheed facility in Fort Worth, Texas between August 20 and August 31, 2007. The review encompassed not only the F-35 Joint Strike Fighter, but also the F-22 Raptor and the F-16 programs.

183. On information and belief, the surveillance findings and other information provided by Solomon to local DCMA monitors at Northrop (and through them to DCMA monitors at Lockheed) were a significant factor in triggering DCMA's decision to conduct its compliance review of the F-35 program.

184. On November 19, 2007, after the close of Award Fee Period 12, the DCMA issued its "Post Acceptance Review For Cause Compliance Report" (the "Compliance Report"), Report No. CTR-2007-002, in which it summarized the results of its August 2007 review.

185. The Compliance Report found evidence that Lockheed engaged in many of the same improper practices that Solomon had already discovered and reported at Northrop. The Report concluded that Lockheed:

[I]s not following, nor consistently applying, the American National Standard Electronic Industries Alliance Earned Value Management Systems (ANSI/EIA-748-A) guidelines during the execution of Department Programs. The findings of the review indicate that, under Lockheed stewardship, the utility of the EVMS has declined to a level where it does not serve its intended purpose and the government is not obtaining useful program performance data to anticipate and mitigate program risks. (Emphasis added)

186. According to the Compliance Report, the DCMA found that Lockheed was “non-compliant in 19 of 32 industry guidelines.” One of DCMA’s “[s]ignificant findings” was that Lockheed was “[u]sing management reserve to alter internal and subcontractor performance levels and overruns.”

187. The DCMA further found:

- Lockheed “routinely altered” the estimated Budgets at Completion (BACs) and EACs of 17 major subcontractors, resulting in unreported cost overruns of about \$124 million. Lockheed’s business analysts also adjusted the Cost Performance Reports (CPRs) of these subcontractors on a monthly basis, to conceal the overruns.
- Adjustments made by Lockheed to Northrop’s July 2007 Cost Performance Report for CNI work (WBS 1434) decreased the to-date overrun reported by Northrop to Lockheed from -\$56 million to -\$3.7 million and reduced Northrop’s reported unfavorable variance at completion from \$56.5 million to zero. These adjusted values were then reported in Lockheed’s CPR to the F-35 JSF Program Office.
- Similar revisions were made to the data of the other 16 subcontractors who were required to submit CPR information. In total, Lockheed reduced to-date overruns reported by its suppliers from \$140.3 million to \$50.5 million, and decreased projected completion cost overruns from \$130.8 million to \$6.1 million.
- The justification given by Lockheed to DCMA for these alterations was that suppliers were working to budgets that were purposefully constrained by Lockheed as “challenges” to contain costs.

- Lockheed told DCMA it believed that supplier performance metrics would be more realistic if adequate budgets were in place and that adjustments were required to compensate for the under-budgeted work condition. The DCMA concluded that this thinking – taken together with the way in which Lockheed “augmented” subcontractor reported performance measurement data through the use of Management Reserve funded Level Of Effort work packages that are never charged – ignores the necessity to maintain the integrity of the Performance Measurement Baseline and misrepresents the actual condition of Lockheed’s cost and schedule status.
- Lockheed had performed similar adjustments to open internal Lockheed work packages, in violation of multiple EVMS ANSI/EIA-748 guideline prohibitions.
- Lockheed consumed Management Reserve to establish Level of Effort (LOE) work packages with no scope of work and no actual cost, and then used “underruns” from these phantom accounts to offset overruns reported by its suppliers. This resulted in “significant distortions” to cost performance data. Furthermore, the improper consumption of Management Reserve weakened Lockheed’s ability to properly fund unanticipated future requirements.
- The DCMA reiterated that there must be “no exceptions” to the strict limits imposed by EVMS on the narrow circumstances under which retroactive budget changes may be made. However, summary level data over the period from September 2005 to June 2007 shows that Lockheed violated these limits by making at least \$1.6 billion in negative retroactive adjustments to earned value performance. Between April 2005 and June 2007, BCR log records show that 1,093 retroactive changes totaling \$1.2 billion were recorded from “giving” control accounts and work packages, and 2,130 retroactive changes totaling \$2.7 billion were recorded to “receiving” accounts.
- Subsequent to the EAC 4 exercise (August 31, 2006), as discussed above, Lockheed authorized distribution of \$97 million from Management Reserve to increase the budgets of open work packages for Lockheed and its subcontractors Northrop and BAE Systems. Although Lockheed referred to this practice as a “Risk Mitigation” strategy, the government review team concluded that the actual purpose was “to improve the [Cost Performance Indices] of various WBS elements.”

