Audit Report

OFFICE OF THE INSPECTOR GENERAL

AUDIT OF CONTRACTOR ACCOUNTING PRACTICE CHANGES FOR C-17 ENGINEERING COSTS

Report Number 92-046 February 13, 1992

This special version of the report has been revised to omit contractor sensitive data.

Department of Defense

The following acronyms are used in this report.

ACO.....Administrative Contracting Officer
DAB.....Defense Acquisition Board
DCAA.....Defense Contract Audit Agency
DPRO.....Defense Plant Representative Office
EAC.....Estimate at Completion
FAR.....Federal Acquisition Regulation
PPR.....Progress Payment Request
RDT&E.....Research, Development, Test and Evaluation
T-1.....C-17 Flight Test Aircraft
USD(A).....Under Secretary of Defense for Acquisition
WBS.....Work Breakdown Structure

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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February 13, 1992

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE LOGISTICS AGENCY
DIRECTOR, DEFENSE CONTRACT AUDIT AGENCY

SUBJECT: Report on the Audit of Contractor Accounting Practice Changes for C-17 Engineering Costs (Report No. 92-046)

We are providing this report for your information and use. Comments on a draft of this report were considered in preparing this final report. DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, the Director, Defense Contract Audit Agency, must provide final comments on the unresolved recommendations by April 13, 1992. The comments must indicate concurrence or nonconcurrence in the finding and each recommendation addressed to you. If you nonconcur, you must state your specific reasons. If appropriate, you may propose alternative methods for accomplishing desired improvements.

We appreciate the courtesies extended to the audit staff. If you have any questions on this audit, please contact Russell Rau at (703) 693-0186 (DSN 223-0186) or Patricia Brannin at (703) 693-0392 (DSN 223-0392). The report distribution is listed in Appendix E.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Enclosure

cc:
Secretary of the Air Force
Comptroller of the Department of Defense

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Office of the Inspector General

AUDIT REPORT NO. 92-046 February 13, 1992
(Project No. 1AE-5006.03)

CONTRACTOR ACCOUNTING PRACTICE CHANGES FOR C-17 ENGINEERING COSTS

EXECUTIVE SUMMARY

Introduction. In 1981, the Air Force initiated development of the C-17 aircraft to provide additional capability to airlift the full range of Defense cargo. The Air Force plans to buy 120 aircraft for an estimated $35 billion. Douglas Aircraft Company, the prime contractor, has a fixed-price-incentive contract for development and production of six aircraft, including the production of the C-17 flight test aircraft, with an estimated ceiling price of $6.6 billion. As of July 1991, a Government estimate for completion of the contract was $7.3 billion. In July 1991, the Air Force awarded a contract for four more aircraft with target and ceiling prices of $1.0 billion and $1.2 billion, respectively.

Objective. The C-17 was one of nine programs included in the "Audit of the Effectiveness of the DoD Use of Contractor Cost and Schedule Control System Data on Major Defense Acquisition Programs." The audit objective was to evaluate the effectiveness of the implementation and oversight of cost and schedule control systems and the use of data reported by contractors complying with Cost and Schedule Control System Criteria. The accounting practice changes were reflected in contractor Cost Performance Reports reviewed as part of the overall audit.

Audit Results. Douglas Aircraft Company was allowed to inappropriately redefine the point at which the transition to sustaining engineering occurred, and progress payments were approved to Douglas based on retroactive cost accounting changes, which were contrary to Cost Accounting Standards. Also, the Defense Contract Audit Agency did not comply with its audit manual and ensure compliance with applicable Federal Acquisition Regulations in reviewing and approving the accounting change. The Defense Contract Audit Agency also did not adequately address the funding implications of the accounting change. As a result, at least $172 million in engineering costs for the development effort were charged as production costs, and progress payments totaling $148 million were prematurely paid.

Internal Controls. The audit identified material internal control weaknesses in that Douglas did not submit a Disclosure Statement revision and cost impact statement in a timely manner for the accounting practice change, and a noncompliance report was not issued as required in the Defense Contract Audit Agency's Contract Audit Manual and the Federal Acquisition Regulation. Also, the Defense Contract Audit Agency did not adequately review funding implications of the accounting practice change. These internal control weaknesses are further discussed in Part I of the report.

Potential Benefits of Audit. The benefits (Appendix C) to be realized from implementing the recommendations in this report are nonmonetary. Recommendation 1. will correct the improper implementation of an accounting practice change. Recommendation 2. will result in improved review of contractor actions.

Summary of Recommendations. We recommended that the retroactive accounting journal entries be disapproved and the contractor's Disclosure Statement be revised to reflect prospective application of the change; the impact of disapproving the retroactive change be reported; and the funding implications of contractor activities be included in audits and audit report qualifications be reviewed.

Management Comments. The Office of the Under Secretary of Defense for Acquisition concurred with the intent of the recommendations, and actions have been taken to implement the intent of the recommendations. The Defense Contract Audit Agency nonconcurred with Recommendations 2.a.(1) and 2.a.(2) and concurred with Recommendation 2.b. Therefore, the Defense Contract Audit Agency must comment on this final report by April 13, 1992.

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This report was prepared by the Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate, (703) 693-0340.

PART I - INTRODUCTION

Background

In 1981, the Air Force initiated development of the C-17 aircraft to provide additional capability to airlift the full range of DoD cargo and to provide military capabilities not available in any one cargo aircraft. The C-17 was planned to meet shortfalls in long range airlift capabilities by providing an all-weather, air-refuelable aircraft that can operate from small, austere airfields and deliver troops and all types of cargo for intertheater and intratheater operations. Initially, the Air Force planned to buy 210 C-17 aircraft for about $42 billion. However, because of reductions in the DoD budget, in April 1990, the Secretary of Defense, based on the Major Aircraft Review, reduced the quantity of C-17 aircraft to be procured to 120. As of July 1991, the estimated cost for the 120 aircraft was $35 billion.

In December 1985, the Air Force awarded contract F33657-81-C-2108 to Douglas Aircraft Company (Douglas) for the full-scale engineering development and testing of one C-17 flight test aircraft (T-1) and two ground test articles. On January 13, 1988, and July 28, 1989, the Air Force exercised options for two (Lot I) and four (Lot II) production aircraft, respectively. The Douglas contract experienced significant cost overruns and schedule delays, as well as technical problems. The contract had a single ceiling price[1/] for development and production Lots I and II. As of July 1991, the target price for development was $4.9 billion, while the target price for production of the first six aircraft was $1.7 billion. The contract was estimated to overrun its $6.6 billion contract ceiling price by $0.7 billion to $2.6 billion, depending on what analysis was used. As of July 1991, the estimate-at-completion (EAC) for development and Lots I and II used for progress payment purposes was $7.3 billion. On July 25, 1991, the Under Secretary of Defense for Acquisition (USD[A]) approved the award of the Lot III production contract to acquire four more aircraft. The target and ceiling prices were $1.03 billion and $1.2 billion, respectively. First flight, which was originally scheduled for February 1990, occurred on September 15, 1991.

1/ The contract ceiling price covered the contract line items without distinguishing between those funded with appropriations available only for development and those funded with appropriations available for procurement. Thus, the contract had a single ceiling price.

Objective

As a result of issues identified during Project Number 1AE-5006, "Audit of the Effectiveness of the DoD Use of Contractor Cost and Schedule Control System Data on Major Defense Acquisition Programs," we expanded the scope of our audit related to the C-17. The overall audit objective was to evaluate the implementation and oversight of cost and schedule control systems and the use of data reported by contractors complying with the Cost and Schedule Control System Criteria. The expanded audit objective was to evaluate the management review process for an accounting practice change to reallocate sustaining engineering costs on the C-17 contract. The accounting practice change had been reflected in contractor Cost Performance Reports reviewed as part of the overall audit.

Scope

We selected the C-17 as one of nine major Defense acquisition programs to be included in the overall audit. This program audit was conducted in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were deemed necessary. We reviewed data and information dated from 1988 to 1991 related to the issues addressed in the report. Our review was performed between December 1990 and September 1991. Personnel involved in the acquisition of the C-17 and cognizant of the issues identified were interviewed. A list of activities visited or contacted is in Appendix D.

