Audit Report

COST CHARGED TO OTHER TRANSACTIONS

Report No. D-2000-065 December 27, 1999

This special version of the report has been revised to omit Contractor Proprietary data.

Office of the Inspector General
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Acronyms

CAS	Cost Accounting Standards
DARPA	Defense Advanced Research Projects Agency
DCAA	Defense Contract Audit Agency
DDP	Director, Defense Procurement
DDR&E	Director, Defense Research and Engineering
IR&D	Independent Research and Development

INSPECTOR GENERAL
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December 27, 1999

MEMORANDUM FOR DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
DIRECTOR, DEFENSE PROCUREMENT

SUBJECT: Audit Report on Costs Charged to Other Transactions
(Report No. D-2000-065)

We are providing this redacted audit report for public release. The For Official Use Only report contained contractor proprietary information. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all findings and recommendations be resolved promptly. We request the Directors, Defense Research and Engineering and Defense Procurement, provide additional comments on the recommendations by February 28, 2000.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Raymond A. Spencer at (703) 604-9071 (DSN 664-9071) (rspencer@dodig.osd.mil) or Mr. Roger H. Florence at (703) 604-9067 (DSN 664-9067) (rflorence@dodig.osd.mil). See Appendix H for the report distribution. The audit team members are listed inside the back cover.

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Report No. D-2000-065 December 27, 1999
(Project No. 7AB-0051.01)

Costs Charged to Other Transactions

Executive Summary

Introduction. This audit was a joint effort involving the Inspector General, DoD, and the Defense Contract Audit Agency. The Inspector General, DoD, had overall cognizance for this review.

Other transactions are instruments other than contracts, grants, and cooperative agreements that are used to stimulate or support research or acquire a prototype. Other transactions were authorized to reduce barriers to commercial firms in DoD research, to broaden the technology and industrial base available to DoD, and to foster new relationships and practices within the technology and industrial base that supports national security. Other transactions are generally not subject to statutes or regulations associated with contracts, grants, or cooperative agreements.

The authority to use other transactions for a research project is in section 2371, title 10, United States Code, "Research Projects: Transactions Other Than Contracts and Grants." Section 845 of the National Defense Authorization Act for FY 1994 augmented the other transaction authority to allow development of prototype projects that are directly relevant to weapons or weapon systems.

From October 1, 1989, to October 16, 1998, the DoD issued 302 other transactions for research or prototype development, with a total Government and contractor value of about $7 billion. This is the first review of contractor costs charged to other transactions in the 10 years of the authority.

Objectives. The overall audit objective was to review the financial and cost aspects of other transactions. Specifically, we reviewed the costs charged to the other transactions by the participating contractor(s), and identified whether cost shares were being met. During the audit, we also quantified the number of contractors participating in other transactions.

Results. The management of the financial and cost aspects of other transactions needed improvement.

- Issues were identified with $83.4 million (27 percent) of the $304.3 million contractor cost share for research other transactions. DoD inappropriately accepted $60.2 million of prior independent research and development, $19.7 million of research funded by the Government, and $3.5 million for duplicative equipment depreciation as contractor cost share. No similar issues were identified with prototype other transactions. As a result, research contractors were allowed to reduce their actual cost share and risks under the other transaction. Further, access to records needs to be clarified and standardized in regulations (Finding A).

- DoD officials were not always aware of the actual cost to the Federal Government for other transactions. This occurs because portions of contractors cost contributions for other transactions were allocated to other Government contracts through indirect charges of contractor independent research and development costs. As a result, the Federal Government, in some cases, paid a greater cost share than shown for the other transactions, and although not required, DoD reports to Congress did not fully disclose the actual costs to the Federal Government for other transactions (Finding B).

- Research contractors' accounting treatment of cost shares was inconsistent, and contractors did not always use provisional overhead rates for other transactions. As a result of the accounting treatment, 10 contractors were in technical violation of Cost Accounting Standards for their other Government contracts, and DoD was prematurely charged at least $850,000 more than if DoD provisional overhead rates had been used. Also, the majority of research contractors did not identify benefits from using other transactions (Finding C).

Summary of Recommendations. We recommend that the Directors, Defense Research and Engineering and Defense Procurement, issue other transaction guidance in DoD directives, instructions, or regulations. The guidance should preclude the use of Government-funded research as contractor cost share; provide for reasonable use charge of contractor assets; identify how to design an access-to-records clause; identify the roles and responsibilities of the Defense Contract Audit Agency; provide agreement officers training on the effects of independent research and development reimbursement on contractor cost shares, require agreement officers to inform the administrative contracting officer and the Defense Contract Audit Agency of the award of an other transaction for their review for potential inconsistent accounting treatment of cost shares, and require contractors to use DoD-approved overhead rates when available. In addition, reports to Congress for other transactions should show the effect of independent research and development reimbursements on contractor cost share.

Management Comments. The Directors, Defense Research and Engineering and Defense Procurement, generally agreed with the recommendations except for the ones related to use of the Defense Contract Audit Agency and the effect of independent research and development costs. The Directors agreed there was a role for the Defense Contract Audit Agency in other transactions but did not agree the role should be as broad a requirement to cite the need to use the audit agency for any required review of contractors. They also disagreed there was a need for training on the effects of independent research and development reimbursements and showing in reports the effect of the reimbursements on contractor cost share. A discussion of management comments on the recommendations is in the Findings section of this report, comments on the findings and audit responses are in Appendix G, and the complete text is in the Management Comments section.

Audit Response. The recommendations on use of the Defense Contract Audit Agency for other transactions, when needed for audits, will only help improve the management of other transactions. Further, training on the effects of independent research and development costs can only assist the personnel negotiating other transactions and disclosure of the costs will only help the DoD explain how other transactions work. We request clarification on the planned corrective actions for recommendations management concurred with and reconsideration of management's position on other recommendations. Comments from the Directors, Defense Research and Engineering and Defense Procurement, are requested by February 28, 2000.

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Background

History. Other transactions are instruments other than contracts, grants, and cooperative agreements that are used to stimulate, support, or acquire research or prototype projects. Other transactions were authorized as a way to encourage commercial firms to join with the DoD to advance dual-use technology, to broaden the technology and industrial base available to DoD, and to foster new relationships and practices within the technology and industrial base that supports national security. Other transactions are generally not required to comply with statutes or regulations that are applicable to contracts, grants, or cooperative agreements. Other transactions do not impose the requirements of the acquisition regulations established for contracts, including the Federal Acquisition Regulation and its Supplements, and Cost Accounting Standards.

Research Other Transactions. In 1989, Congress enacted section 2371, title 10, United States Code (10 U.S.C. 2371), which authorized the use of other transactions for basic, applied, and advanced research projects. Congress enacted 10 U.S.C. 2371, "Research Projects: Transactions Other Than Contracts and Grants," as a 2-year pilot program for the Defense Advanced Research Projects Agency (DARPA). The National Defense Authorization Act for FY 1991 broadened the authority to include the Military Departments and made the authority permanent. In issuing other transactions, the Military Departments and Defense agencies must ensure that DoD funding does not exceed that provided by the nonGovernment parties to the maximum extent practical, and that the research should not duplicate efforts already performed. Research other transactions are usually issued to a consortium consisting of private companies, not-for-profit agencies, universities, and Government organizations (hereafter, contractor(s)). Research other transactions are used to support or stimulate research and may be used when it is not appropriate or feasible to use a standard contract, grant, or cooperative agreement.

Prototype Other Transactions. The National Defense Authorization Act of FY 1994, section 845, augmented the other transactions authority to allow the use of the authority for prototype projects directly relevant to weapons or weapon systems. Section 845 was a 3-year pilot program allowing DARPA to use other transactions for prototype projects. The National Defense Authorization Act of FY 1997, section 804, further broadened the authority to include the Secretaries of the Military Departments and other officials designated by the Secretary of Defense. The authority to use prototype other transactions was extended until September 30, 2001. A prototype other transaction does not require cost sharing by the contractor(s), requires the use of competitive procedures to the maximum extent practical, and may be used even when a traditional contract would be feasible or appropriate. In FY 1997, the Commercial Operations and Support Savings Initiative (COSSI) Program started using prototype other transactions to develop commercial products to reduce system costs. Thirty of the 97 prototype other transactions awarded, valued at

$102 million, were for the Commercial Operations and Support Savings Initiative Program. Funds were not appropriated for COSSI in FY 1998; however, funds were appropriated for FY 1999.

DoD Guidance for Using Other Transactions. DoD guidance for other transactions is determined by whether the principal purpose of the other transactions is to support or stimulate research or to develop a prototype. The Director, Defense Research and Engineering (DDR&E), is responsible for other transaction guidance for research. The Director, Defense Procurement (DDP), is responsible for other transaction guidance for prototype development.

Research Other Transaction Guidance. In 1994, the DDR&E issued interim guidance to the Military Departments and DARPA on using research other transactions to support or stimulate research efforts. The DDR&E updated the 1994 guidance in memorandums issued in December 1997, March 1998, and February 1999, as a result of legislative changes and lessons learned by using the agreements. The updated guidance adopted the term "technology investment agreements" for other transactions and cooperative agreements used by DARPA and the Military Departments. The DDR&E plans to incorporate the memorandum guidance in DoD 3210.6-R, "DoD Grant and Agreement Regulations," April 1998.

Prototype Other Transaction Guidance. In his memorandum of December 14, 1996, "10 U.S.C. 2371, section 845, Authority to Carry Out Certain Prototype Projects," the Under Secretary of Defense for Acquisition and Technology issued guidance for prototype other transactions. The memorandum implemented statutory requirements, established reporting requirements, and emphasized the importance of good business sense and appropriate safeguards to protect the Government's interest. The memorandum also lists statutes that may not necessarily apply to section 845 other transactions. In October 1997, the DDP issued a memorandum providing guidance for assigning identification numbers and collecting data for section 845 other transactions. On October 23, 1998, DDP issued a memorandum in response to Inspector General, DoD, recommendations. The October 1998 memorandum required agreement officers to adjust payable milestones when necessary, ensure receipt of progress reports, and to ensure that final technical reports are sent to a central depository. The Defense Acquisition Deskbook includes a guide that contains nonmandatory procedures for using prototype other transactions.

DoD Directive System. DoD Directive 5025.1, "DoD Directive System," June 24, 1994, states that policy memorandums must be reissued as DoD issuances within 90 days. Because the memorandums were never incorporated into a DoD directive, instruction, or regulation, the guidance in the memorandums on research and prototype projects is nonmandatory. As a result, public law applicable to other transactions is the only mandatory guidance. Even though the Federal Acquisition Streamlining Act of 1994, required the Secretary of Defense to issue regulations on other transactions, none were issued.

Use of Other Transactions. The Military Departments, DARPA, and Defense agencies issued other transactions for research (10 U.S.C. 2371) and prototypes (10 U.S.C. 2371, section 845), as shown in Table 1. Appendix B provides the details by awarding organization as reported to Congress.

Table 1. Research and Prototype Other Transactions Issued

FY 1990–1995		FY 1996		FY 1997		FY 1998		Total	
2371	845	2371	845	2371	845	2371	845	2371	845
96	7	35	8	16	45	58	37[1]	205	97[1]
Value (millions)									
$1,814.3	$306.9	$430.7	$55.2	$148.6	$360.0	$499.3	$3,384.9[1]	$2,892.9	$4,107.0[1]

The Inspector General, DoD, developed a database of other transactions issued by DoD. In the database, participating contractors were classified as traditional or new contractors performing services for DoD based on whether the Defense Contract Audit Agency had performed incurred costs or related reviews at the contractor location. We also searched the Defense Contract Action Data System (DD350) to determine whether the contractors performed research on cost-type contracts with DoD. The Inspector General, DoD, database reflects all FY 1990 to FY 1997 other transactions and modifications as of September 30, 1997, and initial awards in FY 1998. Participating contractors or subcontractors were identified from the original other transaction or later modifications. Table 2 shows the DoD cost shares going to new and traditional DoD contractors. For research other transactions, cost shares were based on the funds provided by contractors as identified in the agreements. For prototype other transactions, the DoD cost share was equally divided by the number of participating contractors because the other transaction did not always identify the DoD cost share provided to each participating contractor.

[1]Includes two prototype other transactions issued October 16, 1998, for the Evolved Expendable Launch Vehicle program by the Air Force that had FY 1998 agreement numbers with a DoD and contractor value of $3.0 billion.

Table 2. Participation by New and Traditional Contractors

Type of Other Transaction	DoD Cost Share (millions)	DoD Cost Share to New Contractors (millions)	percent	DoD Cost Share to Traditional Contractors (millions)	percent
Research	$1,532	$429	28.0	$1,103	72.0
Prototype[2]	$2,102	$115	5.0	$1,987	95.0
Total	$3,634	$544		$3,090	

One of the reasons that other transactions are used for research is to obtain services from the commercial sector, which normally does not do business with the Government because of Government procurement regulations and policies. Tables 3a and 3b provide the totals of new contractors and traditional contractors from FYs 1990 through 1998 for research and prototype other transactions. Appendix C provides the total of new contractors by fiscal year.

An analysis of the research other transactions shown in Table 3a shows that 25 percent of all contractors that participated in the research agreements were new contractors. The remaining 75 percent of the research participants were traditional Defense contractors or nonprofit universities or organizations.

Prototype other transactions rely more heavily on traditional DoD contractors (Table 2 and Table 3b). In addition, on February 27, 1999, in response to the Strom Thurmond National Defense Authorization Act for FY 1999, DoD submitted a report to the congressional Defense Committees on the use of prototype other transactions that identified the number of other transactions issued and DoD and contractor cost-share contributions.

[2] Included in the prototype values are the two other transactions issued October 16, 1998, for the Evolved Expendable Launch Vehicle program by the Air Force. The Air Force cost contribution was $500 million to each contractor, and the two contractors planned to contribute a total of $2 billion. Excluding this program from the prototype values in Table 2 would result in a DoD cost share to new contractors of 10 percent (as opposed to 5 percent) and 90 percent (as opposed to 95 percent).

Table 3a. New and Traditional Contractor Participation for Research Other Transactions

	1990-1993	1994	1995	1996	1997	1998	Total
New Contractors (Net)[1]	29	54	41	23	7	26	180
New Contractors (Total)[2]	30	58	53	25	9	28	203
Traditional Contractors (Total)	104	168	132	95	31	77	607
Total Contractors	134	226	185	120	40	105	810

[1] New contractors that had not done cost-based research and development with DoD previously. New contractors are counted only once even if they participated in more than one other transaction.
[2] Total of new contractors that had not performed cost-based research and development before. A new contractor is counted more than once if performing on more than one other transaction.