188. The DCMA’s conclusion with respect to the EAC 4 “Risk Management” plan was consistent with what Solomon had already discovered and reported.

189. On information and belief, particularly with regard to Northrop's portion of the F-35 program, the DCMA's findings were based in substantial part on information previously discovered and reported by Solomon.

I. Defendants Depleted Management Reserve by \$1.4 Billion.

190. Defendants burned through Management Reserve funds at a rate much faster than had been estimated and budgeted. By late 2007, Management Reserve had been depleted by about \$1.4 billion. Although the F-35 design and development program was only halfway to completion, two-thirds of the budgeted Management Reserve had already been spent.

191. Such a high expenditure of Management Reserve during the early years of the F-35 program was very unusual, and strongly indicative of the fraudulent scheme described above. Based on Relator Solomon's extensive experience in developing and applying EVMS standards and auditing EVMS compliance, such a high "burn rate" suggests that Management Reserve funds are being used for improper purposes. When Management Reserve is used properly, relatively little of it should be spent during the development phase, because significant costs for unforeseen contingencies are more likely to arise in later years during the production phase.

192. On information and belief, a substantial part of the \$1.4 billion depletion of Management Reserve by late 2007 represented premeditated improper expenditures by Lockheed and/or Northrop whose purpose was to conceal cost overruns, as discussed above. Thus, the depletion of Management Reserve – which endangered the ongoing viability of the F-35 program – was the direct result of Lockheed and Northrop's unlawful and fraudulent agreement and conduct.

193. As of September 2007, only about \$400 million remained in the Management Reserve. The Department of Defense concluded that this amount was woefully inadequate to

cover unanticipated demands that might arise during the remaining years of the program. The Department of Defense also concluded that an additional infusion of approximately \$600 million would be required to bring Management Reserve back up to a level of about \$1 billion, which it believed would be adequate to address future program needs. On information and belief, however, the Department of Defense believed that Congress would not be receptive to a request for \$600 million in additional funding. For that reason, the Department of Defense decided to find the money to replenish Management Reserve by making extensive cuts elsewhere in the F-35 program.

194. Accordingly, the Department of Defense proposed a “Mid-Course Risk Reduction Plan” to fill the gap in Management Reserve by scaling back resources that had been allocated to testing and development of the F-35 fighter. The Office of the Secretary of Defense approved the plan in September 2007. The JSF Program Office ordered staff reductions, removed two development aircraft, eliminated 850 test flights, mandated that more test points be covered in each flight, and forced the program to rely more heavily on ground test labs rather than actual test flights. These cuts – the savings from which were used to recapitalize Management Reserve – were valued by JSFPO at between \$470 million and \$650 million.

195. At the time that the JSFPO proposed these program cuts and the Department of Defense approved them, they were not yet aware of the findings in the DCMA’s November 2007 Compliance Report regarding Lockheed’s inaccurate cost performance data and misuse of Management Reserve. As a result, JSFPO and the Department of Defense relied on the inaccurate, misleading, and unreliable cost estimates provided by Lockheed in determining the extent of the necessary replenishment of Management Reserve and the value of the proposed program cuts. On information and belief, the economic impact on the F-35 program of the

extensive cuts in testing resources resulting from Defendants' misuse of Management Reserve may have been even greater than the \$470 million to \$650 million estimated by JSFPO.

196. In March 2008, the government's General Accounting Office (GAO) issued a report (GAO-08-388) further detailing Lockheed's misuse of Management Reserve. In the report, the GAO concluded:

- Management reserves are budgeted funds set aside for unanticipated development challenges and increase a program's capacity to deal with unknowns. At development start, JSF budgeted reserves at 10 percent of contract value and expected to draw on them at about the same rate as contract execution. However, the program has had to use these funds much faster than expected to pay for persistent development cost increases and schedule delays.
- [The data] shows how management reserves totaling almost \$1.4 billion have been depleted since the 2004 Replan.
- By mid-2007, the development program had completed one half of the amount of work scheduled, but had expended two-thirds of the budget. Management reserves had shrunk to about \$400 million, less than one-half the amount officials believed necessary to complete the final 6 years of development.

197. The GAO report criticized the Defense Department's Mid-Course Risk Reduction Plan for its decision to cut testing resources, a plan which "significantly increases the risks of not completing development testing on time and not finding and fixing design and performance problems until late into operational testing and production, when it is more expensive and disruptive to do so."