Internal Controls

The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. The internal controls that existed as of the time of the audit, if properly implemented, were adequate to prevent or detect the deficiencies identified in this report. However, the internal control weakness was due to noncompliance with policies and procedures for the review and approval of contractor accounting changes. The Defense Contract Audit Agency (DCAA) did not comply with its Contract Audit Manual and applicable sections of the Federal Acquisition Regulation (FAR) in reviewing and approving an accounting change at Douglas and did not adequately consider the impact of the accounting practice change on contract funding and financing. Further, the series of decisions by the Air Force, the Defense Plant Representative Office (DPRO), and DCAA were uncoordinated, resulting in no proper assessment of the accounting practice changes and their proposed implementation. The decisions did not ensure that the transition point for segregating nonrecurring and engineering recurring efforts was

reasonable, that compliance with Cost Accounting Standards was ensured, and that funding implications were adequately considered. Recommendations in this report, if implemented, will help correct these weaknesses. A copy of this report is being provided to the senior officials responsible for internal controls within the Office of the Secretary of Defense and the Department of the Air Force.

Prior Audits and Other Reviews

With the exception of DCAA audit reports discussed in Part II, there have been no audit reports or other reviews that have addressed issues on the C-17 Program similar to those in this audit report.

PART II - FINDING AND RECOMMENDATIONS

ACCOUNTING PRACTICE CHANGE

Full-scale engineering development costs were retroactively charged to procurement-funded production lots under the C-17 single ceiling development and production contract. The Government "approved" Douglas' inappropriate definition of the point of transition sustaining engineering costs from development to production. Also, Douglas made a retroactive cost accounting practice change, contrary to Cost Accounting Standards, and the accounting practice change was not evaluated in accordance with required Government procedures and did not include an adequate assessment of the impacts of the change on funding and financing the contract. As a result, at least $172 million of development costs was improperly reallocated to production lots. Also, the reallocation resulted in at least $148 million in additional financing provided to Douglas that otherwise would not have been received in FY 1991 because of limitations on Government contract obligations.

DISCUSSION OF DETAILS

Background

During the latter part of FY 1990, it became apparent to the Air Force and Douglas that sufficient FY 1990 Research, Development, Test and Evaluation (RDT&E) funding was not available to continue to finance contract performance through progress payments. Douglas had received the last financing for FY 1990 RDT&E effort in July 1990. The contract's Limitation of Government Obligation Clause required that the contractor perform within the funding availability constraints established in the contract and continue to perform, at the contractor's expense, if incremental funding is exceeded. By October 1, 1990, Douglas had a progress payment request for development efforts totaling over $235 million for which no payments could be made by the Government because FY 1990 RDT&E funds on the contract had been expended. Also, during the latter part of FY 1990, it was clear that projected expenditures would rapidly deplete development related funding in FY 1991, which at that time was estimated to be an additional $417 million.

Also, during September and October 1990, the DPRO for Douglas Aircraft Company, a Defense Contract Management Command organization, determined that the contractor's EAC for the total single ceiling contract was unreasonable and that the EAC was expected to exceed the contract ceiling price. Thus, the application of a loss ratio to protect the Government's interest was warranted. It was in this environment that Douglas requested, and the Government "approved," the accounting practice change to transition engineering cost from development to production.

Accounting Practice Change

The accounting practice change defining the transition from nonrecurring to sustaining engineering was not in accordance with the intent of the Air Force Pamphlet used as justification for the change. Implementation of the change was not in accordance with Cost Accounting Standards and Government approval procedures, including the reallocation of funds to long-lead items that would be made part of a future contract. We also believe that the change resulted in an improper reallocation of RDT&E and procurement expenditures, thereby providing a means of permitting additional financing to the contractor during FY 1991 that would otherwise not have been available. It should be noted that the reallocation of engineering costs did not increase the price of the single ceiling contract or the total amount of progress payments that would eventually be paid to the contractor at contract completion, but significantly accelerated the timing of the cash flow.

Establishment of the change. Nonrecurring engineering is the work associated with the actual design and development activities. Sustaining engineering is engineering effort that ensures that the system design is correctly and efficiently implemented during the system's production phase. The Air Force and Douglas considered an allocation method necessary because of the high concurrency in development and production in the C-17 Program. The C-17 contract required that development (RDT&E funds) and production costs (Aircraft Procurement funds) be segregated but did not address how the costs were to transition from development to production. According to Douglas, the allocation of past costs from development to production was necessary to better assign costs to the "benefiting cost objectives."

For almost 2 years, the Air Force and Douglas attempted to agree on how to allocate the sustaining engineering costs between development and production efforts. Because of the shortfalls in development funding, impetus was given to resolving the issue of how to allocate the engineering cost. On October 11, 1990, Douglas requested that the Procurement Contracting Officer at the C-17 Program Office and the Administrative Contracting Officer (ACO) concur with Douglas' proposal to allocate sustaining engineering effort between full-scale engineering development and all production buys. The proposal would allocate sustaining engineering costs based on the number of aircraft in the manufacturing process. The Douglas-proposed practice would allocate engineering costs associated with work breakdown structure (WBS) elements related to the C-17 air vehicle (WBS 1010), system engineering management (WBS 1061), and project management (WBS 1062) (see Appendix A for a description of the WBS elements). The point of transition for allocating sustaining

engineering from development to production was determined to be "90-percent initial drawing release," which had occurred in November 1988, 2 years before the October 1990 request. According to Douglas and the C-17 Program Office, this transition point was in accordance with Air Force Systems Command Pamphlet 800-15, "Acquisition Management, Contractor Cost Data Reporting (CCDR) System" 2/ (the Pamphlet), November 5, 1973.

In October 1990, the ACO documented that he would not concur with the proposed change but would "implement this reallocation if DCAA finds no problems exist. But that's all." On November 1, 1990, the C-17 System Program Office indicated that the Douglas request to use the 90-percent initial drawing release was acceptable, subject to scrutiny by DCAA and the DPRO. The change was to be effective on October 1, 1990.

In addition to making the accounting practice change beginning October 1, 1990, Douglas made retroactive adjustments to reflect the change. At least $172 million, including $13 million for production Lot III, that had been charged to the development contract from December 1988 to September 1990 was reallocated to the production effort. As of October 1990, the amount reallocated had increased to $184.5 million, including $14.9 million and $0.5 million for long-lead requirements for Lots III and IV, respectively. In July 1991, these long-lead requirements and corresponding contract prices were moved to a new production contract.

Policy on recognition of recurring cost. We believe that the Air Force Pamphlet 800-15 was misinterpreted and misused. Douglas and the C-17 Program Office used the Pamphlet as a basis for the method of allocating sustaining engineering between development and production. The Pamphlet states:

> . . . it is preferable to identify the point of segregation between nonrecurring and recurring engineering costs as a specific event or point in time. Ideally, the event used would be the point at which "design freeze" takes place as a result of a formal test or inspection, and after which formal engineering change proposal procedures must be followed to change

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2/ The Contractor Cost Data Reporting System was developed to provide the primary common data base for use in most cost estimating efforts, including procurement management activities involved with monitoring contractor progress related to cost. The System provides uniform procedures for collecting contractor cost data in accordance with standard definitions, against a uniform reporting structure.

> design. If no reasonable event can be specified for this purpose, then all engineering cost incurred up to the date of 90 percent engineering drawing release may be used.

The C-17 Program had scheduled Functional and Physical Configuration Audits that met the definition in the Pamphlet. Functional Configuration Audits provide a means of validating that development has been satisfactorily completed and that the item functions as required. Physical Configuration Audits provide a means of validating that the system is built in accordance with its design documentation. After successful completion of the Physical Configuration Audit, changes are processed by engineering change actions. The C-17 Configuration Audits were to occur on the fifth production vehicle, which was scheduled for delivery in October 1992. Normally, the Physical Configuration Audit would be done on the first production aircraft or the first aircraft delivered for operational use. When the accounting practice change was proposed, the first C-17 production aircraft was scheduled for delivery in September 1991. However, when the production schedule was restructured in July 1991, the delivery of the first production aircraft had slipped to February 1992.

Also, the Air Force and Douglas used 90-percent initial drawing release instead of final drawing release to determine the point of 100-percent transition to sustaining engineering. Initial drawing release occurs earlier than final drawing release. The number of drawings generally increases over the development period and, in fact, did significantly increase on the C-17 Program. In validating the initial drawing release date, the Program Office did not use actual initial drawing release. Instead, the Program Office stated that the count of drawing releases was not of actual drawings, but rather was a count of engineering orders that the contractor used to authorize the work that creates the drawings. The Air Force determined that 90-percent initial drawing release occurred in November 1988. Based on this determination, Douglas proceeded with charging all of the engineering work in the affected WBS elements as sustaining effort, primarily to the production lots.

Although we believe that the configuration audits, as scheduled, were the appropriate point to transition to 100-percent sustaining engineering for the C-17 Program, we would expect a gradual transition to 100-percent sustaining effort to occur, rather than an abrupt, single transition point. Therefore, we agree that an allocation methodology to permit this gradual transition was needed. Although some sustaining engineering may have occurred before October 1990, it was not reasonable that most of the affected costs incurred were applied to production aircraft, as was planned and implemented by Douglas.