Table 3b. New and Traditional Contractor Participation for Prototype Other Transactions

	1994	1995	1996	1997	1998	Total
New Contractors[1,2]	0	2	2	32	24	60
Traditional Contractors (Total)	10	16	39	66	93[3]	224

[1] New contractors that had not done cost-based research and development before.
[2] There were no duplicate contractors.
[3] Includes the two prime contractors for the Evolved Expendable Launch Vehicle program.

Officials in the Office of the Secretary of Defense believe that one sign of success of other transactions is demonstrated by the number of agreements that have new contractor participation. Table 1 identifies that 205 research other transactions were issued from FY 1990 through FY 1998. Of the 205 research other transactions, 114 included a new contractor that had not previously participated in a cost-type effort with DoD. Table 1 also identified that 97 prototype agreements (including the 2 other transactions for the Evolved Expendable Launch Vehicle program) were awarded. Of the 97 prototype other transactions, 88 included traditional DoD contractors and 34 included a new contractor.

Objectives

The overall audit objective was to review the financial and cost aspects of other transactions. Specifically, we reviewed costs charged to other transactions by contractor(s), and identified whether cost shares were being met. During the audit, we also quantified the number of contractors participating in other transactions. Appendix A describes the audit scope and methodology and prior audit coverage.

A. Contractor Cost Sharing

We reviewed five research other transactions that had a contractor cost share of $304.3 million and identified issues of concern with $83.4 million (27 percent). The issues involved DoD acceptance of $60.2 million of contractor prior independent research and development (IR&D), $19.7 million of research funded by the Government, and $3.5 million for duplicative equipment depreciation as contractor cost share. We did not identify these issues for the two prototype other transactions included in this review. The research other transactions issues partly resulted from the DARPA interpretation of 10 U.S.C. 2512 (since repealed) as it related to contractor cost share, and a lack of definitive guidance and oversight of the process. As a result, the reports to Congress did not identify the reduced contractor cost share and risk under the other transactions, and the reports understated the cost to the Federal Government for research efforts.

Background

Section 2371, title 10, United States Code (10 U.S.C. 2371), requires cost sharing by contractors for research other transactions whenever practical; cost sharing for prototype other transactions is not required. Cost sharing is required to share the cost risks associated with research efforts and to ensure that contractors have a vested interest in the effort's success. Contractor cost sharing may consist of cash, cash equivalents, in-kind contributions, or current IR&D contributions. Cash equivalents represent the cost of acquiring material, buying equipment, and paying for labor costs associated with the research effort. In-kind contributions can also include labor cost, leases, special equipment, the value of goods and services, and the value of previously developed software or intellectual property. Current IR&D contributions are research efforts supported by contractor funds that apply to the other transaction effort. A portion of contractor IR&D is paid by DoD and other Federal agencies through indirect charges if other Government contracts are performed by contractor business segments. Contractors are reimbursed by DoD for IR&D based on the annual ratio of Government business to commercial business. Traditional DoD contractors for research that treated their cost share as an IR&D effort had an average Government business base of 64 percent and the reimbursement rate for 8 of the 21 contractors reviewed was more than 80 percent.

Evaluation of Other Transaction Agreements

The Defense Contract Audit Agency (DCAA) evaluated seven other transactions (five research and two prototype) in agreed-upon procedures for the Inspector General, DoD. The Federal Acquisition Regulations, cost principles, and cost accounting standards generally do not apply to other transactions, therefore standard contract audit procedures do not apply. The agreed-upon procedures

included reviews of billings, incurred costs, in-kind contributions and the basis of their valuation, indirect rates, the accounting system and practices, and compliance with the terms of the agreement. The seven other transactions consisted of contractors or universities that created consortiums or prime and subcontractor arrangements to perform research or to develop prototypes. The other transactions involved 77 contractors, interdivisional entities, subcontractors, universities, and nonprofit organizations (contractor(s)). DCAA evaluated 37 of the 77 contractors. Of the 37 contractor or their segments (34 of the 37 were different contractors); 28 contractors were on research other transactions and 9 contractors were on prototype other transactions.

Table 4. Value of Other Transactions Reviewed (in millions)

	DoD		Contractor		
	Dollars	Percent	Dollars	Percent	Total
Research cost share	$190.3	38	$304.3	62	$494.6
Prototype cost share	$474.5	94	$ 29.5	6	$504.0
Total	**$664.8**		**$333.8**		**$998.6**
Cost share reviewed					$754.5
Percentage of research cost reviewed by DCAA					76
Percentage of prototype cost reviewed by DCAA					76

Details of other transactions reviewed and DoD and contractors' cost shares are in Appendix D.

The DCAA evaluation identified issues of concern with contractor cost share for research other transactions. The DCAA did not find similar issues with the prototype agreements because these contractors treated the other transactions in the same manner as a DoD contract, and the prototype other transactions reviewed either did not require cost sharing or the cost did not reach the cost ceiling requiring the contractor to share costs. Finding C discusses accounting problems and other problems with research and prototype other transactions.

Contractor Cost Share and Financial Risks

DCAA reported that research contractors included prior IR&D, prior and current Government-funded research and development, and charges for fully depreciated items or overvalued assets as their cost share. This overstated the contractors' actual cost share and understated DoD financial risks associated with the research.

Table 5. Elements of Contractor Cost Share

Contractor cost share		$304,275,546	100 percent
Less:			
Prior IR&D	60,211,690		
Prior Government funded	6,127,468		
Current Government funded	13,569,000		
Depreciable equipment	3,460,948		
Subtotal		83,369,106	27 percent
Revised contractor cost share		$220,906,440	73 percent

The research contractors in Table 5 were actually at risk for $220.9 million instead of $304.3 million. Also, reports to DoD and Congress overstated the research to be achieved with contractor funds by $83.4 million (27 percent).

Prior IR&D and Government-Funded Research. DCAA reported that 10 contractors participating in research other transactions provided $60.2 million of prior IR&D and $6.1 million of prior Government-funded research as contractor cost share. The inclusion of prior IR&D and Government research that was already paid by DoD was permitted by DARPA; however, it was inappropriate because it did not advance research efforts, did not meet the intent of cost share under 10 U.S.C. 2371, and reduced contractors' financial risks. Appendix E shows the effect on cost sharing for three research agreements.

Commercial-Military Integration Partnership Program Other Transaction. For example, a consortium for "Affordable Composites for Propulsion Cooperative Arrangement," (MDA972-94-3-0029), used prior contractor IR&D ($59.6 million), prior and current Government-funded research ($19.7 million), and depreciated equipment ($1.7 million) as its cost share. The research other transaction was for $370 million, the contractors' cost share was $240 million (65 percent), and DARPA provided the remaining $130 million (35 percent). The value of the prior IR&D and Government-funded research used as the contractors' cost share affected the actual cost share and cost risk. However, the contractors in the consortia were allowed to reduce their cost share to 55 percent by using prior IR&D, Government-funded research, and charges for depreciated equipment.

	DoD		Contractor		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Agreement Cost Share	130	35	240	65	$370
Revised Cost Share	130	45	159	55	$289

DARPA officials were aware that the consortium's cost share included prior and current Government-funded research. The DARPA officials stated that the research other transaction was issued under Section 2512, title 10, United States Code (10 U.S.C. 2512), "Commercial-Military Integration Partnership."

DARPA officials stated that the statute required the Secretary of Defense to ensure that the amount of funds provided by the Secretary (as opposed to the Government) under the partnership did not exceed the limits established in the statute. DARPA officials interpreted the statute to apply only to DoD funds; therefore, DARPA believed other Government-funded research was allowable as contractor cost share. Section 2512 was repealed in 1996.

The DARPA solicitation allowed contractors to use other Government efforts as part of the contractors' cost share. The solicitation was silent about charging prior IR&D. Section 2512, Title 10, United States Code, did not state that other Government efforts and prior IR&D could be used as part of the contractors' cost share. The DARPA interpretation of the statute allowed prior IR&D and other Government-funded research as part of contractor cost share, but the allowance did not advance research and it distorted the actual expenditures for research. DARPA stated that every Member of Congress received a copy of the program information package on the Technology Reinvestment Project that allowed the use of prior IR&D and Government-funded research, but that DARPA received no objection from Congress. However, DARPA did not explain the effect on contract cost share of including prior IR&D and other Government-funded research contracts to Congress, as does this report.

Defense Dual-Use Critical Technology Program Other Transaction. Another research other transaction, "Precision Laser Machining Consortium" (MDA972-94-3-0020), had a cost share of $75.2 million, with the contractor providing $38.1 million (51 percent) and DARPA providing the remaining $37.1 million (49 percent). DCAA reported that $507,000 of the contractor's $38.1 million cost share was associated with prior IR&D, and $1.2 million was associated with fully depreciated equipment. As a result, the consortium's actual cost share was $36.4 million, or 50 percent, of the estimated research costs as shown below.

	DoD		Contractor		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Agreement Cost Share	37.1	49	38.1	51	$75.2
Revised Cost Share	37.1	50	36.4	50	$73.5

The research other transaction was issued under 10 U.S.C. 2511, "Defense Dual-Use Critical Technology Program," and other transaction authority of 10 U.S.C. 2371. Section 2511 requires that funds provided by the Federal Government for a project conducted under the program may not exceed 50 percent of the projected cost.

The May 1996 report of the Senate Committee on Armed Services, accompanying the National Defense Authorization Act for FY 1997, stated that costs of prior IR&D efforts by contractors should not be counted as cost share. In December 1997, in response to the Senate report, DDR&E issued memorandum guidance that prohibited the acceptance of contractor prior IR&D

as contractor cost share and stated that only additional contractor IR&D efforts would be allowed. The DDP issued similar nonmandatory guidance in the Defense Acquisition Deskbook for prototype other transactions.

In commercial business where risk is shared on research, participant No. 1 would not let participant No. 2 put up research that was funded by participant No. 1 as its cost share. The DoD should not allow contractors to use Government-funded research and development efforts as contractor cost share, and guidance should be issued to preclude its use.

Facility and Equipment Charges

DCAA reported that nine research contractors used $3.5 million of rental expenses for existing assets and software as the contractors' cost share. These facilities and equipment charges were also charged to the contractors' overhead accounts, and using these items as cost share represents the same cost claimed twice. For example, DCAA reported that one research contractor's cost share included $282,055 as the fair market value of facilities and equipment, of which $193,048 was charged to the other transaction. The contractor estimated the fair market value of facilities and equipment and allocated the value as rental usage over the period of performance of the other transaction. DCAA also identified that the fair market value reflected the cost of purchasing new equipment; however, in many cases, the facilities and equipment were fully or partially depreciated assets that were originally purchased under other Government contracts. In addition, DCAA reported that the research contractor's fair market value estimates were not fully supported and, in some cases, exceeded the initial purchase price. This condition would not occur in a regular contract because there is adequate guidance that allows only a reasonable charge for a fully depreciated item and provides guidance on how to calculate the charges. However, no guidance exists on how to determine the appropriate charges for fully depreciated or overvalued equipment for other transactions.

Actual Costs Reporting

DCAA identified one research contractor that reported an other transaction cost of $3,599,816; however, the actual cost was $3,284,816. The difference of $315,000 represented the double counting of in-kind contributions because the research contractor included the $315,000 in both the contractor-incurred costs billed to the other transaction and also as in-kind contributions. Without the DCAA evaluation, this misreporting would not have been identified.

Actions Needed

We reviewed 5 research other transactions, with a total value of $560 million, out of a universe of 205 research other transactions, valued at $2.9 billion. Because this was the first evaluation of costs charged to other transactions, DARPA participated in the selection. The review identified issues with $83.4 million out of $304.3 million of the contractors' cost share for the 5 research other transactions.

DDR&E nonmandatory guidance precludes using prior IR&D, and research and development efforts funded by DoD or another Government organization as contractor cost share. DDP nonmandatory guidance preclude using prior IR&D but does not prohibit contractors from using research and development efforts funded by DoD or another Government organization. Neither DDR&E or DDP guidance discuss fully depreciated or overvalued assets. Contractor use of Government-funded research and development and fully depreciated or overvalued assets as part of their cost share reduces the contractor's cost risk and is not in accordance with the spirit of cost sharing. To resolve the issues, DDR&E and DDP need to issue additional guidance. Although these issues were not found in the prototype other transactions at the time of the DCAA review, we believe it would be prudent to issue guidance to prevent potential future issues.

Congressional Reporting and Research Achievement

DoD reports the use of other transactions annually to the House and Senate Committees on Armed Services. DoD overreported the benefits of research other transaction by about $83.4 million because prior IR&D expenditures, Government-funded research and development, and fully depreciated and overvalued assets were used as contractor cost share. Similar issues were not found for prototype other transactions. The overreporting misrepresents contractor investment and actual research achieved because there was no additional research for the $83.4 million. Because we reviewed only 5 of 205 research other transactions, the total amount of overreported benefits is unknown.

The incorrect reporting of contractors cost share also overstated the actual cost of research achieved. If other transaction costs were accurately reported, Congress, DoD, and contractors would better understand the true cost of achieving goals for different research areas. Finding B contains additional concerns we identified in the reports to Congress.

Access to Records Provisions

Other transactions are issued without many of the controls and safeguards associated with contracts and grants. In addition, the Military Departments and Defense agencies issued other transactions without establishing uniform audit

and access-to-records provisions. The seven other transactions identified a variety of audit provisions; three provided for a Government representative to evaluate costs, three provided for either a Government representative or nonGovernment auditor (independent public accounting firm) to evaluate costs, and one provided for only nonGovernment auditors to review costs. The variety of audit provisions did not comply with DoD audit policy, did not consider the use of DCAA audit resources, and did not consider provisions of the Single Audit Act. This problem was initially reported in the "Award and Administration of Contracts, Grants, and Other Transactions Issued by the Defense Advanced Research Projects Agency," Inspector General, DoD, Report No. 97-114, March 28, 1997. The Inspector General, DoD, and DDR&E agreed that this audit would help provide the basis for establishing audit provisions for other transactions.