198. The GAO also concluded that further cost overruns on the JSF program were likely to be "much higher" than JSFPO estimated, because JSFPO had relied on the inaccurate and misleading cost estimates and cost performance data provided by Lockheed.

199. In concluding that Lockheed's cost estimates were unreliable, the GAO report relied in large part on the findings of DCMA's November 2007 Compliance Report, which in turn relied in part on information uncovered by Solomon.

J. The Harm Resulting from Defendants' Fraudulent Scheme.

200. Lockheed and Northrop's fraudulent conduct harmed the United States government in several ways, both in economic terms and in terms of the effectiveness and combat-readiness of a key national defense program.

201. By submitting false and misleading cost performance data to the government, Lockheed and Northrop (through Lockheed) were able to obtain higher Award Fee amounts to which they were not entitled, causing losses to the government in an amount to be proved at trial.

202. As a result of Lockheed and Northrop's fraudulent agreement to understate their cost estimates, the government received substantially less than what it had bargained for when it agreed to the 2005 modification of the SDD Contract. Lockheed (and Northrop through Lockheed) promised the government that it could deliver the F-35 at a cost it knew it would not be able to meet and did not intend to meet. As a result, the government was forced both to pay higher costs, and to accept a smaller and less effective program, than it had bargained for.

203. By deliberately understating their cost estimates, Lockheed and Northrop deprived the Department of Defense and Congress of the accurate information they needed in order to make informed decisions about how much of their limited resources should be spent on the F-35 program (which was already the most expensive defense program in history) versus other defense and non-defense spending priorities.

204. By using Management Reserve to conceal predictable cost overruns, Lockheed and Northrop effectively shifted their cost problems into later stages of the program, where the problems would cost more to address and would have a more disruptive effect.

205. In particular, the steep cuts in development testing that resulted from the depletion of Management Reserve by 2007 had expensive and detrimental consequences for the F-35 program in the long run. Fewer test planes and fewer early test flights meant that fewer technical problems would be identified at the early stages when they could be corrected easily and inexpensively. Instead, serious defects were more likely to be discovered after the plane was in production, when fixing them would be a much more expensive proposition with hundreds of aircraft already in the field.

206. The delay, expense, and disruption caused by these cuts at the testing and development phase remain a pervasive problem for the F-35 JSF program to this day. Since 2007, the entire F-35 fleet has been grounded for expensive repairs nearly a dozen times upon discovery of major defects, including twice in 2013 for engine turbine blade cracking and excessive wear on rudder hinges, and most recently in June 2014 after an engine caught fire on the runway and “ripped through the top of the plane.”⁴

207. After hundreds of billions of dollars in government spending and more than fifteen years of design, development, testing, and production, the F-35 Joint Strike Fighter remains years away from operational and combat readiness. For example, because of repeated

⁴ See Defense-Aerospace.com, “F-35 Grounded After New F-135 Engine Problems, Feb. 22, 2013, http://www.defense-aerospace.com/articles-view/feature/5/142927/the-long-history-of-f_35-engine-problems.html (last accessed March 1, 2015); Adam Ciralsky, “Will it Fly?”, Vanity Fair, Sept. 16, 2013, <http://www.vanityfair.com/news/2013/09/joint-strike-fighter-lockheed-martin> (last accessed March 1, 2015); Andrea Shalal, “U.S., U.K. officials prepare inspection orders for all F-35s,” Reuters, July 2, 2014, <http://www.reuters.com/article/2014/07/02/us-lockheed-fighter-inspections-idUSKBN0F72F020140702> (last accessed March 1, 2015).

delays on Lockheed's end in developing and delivering the necessary software, the F-35 will not be able to fire its guns until at least 2019.⁵

K. Lockheed's EVMS System is Decertified.

208. Lockheed's EVM System was decertified by the DCMA on or about October 4, 2010 because of its inability to cure the deficiencies in the System.

209. One of the recommendations that DCMA made as a result of the Compliance Review was that:

Under Secretary of Defense for Acquisition, Technology, and Logistics should establish incentives for implementing and maintaining EVM Systems. For all new contracts include a contract clause for withholding up to 5-10 percent from supplier payments for failure to adequately implement and maintain a validated EVM System. For existing contracts, add a provision within the program award fee plan to establish similar incentives. (Emphasis added)

As will be discussed below, this DCMA recommendation was followed in February 2012 when Defense Federal Acquisition Rules were revised to allow the government to withhold payments from a contractor with a non-compliant EVM System.