Specifically, most of the engineering effort in the affected WBSs should not have been charged to production lots, given that the first aircraft had not flown or even completed assembly, mission computer software was still under development and testing, and the static and durability test articles were significantly behind schedule. In addition, the first four production aircraft, as well as the T-1 flight test aircraft, were to be used for the flight test program, a function of RDT&E. We also noted that the Configuration Audits were planned to be accomplished on the fifth production aircraft. Program plans were to refurbish the production aircraft after the test program and before the aircraft is released for use. In addition, the Air Force did not plan to validate Douglas' cost and schedule control system for production contracts until Lot III, relying instead on the development cost and schedule control system.

The increasingly high degree of concurrency between development and production was not indicative that a stable production configuration was achieved in November 1988 or by October 1990. Rather, it reflects the significant schedule delays in the aircraft's development. Therefore, the Program's concurrency is not a valid basis for a retroactive adjustment of the cost charging. Also, the nature of the work that was being done from November 1988 to October 1990 did not support the use of the per-aircraft allocation methodology based on the WBS descriptions of the work performed.

Cost Accounting Standards. Douglas did not comply with Cost Accounting Standards in implementing the accounting practice changes, and the Government did not comply with normal procedures for reviewing and approving the accounting change. Cost Accounting Standard 331.50 requires that, unless determined to be in the Government's best interest, any change in cost accounting practices must be applied prospectively to the contract, and the Disclosure Statement [3/] must be amended accordingly. The cost accounting change was not in accordance with the Cost Accounting Standards because it retroactively reallocated at least $172 million incurred from December 1988 to September 1990, despite the requirement for prospective implementation, resulting in payment of progress payments to the contractor earlier than would have otherwise occurred. Also, Douglas did not provide timely revision to its Disclosure Statement or a cost impact statement before the change from a direct to an indirect allocation methodology for charging the engineering costs was made.

3/ The FAR defines a Disclosure Statement as a written description of a contractor's cost accounting practices and procedures and states that contractors are responsible for maintaining accurate Disclosure Statements and complying with disclosed practices.

In its October 11, 1990, letter requesting approval for the reallocation of sustaining engineering costs, Douglas identified the November 1988 90-percent initial drawing release date. Douglas also stated that its proposed methodology did not constitute a change in its disclosed accounting practices. Rather, according to Douglas, the methodology reflected a better recognition of when the recurring effort began. However, we agree with the DCAA advice to the ACO that the proposed methodology was a retroactive change to the disclosed accounting practices that affected a number of cost objectives, including the separately funded items within the single ceiling contract and subsequent production contracts.

In our opinion, the adequacy of the Disclosure Statement should have been determined before the change's effective date. In its October 31, 1990, Audit Report No. 4461-91B13980003 on Douglas' proposed allocation method, the cognizant DCAA field office at Douglas Aircraft Company recommended that the contractor submit a Disclosure Statement revision, as required and as DCAA had verbally informed Douglas. However, DCAA took no exception to Douglas' proposed methodology or the costs proposed for reallocation. Therefore, the Program Office and the DPRO allowed the change to proceed and began making progress payments based on the change. DCAA Contract Audit Manual 8-303.3, "Changes to Disclosure Statements and/or Established Practices," July 1991, requires that DCAA issue a noncompliance report when a Disclosure Statement revision is required but not made. In its report, DCAA notified Douglas, the Air Force, and the DPRO that the accounting change required a revision to the Disclosure Statement and qualified its report accordingly. We believe that DCAA should not have concluded it took no excepion to the accounting change until Douglas provided a Disclosure Statement revision and cost impact statement for review and the Government determined the adequacy of the revision and cost impact statement.

Although the DPRO should not have approved progress payments or accepted contractor reports that reflected the accounting practice changes until the Revised Disclosure Statement and cost impact statement had been approved, it is DCAA's responsibility to provide advice on cost accounting matters and make recommendations concerning proposed cost accounting changes. FAR 42.302, "Contract Administration Functions," states that the Contract Administration Office (DPRO) is responsible for determining the contractor's compliance with Cost Accounting Standards, with support from DCAA. In this case, the DPRO did not agree with the contractor's proposal, but did not exercise its authority based on the DCAA's and the Air Force's acceptance of the accounting practice change. Had DCAA followed guidance and recommended not accepting the proposed change until the Disclosure Statement and the cost impact statement had been reviewed, the DPRO would have had additional support for not allowing implementation of the change for payment purposes.

Since the October 31, 1990, DCAA report, Douglas submitted three revisions (December 19, 1990, March 4, 1991, and April 11, 1991) to its Disclosure Statement, and DCAA issued three reports on the adequacy of the revisions to the Disclosure Statement describing the accounting practice change. The December 19, 1990, revised Disclosure Statement showed a November 1988 effective date, resulting in retroactive implementation of the accounting change.

The revision also provided that the C-17 sustaining engineering costs in the affected WBS elements for the development contract, including long lead for the Lot III production, would be allocated based on the "quantity of aircraft in production (fabrication start to assembly complete) during a given calendar quarter. . . ." On February 28, 1991, DCAA issued Audit Report No. 4461-91B44100007 on the December 19, 1990, revision to Douglas' Disclosure Statement. DCAA observed that this disclosed practice for the WBS 1010 engineering cost was different from the practice actually being applied on the Lot III C-17 production aircraft. For the Lot III production aircraft, Douglas was charging these costs directly to the aircraft for which the effort was incurred based on the effective date of the design change. DCAA recommended that Douglas be cited for noncompliance with Cost Accounting Standard 331.50(a)(1) and be requested to furnish the Government a revision to the Disclosure Statement to reflect Douglas' current cost accounting practice. Cost Accounting Standard 331.50(a)(1) was not met because actual cost accounting practices were not adequately described in the proposed revision to the Disclosure Statement. As of September 1991, an adequate Disclosure Statement reflecting the accounting practice changes still had not been provided.

In its February 1991 report, DCAA also recommended that Douglas be notified that the Government would not permit the contractor to charge Government contracts using a cost accounting practice resulting from a retroactive change. When the contractor issued its December 1990 revised Disclosure Statement, it failed to give the Government the required 60-day notice before the October 1990 implementation of the change which, in fact, had already occurred in October 1990. Douglas also failed to provide the required cost impact statement. Without the cost impact statement, the Government could not estimate the magnitude of the total cost impact of the proposed changes on the affected cost objectives. While the February 1991 DCAA report partially corrected the weaknesses in the October 31, 1990, DCAA report, it still did not consider the funding implications of the proposed changes and the nature of the underlying costs being allocated.

On March 4, 1991, Douglas provided another revision to the Disclosure Statement to correct the inadequacies that DCAA noted in its February 1991 report. In its March 28, 1991, Audit Report No. 4461-91B44100002, DCAA did not identify an inadequacy in the March revision that described the revised accounting practice

relating to the allocation of the sustaining engineering costs. However, on April 12, 1991, DCAA issued a supplement to its March 28, 1991, report stating that the Disclosure Statement was unclear as to whether the allocation of the engineering cost for the affected WBS elements ceased at "T-1 Assembly Complete" or at some other time, such as "Ramp Complete."

As a result of the questions that DCAA raised in its March 1991 report, Douglas submitted another revision to the Disclosure Statement on April 11, 1991. In its May 29, 1991, Audit Report No. 4461-91B44100003, DCAA determined that the accounting practice involving WBS 1010 sustaining engineering costs directly identifiable to all future contracts was not adequately described. Douglas proposed to directly charge these costs to the "benefiting contract"; however, Douglas informed DCAA that it was considering changing its cost accounting practice regarding what the benefiting contract is. Determining the benefiting contract, or benefiting cost objective, is critical to determining where aircraft sustaining engineering costs will be allocated. The proper allocation of sustaining engineering cost was given as the primary reason for considering the accounting practice change. Yet almost a year later, Douglas was still considering the proper definition of the benefiting cost objective.

Funding impact of the accounting practice change. By implementing the accounting practice change, Douglas did not properly charge development and production costs. The contract required that the contractor segregate costs incurred for the full-scale development portion of the contract, which were paid with RDT&E funds, and the production line items, which were paid with aircraft procurement funds.

The timing of the decision to implement the accounting change and make the change retroactive was driven primarily by the projected shortage of available RDT&E appropriated funds. RDT&E funds on the contract were expended by July 1990 and therefore the Government could not continue to make progress payments for eligible incurred development costs. However, production funds for the FY 1988 and FY 1989 buys were still available. The retroactive accounting practice change would have allowed the contractor to receive at least the reallocated $172 million as progress payment for costs incurred through September 30, 1990.