Audit Policy. DoD Directive 7600.2, "Audit Policies" (the Directive), February 2, 1991, states that DoD Components will not contract for audit services unless the audit expertise is not available in DoD audit organizations. The Directive also requires DoD Components to obtain approval from the Office of the Inspector General, DoD, before they contract for audit services. Since issuance of the Directive, the Office of the Inspector General, DoD, has issued written and oral guidance to the Military Departments, the Audit Chiefs of the Military Departments, the Under Secretary of Defense for Acquisition and Technology, and the Under Secretary of Defense (Comptroller) that DoD Components must obtain approval from the Inspector General, DoD, before releasing solicitations for audit services from nonGovernment sources. The Inspector General, DoD, issued the guidance to ensure the appropriate use of nonGovernment auditors and to ensure compliance with applicable auditing standards. DoD Directive 7600.2 is under revision and will incorporate the specific requirement for the Office of the Inspector General, DoD, review and approval of any statements of work for contract audit services.

None of the four other transactions issued by DARPA, whose provisions allowed the use of nonGovernment auditors, obtained prior approval from the Inspector General, DoD. We asked how DARPA planned to use the audit provisions citing independent public accounting firms, DARPA officials stated that it had no plans to use the audit provisions, had no mechanism to hire auditors, and had no funds to pay the auditors without reducing the funds available for the research or prototype other transactions. Acquisition personnel are not usually expected to be aware of DoD Directive 7600.2. It would help if personnel issuing other transactions understood the audit policy so that future problems would be precluded. Therefore, other transaction guidance should reference the Directive and synopsize its provisions.

DCAA Audit Resources. DCAA is the primary contract audit agency for DoD and many other Federal agencies, and it has the expertise to provide financial advice and audit costs associated with DoD-funded efforts. DCAA is responsible for performing contract audits for DoD and providing accounting and financial advisory services on contracts and subcontracts to all DoD Components. DCAA maintains audit staffs at numerous DoD contractor sites and conducts routine evaluations of contractor accounting systems and internal controls, assists in establishing provisional overhead rates, and performs final cost audits. DCAA

also performs audits at many contractor sites whose DoD business does not dictate resident offices. From 1997 to 1999, DCAA has conducted reviews at over 1,900 commercial contractors that were new to doing business with DoD. The DCAA reviews include cost or fixed price proposal evaluations, audit of costs on cost reimbursable contracts, review of fixed price contract progress payments, and preaward accounting system reviews. Other transactions have expanded from DARPA to include the Military Departments and defense agencies. In addition, the Defense Contract Management Command assists in administering these agreements in ways that are both different and similar to their administration of contracts. The DCAA is also a valued part of the acquisition corps and has been a major part of the acquisition reform effort in DoD. As part of acquisition reform, DCAA has been evolving its role and its services available. Guidance for prototype other transactions mentions DCAA and states that DCAA could provide financial services, provide the status of the contractors' accounting system, and help the agreement's officers determine a fair and reasonable price; however, guidance on the use of DCAA is not mandatory. Guidance for research other transactions makes no reference to DCAA services in the overall strategy for use of agreements. DCAA can provide many services other than traditional audits, such as helping agreement officers to properly value assistance-in-kind, evaluate and research the labor and other rates for traditional or nontraditional DoD contractors or the commercial business segments of traditional DoD contractors, and evaluate risk and materiality in agreements. Expanded definitions and purchases of commercial items are part of DoD acquisition reform changes, as are other transactions. In the FY 1999 National Defense Authorization Act, DoD was directed to determine the role and responsibility of DoD support organizations, of which DCAA is one, in procedures for determining the price reasonableness for commercial spare parts. We believe a similar type action was needed for other transactions. DoD needs to issue guidance that cites the availability, roles, services, and responsibilities that DCAA can contribute to other transactions. Other transactions started out in DARPA without a role for DCAA or the Defense Contract Management Command, but the Defense Contract Management Command was brought in on a partnership basis to help improve the use of other transactions. A similar role should be defined for DCAA because DCAA provides services for the negotiation, administration, and settlement of contracts and subcontracts. DCAA can also provide assistance to other transaction officers on valuing in-kind contributions, determining a reasonable charge for fully depreciated assets, and assisting in verifying whether the terms and conditions of the other transactions were met. Table 2 shows that 85 percent (research and prototypes combined) of all DoD cost share funding is provided to traditional DoD contractors, which makes defining a role for DCAA more important.

Single Audit Act. The Office of Management and Budget Circular A-133, "Audits of States, Local Governments, and Nonprofit Organizations," implements the Single Audit Act Amendments of 1996 (Public Law 104-156). The Single Audit Act streamlined and improved the effectiveness of Federal award audits and reduced the audit burden on States, local governments, and nonprofit organizations. The Single Audit Act requires audits of Federal awards to be performed in accordance with Government Auditing Standards; to include reviews of financial statements, expenditures, and internal controls; and to comply with contract or grant provisions. Circular A-133 also defines agency responsibilities for conducting audits under the Single Audit Act. The Single

Audit Act provides for annual and program-specific audits, and its provisions should be applied to funds received by educational and nonprofit institutions for other transactions. The annual audits already examine all Government funds received on contracts, grants, and cooperative agreements, and they serve as a basis for program managers to determine whether the necessary internal controls are in place and are effective. The DoD guidance on other transactions should reference DoD Directive 7600.10, "Audits of State and Local Governments, Institutions of Higher Education, and Other Nonprofit Institutions," May 20, 1991, which shows that funds received by an institution of higher education or nonprofit organization from an other transaction would be subject to the provisions of the Single Audit Act. As a proponent of DoD Directive 7600.10, the Inspector General, DoD, will modify the Directive, as appropriate, to reference other transactions. DDR&E and DDP should explain in regulations for other transaction how the agreements will be incorporated in the Single Audit Act for nonprofit institutions and universities.

Policy Needed for Access to Records. The DARPA provision allowing access to records for the seven other transactions did not specifically state whether DoD had access to contractor records to verify whether the terms and conditions of the other transactions were satisfied. In addition, DARPA officials stated that they did not plan to use the provisions to audit these agreements. The DoD had not issued guidance on providing a good access-to-records clause for other transactions. The access-to-records clause would be used to verify the terms and conditions of the other transaction. The access-to-records clause should permit access by the other transaction agreement officer, his or her designee, or an auditor based on the terms, conditions, materiality, and risks involved with the other transaction. Other transactions that include fixed prices, low risk, adequate financial reporting, contractors with excellent past performance, and contractors with adequate business systems may require minimal access to records. Conversely, other transactions that include large amounts of funds, are cost based, include contractors with below average past performance, or contractors with inadequate business systems may require a more detailed access-to-records clause. DCAA can assist the agreement officer in judging risk and materiality and can provide professional advice on writing an access-to-records clause so that DoD can actually access the needed contractor records, when and if they are needed. Not every other transaction will need an audit. Putting in an access to records clause does not mean an audit will occur. The inclusion of an appropriate access-to-records clause to verify terms and conditions and to use DCAA resources when audits are needed at contractors makes good business sense, acts as a deterrent to procurement scandals, and helps protect the public trust in DoD acquisition programs.

The Conference Report (HR 106-301) for the National Defense Authorization Act for FY 2000 states that the General Accounting Office shall be provided access to records for any party to a prototype other transaction that is valued in excess of $5 million. The access to records for the General Accounting Office shall not apply with respect to a party that has not entered into any other transaction that provides for audit access by a Government entity in the year prior to the date of the other transaction. The head of the contracting activity can waive the General Accounting Office audit access if a determination is made that it would not be in the best interests of the Government and notification of

the waiver is sent to Congress and the Comptroller General. The support DCAA would provide to agreement officers is different than what the General Accounting Office would use access to records for. The congressional action shows there is an interest in providing audit access to other transactions and that we believe the DoD should move forward in involving the DCAA in other transactions.

The Acquisition Deskbook guide on prototype other transactions contains some nonmandatory audit guidance for prototype projects and states that other transactions should provide for access to financial records. An adequate access-to-records clause would also be beneficial and would protect DoD and the contractor if either party terminated the agreement. Termination settlements of the other transaction could occur if the contractors in the consortium disagree, if the research does not provide beneficial results commensurate with expenditures, if research priorities shift, or if a participant defaults. Terminations are often based on actual costs incurred and noncancellable obligations and could include license costs. Access to financial records and use of DCAA for reviewing costs on a terminated other transactions makes sound business sense.

Recommendations, Management Comments, and Audit Response

A. We recommend that the Directors, Defense Research and Engineering and Defense Procurement, include in DoD directives, instructions, or regulations other transaction guidance that:

1. Precludes using Government-funded research and overvalued assets and provides a reasonable-use charge for fully depreciated assets as contractor cost share.

Management Comments. DDR&E partially concurred. DDR&E stated that guidance in the existing Technology Investment Agreements memorandum required recipients to provide their cost share from non-Federal resources and, therefore, additional guidance was not needed. DDR&E concurred with providing guidance on the use of fully depreciated assets as recipients' cost share. DDR&E will issue its guidance in a DoD Instruction 4 months after the issuance of the final audit report.

DDP concurred with the recommendation. DDP stated that the Under Secretary of Defense for Acquisition, Technology, and Logistics was considering issuing a Directive mandating the use of the prototype other transaction Guide. DDP stated that the Guide would include restrictions on research and development funded as a direct cost under a Government contract, grant, or other agreement from being used as contractor cost share. In addition, the Guide would include factors to consider in determining usage charges for fully depreciated assets.

Audit Response. DDR&E comments were partially responsive. We agree that DDR&E issued memorandum guidance for Technology Investment Agreements that states "to the maximum extent practicable, the non-Federal parties carrying out the research project under a Technology Investment Agreement are to provide at least half of the costs of the project from non-Federal resources that are available to them (unless there is specific authority to use other Federal resources for such cost sharing)." However, this guidance does not prohibit the use of Government-funded research as contractor cost share; the guidance implies that Federal resources should not be used as contractor cost share. Therefore, guidance is needed to prohibit the use of Government-funded research as contractor cost share. The required guidance needs to be issued in a DoD directive, instruction, or regulation. DoD Directive 5025.1, "DoD Directive System," June 24, 1994, states that policy memorandums are valid for only 90 days and that the memorandums must be subsequently incorporated into a DoD directive, instruction, or regulation to require the guidance to be mandatory.

DDP comments were partially responsive. The DDP will issue guidance that restricts the use of Government-funded research and development as contractor cost share usage charges which is responsive to the recommendation. However, the DDP comments indicated that DDP is considering issuing a Directive that will implement a Guide. According to DoD Directive 5025.1, "DoD Directive System," a Guide only provides information. DDP needs to be more specific as to how and when it plans on issuing the agreed upon guidance.

Therefore, we request additional comments from DDR&E and DDP that specifically address whether planned guidance will be issued in a directive, instruction, or regulation and DDP needs to state when the guidance will be issued.

2. Identifies how to design an appropriate access-to-records clause to verify the terms and conditions of the agreement. Guidance should include consideration of risks, materiality, funding involved, contractor past performance, adequacy of contractor business systems, and methodology of payment (cost based or performance based), and the need to verify Government and contractor cost share contributions. The guidance should reference and describe the application of DoD Directive 7600.2, "Audit Policies," and DoD Directive 7600.10, "Audits of State and Local Governments, Institutions of Higher Education, and Other Nonprofit Institutions."

Management Comments. DDR&E partially concurred. DDR&E stated that it would issue guidance on the Single Audit Act (DoD Directive 7600.10) but that it was unclear on whether DoD Directive 7600.2 applied to assistance instruments (as opposed to a procurement contract). However, DDR&E stated that it would issue guidance to DoD Components to coordinate with the Inspector General, DoD, when DoD Components contract with non-Federal auditors or when the recipient (contractor) hires an independent auditor to conduct an audit on behalf of the Government. DDR&E stated that it would

work with the Inspector General, DoD, to design a coordination process that does not delay negotiation of other transactions and would issue the guidance within 4 months after issuance of the final audit report.

DDP partially concurred with the recommendation. DDP stated it would issue guidance on access to records and the factors to be considered. However, DDP stated that guidance must be flexible in incorporating DoD Directive 7600.2. DDP stated that it would work with the Inspector General, DoD, to establish guidance with regards to DoD Directives 7600.2 and 7600.10, and would provide the Inspector General with an annual list of any independent auditors used.

Audit Response. The DDR&E and DDP comments were partially responsive. The Inspector General, DoD, is responsible for providing audit policy for DoD. The DoD audit policy is that, with the exception for the Single Audit Act, military departments and Defense agencies will not contract for audit services unless the audit expertise is not available within DoD. This audit policy applies to other transactions. DCAA is the preferred audit service provider for reviews of contractor records and because many of the other transactions are awarded to contractors where DCAA already has audit cognizance, the use of non-Federal auditors would duplicate audit effort and companies' resources would be wasted by having to comply with multiple sets of auditors. Therefore, any audit guidance issued by DDR&E or DDP must state that DCAA is the preferred audit service provider for other transactions and exceptions to the policy must be obtained from the Office of the Inspector General prior to soliciting any non-Federal audit services. The Inspector General, DoD, will update DoD Directive 7600.2 to specifically identify contract-like instruments such as other transactions.

We request DDR&E and DDP to reconsider their position and provide additional comments in response to the final report.

3. Identifies the roles and responsibilities that the Defense Contract Audit Agency has for other transactions and the services it can provide to agreement officers. The guidance should be developed in coordination with the Agency and state that agreement officers should use the Agency to verify terms and conditions of other transactions unless approval has been received from the Inspector General, DoD, to obtain the services of non-federal auditors.

Management Comments. DDR&E partially concurred. DDR&E stated that it would provide guidance on the DCAA role and would develop the necessary language in coordination with DCAA. DDR&E also stated that it would not issue guidance that explicitly states that DCAA will be used to verify recipients' (contractors) compliance with agreements even though DCAA may be present at the contractor. DDR&E stated that audit policy should not be more restrictive than existing policy for the DoD grants and cooperative agreements issued in 1998 in Part 34, "Administrative Requirements for Grants and Agreements with For-Profit Organizations." DDR&E said that policy provides that any for-profit recipient that expends $300,000 or more per year in Federal awards shall have an audit. The recipient may use audits performed by the DCAA or other

Federal auditors, or may rely on a combination of non-Federal and Federal auditors in a coordinated audit approach. The policy does not require each recipient that has a DCAA audit presence to meet the requirement through DCAA audits, and the policy was adopted with IG, DoD, concurrence. The policy for other transactions should not be more restrictive than the policy in Part 34, and we are not aware of problems that have arisen to justify a policy change. DDR&E will work with the Inspector General, DoD, and DCAA to develop a reasonable approach to verify recipients' compliance with the other transaction terms. DDR&E will issue the guidance in 4 months after issuance of the final audit report.