210. The Compliance Review further provided:

- "Lockheed and the Program Management Office should jointly develop and provide to the DCMA, no later than February 8, 2008, a plan of corrective action plan and milestones to address all compliance and program application issues in order to retain EVMS certification;" and
- "The action plan should conclude with a follow-on compliance review in 4Q CY2008."

211. On or about October 4, 2010, Lockheed was notified by the Department of Defense that its EVM System was decertified due to the company's failure to cure the System

⁵ See Dave Majumdar, "New U.S. Stealth Jet Can't Fire Its Gun Until 2019," DailyBeast.com, Dec. 31, 2014, <http://www.thedailybeast.com/articles/2014/12/31/new-u-s-stealth-jet-can-t-fire-its-gun-until-2019.html> (last accessed March 1, 2015).

deficiencies. As a result of having its EVM System decertified, Lockheed was disqualified from bidding on new government contracts over \$20 million.

212. Effective February 24, 2012, defense procurement regulation DFAR 252.242-7005 empowered Contracting Officers to withhold up to five percent of amounts due if the contractor is found to have “significant deficiencies” in one of the contractor’s business systems, including its EVMS.

213. Immediately following the effective date of the new rule, the DCMA imposed a two percent withhold on payments to Lockheed because its corrective action plan for resolving EVMS deficiencies was found to be inadequate. At that time, the withhold amounted to approximately \$1 million per month.

214. In June 2012, the DCMA halted its review of Lockheed’s EVMS due to a lack of adequate progress in correcting the deficiencies and imposed the maximum penalty allowed, increasing the amount withheld from payments to five percent. As of late October 2012, a total of \$46.5 million was being withheld from Lockheed.

215. It was not until December 2, 2012 that Lockheed’s EVM System was recertified.

VI. THE FALSE CLAIMS ACT

216. The False Claims Act, as applicable to this action,⁶ imposes liability on any person who:

- (1) knowingly presents, or causes to be presented, to an officer or employee of the United States Government or a member of the Armed Forces of the United States a false or fraudulent claim for payment or approval;
- (2) knowingly makes, uses, or causes to be made or used, a false record or statement to get a false or fraudulent claim paid or approved by the Government; [or]

⁶ This action is governed by the version of the False Claims Act that was in effect prior to the amendments of May 20, 2009, because it concerns conduct that took place before that date. *See* Fraud Enforcement and Recovery Act of 2009 (FERA), May 20, 2009, P.L. 111-21, § 4(f), 123 Stat. 1625.

- (3) conspires to defraud the Government by getting a false or fraudulent claim allowed or paid.

217. Under the False Claims Act, the terms “knowing” and “knowingly” mean that a person, with respect to information—

- (1) has actual knowledge of the information;
- (2) acts in deliberate ignorance of the truth or falsity of the information; or
- (3) acts in reckless disregard of the truth or falsity of the information; and
- (4) no proof of specific intent to defraud is required. 31 U.S.C. § 3729(b).

218. Under the False Claims Act, a false statement or omission is “material” if it has a “natural tendency to influence, or [is] capable of influencing, the decision of the decision making body to which it was addressed.” *United States ex rel. Longhi v. Lithium Power Techs., Inc.*, 575 F.3d 458, 468 (5th Cir. 2009).

VII. CAUSES OF ACTION

COUNT I **FRAUDULENT INDUCEMENT** **FEDERAL FALSE CLAIMS ACT** **(31 U.S.C. § 3729 et seq.)**

219. Relator Solomon realleges the preceding paragraphs as if set forth herein.

220. Defendants fraudulently induced the government to award increased funding under the 2005 modification of the SDD Contract by knowingly submitting cost estimates and other information that were misleading and unreliable.

221. Defendants knew the cost estimates and other information were false.

222. When they induced the government into the 2005 modification, Defendants had no intention of adhering to their obligations to the government under the SDD Contract at the estimated cost provided by the defendants.

223. Through the acts and omissions described above, Lockheed and Northrop (through Lockheed) obtained payments from the government under the SDD Contract to which they were not entitled, by knowingly presenting, or causing to be presented, to an officer or employee of the United States Government, false or fraudulent claims for payment or approval in violation of 31 U.S.C. § 3729(a)(1).