However, the DPRO's action to institute a loss ratio [4/] in calculating the approved progress payment resulted in delaying the benefit to the contractor of the $172 million until after the FY 1991 funding was exhausted.

Although DCAA requested technical assistance to determine the date for the 90-percent initial drawing release, it failed to review or request technical evaluation of the appropriateness of allocating the work described in the affected WBS elements as nonrecurring or recurring (sustaining) engineering costs before issuing its October 1990 report. In addition, based on its own assessment, DCAA concluded that the cost objective was the single ceiling contract for development and production and that the accounting change had no material impact on the Government because only a "small amount," $13 million, was expected to be shifted to the C-17 Lot III production contract. Thus, DCAA did not review and report on the effect the proposed change would have on the expenditure of different types of appropriated funds specified in the contract. For example, DCAA could have reviewed contractor costs reported by appropriation in both the Contract Funds Status Report and as a supplement to the progress payment requests.

In a December 1990 memorandum, the Office of the DoD General Counsel stated that the contract provided for the single ceiling price for the line items without distinguishing between those line items funded with appropriations available only for research and development and those line items funded with appropriations available only for procurement. However, the memorandum stated that "overruns" of the development portion of the contract should be funded with research and development funds.

We believe the inappropriate method of allocating the sustaining engineering between development and production portions of the C-17 development contract could result in a violation of U.S.C., title 31, sec. 1301, which requires that funds only be spent for the purposes for which they were appropriated. By charging the cost of development work to procurement accounts, the costs are paid out of funds not appropriated for that purpose. Government costs can be affected by the ramifications of funding issues including the impact on progress payments discussed below. Therefore, we believe that DCAA should consider funding issues and the impact of the issues it identifies on the appropriate use of funds in its audits.

4/ FAR 32.503-6(g), "Loss Contracts," requires that if the EAC for the contract is likely to exceed the contract price, the contracting officer shall compute a loss ratio factor. The loss ratio reduces the contractor's request for progress payment by an amount equal to the ratio of the EAC and the contract ceiling price.

Financial impact of the accounting practice change. Although no additional funding was added to the contract and the contract price was not increased, the accounting practice change resulted in at least an additional $172 million in RDT&E funds being made available for progress payments, thus providing financing to the contractor through progress payments that otherwise could not have been made in FY 1991. Also, we estimated that of the $172 million, at least $148 million was actually paid to the contractor in FY 1991. On November 1, 1990, as a result of the accounting practice change requested by the contractor and "approval" of the change by the C-17 Program Office and DCAA, the ACO approved payment of $59.2 million of Douglas' resubmitted Progress Payment Request (PPR) No. 98 for $386.5 million. The $59.2 million was after adjustment for a loss ratio calculated using an EAC of $7.1 billion instead of the contractor's EAC of $6.6 billion.

PPR No. 98, for costs incurred through September 30, 1990, included an estimated reallocation of $170.6 million of sustaining engineering cost to production. Thus, the $170.6 million of RDT&E funding previously disbursed for those costs became available for funding additional RDT&E effort. PPR No. 99, for costs incurred through October 28, 1990, included the actual transfer of $171.7 million sustaining engineering costs to the production lots that had been incurred from December 1988 to September 1990. The total sustaining engineering cost that was transferred in PPR No. 99 was $184.5 million from December 1988 through October 1990. The $184.5 million included $15.4 million of sustaining engineering cost that was transferred to the Lot III and Lot IV long-lead contract line items. In July 1991, Lot III and Lot IV long-lead costs were transferred to contract F33657-89-C-0001, the contract for production of four Lot III aircraft. The table on the next page shows that, as of September 30, 1991, at least $148 million was disbursed to finance development efforts (progress payments made from RDT&E funds) that would not have otherwise been available in FY 1991 as a direct result of the retroactive accounting change.

It should be noted that these additional progress payments are based on costs that the contractor incurred and do not result in the contractor eventually receiving more than the total contract price less its share of costs based on the share ratio established in the contract. The additional progress payments result in payments of the incurred cost being made earlier than would otherwise have been made because of the additional RDT&E funds available before reaching the Limitation of Government Obligation. Thus, the cost to the Government would be the imputed interest cost of financing the earlier payments to Douglas and increased risk to the Government because of higher than warranted unliquidated progress payment balance.

INCREASE IN PROGRESS PAYMENTS FOR RDT&E RESULTING FROM THE ACCOUNTING JOURNAL ENTRY (MILLIONS OF DOLLARS)

Limitation of Government Obligation for RDT&E Through November 13, 1991		$4,401
Total Progress Payments Disbursed Through September 26, 1991	$4,340	
Additional Amounts Invoiced and Disbursed for Accepted Line Items	38	
Total Disbursed		$4,378
Remaining Limitation of Government Obligation on September 26, 1991		$ 23
Amount Journaled in October 1990, Result of Accounting Policy Change		(171)
Journaled Amount Disbursed Through September 26, 1991 (Increase in Available Obligation Actually Disbursed)		($ 148)

Douglas made corresponding retroactive adjustments in its cost and schedule control system as indicated in the C-17 Cost Performance Reports. Costs were reallocated from the development portion of the contract to the production portion of the contract without also reallocating the budget associated with the costs. This resulted in immediate and significant cost overruns on the production lots. At the time of our audit, the DPRO was evaluating Douglas' contention that there was no need to move the allocated budget along with the costs. We found no basis for categorizing these costs as charged in error to the development portion of the contract. More importantly, we believe that because the allocated budget was not moved, the relationship between cost and work performed was not maintained and, in essence, the result was a transfer solely of overruns from RDT&E funded cost accounts to procurement funded cost accounts. The result of the accounting change caused a $225 million increase in the EAC for production with a corresponding decrease in the EAC for the development portion of the contract.

Because only prospective changes are allowed, all retroactive changes should be reversed. This includes any changes to progress payments; adjustments to other cost reports, such as Cost Performance Reports and Contractor Cost Data Reports; and changes in appropriation accounts charged for those costs.

Decisions Affecting Contract Financing

The contractor's request, and the Air Force's subsequent "approval," to reallocate C-17 development costs to production appeared to be part of an overall plan to provide *

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* . This plan was documented in a briefing on the results of a review of the McDonnell Douglas Corporation contract performance problems, financial condition, and actions that could be taken to "fix" these problems (Financial Condition Review). The Financial Condition Review took place during September 1990 and October 1990. The team conducting the Financial Condition Review (the Team) was comprised of representatives of the contractor, OSD, Air Force, and Defense Contract Management Command, as well as Army and Navy participants. Specifically, the briefing outlined six options available to the Government. Three options could be implemented within DoD and three options required external approval. *

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Douglas' October 1990 request to reallocate sustaining engineering costs came shortly after the Air Force presented the options from the Financial Condition Review. The accounting practice change that reallocates sustaining engineering appeared to fit the option dealing with allocation of costs. However, as previously stated, we disagree that it was a proper allocation of costs. In essence, the reallocation had the impact of a transfer or reprogramming because it increased, by more than $170 million, the amount of funding available to finance development during FY 1991. However, this increase in financing burdened the production lots for the same amount. It should be emphasized that this measure was temporary because, as production effort increased, there would be insufficient incremental funding available to continue to finance production efforts through progress payments, a situation which was dependent on the loss ratio applied.

Progress payment financing. In addition to the accounting practice change, other actions were taken that inappropriately provided financing to the contractor. We found particularly disturbing an October 1, 1990, memorandum by the Government Principal ACO at Douglas directing the payment of the September progress payment, PPR No. 97. The memorandum indicated

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* Contractor confidential or proprietary data has been deleted.

that senior Air Force officials, based on information from the Chairman of the Board and Chief Executive Officer of McDonnell Douglas, had stressed the need for approval of the progress payment *

* potential adverse impact to the C-17 program." The information was provided to the Principal ACO on "Saturday, September 28, 1990 [sic]." The Principal ACO, in turn, directed the C-17 ACO to proceed with the progress payments. This situation lends the appearance of undue influence being used to compromise the independence of the ACO to use his best judgment concerning contract administration matters. The Principal ACO did not request any further justification from the Air Force concerning why progress payments, already being paid at 99 percent of eligible costs incurred, should be paid based on contractor financial need. Also, the Principal ACO did not require that Defense Contract Management Command headquarters officials document their decision based on the Air Force information to release progress payments based on financial need. We do not consider this matter a failing of the Principal ACO, but rather indicative of the environment under which the accounting practice change was approved.