DDP concurred. DDP stated that it would issue guidance that requires the use of DCAA where DCAA has audit cognizance. DDP also stated that where DCAA did not have audit cognizance, DDP would provide the Inspector General, DoD, with an annual list of any independent auditors used.

Audit Response. DDR&E and DDP comments are partially responsive. Based on comments received, we revised the wording of the recommendation to make it clear that this is an audit policy issue that needs implementing guidance for personnel writing other transactions. DDR&E and DDP must issue guidance for other transactions to ensure compliance with the DoD audit policy contained in DoD Directive 7600.2. The Inspector General, DoD, is responsible for issuing audit policy and, except for non-profit institutions and institutions of higher education, which are covered by the Single Audit Act, DCAA is the preferred audit service provider for review of contractor records. The policy is based on efficiency and effectiveness, and exceptions to this policy must be obtained from the Office of the Inspector General, DoD. The guidance cited in Part 34 covers grants and cooperative agreements that are low risk instruments and more definitive guidance is needed for other transactions. We do not agree that the guidance in Part 34 should apply to other transactions. Therefore, we request DDR&E and DDP to provide additional comments to the final report.

Management Comments on the Finding and Audit Response

Summaries of management comments on the finding and our audit response are in Appendix G.

B. Effect of Independent Research and Development Costs on Contractor Cost Share

DoD officials were not always aware of the actual cost to the Federal Government for other transactions. This condition occurred because portions of the cost contributions subsequently allocated to Government contracts were not visible to agreement officers and because agreement officers were not trained on the effect of current IR&D on contractor cost share. As a result, the Government, in some cases, paid a greater cost share than agreed upon. In addition, although not required, DoD reports to Congress did not fully disclose the actual costs to the Federal Government for other transactions.

Background

Congressional actions have furthered industry research and development through IR&D and research tax credits. Use of IR&D and research tax credits helps reduce the cost and risk associated with the contractors' cost share of an other transaction, which, in turn, furthers more research and development.

Independent Research and Development. DoD encourages contractors to engage in research and development activities of potential interest to DoD. DoD pays contractor IR&D costs through indirect charges to other Government contracts that are performed by contractor business segments. DoD reimburses contractors for IR&D based on an annual ratio of Government-to-commercial business. A nontraditional or new contractor to DoD who participates in an other transaction may not have an IR&D account and therefore could not be reimbursed by the Government because it had no other Government contracts to which it could allocate IR&D costs.

IR&D is that part of a contractor's total research and development program that is not directly funded by Government contracts or grants and is undertaken in areas at the discretion of the contractor. Section 403 of the FY 1970 Defense Authorization Act and, subsequently, Section 203 of the FY 1971 Defense Authorization Act allowed IR&D as long as there was a relationship to a military function or operation. Section 203 allowed DoD to negotiate advance agreements and dollar ceilings if the contractor received more than $2 million in IR&D payments in a year. The agreements and ceilings were established to avoid recurrence of instances where DoD funds were used to fund research on commercial products.

The FY 1991 Defense Authorization Act repealed section 203 and established IR&D in 10 U.S.C. 2372 "Independent Research and Development and Bid and Proposal Costs: Payments to Contractors." Congress revised 10 U.S.C. 2372 in the National Defense Authorization Act for FYs 1992 and 1993 by eliminating the requirement for advance agreements, technical reviews, and cost ceilings. It was the intent of the Congress to encourage industry to increase

expenditures for IR&D and to fully reimburse IR&D costs to the extent that the costs were reasonable, allocable, and otherwise not disallowed under applicable laws. The Senate Committee on Armed Services, in a report to accompany the FY 1997 National Defense Authorization Act, stated that cost of prior IR&D efforts by contractors should not be counted as part of a contractor's cost share for other transactions.

IR&D is also discussed in 10 U.S.C. 2320, "Rights in Technical Data." The statute distinguishes between items developed at Federal expense and those developed at private expense. In the Conference Committee Report accompanying the National Defense Authorization Act for FY 1987, the committee expressed frustration that efforts had been ongoing in DoD since 1962 to define the terms "developed" and "at private expense" in regulations. At issue was who would own the rights to technical data. The Committee defined "at private expense" to include IR&D that was reimbursed by the Government as an indirect cost, but not by direct payment, and stated that such IR&D would be treated as contractor funds for purposes of the Section 2320, "Rights in Technical Data." In the FY 1988 and FY 1989 National Defense Authorization Act, the Congress amended 10 U.S.C. 2320 to state that IR&D costs would not be considered Federal funds only for the purposes of definitions in paragraph (a) (3) of 10 U.S.C. 2320.

Research Tax Credits. Research and Development Investment Tax Credit, 26 U.S.C. 41, allows companies to receive tax credits for qualified research expenditures. The Internal Revenue Code states that the amount of research tax credit is determined by a fixed percentage and the average annual gross receipts for 4 years prior to the year when the tax credit is determined. The actual tax credit allowed for research cannot exceed 10 percent of total research expenditures. However, based on discussion with Internal Revenue Service officials, Defense contractors are generally granted about 4 percent of their research expenditures as a tax credit. Companies can reduce the costs and risks associated with other transactions by using the tax credit. Traditional as well as new DoD contractors can use the research tax credit.

DoD personnel stated that Federal taxes were not relevant to DoD acquisitions. However, Federal taxes have been an issue in other DoD acquisitions. Congress addressed the effect of Federal taxes on leases for vessels or aircraft in 10 U.S.C. 2401. In this statute, Congress directed that DoD prepare an analysis, including lost tax revenues, which compared the cost to the United States of any lease compared to the cost of procurement of the vessel or aircraft. The issue was that, under the tax code, the tax credits and deductions permitted a company leasing an item to DoD, plus the lease payments by DoD, may exceed the cost of purchasing a vessel or aircraft.

Contractors Reviewed

The DCAA evaluation of the other transactions identified 21 contractors with $266 million of cost share. These contractors treated their cost share as IR&D in their accounting system and had incurred costs of $223 million at the time of the DCAA evaluation. Of the $223 million incurred costs, $159 million was recorded as current IR&D. These 21 contractors had a Government business base between 1 and 99 percent; therefore, considering the different business bases, Government programs would be charged an estimated $56.9 million of the current IR&D through contractor indirect rates. For example, one research other transaction, the "Precision Laser Machining Consortium" (MDA972-94-3-0020), cost share included current IR&D costs of $15.7 million. The contractors' amount of other Government business ranged between 23 and 99 percent. As a result, the contractors applied $12.8 million of the $15.7 million of IR&D costs to other Government contracts and, in effect, reduced their cost share by 11 percent (Table 7). In another research other transaction, the "Affordable Composites for Propulsion Cooperative Arrangement" (MDA972-94-3-0029), cost share included $133 million of current IR&D costs . The amount of other Government business for the contractors ranged between 1 and 90 percent. Therefore, the contractors charged $37.2 of the $133 million of the current IR&D to other Government efforts and reduced their cost share by 7 percent (Table 8).

The allocation effect of current IR&D reimbursement for the five other transactions DCAA reviewed are shown below and detailed in Appendix E.

Table 6. Trauma Care Information Management Systems Consortium (DARPA Agreement No. MDA972-94-2-0010)

	Government		Contractors		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Cost share	12.2	47	13.7	53	$25.9
Revised cost share after IR&D reimbursement	12.2	51	11.6	49	$23.8

Table 7. Precision Laser Machining Consortium (DARPA Agreement No. MDA972-94-3-0020)

	Government		Contractors		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Cost share	37.1	50	36.4	50	$73.5
Revised cost share after IR&D reimbursement	37.1	61	23.6	39	$60.7

Table 8. Affordable Composites for Propulsion Cooperative Arrangement (DARPA Agreement No. MDA972-94-3-0029)

	Government		Contractors		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Cost share	130.0	45	158.9	55	$288.9
Revised cost share after IR&D reimbursement	130.0	52	121.7	48	$251.7

Table 9. Field Emission Flat Panel Display Technology (DARPA Agreement No. MDA972-95-3-0026)

	Government		Contractor		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Cost share	11.2	42	15.4	58	$26.6
Revised cost share after IR&D reimbursement	11.2	49	11.7	51	$22.9

Table 10. Next Generation Electroluminescent Display Consortium (DARPA Agreement No. MDA972-95-3-0029)

	Government		Contractors		
	Dollars (millions)	Percent	Dollars (millions)	Percent	Total
Cost share	30.7	50	30.7	50	$61.4
Revised cost share after IR&D reimbursement	30.7	51	29.7	49	$60.4

Guidance, Training, and Knowledgeable Negotiators

DoD guidance and training do not discuss the implication of reimbursement of the contractor cost share when the contractor treats its cost share as an IR&D expense. Also, DoD personnel lack knowledge of the research and development tax credits that contractors receive from the Internal Revenue Code. These two elements reduce the contractor's actual cost and risk. We discussed this with DoD officials who stated that, under 10 U.S.C. 2320, Congress defined IR&D as private funds. The officials stated that it is not practical and in most cases not possible to determine if the contractor qualifies for the research tax credit or how much the credit could be. They further stated that Congress defined IR&D as private funds only for "Rights to Technical Data."

If the negotiator of an other transaction were knowledgeable of the effects of IR&D reimbursement, the negotiator might be able to better negotiate with the contractor. The DCAA can readily provide the IR&D reimbursement rates to the negotiator. It would be difficult for negotiators to determine the impact of the research and development tax credit on an other transaction, but it would be useful for them to understand that research tax credits exist.

DoD was trying to encourage new contractors to perform research and development with DoD through other transactions. A new contractor who does not have a contract with DoD might be at a disadvantage when competing against a traditional DoD contractor who will be reimbursed by the Government with a portion of its cost share through IR&D.

There is no commercial equivalent to DoD purchases of research and development and IR&D. Commercial industry normally conducts research and development in-house, uses currently available technologies or suppliers who may be able to rapidly develop technology, and, in cases where research and development must be purchased, makes payment on deliverables or purchases patents. However, in the fall of 1998, DoD learned from two different industry roundtables that industry accumulates knowledge about suppliers and develops professionals who are well trained in the market in which they buy and are knowledgeable of the supplier's business. It would be a commercial-like

practice for DoD to educate its agreement officers on the effect of IR&D and the existence of the research tax credit. Just as in the commercial world, a more knowledgeable agreement officer can negotiate better other transactions.

Other Transaction Reporting

DoD should show the effects of contractor IR&D reimbursement in its reports to Congress because the reports do not clearly disclose the full cost of other transactions to the Government. The IR&D reimbursement reduces the contractor's cost share and risk and increases the cost to other DoD and Government contracts. Excluding the IR&D reimbursement understates the actual cost to DoD and does not provide Congress and senior DoD officials with the full cost of the other transaction to the Government.

In its reports to Congress, DoD reported that it awarded 205 research other transactions with a DoD cost share of $1.4 billion and a contractor cost share of $1.5 billion. Our analysis shows that 72 percent of DoD cost-share funds went to traditional DoD contractors and nonprofit organizations for research other transactions (Table 2).

On February 26, 1999, a report to Congress on prototype other transactions showed that 97 prototype other transactions had been issued since inception of the program. The report on prototype other transactions showed a DoD cost share of $2.3 billion and an estimated contractors' cost share of $2.2 billion. About $2 billion of the contractors' $2.2 billion cost share was from two Evolved Expendable Launch Vehicle other transactions. These two other transactions did not require contractor cost contributions, but the contractors could not accomplish the agreement without investing their own funds. Congress directed the Inspector General, DoD, to review the two other transactions. A portion of a subsequent report will discuss IR&D and the costs for the Evolved Expendable Launch Vehicle. Excluding the Evolved Expendable Launch Vehicle program, the DoD and contractor cost share reported for prototype other transactions was $1,337 million and $250 million, respectively.[3]

The Inspector General, DoD, prototype other transactions database showed that 95 percent of the $2.1 billion of DoD funds went to traditional DoD contractors (Table 2). Our analysis of the February 26, 1999, report to Congress showed that the five largest DoD contractors received 73 percent of the $2.3 billion of DoD funds.[3] The three largest DoD contractors accounted for 68 percent of all DoD funds for prototype other transactions. When we excluded the Evolved Expendable Launch Vehicle program from our analysis, the five largest traditional DoD contractors and three largest traditional DoD contractors received 53 and 44 percent of the DoD funds, respectively.

[3] The $2.3 billion and $250 million was obtained from the February 26, 1999, DoD report on other transaction awards for prototype projects. Also, the $2.3 billion includes subsequent agreement modifications not included in Table 2.

The large DoD contractors had IR&D accounts and high reimbursement rates. For example, the IR&D rate for a business segment for two of the top five contractors was 70 and 99 percent, respectively. To the extent the traditional DoD contractors provided cost sharing and charged their contribution to IR&D, the DoD costs for these two contractors was different than the values shown in the other transactions, and the contractors' cost risk was less than shown in report to Congress. It would be useful information to know the effect of current IR&D reimbursement on other transactions and DoD costs.

Use of other transactions is increasing. Senior acquisition officials and individual program managers can benefit from a better understanding of IR&D and its interrelationship with other transactions.

Recommendations, Management Comments, and Audit Response

B. We recommend that the Directors, Defense Research and Engineering and Defense Procurement:

1. Provide training to other transaction agreement officers on how to determine the effects of current independent research and development reimbursement on contractor cost share and provide information to agreement officers on the research tax credit.

2. Require that the annual report to Congress on research and prototype other transactions identify the estimated effects of independent research and development reimbursement on contractor cost share.

Management Comments. DDR&E and DDP nonconcurred with the recommendations, stating that agreement officer's consideration of Government reimbursement of current IR&D and tax credits were contrary to congressional intent and national policy. DDR&E and DDP stated that Government reimbursement of contractors' IR&D had no impact on the contractors' cost share. DDP stated that inclusion of IR&D in the report to Congress is inappropriate because it would result in treating the costs as Federal funds rather than private funds. DDP also stated that recipients cost share should not be reduced in some portion to reflect Government IR&D reimbursement.