224. Through the acts and omissions described above, Lockheed and Northrop knowingly agreed to make use of, and did indeed make use of, or cause to be made use of, false records or statements to get false or fraudulent claims paid or approved by the Government, in violation of 31 U.S.C. § 3729(a)(2).

225. The acts and omissions described above were material to contract approvals, audit and monitoring approval, payments and other contract actions by the United States. The government would not have approved the 2005 contract modification, or subsequent claims for payment under the modified contract, if it had known the true extent of Defendants' anticipated cost overruns. At a minimum, the extensive cost underreporting and submission of false information by Defendants had a natural tendency to influence and was capable of influencing the government's decision to award the 2005 contract modification and to approve subsequent claims for payment under the modified contract.

226. Because the 2005 modification of the SDD Contract was obtained by fraud based on falsified EAC 3 cost estimates, each subsequent claim for payment under that contract which Lockheed submitted in its monthly invoices to the JSF Program Office constitutes an actionable false claim.

227. The acts and omissions described above caused damages to the United States, in substantial amounts to be determined at trial.

COUNT II
FEDERAL FALSE CLAIMS ACT – PRESENTATION OF FALSE CLAIMS
(31 U.S.C. § 3729(a)(1))

228. Relator Solomon realleges the preceding paragraphs as if set forth herein.

229. By virtue of the acts and omissions described above, Defendants knowingly presented, or caused to be presented, to an officer or employee of the United States Government false or fraudulent claims for payment or approval in violation of 31 U.S.C. § 3729(a)(1).

230. Specifically, Lockheed (and Northrop through Lockheed) knowingly submitted false cost variance data and other information to the government for the purpose of obtaining higher ratings on measures of cost performance and higher Award Fees. Lockheed and Northrop's Cost Performance Reports and Cost Data Summary Reports, and Lockheed's Award Fee Self-Assessment Briefings, were materially false because they were not based on "most likely" cost estimates and because they reflected the improper use of Management Reserve to cover up cost overruns, in violation of EVMS standards, SDD Contract requirements, and Lockheed and Northrop's own internal procedures.

231. By presenting this false cost performance and other information to the government's Joint Strike Fighter Program Office, Lockheed and Northrop (through Lockheed) knowingly made false statements and engaged in a fraudulent course of conduct with the purpose of obtaining higher Award Fees to which they otherwise would not have been entitled.

232. The Award Fees that were paid by the government to Lockheed (and through Lockheed to Northrop) were substantially based upon the false cost performance information and cost variance data and other information that had been submitted to the government, directly and/or indirectly, by Defendants.

233. The acts and omissions described above were material to contract approvals, audit and monitoring approval, payments and other contract actions by the United States. The government did not know that the cost performance information, cost variance data and other information submitted to it, directly and/or indirectly, by the Defendants was false. Had the government known the data was false, it would not have granted the Award Fee that was given to Defendants during this Period. At a minimum, the falsified cost performance information, cost variance and other data had a natural tendency to influence, and was capable of influencing, the decision of the government's JSFPO Award Fee Board as to how much, if any, Award Fee would be paid.

234. The acts and omissions described above caused damages to the United States, in substantial amounts to be determined at trial.

COUNT III
FEDERAL FALSE CLAIMS ACT - FALSE RECORDS AND STATEMENTS
(31 U.S.C. § 3729(a)(2))

235. Relator Solomon realleges the preceding paragraphs as if set forth herein.

236. By virtue of the acts and omissions described above, Defendants knowingly agreed to make use of, and did indeed make use of, or cause to be made use of, false records or statements to get false or fraudulent claims paid or approved by the Government, in violation of 31 U.S.C. § 3729(a)(2).

237. Specifically, Lockheed, and Northrop through Lockheed, knowingly made, used, or caused to be made or used false records and statements, including but not limited to Cost Performance Reports, Cost Data Summary Reports, and Self-Assessment Briefings, for the purpose of obtaining higher ratings on measures of cost performance and higher Award Fees. These records and statements were materially false because they were not based on "most likely"

cost estimates and because they reflected the improper use of Management Reserve to cover up cost overruns, in violation of EVMS standards, SDD Contract requirements, and Lockheed and Northrop's own internal procedures.

238. The acts and omissions described above were material to contract approvals, audit and monitoring approval, payments and other contract actions by the United States. The government did not know that the cost performance reports and statements submitted to it, directly and/or indirectly, by the Defendants were false. Had the government known these reports and statements were false, it would not have granted the Award Fees that were given to Defendants. Alternatively, the false reports and false statements had a natural tendency to influence, and were capable of influencing, the decision of the government's JSFPO Award Fee Board as to how much, if any, Award Fee would be paid.