As a result of the direction, $81.2 million for PPR No. 97 (costs incurred through September 2, 1990) was paid to the contractor. The ACO had indications that PPR No. 97 should not be paid because the contractor's EAC was not realistic and the contract was likely to go over its ceiling price. The $81.2 million was for production related costs because the RDT&E funds had been exhausted. We calculated that the contractor should have been paid only $9.1 million instead of $81.2 million for PPR No. 97 if a loss ratio based on an EAC of $7.1 billion was applied (Appendix B). This excess $72.1 million payment should not have been made because the Government was aware that the probable EAC would exceed the contract ceiling price. Therefore, application of a loss ratio was appropriate. If the loss ratio had been applied to PPR No. 97 and the accounting practice change not been implemented in PPR No. 98, Douglas would have been paid $53.7 million less than the $153.4 million actually paid (Appendix B, page 31).

The ACO had documented indicators of an over ceiling condition including "ambitious" overhead rates, unrealistic assembly learning curves, subcontractor EAC problems, and questionable adjustments to cost account manager estimates. Similarly, we observed that Douglas had artificially kept EACs low by capping manufacturing hours for the four Lot II production aircraft to compensate for increased engineering costs associated with the off-loading of engineering effort caused by the accounting practice change.

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* Contractor confidential or proprietary data has been deleted.

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* The application of the loss ratio did not occur with this or prior progress payments although the FAR requires immediate unilateral action in circumstances such as overpayments or unsatisfactory contractor performance. Before PPR No. 97, Douglas had not submitted a progress payment request since the July 1990 PPR No. 96 was submitted. Since contract performance continued and additional costs were incurred, this delay in submission eliminated the need for the Government to recoup the overpayment calculated based on the contract's expected loss. PPR No. 97 was actually approved on October 1, 1990, after the fall 1990 Financial Condition Review Team had concluded the initial part of its review and the day before the Defense Acquisition Executive was to be briefed on the review results. At that time, the Team had essentially concluded that use of an EAC of $7.1 billion was necessary, and the ACO had concluded that the contractor EAC was understated. The ACO was nevertheless directed by the Principal ACO to pay PPR No. 97 without calculating a loss ratio.

Progress payment rates. FAR 32, "Contract Financing," provides that customary flexible progress payments may be authorized if the contractor demonstrates actual financial need or the unavailability of private financing. The customary flexible progress payments are paid at a rate determined through a cash flow analysis. Douglas was already receiving flexible progress payments at the rate of 99 percent of eligible costs incurred, rather than the customary rate of 80 percent for large DoD contracts. The FAR provides for other forms of contract financing, specifically advance payments and loan guarantees, but both require determinations that the activities being financed are critical to national defense and other suitable means of financing are not available, as well as a formal approval process.

On October 12, 1990, the ACO notified the procurement contracting officer that the flexible progress payment rate of 99 percent needed to be changed. In the September 28, 1990, Audit Report No. 4461-0B175030 on a review of Douglas' request to change the flexible progress payment rate from 99 to 100 percent, DCAA recommended that the 99-percent progress payment rate should be reduced to 96 percent. The reduction was required because of the significant lag in Douglas' payments to subcontractors and vendors relative to what the 99-percent rate was based on. If PPR No. 97 had been paid based on the 96-percent progress payment rate, the maximum permissible progress payment and maximum unliquidated progress payment would have been $61.9 million less

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* Contractor confidential or proprietary data has been deleted.

than that paid using the 99-percent rate. As a result, Douglas was paid $10.8 million more than it would have been using a 96-percent progress payment rate (the $10.8 million was exclusive of the $123.8 million development costs eligible for progress payment because of the nonavailability of RDT&E funds). In May 1991, Douglas resubmitted its flexible progress payment proposal, again requesting a 100-percent progress payment rate. As of September 1991, DCAA continued to recommend 96 percent, and the DPRO had developed an interim position of 97 percent. At the conclusion of our audit, a final determination was being negotiated.

The FAR emphasizes that contract financing through progress payments is to aid, not impede, an acquisition. However, in this case, the provisions of the FAR were not properly applied, resulting in additional contract financing. The FAR also states that the contracting officer shall avoid any undue risk of monetary loss to the Government through contract financing. *

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We strongly disagree that the Government should have proceeded with production related progress payments based on a contractor EAC that was seriously in doubt, especially given that the contractor's financial condition had already been determined to be weak. As required in the FAR, the Air Force and the DPRO should have withheld progress payments based on the established loss ratio. Such action would protect the Government's interest and adjust the progress payment rate in a timely manner.

DCAA audits of progress payments. DCAA repeatedly qualified its audit reports on contractor progress payment requests by stating that supporting documentation for the estimate-to-complete the contract did not exist. Therefore, the estimate could not be tested to determine its reasonableness. The estimate-to-complete the contract, along with the incurred cost to date, make up the EAC. On August 27, 1990, the cognizant DCAA field office issued Audit Report No. 4461-0B110014-S1 on Douglas' Billing System. The report detailed numerous significant deficiencies relating to procedures for calculating the C-17's EAC. However, DCAA made no recommendations either to withhold or suspend progress payments or to substitute a Government EAC in the calculation of the appropriate amount for the progress payments.

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* Contractor confidential or proprietary data has been deleted.

The DCAA field office issued audit reports on PPR Nos. 94, 95, and 96 5/ that were qualified because of the unauditable estimate-to-complete and lack of a technical evaluation from the DRPO. A DPRO technical evaluation was necessary to determine the reasonableness of the estimate-to-complete. Each of these reports stated that the audit disclosed no weaknesses in the contractor's internal procedures that would necessitate a restriction of contract financing through progress payments. We disagree with this conclusion and believe that the lack of documentation for the EAC is an internal control weakness. As stated in Office of Management and Budget Circular A-123, "Internal Control Systems," August 1983, readily available and clear documentation is a specific standard for internal control systems, transactions, and other significant events.

In Audit Report No. 4461-91B17500006, October 24, 1990, on PPR No. 97, DCAA once again qualified its report because of the lack of supporting documentation and DPRO technical evaluation. Also, DCAA identified a $2 million error in the cumulative allowable incurred cost claimed by Douglas. DCAA recommended more frequent progress reviews because of the deficiencies noted in earlier reports. However, DCAA again failed to make recommendations or draw conclusions that were commensurate with the qualifications and other available, pertinent information.

In none of the audit reports related to the C-17 Program progress payments did DCAA recommend a withhold or suspension of progress payments, a substitution of a Government EAC, or other such recommendation commensurate with the qualifications and findings. Rather, they recommended more frequent progress payment reviews which, in our opinion, added little to the administration of progress payments. DCAA was already reviewing each progress payment; therefore, this recommendation had little meaning.

However, as a result of the November 28, 1990, Report on the A-12 Administrative Inquiry by the Office of the Secretary of the Navy, DCAA and the Defense Contract Management Command initiated a number of actions aimed at improving progress payment administration and DCAA revised its audit program for progress payments. Starting with the November 28, 1990, Audit Report No. 4461-91B17500013 on PPR No. 98, DCAA stopped qualifying its report for the unsupported EAC and, instead, noted the DPRO's EAC. DCAA also recommended that progress payments be submitted for audit before payment. We would expect DCAA to be more

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5/ Audit Report Nos. 4461-0B175016, June 21, 1990; 4461-0B175029, August 27, 1990; and 4461-OB175028, August 27, 1990, were issued on PPR Nos. 94, 95, and 96, respectively.

proactive in its progress payment reviews as a result of the policy revisions implemented in response to the A-12 Administrative inquiry.

Conclusion

The actions surrounding PPR Nos. 97 and 98, that is, the failure to promptly implement a loss ratio, and the reallocation of sustaining engineering costs were part of a common effort to *

* These actions involved significant noncompliance with requirements of the FAR related to timely implementation of a loss ratio, requirements of the Defense Supplement to the FAR related to adjustments to flexible progress payment rates, and requirements of Cost Accounting Standards related to permitting only prospective application of accounting practice changes. The accounting practice change and the delay in changing the progress payment rate, as recommended by DCAA, resulted in $172 million available for FY 1991 progress payments that otherwise would not have been available and $62 million of additional unliquidated obligations.

At the conclusion of our audit, the Disclosure Statement describing the accounting practice change had not yet been approved. The accounting change resulted in allocating at least $172 million of sustaining engineering costs from full-scale engineering development to the production lots. Consequently, the effort was improperly charged as production costs. This could be construed to be a violation of U.S.C., title 31, sec. 1301, which requires that funds be used only for the purposes for which they are appropriated. Also, the accounting practice change resulted in progress payments being made to the contractor in FY 1991 that would otherwise not have been made. We believe that the accounting practice change should only be made prospectively in accordance with Cost Accounting Standards. The change cannot be shown to be in the Government's best interest and does have a cost impact to the Government, specifically imputed interest from earlier financing. It is essential that the Air Force, DCAA, and DPRO protect the Government's interests through review of the total impact to the Government of contractor actions. The individual decisions made by the Program Office, DCAA, and DPRO in allowing Douglas to make the accounting change did not consider the full impact and results of the change. Each organization based its decision on the assumptions made by others; thus, no one appeared to recognize the overall consequences of the accounting practice change.