Audit Response. It is difficult to understand why DoD does not want to permit other transaction agreement officers to become more knowledgeable about IR&D and the research tax credit. The more agreement officers know about the effects of Government reimbursements to the contractor while they are negotiating other transactions is beneficial to DoD. We believe that a more knowledgeable agreements officer is in a better position to negotiate the best possible deal for the Government.

A contractor's actual cost share and risk is reduced if it includes current IR&D costs and the contractor is reimbursed by the Government for a portion of these costs. We have never stated that DoD should reduce a contractor's cost share for IR&D. Disclosure of the impact of IR&D could occur by adding another column in the reports to Congress.

We request DDR&E and DDP to reconsider their positions and provide additional comments on the recommendations.

Management Comments on the Finding and Audit Response

Summaries of management comments on the finding and our audit response are in Appendix G.

C. Contractor Treatment of Other Transactions

The accounting and management of other transactions need improvement. Although all but one contractor that we reviewed used adequate accounting systems, research contractors' accounting treatment of cost share was inconsistent, and some contractors performing on research and prototype other transactions did not use provisionally approved overhead rates. These conditions existed because some contractors did not follow the suggested accounting treatment of cost share, were not required to use provisionally approved overhead rates, and treated other transactions as though they were contracts. As a result of the accounting treatment, 10 contractors were in technical violation of CAS, and DoD was prematurely charged at least $850,000 more than if DoD provisional overhead rates had been used. Also, the majority of contractors did not identify specific benefits from using other transactions.

Summary of Evaluation Results

Table 6 summarizes the DCAA results for 28 research and 9 prototype contractors (see Appendix F for a discussion of details). The 37 contractors were traditional DoD contractors.

Table 11. Summary of Evaluation Results

	Number of Occurrences		Percent of Occurrences	
	Research	Prototype	Research	Prototype
Used adequate accounting systems	27 of 28	9 of 9	96	100
Used inconsistent accounting treatment for DoD and contractor cost shares	10 of 28	N/A	36	N/A
Did not use provisionally approved overhead rates[1]	4 of 27	1 of 6	15	17
Benefits of other transactions[2]				
Quantifiable benefits	0 of 26	0 of 7	0	0
Administrative benefits	5 of 26	3 of 7	19	43
Procedural benefits	6 of 26	0 of 7	23	0
Technical benefits	6 of 26	2 of 7	23	29
Benefits not identified	0 of 26	2 of 7	0	29
No benefits derived	15 of 26	0 of 7	58	0

[1] One research and three prototype contractors did not have provisional overhead rates.

[2] Two research and two prototype contractors did not respond to the DCAA question on benefits derived from other transactions. Also, some contractors reported multiple benefits.

Accounting Systems

DCAA identified that 36 of 37 contractors used an adequate accounting system to track other transaction costs. All contractors used the same accounting systems that they used on other DoD contracts. The contractors' accounting systems were evaluated by DCAA as part of the evaluation of costs on DoD contracts. One research contractor's accounting system was considered inadequate because of deficiencies in the accounting system and the lack of written internal control procedures. However, DCAA stated that the effect of the deficiencies was not significant enough to preclude DCAA from accepting the contractors reported cost.

Accounting Treatment of Cost Share For Research Other Transactions

The DCAA review showed that research contractors treated the DoD and contractor cost shares differently which resulted in a potential violation of Cost Accounting Standards. Also, the contractor's accounting treatment impacts the application of general and administrative costs to the other transactions.

Cost Accounting Standard. Cost Accounting Standard (CAS) 402 requires that all costs incurred for the same purpose and in like circumstances be accounted for as either direct or indirect cost. The purpose of CAS 402 is to ensure that each type of cost is allocated only once and on the same basis to contracts or other cost objectives. Although CAS does not apply to other transactions, CAS violations occur when the contractor has other CAS-covered Government contracts. DCAA identified that 10 of the 28 research contractors treated the DoD and contractor cost share differently in the contractors' accounting systems (Appendix F). The 10 contractors treated the DoD cost share as a contract and treated the contractor cost share as IR&D resulting in a CAS 402 violation on the contractor's CAS-covered contracts. DCAA reported that it did not identify a material cost effect on the CAS-covered contracts and stated that only a technical noncompliance existed. DCAA did not identify inconsistencies in the contractor accounting treatment for prototype other transactions because, at the time of the evaluation, there was no cost sharing by the contractors.

The DDP emphasized this accounting guidance in a memorandum, "Allowability of Independent Research and Development and Bid and Proposal Costs Under the Technology Reinvestment Project," August 11, 1993, which addressed IR&D accounting treatment for other transactions issued for Technology Reinvestment Projects program. The DDP memorandum permitted cost-share to be charged to IR&D and provided notice that in order to avoid a potential CAS 402 violation when cost-share is charged to IR&D, all costs should be accounted for as IR&D with the funds provided by the Government treated as a credit to the IR&D project. Three of the other transactions reviewed by DCAA were issued under the Technology Reinvestment Project. These three other transactions included 19 contractors and DCAA reported that 10 of those contractors did not treat the DoD and contractor cost share as an

IR&D project in the contractors accounting systems. DoD does not dictate how contractors should treat DoD and contractor cost shares in their accounting systems. However, DDR&E and DDP should include a requirement that agreement officers be aware of contractor treatment of cost shares and should alert the administrative contracting officer and DCAA of a contractor's potential CAS 402 noncompliance on other Government contracts, when inconsistent treatment of cost shares exists.

General and Administrative Costs. The method of accounting that a contractor uses for the treatment of DoD and contractor cost share affects the general and administrative costs charged to the other transaction. DCAA reported that 17 of the 28 research contractors treated the DoD cost share as a contract, and 7 of the 28 contractors treated the contractor cost share as a contract. The treatment of the DoD or contractor cost share as a contract in the contractor's accounting system results in the application of general and administrative costs to the other transaction and reduces the amount available for research. If contractors treated the entire other transaction effort as IR&D, DoD would receive more direct research from the other transaction, but the DoD contract costs would increase by absorbing more general and administrative costs.

Provisionally Approved Overhead Rates

The DCAA evaluation of accounting practices at the 33 contractors or their segments identified that 28 contractors with provisionally approved overhead rates used them to calculate costs associated with other transactions. Contractors use the provisionally approved rates until the Government approves final year-end overhead rates. Contractors apply the provisionally approved rates to direct costs (for example, labor and material) to develop interim progress billings on DoD contracts. When the Government approves the final overhead rates, the contractor adjusts the interim billings to reflect actual allowable indirect costs.

DCAA identified five contractors (four for research and one for prototypes) that used rates other than the provisionally approved overhead rates (Appendix F). One contractor used nonapproved rates that resulted in billed costs of $780,000 more than if it had used DoD provisional rates. Another contractor overstated incurred costs by $63,000 because it used a proposed overhead rate instead of the approved rate. This is a timing issue because the contractor was reimbursed more than if provisional rates had been used. Eventually, the contractor should reduce claimed amounts to reflect negotiated final indirect costs.

Neither DDR&E nor DDP has an established policy for using overhead rates on other transactions. The DDR&E and DDP should establish policy that requires contractors to use overhead rates, if available, that do not exceed the provisionally approved DoD rates in determining costs for other transactions.

Benefits of Other Transactions

Many policies and regulations associated with standard contracts do not apply to other transactions; therefore, contractors may derive benefits that they otherwise would not. DCAA asked contractor business managers or contracting officials whether the contractor realized benefits resulting from the absence of the policies and regulations in using the other transaction authority. Of 37 contractors, 33 responded; 8 reported administrative benefits, 6 reported procedural benefits, 8 reported technical benefits, and 2 stated there were benefits but did not categorize them.[4] Fifteen research participants reported no identifiable benefits.

The contractors who reported administrative benefits included the absence of documentation required by the Federal Acquisition Regulation, such as monthly vouchers, invention notifications, subcontract declarations, deliverable schedules, elimination of military specifications, and absence of cost and performance data. Procedural benefits included rapid turnaround time and expeditious program decisions. Technical benefits included the establishment of a forum for contractors to exchange knowledge. Another reported benefit was the retention of intellectual property rights while making the technology available to DoD. Two prototype contractors reported benefits but did not identify the nature and type. Another research contractor stated that the other transaction provided the essential approach for achieving a commercially sustainable product that enabled the contractor to retain the intellectual property rights and meet commercial and military requirements at the same time. None of the contractors that reported benefits quantified them. The contractors were not asked whether their unquantified benefits were considered to be minor or major.

Recommendations, Management Comments, and Audit Response

In response to DCAA comments, we revised Recommendation C.1. to include the requirement to alert the administrative contracting officer of an other transaction award as well as DCAA, so that the administrative contracting officer and DCAA can assess the contractor's accounting system.

C. We recommend that the Directors, Defense Research and Engineering and Defense Procurement, establish policy in DoD directives, instructions or regulations for other transactions that:

1. Require agreement officers to alert the administrative contracting officer and the Defense Contract Audit Agency when an other transaction has been awarded to a contractor so that the administrative contracting officer and the Defense Contract Audit Agency can assess the contractor's

[4] Some contractors reported more than one type of benefit; therefore, does not add to 33 responses.

accounting treatment of cost share to determine if a Cost Accounting Standard 402 noncompliance exists on the contractor's other Government contracts.

Management Comments. DDR&E concurred and stated that it would issue guidance to require agreements officers to notify DCAA if they become aware of a potential noncompliance with CAS 402. DDR&E will issue the guidance 4 months after the final audit report.

DDP concurred and will issue policy that requires agreement officers to notify DCAA of a potential noncompliance with CAS 402.

Audit Response. The DDR&E and DDP response to the draft report recommendation was responsive. However, we modified the draft report recommendation to include the agreement officer notification of the administrative contracting officer as well as DCAA. Therefore, we request additional comments on the revised recommendation.

2. Require contractors to use overhead rates, if available, that do not exceed the provisionally approved DoD overhead rates to determine other transaction costs.

Management Comments. DDR&E partially concurred. DDR&E stated that when reimbursement is based on cost incurred, contractors will be required to use provisionally approved DoD overhead rates. However, when reimbursement is based on milestone payment provisions, payments of agreed-upon amounts would occur when the milestone is completed.

DDP concurred that guidance on other transactions that provide for interim reimbursement based on actual costs incurred will require the use of provisionally approved indirect rates, when rates are available.

Audit Response. DDR&E comments are partially responsive to the recommendation. Other transactions that have payments based on milestone payment provisions should also require contractors to use provisionally approved DoD overhead rates in determining cost. Other transactions that have milestone payment provisions are not fixed-price research agreements and the provisional payments were based on estimates of costs associated with accomplishing the technical milestones. If DoD payments exceed estimated cost significantly, milestone payment provisions are adjusted to preclude overpayment. For this recommendation, we see no difference between other transactions that have cost payment schedules and those based on meeting technical milestones. Therefore, contractors should be required to use provisionally approved DoD overhead rates, when available, to determine other transaction costs. We request DDR&E to reconsider its position and provide comments to the final report.

DDP comments were responsive; however, it is unclear whether DDP agreed to require the use of provisionally approved DoD overhead rates when reimbursement is based on meeting technical milestones. Therefore, we request DDP to provide additional comments to clarify its position and state when the new guidance will be issued.

Management Comments on the Finding and Audit Response

Summaries of management comments on the finding and our audit response are in Appendix G.

Appendix A. Audit Process

Scope

Work Performed. DCAA performed this agreed-upon procedure evaluation at the request of the Inspector General, DoD, from January 1998 through August 1999. During this period, DCAA issued 38 separate reports to the Inspector General, DoD, which encompassed five other transactions for research, with a value of $494.6 million, and two other transactions for prototype development, with a value of $504 million.[5] Of the $494.6 million for research other transactions, DCAA evaluated costs billed to DARPA valued at $373.8 million, or 76 percent of the costs. Of the $504 million for prototype other transactions, DCAA evaluated costs billed to DARPA of $380.6 million, or 76 percent of the costs. The research and prototype other transactions performance periods ranged from March 1994 through November 2000. See Appendix D for details of the seven other transactions.

DoD-Wide Corporate Level Government Performance and Results Act (GPRA) Goals. In response to the GPRA, the Department of Defense has established 2 DoD-wide goals and 7 subordinate performance goals. This report pertains to achievement of the following goal and subordinate performance goal:

> **Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **Subordinate Performance Goal 2.4:** Meet combat forces' needs smarter and faster, with products and services that work better and cost less, by improving the efficiency of DoD acquisition processes. **(00-DoD-2.4)**

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the Defense Contract Management high-risk area. Although other transactions are not considered to be contracts, we grouped the other transactions in this high-risk area because their purpose is similar to contracts.

[5] DCAA did not review all the costs associated with the other transactions. The dollars only represent the value of the costs with contractors reviewed. Appendix C identifies the total number of contractors for each other transaction not reviewed and the total value of the agreement.

Methodology

DCAA evaluated seven other transactions issued by DARPA from FYs 1994 through 1995. The agreed-upon procedures required DCAA to:

- determine the accounting practices applied to the other transactions;
- determine incurred costs and billed amounts to the other transactions and determine the contractor cost share at the time of the evaluation;
- reconcile incurred cost to the amounts reported in the quarterly financial status report; and
- query contractors on the cost savings or other benefits achieved as a result of statutory and regulatory relief provided by the use of other transactions.

Auditing Period and Standards. We performed this financially related audit from September 1998 through August 1999, in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. DCAA performed the evaluation from January 1998 through April 1999 in accordance with generally accepted Government auditing standards and issued reports or their supplements through August 1999.

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. The scope of this audit only covered an examination of the management control program for costs charged to other transactions by the participating contractors. This report summarizes the results of cost evaluations performed by DCAA at the request of the Inspector General, DoD.

Adequacy of Management Controls. We identified material management control weaknesses as defined in DoD Directive 5010.38. Regulations are needed to ensure that contractors do not use Government-funded research and fully depreciated or overstated values for assets as part of contractor cost share. Also, procedures are needed that require agreement officers to alert DCAA to a potential Cost Accounting Standard 402 noncompliance on other Government

contracts when contractors treat cost share differently in their accounting systems. In addition, procedures are needed that require contractors to use overhead rates that do not exceed the DoD provisionally approved overhead rates in determining other transaction costs.

Recommendations A.1., C.1., and C.2., if implemented, will improve management controls for other transactions. A copy of the report will be provided to the senior official responsible for management controls in the Office of the Under Secretary of Defense for Acquisition and Technology.