239. The acts and omissions described above caused damages to the United States, in substantial amounts to be determined at trial.

COUNT IV
FEDERAL FALSE CLAIMS ACT – CONSPIRACY
(31 U.S.C. § 3729(a)(3))

240. Relator Solomon realleges the preceding paragraphs as if set forth herein.

241. Defendants, by virtue of the acts and omissions described above, knowingly conspired to defraud the United States Government by getting false or fraudulent claims allowed or paid, and to commit acts in violation of 31 U.S.C. § 3729 (a)(1)–(2). Defendants committed overt acts in furtherance of the conspiracy as described above.

242. The acts and omissions described above were material to contract approvals, audit and monitoring approvals, and payments and other contract actions by the United States.

243. The acts and omissions described above caused damages to the United States, in substantial amounts to be determined at trial.

VIII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff-Relator Paul J. Solomon, on behalf of himself and the United States Government, prays that:

1. This Court enter judgment against Defendants in the amount of three times the damages the United States Government has sustained, in an amount to be proven at trial, pursuant to 31 U.S.C. § 3729(a);

2. This Court enter judgment against Defendants for civil penalties of not less than five thousand dollars (\$5,000) or more than ten thousand dollars (\$10,000) for each and every specific false or fraudulent claim or certification, false statement, or material omission made by Defendants, as may be identified at trial after full discovery, as provided for in 31 U.S.C. § 3729(a);

3. The Relator be awarded the maximum amount allowed pursuant to §3730(d) of the False Claims Act;

4. The Relator be awarded all reasonable attorneys' fees, costs, and expenses;

5. The Court award pre-judgment and post-judgment interest;

6. The United States and the Relators receive all other relief, both at law and in equity, to which they are entitled.

IX. DEMAND FOR JURY TRIAL

Relator, on behalf of himself and the United States, demands a jury trial on all issues so triable.

DATED: March 20, 2015

Respectfully submitted,

/s/ Natalie L. Arbaugh

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document has been served on all counsel of record via the Court's ECF system on March 20, 2015.

/s/ Natalie L. Arbaugh
Natalie L. Arbaugh

EXHIBIT A

Paul Solomon
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The Honorable Henry Waxman
2204 Rayburn House Office Building
Washington, D.C. 20515

March 10, 2008

Subject: Award Fees, Contract Oversight and Lockheed Martin

Dear Representative Waxman:

This letter supplements my letter of June 22, 2007. I had informed you that I support your initiatives to prevent unjustified award fees to federal contractors and discussed my concerns with a defense industry position paper on award fee incentives. The paper was sent to the Deputy Under Secretary of Defense. It stated that some defense contracts have misused incentives that were tied to achieving contractually-required reports of cost and schedule performance, called Earned Value Management (EVM) reports. The paper stated that the use of these incentives poses a risk that the contractors might sacrifice providing objective program status reporting in favor of "making the number" and that they may "manage data and reports."

I have evidence that Lockheed Martin (LM) has "managed data" in order to "make the number" on the F-35 Joint Strike Fighter (JSF) program. LM's practices were not in compliance with the EVM Standard (EVMS) that is required by the Federal Acquisition Regulation (FAR) and Defense FAR (DFAR). LM submitted monthly EVM reports which are the basis of semi-annual award fee claims. These reports misstated cost and schedule performance. Consequently, LM received unjustified award fees and also understated the final program costs, thereby avoiding Nunn-McCurdy scrutiny.

Although my evidence pertains to only the JSF program, it is pertinent that both DoD and the U.S. Navy issued policy memoranda (attached) which disclose that EVM is not working for acquisition management. The DoD memorandum states that:

- EVM is not serving its intended function in the internal control process
- DoD is committed to resolve systemic, DoD-wide weaknesses
-

The Navy memo is explicit regarding contractor issues. It states that:

- Numerous Navy contractors are not compliant with the EVM guidelines
- Reviews have found broad deficiencies across multiple contractor sites including
 - Intentionally masking cost and schedule variances
 - Failure to document and manage changes to the baseline

The conditions described above exist on the JSF program. LM has been non-compliant with EVMS guidelines and with its internal procedures. The guidelines preclude a contractor from using Management Reserve (MR) to offset accumulated cost overruns. LM has reported cost overruns that were subsequently reduced by using MR. By doing so, it has managed the data and reports in order to obtain higher award fees and mask the real cost overrun. LM has also ignored an EVMS guideline by understating the most likely program Estimate at Completion (EAC).