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* Contractor confidential or proprietary data has been deleted.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Under Secretary of Defense for Acquisition:

a. Direct the cognizant Defense Plant Representative Office to require that the Douglas Aircraft Company submit a revision to its Cost Accounting Standards Disclosure Statement and associated cost impact statement based only on prospective application of the accounting practice change that affects the allocation of sustaining engineering costs. The effective date of the application of the change should be no earlier than October 1990, when tacit approval of the change was given.

b. Direct the Secretary of the Air Force to report the impact of the prospective application of the revised accounting practice change on the use of appropriated funds.

c. Direct the cognizant Defense Plant Representative Office to apply the Government-approved contractor accounting practice change prospectively from October 1990, including for approving progress payments, in accordance with the Cost Accounting Standards clause in the contract.

2. We recommend that the Director, Defense Contract Audit Agency:

a. Direct the review of funding implications of contractor activities, to include:

(1) guidance on how to incorporate funding considerations into audit scope and related findings in such areas as progress payment reviews, cost accounting practice changes, and Contract Fund Status Report reconciliations; and

(2) audit procedures to ensure that the contractor is properly segregating costs by appropriation.

b. Direct the review of audit report qualifications as part of Defense Contract Audit Agency's Quality Control Program to ensure that serious qualifications are addressed in the conclusions of the report and progress payment withholds are recommended when warranted.

MANAGEMENT COMMENTS

The Office of the USD(A) concurred with Recommendation 1.b. and partially concurred with Recommendations 1.a. and 1.c. (Part IV). The Program Office, DCAA, and DPRO agreed on the

prospective treatment of sustaining engineering costs. The correction of the change will be made by January 31, 1992; the Air Force will provide the impact of the prospective application within 45 days; and the DPRO will take action to adjust $142 million of sustaining engineering costs from production to development by January 31, 1992, and has made an interim adjustment on the November 1991 progress payment. The DPRO determined that $30 million ($172 million minus $142 million) was legitimate sustaining engineering cost for development aircraft.

The Office of the USD(A) did not agree that the problem identified in the report was a material internal control weakness. Instead, it believed the weakness was a miscommunication among the parties involved.

DCAA concurred with Recommendation 2.b. and nonconcurred with Recommendations 2.a.(1) and 2.a.(2). DCAA did not agree that guidance to incorporate funding considerations into its audit scope was necessary because proper cost accounting treatment is not, and should not be, influenced by contract funding issues. Also, DCAA did not agree that audit procedures needed to be established to ensure that contractors are properly segregating costs by appropriation because DCAA is responsible for ensuring that contractors comply with contract terms and conditions requiring separate accounting and billing of cost. DCAA stated that the contracting officer is responsible for making decisions on contract cost disputes and monitoring contract funding, as well as including terms and conditions in contracts, which address restrictions on appropriations.

In addition, DCAA stated that it did not agree with the finding regarding the misapplication of Cost Accounting Standards requirements because DCAA's original audit opinion was in error.

AUDIT RESPONSE TO MANAGEMENT COMMENTS

The Office of the USD(A) comments are considered responsive to the intent of our recommendations. Therefore, no additional comments are required from the USD(A).

We agree that miscommunication between the parties was a key factor in the problem we found. We disagree, however, with the comment that the problem is not a material internal control weakness. The internal control weakness existed because of failure to comply with important existing procedures. The significance of the problem, which resulted in actual or potential violations of public law and evoked considerable concern during November 1991 congressional hearings, should not be minimized. We will review the Air Force's assessment of the

impact of the prospective application and ensure that any violations of public law are properly reported.

We believe that DCAA misinterpreted our recommendations. We agree that the contracting officer is responsible for monitoring contract funding and addressing restrictions on funding. Recommendation 2.a.(1) was not meant to imply that this responsibility should be changed. However, DCAA, in its role as advisor to the contracting officer, must be able to provide advice and recommendations concerning issues that affect contract funding and restrictions on funding, including issues related to the proper use of funds within a contract. We also agree that the proper accounting practice should not be influenced by funding issues. However, as DCAA commented, the auditor should be interested in contractor motivations, including those related to funding issues, and this motivation should be used in determining the extent of audit testing to be conducted. Although DCAA obtained the Program Office's determination for the point of transition, it did not adequately consider the implications of the change. DCAA stated that the effect of the change was minor because an insignificant amount was transferred to another contract. However, the change reallocated costs within contract 2108 that resulted in violations of public law concerning the proper use of appropriated funds. Such information must be considered by the auditors and reported when appropriate. The auditors must be knowledgeable of the requirements of public law concerning the use of appropriated funds in order to recognize and report on issues related to funding, including the importance of funding related contract clauses. This knowledge is also necessary to establish the degree of testing mentioned by DCAA in its comments, not only for cost accounting issues, but also for its work in other areas such as progress payments and Contract Fund Status Report reconciliations. We did not find guidance or information in the DCAA Audit Manual on the public laws concerning appropriations or the consequences of misapplication of the contract funds.

Regarding DCAA's comments to Recommendation 2.a.(2), we also agree that DCAA is responsible for auditing contractor compliance with contract requirements, including those that call for separate accounting and billing, and we agree that the contracting officer must include appropriate contract clauses in the contract. Contract 2108 did require that the contractor segregate the cost between development and production (that is, by appropriation) and report segregated costs in its Cost Performance Reports and Contract Funds Status Reports. The contractor also provides supplements to its progress payment requests that segregates the cost. DCAA recognized that different funds existed on the contract; however, DCAA concluded

that the issues with the accounting change were a funding consideration and had no affect on the contract. We believe that DCAA should have reported the change's impact on the funding and its possible consequences, specifically violations of public law. It is our opinion that DCAA guidance does not sufficiently emphasize the importance of funding considerations. Such guidance is necessary to provide adequate advice concerning the result of audits to the contract administrators. The DCAA Audit Manual did not provide information on the importance of properly segregating costs related to the requirement of appropriation, or funding, laws.

Although DCAA stated that its original determination of the accounting practice change was in error and that the proper classification of recurring versus nonrecurring engineering costs is not an accounting practice, DCAA still classified the change in allocation methods for these costs as a cost accounting practice change. The most significant monetary impact occurred because of the redefinition of recurring to nonrecurring costs and its retroactive application. Nevertheless, DCAA failed to follow its own guidance and the applicable federal regulations on how to process a cost accounting practice change. Although DCAA stated that a disclosure statement had been received from Douglas, the final resolution of the change is still not completed.

We request that DCAA reconsider its position on Recommendations 2.a.(1) and 2.a.(2) and comment by April 13, 1992.

PART III - ADDITIONAL INFORMATION

Appendix A - Work Breakdown Structure Elements
Appendix B - Calculation of Progress Payment Request Nos. 97 and 98 Using a Loss Ratio and No Accounting Practice Change
Appendix C - Summary of Potential Benefits Resulting from Audit
Appendix D - Activities Visited or Contacted
Appendix E - Report Distribution

APPENDIX A: WORK BREAKDOWN STRUCTURE ELEMENTS

Below is a description of the WBS elements included in the accounting change described in this report.

WBS Element 1010 represents the C-17 air vehicle. The air vehicle is the complete flyaway C-17 for delivery to the Air Force. The flyaway C-17 includes the structural airframe with all subsystems, power-plant, communications/navigation systems, electronics systems, automatic flight control systems and mission systems. WBS subelement 1011L, Airframe Integration, was not included in the accounting practice change.

WBS Element 1061 represents C-17 system engineering management. This Element includes contractor efforts to perform system engineering feasibility, research and development activities directly contributing to the overall C-17 system performance. The activities include technical and management programs designed to improve the effectiveness of the weapon system through application of specialized disciplines and techniques.

WBS Element 1062 represents the C-17 project management. It summarizes the contractor effort required to plan, organize, coordinate, direct, and control the overall management of the C-17 Program during development and production. Project management activities include business management, program reviews, cost/schedule control, design to life cycle cost, configuration and data, manufacturing and quality assurance and the management information system.