Prior Coverage

General Accounting Office

General Accounting Office, National Security and International Affairs Division 96-11 (OSD Case No. 1074), "DoD Research, Acquiring Research by Nontraditional Means," March 29, 1996.

Inspector General, DoD

Inspector General, DoD, Report No. 98-191, "Financial and Cost Aspects of Other Transactions," August 24, 1998.

Inspector General, DoD, Report No. 97-114, "Award and Administration of Contracts, Grants, and Other Transactions Issued by the Defense Advanced Research Projects Agency," March 28, 1997.

Appendix B. Research and Prototype Other Transactions Issued

	FY 1990 - 1995		FY 1996		FY 1997		FY 1998	
	2371	845	2371	845	2371	845	2371	845
Army	0	0	10	0	1	10	24[9]	3
Navy	0	0	5	0	1[5,7]	20	20	11
Air Force	0	0	2	0	1	8	7	7[10]
DARPA	96	7[3,4]	18[5]	8[3,6]	13[5]	4[4]	6[5]	15
NIMA[1]	0	0	0	0	0	3[4]	0	1[11]
NSA[2]	0	0	0	0	0	0	1	0
Total	**96**	**7[3,4]**	**35**	**8[3,6]**	**16**	**45[4]**	**58**	**37**
Value (millions)	$1,814.3	$306.9	$430.7	$55.2	$148.6	$360.0[8]	$499.3[8]	$3,384.9[8]

[1]National Imagery and Mapping Agency.
[2]National Security Agency.
[3] Until FY 1997, DARPA was the only agency within DoD with the authority to issue other transactions for section 845 prototypes.
[4]Section 845 efforts with multiple phases were not counted as separate other transactions in this report. In FY 1994, DARPA issued 1 section 845 other transaction and no phased efforts. FY 1995, DARPA issued 6 section 845 other transactions and 1 phased agreement for a total of 7 new other transactions. In FY 1997, DARPA issued 3 phased efforts and NIMA issued 2 phased efforts for a total of 50 other transactions versus the 45 shown in the table total.
[5]Section 2371, bailment agreements, was not accounted for in this report. DARPA issued 1 bailment agreement in FY 1996, 4 bailment agreements in FY 1997, and 2 bailment agreements in FY 1998. In FY 1997, the Navy issued 1 bailment agreement.
[6]Total includes 1 DARPA section 845 other transaction that was not reported in the FY 1996 Annual Report to Congress.
[7]The Navy issued 1 section 2371 other transaction that was not reported in the FY 1997 Annual Report to Congress.
[8]Totals exclude phases, modifications, and orders made to previously issued other transactions. In FY 1997, DARPA issued 3 section 845 other transactions that added phases to existing agreements totaling $45 million.
In FY 1998, the Army Research Laboratory modified an existing section 2371, FY 1997 other transaction totaling $208,000. Further in FY 1998, NIMA issued 11 orders placed on 2 existing section 845, FY 1997 other transactions totaling $32.4 million.
[9]For FY 1998, the Army Research Laboratory issued 1 FY 1997 other transaction included in the FY 1998 count.
[10]Includes two Air Force other transactions issued in FY 1999 for the Evolved Expendable Launch Vehicle program that had an FY 1998 other transaction number.
[11]Section 845 efforts with multiple phases were not counted as separate other transactions in this report. For FY 1998, NIMA issued 11 phased efforts for a total of 46 other transactions versus the 35 shown in the table total.

Appendix C. New Contractor Participation in Research Other Transactions

	1990-1993	1994	1995	1996	1997	1998	Total
New Contractors (Net)[1]	29	54	41	23	7	26	180
New Contractors (Total)[2]	30	58	53	25	9	28	203
New Contractors Total (millions)	**$124.4[3]**	**$104.0[4]**	**$97.1[5]**	**$47.0[6]**	**$7.8[7]**	**$99.2[8]**	**$479.5**
Total Contractor Share (millions)	**$267.7**	**$638.2**	**$309.7**	**$180.9**	**$79.5**	**$243.6**	**$1,719.6**
Percentage of New Contractor Cost Share to Total Consortia Cost Share	46	16	31	26	10	41	28

[1] New contractors that had not done cost-based research and development before. New contractors are counted once even if they participated in more than one other transaction.

[2] Total of new contractors that had not performed cost based research and development before. A new contractor is counted more than once if performing on more than one other transaction.

[3] Two contractors contributed $94.4 million, 76 percent of the $124.4 million.

[4] One contractor contributed $19.6 million, 19 percent of the $104.0 million.

[5] One contractor contributed $45 million, 46 percent of the $97.1 million.

[6] One contractor contributed $12.8 million, 27 percent of the $47 million.

[7] One contractor contributed $5.4 million, 69 percent of the $7.8 million.

[8] Two contractors contributed $86.1 million, 87 percent of the $99.2 million.

Other Transactions – Research

Trauma Care Information Management Systems Consortium
Agreement No. MDA972-94-2-0010
Period of Performance: From March 1994 through March 1998

	Total Cost Share Government	Total Cost Share Contractor	Agreement Total	Total Cost Reviewed by DCAA[1]	Percentage of Cost Reviewed
Rockwell Collins, Incorporated					
Rockwell Science Center, Incorporated					
Science Applications International Corporation					
Texas Instruments, Incorporated					
Contractors not reviewed (10)					
Total	$12,236,600	$14,264,000	$26,500,600	$6,870,666	26

Precision Laser Machining Consortium
Agreement No. MDA972-94-3-0020
Period of Performance: From May 1994 through April 1999

	Total Cost Share Government	Total Cost Share Contractor	Agreement Total	Total Cost Reviewed by DCAA	Percentage of Cost Reviewed
Boeing Defense and Space Group					
Fibertek, Incorporated					
General Electric Aircraft Engines					
General Electric Company, (Corporate Research and Development)					
HRL Laboratories, Limited Liability Company					
Northrop Grumman Corporation (Electronics and Systems Integration Division)					
Northrop Grumman Corporation (Electronics Systems Division, Hawthorne Site)					
SDL, Incorporated					
TRW, Incorporated, Space and Electronics Group					
United Technologies Research Center					
Contractors not reviewed (16)					
Total	$37,113,674	$38,108,057	$75,221,731	$40,222,028	53

[1]Defense Contract Audit Agency
[2]Where cost reviewed by DCAA exceeded the agreement amount, the agreement may or may not be revised.

Darkened area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Affordable Composites for Propulsion Cooperative Arrangement
Agreement No. MDA972-94-3-0029
Period of Performance: From May 1994 through May 2000

	Total Cost Share Government	Total Cost Share Contractor	Agreement Total	Total Cost Reviewed by DCAA	Percentage of Cost Reviewed
Alliant Techsystems, Incorporated, Bacchus Works					
Boeing Commercial Airplane Group					
Dow-United Technologies Corporation Products, Incorporated					
Cyctec Fiberite, Incorporated, Advanced Materials and Structures					
Northrop Grumman Corporation (Commercial Aircraft Division)					
United Technologies Corporation (Pratt & Whitney, Florida Operations)					
United Technologies Corporation (Hamilton Standard Division)[3]					
United Technologies Corporation (Large Commercial Engines Division)					
Contractors not reviewed (0)					
Total	$130,000,000	$240,000,000	$370,000,000	$295,102,358	80

Field Emission Flat Panel Display Technology
Agreement No. MDA972-95-3-0026
Period of Performance: From August 1995 through December 1997

	Total Cost Share Government	Total Cost Share Contractor	Agreement Total	Total Cost Reviewed by DCAA	Percentage of Cost Reviewed
Raytheon Electronic Systems					
Contractors not reviewed (6)					
Total	$11,228,314	$15,448,867	$26,677,181	$9,320,869	35

[2]Where cost reviewed by DCAA exceeded the agreement amount, the agreement may or may not be revised.
[3]These contractors represent subcontractors.

Darkened area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Next Generation Electroluminescent Display Consortium
Agreement No. MDA972-95-3-0029
Period of Performance: From March 1995 through December 1999

	Total Cost Share		Agreement	Total Cost Reviewed	Percentage of Cost
	Government	Contractor	Total	by DCAA	Reviewed
Planar America, Incorporated	[redacted]				
AlliedSignal Microelectronics and Technology Center					
Advanced Technology Materials, Incorporated[3]					
Georgia Institute of Technology/ Georgia Tech Research Corporation					
Honeywell, Incorporated					
Contractors not reviewed (8)					
Total	$30,696,000	$30,696,000	$61,392,000	$22,317,370	36

[3]These contractors represent subcontractors.

Darkened area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Tier III - Technology Demonstrator Acquisition Program
Agreement No. MDA972-94-3-0042
Period of Performance: From June 1994 through January 1999

	Total Cost Share Government	Contractor	Agreement Total	Total Cost Reviewed by DCAA	Percentage of Cost Reviewed
Lockheed Martin Skunk Works Boeing Defense and Space Group Lockheed Martin Corporation (Lockheed Martin Missile and Space)	[redacted]				
Contractors not reviewed (0)	[redacted]				
Total	$244,218,000	$29,522,000	$273,740,000	$188,425,110	69

Tier II Plus
Agreement No. MDA972-95-3-0013
Period of Performance: From November 1994 through December 1999

	Total Cost Share Government	Contractor	Agreement Total	Total Cost Reviewed by DCAA	Percentage of Cost Reviewed
Teledyne Ryan Aeronautical The Boeing Company (Boeing Corporate Airplane Group)[3] Raytheon Systems Company (Sensors and Communications Systems)[3] (Subcontract 67-973-008D) Raytheon Systems Company (Sensors and Communications Systems)[3] (Subcontract 64-564-001D) Raytheon E-Systems Company, Incorporated[3] Vista Controls Corporation[3] Allison Engine Company[3] Contractors not reviewed (0)	[redacted]				
Total	$230,250,000	$0	$230,250,000	$192,227,883	83

[3]These contractors represent subcontractors.
[4]These contractors were under a cost reimbursement agreement.

Darkened area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Appendix E. Effect of Government-Paid Costs on Contractor Cost Share for Other Transactions

Trauma Care Information Management Systems Consortium
Agreement No. MDA972-94-2-0010
Period of Performance: From March 1994 through March 1998

	Government	Contractor	Total
Initial agreement	$12,236,600	$14,264,000	$26,500,600
Percent of cost sharing	46	54	
Cost review by DCAA[1]			$ 6,870,666[2]
Percent of cost reviewed by DCAA			26
Finding A			
Less:			
Prior IR&D[3]		25,000	
Prior Government funded		None	
Current Government funded		None	
Depreciable equipment		563,200	
Revised costs	$12,236,600	$13,675,800	$25,912,400
Revised percent	47	53	
Finding B			
Less:			
Estimated current IR&D Reimbursement		2,069,034	
Estimated costs	$12,236,600	$11,606,766	$23,843,366
Revised cost percent	51	49	

[1] Defense Contract Audit Agency

[2] DCAA reviewed $6,870,666 of contractor cost share and identified issues with $588,200 (9 percent).

[3] Independent Research and Development

Precision Laser Machining Consortium
Agreement No. MDA972-94-3-0020
Period of Performance: From May 1994 through April 1999

	Government	Contractor	Total
Initial agreement	$37,113,674	$38,108,057	$75,221,731
Percent of cost sharing	49	51	
Cost review by DCAA[1]			$40,222,028[2]
Percent of cost reviewed by DCAA			53
Finding A			
Less:			
Prior IR&D[3]		507,000	
Prior Government funded		None	
Current Government funded		None	
Depreciable equipment		1,194,700	
Revised costs	$37,113,674	$36,406,357	$73,520,031
Revised percent	50	50	
Finding B			
Less:			
Estimated current IR&D Reimbursement		12,829,810	
Estimated costs	$37,113,674	$23,576,547	$60,690,221
Revised cost percent	61	39	

[1] Defense Contract Audit Agency
[2] DCAA reviewed $40,223,028 of contractor cost share and identified issues with $1,701,700 (4 percent).
[3] Independent Research and Development

Affordable Composites for Propulsion Cooperative Arrangement
Agreement No. MDA972-94-3-0029
Period of Performance: From May 1994 through May 2000

	Government	Contractor	Total
Initial agreement	$130,000,000	$240,000,000	$370,000,000
Percent of cost sharing	35	65	
Cost Review by DCAA[1]			$295,102,358[2]
Percent of cost reviewed by DCAA			80
Finding A			
Less:			
Prior IR&D[3]		59,679,690	
Prior Government funded		6,127,468	
Current Government funded		13,569,000	
Depreciable equipment		1,703,048	
Revised costs	$130,000,000	$158,920,794	$288,920,794
Revised percent	45	55	
Finding B			
Less:			
Estimated current IR&D Reimbursement		37,193,837	
Estimated costs	$130,000,000	$121,726,957	$251,726,957
Revised cost percent	52	48	

[1] Defense Contract Audit Agency
[2] DCAA reviewed $295,102,358 of contractor cost share and identified issues with $81,079,206 (27 percent).
[3] Independent Research and Development.

Field Emission Flat Panel Display Technology
Agreement No. MDA972-95-3-0026
Period of Performance: From August 1995 through December 1997

	Government	Contractor	Total
Initial agreement	$11,228,314	$15,448,867	$26,677,181
Percent of cost sharing	42	58	
Cost review by DCAA[1]			$9,320,869
Percent of cost reviewed by DCAA			35
Finding A			
Less:			
Prior IR&D[2]		None	
Prior Government funded		None	
Current Government funded		None	
Depreciable equipment		None	
Revised costs	$11,228,314	$15,448,867	$26,677,181
Revised percent	42	58	
Finding B			
Less:			
Estimated current IR&D Reimbursement		3,781,516	
Estimated costs	$11,228,314	$11,667,351	$22,895,665
Revised cost percent	49	51	

[1] Defense Contract Audit Agency
[2] Independent Research and Development.

Next Generation Electroluminescent Display Consortium
Agreement No. MDA972-95-3-0029
Period of Performance: From March 1995 through December 1999

	Government	Contractor	Total
Initial agreement	$30,696,000	$30,696,000	$61,392,000
Percent of cost sharing	50	50	
Cost review by DCAA[1]			$22,317,370
Percent of cost reviewed by DCAA			36
Finding A			
Less:			
Prior IR&D[2]		None	
Prior Government funded		None	
Current Government funded		None	
Depreciable equipment		None	
Revised costs	$30,696,000	$30,696,000	$61,392,000
Revised percent	50	50	
Finding B			
Less:			
Estimated current IR&D reimbursement		1,020,231	
Estimated costs	$30,696,000	$29,675,769	$60,371,769
Revised cost percent	51	49	

[1] Defense Contract Audit Agency
[2] Independent Research and Development.