I have documented evidence of the allegations regarding the reduction of cost overruns and suppression of the EAC. The evidence is in my reports that were prepared while doing EVM surveillance, a type of audit, with the Defense Contract Management Agency at the JSF major subcontractor, Northrop Grumman Corporation (NGC). I have been an employee of NGC for thirty-one years.

LM has managed the schedule performance data as well as the cost performance data. It has repeatedly fallen behind schedule with regard to the schedule baseline. However, after reporting a schedule variance to the baseline, LM has frequently changed both the schedule and budget baselines and administratively eliminated the schedule variance. I did not report this practice as a deficiency in complying with the EVMS standard because the DoD Program Office approved the frequent changes to the schedule baseline.

Subsequent to changing the schedule baseline, LM received award fees that were based on improved schedule performance even though the improvements were perceptual, not real. For example, an improvement in schedule performance was the result of the Program Office's approval of a revised schedule baseline with milestones that were deferred from the original completion dates. There was also a tacit approval of the concurrent elimination or reduction of the reported schedule variance. However, I believe that the award fee decision ignored the fact that the reported improvement in schedule performance was artificial. In fact, the technical maturity and functionality of the weapon system, including software functionality, is way behind the original baseline but the reported schedule data did not disclose the variance from the original baseline as of the last time I reviewed it in mid-2007.

The bottom line is that the cognizant DoD contracting officer approved the payment of award fees to LM prior to October 2007 that were based on reported progress towards meeting cost and schedule objectives. In my opinion, the reported cost performance was based on improper budgeting of past efforts from Management Reserve. The perception of improved cost performance was buttressed by a suppressed EAC and by masking the true schedule variance from the original baseline. The award fees were subsequently shared with LM's subcontractors, NGC and British Aerospace.

I am asking your help both as my representative and as Chairman of the Committee on Government and Oversight Reform. I am a Vietnam War Veteran, an expert on EVM, and of course, a taxpayer. I have worked on the B-2 Stealth Bomber, Global Hawk, and JSF programs. I am a recipient of the DoD David Packard Award for Excellence in Acquisition for my work on the team that wrote the EVM Standard which contains the guidelines that were ignored.

You can learn more about EVM in the Congress Research Service Report, *Earned Value Management as an Oversight Tool for Major Capital Investments*, Order Code RL34257, dated November 21, 2007. The report states that the usefulness of EVM metrics depends on the quality and reliability of the cost, schedule, and functionality data that underlie both a project's baseline plan and its reports on work performed.

The report raises potential oversight questions for Congress such as:

1. Are underlying EVM metrics fully, forthrightly, and timely, and transparently reported?

2. Should EVM metrics be inputs to Congressional oversight, appropriation of funds, and authorization of agency and presidential activities?
3. What might be the advantages of requiring independently, publically accessible assessments, including verification and validation, of the underlying quality of EVM data, including cost estimates and assessments of the functionality that is delivered in comparison with what was planned?

I recommend that you also consider another potential oversight issue with regard to civilian agencies, as follows.

The FAR requires that agencies have "written acquisition plans" in which they "discuss the methodology the Government will employ to analyze and use the earned value data to assess and monitor contract performance. In addition, discuss how the offeror's/contractor's EVMS will be verified for compliance with the American National Standards Institute/Electronics Industries Alliance standard" (EVMS). Given the widespread problems that DoD is having with contractors that are not in compliance with the EVMS, as discussed in the DoD and Navy memoranda, it is likely that civilian agencies, who only recently initiated EVM, are having similar problems. Consequently, additional oversight question should be:

1. Do civilian agencies have trained resources, processes and plans to adequately verify their contractors' compliance with the EVMS?
2. Do civilian agencies also have widespread problems with contractors that are not compliant with the EVMS?

You can also find useful information about EVM and review my credentials at my website www.pb-ev.com. The website includes excerpts from recent OMB and DoD policy and authorization bills that preclude the payment of award fees to contractors that do not meet cost, schedule and performance objectives.

I recommend that you request the GAO to verify my specific allegations regarding the JSF program. After they are verified, you may want to consider the need for additional oversight or legislation. You may also choose to address the potential oversight questions raised in the CRS report and in this letter.