APPENDIX B: CALCULATION OF PROGRESS PAYMENT REQUEST NOS. 97 AND 98 USING A LOSS RATIO AND NO ACCOUNTING PRACTICE CHANGE

The ACO was directed to pay PPR No. 97 based on financial need and not to consider the loss ratio that should be calculated because of an EAC that exceeded the contract ceiling price. As a result, the contractor was paid $81.2 million,* rather than $9.1 million. We calculated the progress payment based on a 92.4-percent loss ratio using a $7.1 billion Government EAC and a $6.6 billion contractor EAC. This was the loss ratio used by the ACO is calculating the appropriate progress payment for PPR No. 98. We have also shown the calculation of PPR No. 98 without the effect of the accounting practice change. PPR No. 98 was the first progress payment where the Government reduced the contractors payment for the loss ratio.

If these progress payments had been made as calculated in this Appendix, the contractor would have been paid $53.7 million less than the actual payments of $153.4 million, as shown in the following table.

	As Paid ($ in Millions)	As Recalculated ($ in Millions)	Difference
PPR No. 97	$ 81.2	$ 9.1	$72.1
PPR No. 98	59.2	90.6	(31.4)
Note 13	13.0	0	13.0
Total	$153.4	$99.7	$53.7

* The contractor was actually paid $71 million because at the same time the progress payment 97 was processed a credit of $10.1 million was also processed that was the result of a change in the liquidation rate from 98.5 percent to 99 percent.

APPENDIX B: CALCULATION OF PROGRESS PAYMENT REQUEST NOS. 97 AND 98 USING A LOSS RATIO AND NO ACCOUNTING PRACTICE CHANGE (cont'd)

CALCULATION OF PROGRESS PAYMENT No. 97
($ IN MILLIONS)

	Development	Lot I	Lot II	Total	Notes
Cost Billable Through 9/2/90	$3,690.4	$294.4	$ 64.1	$4,048.9	1
Loss Ratio at 92.4 percent	$3,409.9	$272.0	$ 59.2	$3,741.1	2
Subcontractor Costs	494.2	62.9	55.3	612.4	3
Total For Current Period	$3,904.1	$334.9	$114.5	$4,353.5	4
Previous Progress Payment Requested	3,949.0	304.0	91.4	4,344.4	5
Eligible for Progress Payment	$(44.9)	$ 30.9	$ 23.1	$ 9.1	6
Douglas Progress Payment Request	$ 235.6	$ 53.3	$ 27.9	$ 316.8	7
Paid by Government	0	$ 53.3	$ 27.9	$ 81.2	8,11
Reduction in Payment by Government	$ 235.6	0	0	$ 235.6	9
Reduction in Payment if Loss Ratio Used	$ 280.5	$ 22.4	$ 4.8	$ 307.7	10

APPENDIX B: CALCULATION OF PROGRESS PAYMENT REQUEST NOS. 97 AND 98 USING A LOSS RATIO AND NO ACCOUNTING PRACTICE CHANGE (cont'd)

CALCULATION OF PROGRESS PAYMENT No. 98
($ IN MILLIONS)

	Development	Lot I	Lot II	Total	Notes
Costs Eligible Under Progress Payment Clause	$3,781.5	$391.0	$178.5	$4,351.0	12
Reversal of Accounting Practice	170.6	(52.3)	(105.3)	13.0	13
Reversal Costs Eligible Under Clause	$3,952.1	$338.7	$ 73.2	$4,364.0	
Cost Billable Through 9/30/91	$3,912.6	$335.3	$ 72.4	$4,320.3	1
Loss Ratio at 92.4 Percent	$3,615.2	$309.8	$ 67.0	$3,992.0	2
Subcontractor Costs	386.3	63.0	55.3	504.6	3
Total for Current Period	$4,001.5	$372.8	$122.3	$4,496.6	4
Previous Progress Payments Requested	3,904.1	334.9	114.5	4,353.5	5,14
Eligible for Progress Payment	$ 97.4	$ 37.9	$ 7.8	$ 143.1	6
If Paid as Calculated	$ 44.9	$ 37.9	$ 7.8	$ 90.6	15
Douglas Progress Payment Request	$ 181.0	$ 92.8	$112.7	$ 386.5	7
Paid by Government	($ 103.5)	$ 63.4	$ 99.3	$ 59.2	5,8
Reduction in Payment Made by Government	$ 284.5	$ 29.4	$ 13.4	$ 327.3	9
Reduction in Payment if No Accounting Practice Change	$ 136.1	$ 54.9	$104.9	$ 295.9	16

APPENDIX B: CALCULATION OF PROGRESS PAYMENT REQUEST NOS. 97 AND 98 USING A LOSS RATIO AND NO ACCOUNTING PRACTICE CHANGE (cont'd)

Notes:

1. Progress Payment rate of 99 percent applied to "Paid costs Eligible Under Progress Payment Clause," line 9 on "Contractors Request for Progress Payment" Form.

2. Loss ratio of 92.4 percent applied to billable cost.

3. "Eligible Subcontractor Progress Payments" from line 14e of "Contractor's Progress Payment" Form.

4. Total cost for the current month is equal to subcontractor cost plus billable cost after loss ratio.

5. Total of "Previous Progress Payments Requested" from line 18 of the "Contractor's Progress Payment" Form.

6. Amount eligible for progress payment is equal to the total costs for the current period less "Previous Progress Payment Requested."

7. "Maximum Balance Eligible Progress Payment" (without application of loss ratio) from line 19 of "Contractors Progress Payment Request Form.

8. Progress Payments as approved and paid by the Government.

9. Reduction in payment over requested amount.

10. Reduction in payment if a loss ratio had been used.

11. RDT&E (development) funds were not available on contract to pay for the development cost incurred.

12. "Paid Costs Eligible Under Progress Payment Clause" from line 9 on "Contractors Request for Progress Payment" Form.

13. The accounting practice change resulted in $13 million transfered to lot III production aircraft, which was paid separately.

14. As adjusted based on the recalculation of PPR 97 in this Appendix.

Notes: (cont'd)

15. Only $44.9 million of the $97.4 million eligible would have been paid. RDT&E funds for development had been exhausted. However, the application of the loss ratio for PPR 97 would have resulted in a credit of $44.9 million to RDT&E funds. Thus, $44.9 million was available to pay development costs.

16. Reduction from contractor's request because of both loss ratio and reversal of the accounting practice change.

APPENDIX C: SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT

Recommendation Reference	Description of Benefit	Type of Benefit
A.1.a. A.1.b. A.1.c.	Compliance with Laws and Regulations. Implementation of the recommendation will result in an accounting practice change that meets Cost Accounting Standards and correct the improper implementation of a cost accounting change.	Nonmonetary.
A.2.a. (1) A.2.a. (2)	Internal Controls. Implementation of the recommendation will help ensure that appropriations are properly controlled in accordance with public law and DoD Instructions.	Nonmonetary.
A.2.b.	Internal Control. Implementation of the recommendation will ensure compliance with DCAA guidance and procedures.	Nonmonetary.

APPENDIX D: ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Washington, DC
Director, Tactical Warfare Programs, Office of Director, Defense Research and Engineering, Washington, DC
Assistant Secretary of Defense (Program Analysis and Evaluation), Washington, DC
Office of the Director, Defense System Procurement Strategies, Office of the Assistant Secretary of Defense (Production and Logistics), Washington, DC

Air Force

Assistant Secretary of the Air Force (Acquisition), Washington, DC
Deputy Assistant Secretary of the Air Force (Contracting), Washington, DC
Program Executive Office, Tactical and Airlift Programs, Washington, DC
C-17 System Program Office, Aeronautical Systems Division, Wright Patterson Air Force Base, OH

Other DoD

Defense Contract Audit Agency, Douglas Aircraft Company Field Office, Long Beach, CA
Defense Plant Representative Office, Douglas Aircraft Company, Long Beach, CA

Non-DoD

Douglas Aircraft Company, Long Beach, CA

APPENDIX E: REPORT DISTRIBUTION

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition
Director, Defense Research and Engineering
Assistant Secretary of Defense (Production and Logistics)
Comptroller of the Department of Defense

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Commander, Air Force Systems Command
Program Executive Office, Tactical and Airlift Programs
C-17 System Program Office, Aeronautical Systems Division

Defense Activities

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Commander, Defense Contract Management Command

Non-DoD

Office of Management and Budget

U.S. General Accounting Office, NSIAD Technical Information Center

Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Ranking Minority Member, Senate Committee on Armed Services
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
Ranking Minority Member, House Committee on Appropriations
House Committee on Armed Forces
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

PART IV - MANAGEMENT COMMENTS

Under Secretary of Defense for Acquisition
Defense Contract Audit Agency

Under Secretary of Defense for Acquisition Comments

OFFICE OF THE UNDER SECRETARY OF DEFENSE

WASHINGTON, DC 20301-3000

ACQUISITION

10 JAN 1992

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on the Audit of Contractor Accounting Practice Changes for C-17 Engineering Costs (Project No. 1AE-5006.03)

This is in response to your request for comments on the subject draft report. Attached are specific comments on the recommendations addressed to USD(A).