Other Transactions - Research

	Accounting Treatment of Cost Shares		Contractor Cost Share			Provisionally	Benefits
	Government Share	Contractor Share	Prior DoD Funded	Prior Government Funded	Prior IR&D[1] Contractor Funded	Approved Overhead Rates Used	From Other Transactions
Trauma Care Information Management Systems Consortium, (MDA972-94-2-0010)							
Rockwell Collins, Incorporated						Yes	Yes
Rockwell Science Center, Incorporated						Yes	None
Science Applications International Corporation						Yes	None
Texas Instruments, Incorporated						Yes	None
Precision Laser Machining Consortium, (MDA972-94-3-0020)							
Boeing Defense and Space Group						Yes	None
Fibertek, Incorporated						Yes	None
General Electric Aircraft Engines						Yes	None
General Electric Company, (Corporate Research and Development)						Yes	None
HRL Laboratories, Limited Liability Company						Yes	Yes
Northrop Grumman Corporation (Electronic and Systems Integration Division)						Yes	None
Northrop Grumman Corporation (Electronic Systems Division, Hawthorne Site)						No	No Comment
SDL, Incorporated						No	Yes
TRW, Incorporated, Space and Electronics Group						Yes	Yes
United Technologies Research Center						Yes	None

[1]Independent Research and Development
[2]Not Applicable

Darked area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Other Transactions- Research (cont'd)

	Accounting Treatment of Cost Shares		Contractor Cost Share			Provisionally	Benefits
	Government Share	Contractor Share	Prior DoD Funded	Prior Government Funded	Prior IR&D Contractor Funded	Approved Overhead Rates Used	From Other Transactions
Affordable Composites for Propulsion Cooperative Arrangement, (MDA972-94-3-0029)							
Alliant Techsystems, Incorporated, Bacchus Works						Yes	Yes
Boeing Commercial Airplane Group						Yes	None
Dow-United Technologies Corporation Products, Incorporated						Yes	No Comment
Cyctec Fiberite, Incorporated, Advanced Materials and Structures						N/A	Yes
Northrop Grumman Corporation (Commercial Aircraft Division)						No	Yes
United Technologies Corporation (Pratt and Whitney, Florida Operations)						Yes	Yes
United Technologies Corporation (Hamilton Standard Division)[3]						Yes	None
United Technologies Corporation (Large Commercial Engines Division)						Yes	Yes
Field Emission Flat Panel Display Technology, (MDA972-95-3-0026)							
Raytheon Electronic Systems						Yes	None
Next Generation Electroluminescent Display Consortium, (MDA972-95-3-0029)							
Planar America, Incorporated						Yes	Yes
AlliedSignal Microelectronics and Technology Center						Yes	None
Advanced Technology Materials, Incorporated[3]						Yes	Yes
Georgia Institute of Technology/ Georgia Tech Research Corporation						Yes	None
Honeywell, Incorporated						No	None
Frequency of Inconsistent Treatment of Cost Shares:		10/28					
Frequency of Yes Answers			1/14	4/14	10/14		11/26
Frequency of No Answers						4/27	

[3]These contractors represent subcontractors.

Darked area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Other Transactions- Prototype

	Accounting Treatment of Cost Shares		Contractor Cost Share			Provisionally Approved Overhead	Benefits From Other
	Government Share	Contractor Share	Prior DoD Funded	Prior Government Funded	Prior IR&D Contractor Funded	Rates Used	Transactions
Tier III - Technology Demonstrator Acquisition Program, (MDA972-94-3-0042)							
Lockheed Martin Skunk Works	[redacted]					Yes	Yes
Boeing Defense and Space Group						Yes	Yes
Lockheed Martin Corporation (Lockheed Martin Missile and Space)						Yes	Yes
Tier II Plus, (MDA972-95-3-0013)							
Teledyne Ryan Aeronautical	[redacted]					N/A	Yes
The Boeing Company (Boeing Corporate Airplane Group)[3]						N/A	Yes
Raytheon Systems Company (Sensors and Communications Systems)[3] (Subcontract 64-973-008D)						No	Yes
(Subcontract 64-564-001D)	[redacted]					N/A	N/A
Raytheon E-Systems Company, Incorporated[3]						Yes	No Comment[5]
Vista Controls Corporation[3]						N/A	Yes
Allison Engine Company[3]						Yes	No Comment[5]
Frequency of Inconsistent Treatment of Cost Shares:	N/A	N/A					
Frequency of Yes Answers			N/A	N/A	N/A		7/7
Frequency of No Answers						1/6	

[3]These contractors represent subcontractors.

[4]These two contractors agreed to cost share if cost exceed a specified level. At the time of the Defense Contract Audit Agency Review, cost had not reached the amount required for the cost share provision.

[5]Contractor did not perform any analysis of benefits or the question was not asked of the contractor.

Darked area (blank spaces) of this report represent data considered contractor proprietary which has been deleted.

Appendix G. Audit Response to Specific Management Comments

The Directors, Defense Research and Engineering and Defense Procurement, provided specific comments on the body of the draft report. Below we discuss each management comment and provide our response. The complete text is in the Management Comments Section.

Director, Defense Research and Engineering

Comments. DDR&E disagreed with the statement, "even though the 1989 statute authorizing other transactions requires the Secretary of Defense to issue regulations, none were issued." DDR&E stated that it is true that DoD had not yet issued a complete set of regulations governing these instruments, but it had issued some regulations that applied to them in the "DoD Grant and Agreement Regulations," DoD 3210.6-R. DoD Grant and Agreement Regulations apply to assistance or nonprocurement instruments generally. Also, the statutory requirement to issue regulations was a 1994 amendment, not the 1989 statute.

Audit Response. We agree that some guidance on assistance instruments is provided in the "DoD Grant and Agreement Regulations;" however, the guidance generally applies to grants and cooperative agreements. DDR&E issued a memorandum, "Technology Investment Agreements," that addressed assistance instruments such as other transactions, and DDR&E planned to incorporate the memorandum into the "DoD Grant and Agreement Regulations." However, as of December 1999, the advisory policy had not been incorporated as required policy.

We modified the final report to reflect the 1994 amendment time period.

Comments. DDR&E disagreed with the implications that DoD reports to Congress understated the cost to the Federal Government for research efforts, DoD financial risks associated with the research were understated, and recipients' actual cost share were overstated. DDR&E stated that there was no basis for those statements and the implication that agreement officers intentionally misreported cost share, thereby misleading Congress. DDR&E stated that agreement officers reported only those amounts that were negotiated. DDR&E stated that the numbers did not appear to include additional cost sharing that DCAA found over and above what the agreement required, which was unfair. The audit report should show actual amounts; however, for the agreements that are not complete, the report can only give an interim status of actual amounts.

Audit Response. We never stated that agreement officers attempted to deceive Congress or that they did not comply with guidance on reporting agreement cost share. This audit went beyond the negotiated cost in the agreement and tried to capture the actual cost of the research efforts to the Government. The DoD can provide more disclosure on its reporting of the cost of other transactions to Congress by including reimbursements of current IR&D by the Government.

DCAA did identify five contractors that apparently contributed more to the research efforts than negotiated in the other transaction (Appendix D). Additional contributions were about 5.5 percent more than the other transaction value for five contractors. However, none of the research efforts were completed and it was unclear whether the other transactions would be revised or whether other research contractors in the consortium would provide less contributions, thereby, offsetting other members' cost sharing.

Comments. DDR&E stated that the report should not state recipients "reduced their cost share" by agreement officers accepting prior IR&D, Government-funded research, and charges for depreciated assets. The statement unfairly impugned the recipients for complying with the terms of the agreements negotiated with the Government.

Audit Response. We agree that research contractors were complying with the terms of the agreements negotiated with the Government. The report is only disclosing that research contractors received Government reimbursements for portions of their cost share.

Comments. DDR&E agreed that better guidance was needed on how to value contributions related to fully depreciated assets. The finding implied that the entire $3.5 million should be disallowed as cost sharing. However, reasonable usage charges are allowable for fully depreciated assets, in accordance with Federal cost principles. Therefore, the finding should identify specific amounts of excess usage charges or revised to recognize that a portion of the $3.5 million is allowable.

Audit Response. The report acknowledged that, under a contract, a reasonable charge for fully depreciated items is an allowable cost and similar guidance is needed for other transactions. However, the DCAA reports did not identify how much of the $3.5 million would represent a reasonable usage charge.

Comments. DDR&E stated that the report was factually incorrect as guidance was issued that states contractors are to provide their cost share from non-Federal resources unless otherwise specified.

Audit Response. We agree that DDR&E has issued a memorandum for Technology Investment Agreements that states "to the maximum extent practicable, the non-Federal parties carrying out the research project under a Technology Investment Agreement are to provide at least half of the costs of the project from non-Federal resources that are available to them (unless there is specific authority to use other Federal resources for such cost sharing)." However, the memorandum has expired, the memorandum does not prohibit the use of Government-funded research as contractor cost share and the memorandum implies that Federal resources should not be used as contractor cost share. Therefore, we believe that guidance is needed in a DoD directive, instruction, or regulation that prohibits the use of Government funded research as contractor cost share.

Comments. DDR&E stated that the issue of noncompliance with DoD audit policy was not justified because it related to DoD Directive 7600.2, "Audit Policies" that only applies to internal audits of DoD organizations and to audits of contractors and subcontractors that receive procurement contracts. The Directive for audits of

agreement type (other transactions) are not clearly delineated; therefore, the finding of noncompliance appears to be unwarranted. DDR&E stated the focus instead should be on what policy the DoD should establish.

Audit Response. In 1996, we informed DDR&E about the audit policies in DoD Directive 7600.2 and the problem with the audit clauses for other transactions. DoD Directive 7600.2 clearly states that "DoD Components shall not contract for audit services . . . unless expertise required to perform the audit is not available with the DoD audit organization . . . ." The Directive also states that prior approval from the Office of the Inspector General, DoD, is required for exceptions to this policy. This is clear guidance.

Comments. DDR&E stated that it was incorrect to imply that DoD officials were not aware of the actual cost of other transactions. DDR&E believes that the finding was incorrect because it was based on the assumption that IR&D costs, if later reimbursed by the Government, are Federal funds. DDR&E stated that Congress indicated that it believes IR&D are considered private funds.

Audit Response. Contractors' IR&D expenditures are considered private funds even when they are Government reimbursed only for paragraph (a)(3) of 10 U.S.C. 2320. However, the issue that we were expressing is that Government reimbursement of contractor IR&D cost used as contractor cost share in an other transaction impacts the actual cost share of DoD and the contractor. A contractor's cost risk is reduced when the contractor is subsequently reimbursed for the IR&D and the actual cost to DoD for the research is increased.

Comments. DDR&E disagreed that nontraditional or new contractors who participated in an other transaction were at a competitive disadvantage with traditional DoD contractors because the nontraditional contractors were not Government reimbursed for their IR&D costs. DDR&E stated that nontraditional contractors pass on the cost of IR&D to its private sector customers through prices of its products. DDR&E stated that this is analogous to Government contractors passing those costs to the Government.

Audit Response. We agree that nontraditional contractors can pass on IR&D costs to their commercial customers as long as commercial market forces make this possible. However, if a traditional DoD contractor is guaranteed reimbursement from DoD for a portion of its IR&D, the contractor's risk and actual costs associated with the other transaction is reduced.

Comments. DDR&E disagreed that the increased use of other transactions would affect the amount of IR&D and that senior acquisition officials and program managers needed to understand that increases in indirect costs on contractors' contracts could result from increased use of the agreements. DDR&E stated that firms make business decisions on the amount of investment in research and development and its effect on the business competitiveness.

Audit Response. We revised the report on this issue. There is a relationship between IR&D and other transactions and that is what the report is disclosing.

Comments. DDR&E disagreed that the use of research tax credits reduces contractors' cost and also that training should be provided to agreement officers so they could better negotiate the agreements. DDR&E stated that adjusting cost sharing to compensate for research and development tax credits would undercut the national policy basis for the tax credit.

Audit Response. We identified the research tax credit as an issue that should be disclosed to other transaction agreement officers. If agreement officers are familiar with research tax credits, as well as reimbursement of IR&D, they would be more knowledgeable when negotiating cost shares. Negotiating the best possible deal for the Government supports an overall national policy of better government for less money.

Comments. DDR&E stated that audit report statements that identify benefits from the use of other transactions are not very meaningful because only traditional DoD contractors and no nontraditional contractors were included in the audit. DDR&E stated that the survey should include nontraditional contractors or the audit statements should be deleted from the report.

Audit Response. The audit included only traditional contractors because nontraditional contractors were not significant participants in those selected agreements. For example, 77 contractors participated in the seven agreements reviewed by DCAA. Of the 77 contractors, 11 (14 percent) were nontraditional and represented 2 percent of the total other transactions' costs.

Comments. DDR&E stated that the finding incorrectly implied that the Government paid $63,000 to a contractor sooner than if provisionally approved indirect rates had been used. However, payments were based on programmatic milestones and not on cost incurred.

Audit Response. Other transactions that have programmatic (technical milestone) payment provisions are not fixed-price research agreements, and the payment structure was developed early in the agreement and was based on cost estimates. If DoD payments exceed estimated cost significantly, payments are supposed to be adjusted. The finding acknowledged that this is a timing issue and that eventually the contractor should reduce claimed amounts to reflect final costs.

Director, Defense Procurement

Comments. DDP stated that 302 other transactions issued from October 1, 1989, to October 16, 1998, included two FY 1999 EELV awards for $3 billion and were the only FY 1999 awards in the Inspector General, DoD, numbers. DDP stated that the inclusion of the EELV in the report significantly distorted the data and urged the Inspector General, DoD, to exclude the EELV from the baseline throughout the report to be consistent with the Under Secretary of Defense (Acquisition and Technology), February 1999 report to Congress.

Audit Response. We kept the EELV in the report because the EELV prototype other transaction awards were the most significant other transactions issued by the DoD. We disagree that excluding the EELV would be consistent with the February 1999 report to

Congress because the EELV agreements were included in the report. However, we were sensitive to how the EELV impacted the data and identified the impact throughout the report.