Your office may contact me to obtain additional information regarding these matters.

Sincerely,

Paul Solomon

EXHIBIT B

**Paul Solomon, PMP
3307 Meadow Oak Drive
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November 22, 2011

GAO FraudNet
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The Honorable John McCain
Ranking Member, Senate Armed Services Committee
241 Russell Senate Office Building
Washington, DC 20510

Subject: Fraud or Abuse on F-35 Joint Strike Fighter Contract; Excessive Award Fees Based on Flawed Earned Value Management Reports

I have evidence of defense contractor fraud or abuse on the F-35, Joint Strike Fighter (JSF) Air System Systems Development and Demonstration (SDD) contract N00019-02-C-3002. The prime contractor is Lockheed Martin Aeronautics Co. (LM), Ft Worth, TX. The major subcontractors are Northrop Grumman Corp. (NGC) and BAE Systems (BAE).

The evidence pertains to LM's earned award fee for Periods 10 and 11 for the six month periods ending October 2006 and April 2007. The intentional failure to follow regulatory reporting guidelines and corporate procedures enabled LM and its major subcontractors to receive excessive award fees. Excessive award fees were earned based on flawed cost performance that was reported in Earned Value Management (EVM) reports called Contract Performance Reports (CPR). The CPRs included false and misleading information with regard to the cumulative cost performance. In preparing and submitting the CPRs, LM did not adhere to regulatory requirements (Defense Federal Acquisition Regulation Supplement or DFARS) and its own corporate policies and command media which preclude authorizing additional budget without associated additional work. NGC also did not adhere to its corporate policies and command media when it implemented contractual direction from LM to apply additional budget from LM's management reserve (MR) without additional authorized work. As a result, the true cost overruns were reduced and unjustified award fees were earned. I also have information regarding the LM direction to BAE but have no documentation to substantiate whether BAE also implemented LM's direction and understated its true cost overrun.

The pertinent award fee that was earned by LM and shared with its subcontractors for Period 11 included \$42,000,000 for "Cost Control," (Attachments A and B). I do not have documentation of the amount of award fee that was earned for Period 10. However, LM did report that it received credit for "recent improvements in cost and schedule performance" for Period 10 (Attachment B.)

There are two objectives of submitting this claim.

1. Assist the Government in recovering any excessive award fees that were paid.

2. Provide information that may lead to regulatory change that will prevent or detect similar fraud or mismanagement with regard to EVM on both defense and non-defense contracts.

Bases of Allegation

LM and NGC knowingly reported cost performance that was overstated or more favorable than it should be if they had complied with DFARS and their own EVM policies and procedures (command media). They violated DFARS and their own command media by:

1. Issuing additional budget from Management Reserve (MR) for authorized work that had been started without authorizing additional work.
2. Issuing additional budget from MR to reduce cost overruns.
3. Understating the Estimate at Completion (EAC) in the CPR to buttress the credibility of the overstated cost performance.

Furthermore, LM and NGC actually signed a contractual Memorandum of Agreement (MOA) that circumvented EVM regulatory guidelines. They understated the EAC and the resultant, revised budget. In my opinion, one purpose of that MOA was to maximize potential award fee by promising additional budget if budgeted cost objectives were not achieved. They knowingly managed the numbers to maximize award fee when submitting the flawed CPRs.

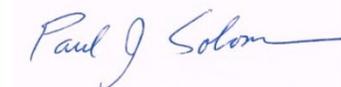
The MOA included the following:

1. The EAC and budget of final SDD costs were intentionally understated. They were based on undefined corrective action plans and unrealistic assumptions. The EAC was not the "most likely" estimate that is required by the guidelines.
2. NG was authorized to transfer budgets between work breakdown structure elements without transferring corresponding work.
3. LM agreed to issue subsequent, additional budget to NGC from MR, without authorizing additional work, in the event that NG failed to achieve low-balled, budgeted performance parameters. The stated justification for the additional budget was "risk mitigation." The total program risk mitigation budget that was used to reduce cost overruns was \$96,800,000 (Attachment C).

Additional information regarding the violation of DFARS and corporate command media is in Attachment D. The MOA is discussed in the letter to Sen. McCain, Attachment E. The MOA itself is Attachment F.

I look forward to assisting GAO by providing additional clarification and documentation. I also hope that GAO's conclusions in this investigation will lead to EVM acquisition reform. My credentials are in Attachment E.

Yours truly,



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