John D. Christie
Director, Acquisition Policy & Program Integration

RECOMMENDATION 1. A.: We recommend that the Under Secretary of Defense for Acquisition (USD(A)) direct the cognizant Defense Plant Representative Office (DPRO) to require the Douglas Aircraft Company to submit a revision to its Cost Accounting Standards Disclosure Statement and associated cost impact statement based only on prospective application of the accounting practice change that affects the allocation of sustaining engineering costs. The effective date of the application of the change should be no earlier than October 1990, when tacit approval of the change was given.

USD(A) RESPONSE: Partially concur. Action has already been taken by the DPRO to ensure the proper accounting treatment of sustaining engineering costs, both retroactively and prospectively. In May 1991, the resident Defense Contract Audit Agency (DCAA) office determined the accounting practice disclosed by Douglas Aircraft Company for sustaining engineering costs was inadequate. In July 1991, the DPRO notified Douglas Aircraft Company in writing that sustaining engineering costs must be allocated to the particular contract line item (full scale development or production effort) which benefitted from the engineering task performed, rather than being automatically allocated to production effort.

The C-17 system program office, DCAA, the DPRO, and the contractor have reached agreement on the prospective treatment of sustaining engineering costs. While the contractor has not yet submitted a change to his disclosure statement reflecting this agreement, the DPRO expects Douglas Aircraft Company to do so in the near future.

The C-17 system program office, DCAA, and DPRO agree on the retroactive adjustments necessary to ensure that sustaining engineering costs are properly allocated, and the estimated completion date for DPRO action is January 31, 1992. Approximately $142 million will be transferred from production to full scale development effort. Because the C-17 contract is a single contract which includes both full scale development and production (Lot I and Lot II) effort, the allocation and reallocation of sustaining engineering costs did not result in any increased costs to the Government. Thus, there is no need for the USD(A) to direct the DPRO to take any action.

RECOMMENDATION 1. B.: We recommend that the USD(A) direct the Secretary of the Air Force to report the impact of the prospective application of the revised accounting practice change on the use of appropriated funds.

USD(A) RESPONSE: Concur. The Air Force will be asked to provide an impact assessment within 45 days.

Final Report Reference

RECOMMENDATION 1. C.: We recommend that the USD(A) direct the cognizant DPRO to apply the Government-approved contractor accounting practice change prospectively from October 1990, including for approving progress payments, in accordance with the Cost Accounting Standards clause in the contract.

USD(A) RESPONSE: Partially concur. The DPRO will retroactively allocate approximately $142 million in sustaining engineering costs from production to full scale development effort. Final resolution is planned for January 31, 1992. As an interim measure, the DPRO adjusted the November 1991 progress payment billing by increasing full scale development costs and reducing production costs to partially correct for the accounting change. This interim measure did not result in any progress payment reductions to the contractor. Therefore, there is no need for the USD(A) to direct the DPRO to take any action.

2,3 MATERIAL INTERNAL WEAKNESS: As stated on Page 4 of the draft audit report, existing internal controls, if properly implemented, were adequate to prevent or detect the deficiencies identified in the report. The DPRO and DCAA have adequate procedures for determining the acceptability of cost accounting systems and disclosure statements. The problem identified in this report resulted from miscommunication among the parties involved in reviewing the proposed accounting change, and does not constitute a material internal control weakness. The problem is not recurring in nature and no increase in cost resulted.

Comments from Defense Contract Audit Agency

DEFENSE CONTRACT AUDIT AGENCY
CAMERON STATION
ALEXANDRIA, VA 22304-6178

IN REPLY REFER TO

14 JAN

PLD 703.3.3.10 (1AE-5006.03)

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING, DEPARTMENT OF DEFENSE, ACQUISITION MANAGEMENT DIRECTORATE

SUBJECT: Draft Report on the Audit of Contractor Accounting Practice Changes for C-17 Engineering Costs (Project No. 1AE-5006.03)

Our response to your draft report dated 5 November 1991 is enclosed.

We will be pleased to discuss our response further with you or your staff. Please direct questions concerning our response to Mr. William I. Luke, Chief, Policy Liaison Division at (703) 274-7521.

William J. Sharkey
Assistant Director
Policy and Plans

Encl

Final Report Reference

DoD IG Draft Report
Audit of Contractor Accounting Practice
Changes for C-17 Engineering Costs
Project No. 1AE-5006.03

5 **Report findings and comments on Cost Accounting Standards matter** (page 7)

We do not agree with the comments regarding the misapplication of Cost Accounting Standards requirements. They are based on the premise that the retroactive adjusting journal entry transferring engineering costs from full-scale engineering development (nonrecurring) to production (recurring) represents a change in a cost accounting practice. This is consistent with DCAA's advisory audit report in which we informed the ACO that the journal entry was an accounting change and recommended that the contractor be required to submit a Disclosure Statement revision. However, our analysis of the circumstances surrounding the cost transfer leads us to conclude that our audit opinion was in error. There was no cost accounting practice change resulting from the untimely recognition of the transition from nonrecurring to recurring engineering.

The issue here is the proper classification of recurring/nonrecurring engineering costs, not a change in cost accounting practice. Once the proper nature of the costs is determined, i.e. recurring vs. nonrecurring, it is simply a matter of classifying the costs in accordance with the contractor's disclosed accounting practice. Doing this with an adjusting journal entry does not constitute a change in an accounting practice. There was, however, a Cost Accounting Standard (CAS) issue involved with how the contractor allocated the costs. The change, which had only a minor effect on contract costs, involved allocating the costs on the "quantity of aircraft during a given calendar quarter" rather than the disclosed allocation base of "quantity of units being produced". A disclosure statement revision has been submitted for this change and any cost impact will be determined through normal CAS procedures.

Recommendation 2 a.

We recommend that the Director, Defense Contract Audit Agency direct the review of funding implications of contractor activities to include:

(1) Guidance on how to incorporate funding considerations into audit scope and related findings in such areas as progress payment reviews, cost accounting practice changes, and Contract Fund Status Report reconciliations.

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DCAA Response:

Nonconcur. The proper cost accounting treatment is not and should not be influenced by contracting funding issues. The auditor's role is to advise the contracting officer on accounting matters. The contracting officer's role is to administer the contract by making decisions on contract cost disputes and monitoring contract funding.

We do agree that contractor motivation for reclassifying costs or making other billing related changes are of interest to the auditor in assessing risk and establishing the extent of audit testing to be conducted. In the immediate case, the field audit office was aware that the reclassification of cost may have been motivated by funding limitations. Accordingly, they had discussions with the cognizant DPRO and the C-17 SPO on the matter and the need for engineering scrutiny of the contractor's rationale.

With respect to distinguishing between recurring and nonrecurring engineering costs, we relied on a technical opinion provided by the Air Force Systems Program Office regarding the transition point (90% initial drawing release, November 1988). Unfortunately, this was not a sufficient technical analysis of the engineering effort to determine proper classification of these costs.

The DPRO is performing a detailed analysis of the nature of the engineering costs. Upon receipt of their technical report (expected in January 1992), we will be in a position to determine the proper classification and accounting treatment of the costs. In the meantime, we have recommended to the ACO that the adjusting journal entry be reversed until proper classification of engineering costs can be determined.

Recommendation 2 a.

We recommend that the Director, Defense Contract Audit Agency direct the review of funding implications of contractor activities to include:

(2) Audit procedures to ensure that the contractor is properly segregating costs by appropriation.

DCAA Response:

Nonconcur. It is our responsibility to ensure that contract costs are properly accumulated and billed in accordance with Federal Acquisition Regulations, Cost Accounting Standards, and contract terms and conditions. When the terms of a contract call for separate accounting and billing of costs by contract line item, we are responsible for ensuring that contractors comply with such terms and conditions. The inclusion of terms and conditions in contracts which address restrictions on appropriations is, however, a contracting officer's responsibility. Our audit guidance is already adequate to accomplish DCAA responsibilities.

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Recommendation 2 b.

We recommend that the Director, Defense Contract Audit Agency direct the review of audit report qualifications as part of DCAA's Quality Control Program to ensure that serious qualifications are addressed in the conclusions of the report and progress payment withholds are recommended when warranted.

DCAA Response:

Concur. As part of our Quality Control Program, we will add a step to the audit report review critique which will require a comparison of any report qualifications to the conclusion paragraph to ensure that they are consistent with each other. In addition, we will issue a memorandum to the field which will emphasize the importance of recommending the withholding or suspension of progress payments when serious deficiencies are noted in internal controls, e.g. the calculation of the contractor's estimate at completion.

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