Comments. DDP stated that the Inspector General, DoD, database did not include all new contractors participating in prototype other transactions. DDP stated that Table 2 should be revised to include an analysis of the number and value of agreements involving new contractors that was based on updated information provided to the Inspector General, DoD, after the draft report was issued.

Audit Response. In response to DDP comments, we updated Table 2 to include the 68 traditional and 41 new contractors for the final report. As a result, the DoD cost share to traditional DoD contractors is 95 percent.

Comments. DDP stated that not all new contractors participating in the prototype agreements were included in the Inspector General, DoD, database used to support Table 3b. The DDP review identified 41 additional new contractors participating in prototype agreements.

Audit Response. After issuance of the draft audit report, DDP queried the Military Departments and Defense agencies to verify the Inspector General, DoD, database categorization of traditional and nontraditional contractors (new contractors) and to identify additional contractors that were not included in the database. The DDP effort identified 41 new contractors and 68 traditional contractors. The new contractors were identified as participants at the first, second, and third tier subcontractor level, and were not identified in the other transaction. In response to the DDP request, we revised Table 3b.

Comments. The DDP stated that the report recognizes that OSD officials believe new contractors participation is appropriately measured by the number of agreements that have "new contractor" participation. DDP requested that the audit report be revised to display the alternative measures as the tables reflect the Inspector General, DoD, philosophy. DDP stated that the number of agreements involving new contractors increased to 34 (36 percent) when the additional 41 new contractors identified by the Military Departments and Defense agencies were included.

Audit Response. We revised the report to reflect the additional contractors identified by the Military Departments and Defense agencies.

Comments. The DDP stated that the DoD audit policy in DoD Directive 7600.2 applies to contracts and is ambiguous about whether it also applies to other transactions. DDP stated that the criticism of activities not considering this policy is unwarranted because when the audit policy was written, other transactions were not contemplated. However, DDP agreed to work with the Inspector General, DoD, to incorporate appropriate audit guidance.

Audit Response. Although DoD Directive 7600.2 does not specifically list applicability to other transactions, we believe that the policy clearly applies to these instruments. The Directive will be revised to identify its specific applicability to all contract like instruments to include other transactions. The audit policy was written to cover all situations and development of a new acquisition instrument does not make audit policy moot.

Comments. DDP recommended deleting the report narrative that states "since other transactions are somewhat like the buying of commercial spare parts in that standard procurement policies and practices do not apply . . . ." DDP stated that the reference was incorrect and commercial items are procured by use of the Federal Acquisition Regulation. Other transactions do not use standard procurement policies because they are a different type of agreement and are not a subset of contracts.

Audit Response. We clarified that section of the report. We acknowledge that other transactions are not contracts. However, it is important to issue policy to identify the services that DCAA can provide for other transactions.

Comments. The DDP stated that it is incorrect to imply that the use of IR&D helps reduce contractors cost and risk and that DoD officials were not always aware of the actual cost to the Government of other transactions because portions of cost contributions are subsequently allocated to Federal contracts. DDP stated that these statements are based on the incorrect assumptions that a company's IR&D are Federal funds rather than private-sector funds.

Audit Response. Contractor's cost share and risks are reduced through the subsequent reimbursement of IR&D costs through other Government contract charges. There should be recognition of the reimbursement and adequate disclosure of the costs. We have difficulty understanding why DoD does not want to recognize that there is a relationship between IR&D and contractor cost share for other transactions.

Comments. The DDP disagreed with the Inspector General, DoD, analysis showing that the five largest DoD contractors received 73 percent of the $2.3 billion of DoD funds for prototype other transactions and that, excluding the EELV, these five contractors received 53 percent of DoD funds. DDP also disagreed that the large DoD contractors had IR&D accounts and high Government reimbursement rates. DDP stated that the Inspector General, DoD, analysis did not go below the prime contractor level and that it overstated the extent of the DoD dollars to traditional contractors. DDP also stated that information was not readily available on the extent to which recipients' investments (cost share) were funded by IR&D and for the majority of the EELV contractor cost share did not come from IR&D accounts. DDP recommended that the Inspector General, DoD, analysis be removed from the report.

Audit Response. We wanted to disclose that the largest DoD contractors are also the largest recipients of funds for prototype other transactions. For prototype other transactions, 95 percent of DoD funds go to traditional DoD contractors. Our database identified that traditional DoD contractors participated in 88 of the 97 prototype agreements. That information is important because many of the regulations and policies relating to contracts do not apply to other transactions. We allocated costs to prime contractors and any subcontractors identified. The DoD database for contracts allocates amounts for contract awards only to the prime contractor. We have fairly disclosed the participation of traditional DoD contractors in this report.

Comments. The DDP stated that it is incorrect to assume "increases in contractors' indirect costs could result from increased use of other transactions to attract more contractor IR&D." DDP stated that this assumes a company does not budget for IR&D funds. A company's IR&D funds are limited and therefore allocated to the highest priority. It is incorrect to assume that the IR&D budget will increase when an other transaction is awarded.

Audit Response. DoD officials can benefit from understanding the relationship of current IR&D and contracts. Based on the DDP comment, we modified the report.

Comments. The DDP stated that the Inspector General, DoD, used the audit to accomplish a limited assessment of the benefits of other transactions. DDP stated that the small sample of responses from only seven business managers and contracting officials could not be a reasonable representation. DDP recommended deleting the discussion in the final report or at least recognizing other efforts to access the benefits of the authority. The DDP stated that the DoD annual reports to Congress; the Global Hawk and Arsenal Ship, an IDA study of research agreements; and the Potomac Institute for Policy studies would provide reported benefits.

Audit Response. It should be noted that the DoD did not develop performance metrics on the use of the other transactions since the authority was authorized; therefore, quantifying benefits from the agreements is difficult. Our analysis attempted to measure the benefits resulting from these other transactions audited.

As suggested by the DDP, we reviewed the reports to identify benefits derived from other transactions. All the reports were either funded by or conducted for DARPA and examined the use of other transactions for research and prototypes. The reports identified benefits in the administration and technical management of these agreements. Benefits were derived from attracting contractors to participate that otherwise would not under a FAR contract; waiving of CAS and military standards and specifications; more timely decision-making processes; and eliminating oversight functions. One report stated that a contractor estimated a 23 percent cost reduction while another contractor estimated a 50 percent cost reduction and schedule. However, the report stated that estimating savings was difficult and validity of estimates could not be determined.

Appendix H. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
  Director, Defense Research and Engineering
  Director, Defense Procurement
  Deputy Under Secretary of Defense (Acquisition Reform)
  Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Assistant Secretary of the Army (Research, Development, and Acquisition)
Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Assistant Secretary of the Navy (Research, Development, and Acquisition)
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Commander, Air Force Materiel Command
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Advanced Research Projects Agency
Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
  Director, Defense Contract Management Command
  Director, Defense Contract Management Command – Atlanta
  Director, Defense Contract Management Command – San Diego
  Director, Defense Contract Management Command – Seattle
  Director, Defense Contract Management Command – Syracuse
Director, National Imagery and Mapping Agency
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Federal Organizations

Office of Management and Budget
General Accounting Office
  National Security and International Affairs Division
    Technical Information Center

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform

Defense Research and Engineering Comments

DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING
3030 DEFENSE PENTAGON
WASHINGTON, D C 20301-3030

OCT 13 1999

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL (AUDITING)

SUBJECT: Draft Audit Report on Costs Charged to "Other Transaction" Agreements

This memorandum provides comments on a draft audit report from the Office of the Inspector General (OIG) entitled "Costs Charged to 'Other Transaction' Agreements" (Project Number 7AB-0051.01). This memorandum responds to the draft report as it applies to agreements used to stimulate or support research; the Director of Defense Procurement is responding separately for "other transactions" used to acquire prototypes. The draft OIG report, dated September 2, 1999, requested comments that indicate concurrence or nonconcurrence with the findings and recommendations. Attachment 1 to this memorandum provides comments on findings in the text of the report and Attachment 2 responds to the recommendations.

The draft report is the result of a joint effort of the OIG and the Defense Contract Audit Agency (DCAA). The DCAA reviewed costs charged to five research agreements that were awarded in 1994 and 1995. There weren't many "other transactions" awarded before 1994, so the review examined some of the earlier agreements of this type.

The report's assessment of the costs charged to the agreements identified some areas where additional guidance is needed for cost sharing contributions. However, we are pleased that the review raised no issues with the $190 million charged to the Government funds provided by the agreements, nor with $221 million of the $304 million that agreements officers accepted as recipients' cost sharing. The latter fact is notable in that cost sharing in assistance awards to for-profit firms was relatively new to the DoD in 1994-1995; agreements officers therefore went through a learning process as they negotiated these instruments.

We also noted that DCAA reports from the review suggest that some recipients contributed more cost sharing to the projects than the agreements required of them. If that is the case, the amounts of cost sharing and the total costs of the projects as performed are both higher than the amounts negotiated. The three types of questioned contributions then would have less effect on cost sharing percentages than the draft report states and the report should be revised to assess actual cost shares, which are more significant than negotiated shares.

It still is important to address the issues the report raises with $83 million in three types of cost sharing contributions. About $60 million of the $83 million is due to prior independent research and development used as cost share. The report correctly notes that the issue was resolved in 1997, so what the review found was a vestige of a past problem that already had been identified and corrected. The second largest issue, with $20 million of the $83 million, is with Government-funded research used as cost share. The report should be revised to state that the guidance for the agreements already addresses Government-funded research, although the issue

in the report really is an issue with the specific program involved, rather than the agreements. We appreciate the OIG identifying the last issue with about $3 million in costs related to depreciated assets, an area where we still need to improve the guidance for the agreements.

The review sought in two ways to identify benefits of using the agreements. One way was to see if they achieved one of their main goals and reached "nontraditional" firms, companies that had not been participating in cost-based, DoD research business. It is encouraging that the OIG looked at the consortia that received more than 200 agreements between 1990 and 1998 and found that 56 percent of the consortia included at least one nontraditional firm. Moreover, the firms' participation in consortia with traditional DoD performers should build new relationships within the technology and industrial base, another Congressional goal for the agreements.

The second way that the OIG used to try to identify benefits of using the instruments was to ask for-profit consortium members about the advantages that they perceived. The draft report's stated result is that "the majority of research contractors did not identify specific benefits from using 'other transaction' agreements." However, the 28 firms that were surveyed were all traditional DoD contractors. Since the agreements are designed to remove barriers to nontraditional firms' participation in DoD research, one might expect that the 12 nontraditional firms involved in the five agreements would be the firms most likely to perceive the benefits. In order to make a meaningful evaluation of the benefits of the instruments, therefore, the OIG's survey should include at least a representative sample of nontraditional firms. Otherwise, we believe that the OIG should drop this portion of the report.

The report is helpful in pointing out areas where improvements are needed, because we strongly believe in providing good stewardship of Federal funds while trying to reduce unnecessary barriers to participation of nontraditional firms. However, I ask that you consider carefully the way that the draft report characterizes some areas, to ensure that the final product is fair, balanced, and objective. For example, the draft report includes statements that statutory reports to the DoD and Congress overstated or misrepresented recipients' cost sharing. Some of the statements are easily misread to mean that agreements officers intentionally reported exaggerated amounts for cost sharing, thereby deliberately misleading the DoD and the Congress. That would be a very serious allegation but it is not supported by the facts in the report. The report should state its findings as clearly as possible, so that it does not inadvertently mislead readers. Attachment 1 to this memorandum identifies other areas where rewording would help prevent misleading readers, as well as areas where there are factual errors.

We appreciate having the opportunity to comment on the draft report. We look forward to continuing to work with you as we make improvements based on the report.

Hans Mark

Hans Mark

Attachments

Final Report Reference

ATTACHMENT 1:
COMMENTS ON FINDINGS IN THE DRAFT REPORT

SUMMARY OF FINDING	LOCATION(s) IN DRAFT REPORT	COMMENT
Even though the 1989 statute authorizing "other transactions" requires the Secretary of Defense to issue regulations, none were issued.	Background, p. 2, 4th ¶.	We do not agree with the finding that "none were issued." It is true that the DoD has not yet issued a complete set of regulations governing the award and administration of these instruments, but it has issued some regulations that apply to them. Those regulations are selected portions of the DoD Grant and Agreement Regulations (DoD 3210.6-R) that apply to assistance or nonprocurement instruments generally (which include the type of "other transaction" that the OIG reviewed). Further, the finding should be corrected to state that the statutory requirement to issue regulations was due to a 1994 amendment, and was not in the 1989 statute.
Because prior IR&D, Government-funded research, and fully depreciated assets were included in recipients' cost sharing contributions: - DoD reports to Congress understated the cost to the Federal Government for research efforts; - Statutory reports to DoD and Congress overstated the research to be achieved with recipient funds; - DoD financial risks associated with the research were understated; and - The recipients' actual cost share was overstated.	Executive Summary, p. ii, 2nd ¶ Section A., p. 7, 1st ¶. Section A , p. 9, 1st ¶, Section A, p. 12, 3rd ¶, Section A, p. 12, 4th ¶. Section A., p. 8, last ¶. Section A , p. 8, last ¶, Section A , p. 9, 3rd ¶, Section A, p. 12, 3rd ¶, Section A, p 12, 4th ¶	We disagree for three reasons. First, there is no basis for these statements' implication that agreements officers intentionally misreported cost sharing amounts, thereby misleading Congress. To the best of our knowledge, agreements officers accurately reported the amounts of recipient cost sharing that they negotiated. Guidance for the instruments now precludes accepting some types of costs that agreements officers accepted as recipients' cost sharing for agreements reviewed by the OIG, but the awards were made in 1994-1995, before that guidance was issued. Second, the anticipated "cost to the Federal Government for research efforts" and the "DoD financial risks associated with the research" are the amounts of Federal funds awarded through the agreements. Those amounts do not depend on the amounts of recipients' cost sharing. To the best of our knowledge, agreements officers accurately reported the amounts of Federal funds awarded for the agreements. Third, while the draft report uses the term "actual" cost share, it does not seem to properly assess recipients' actual cost share. The numbers do not appear to include additional cost sharing that the DCAA found some recipients contributing voluntarily to the research efforts, over and above what the agreements required of them. "Actual" cost shares include those voluntary contributions. Ignoring the amounts is unfair to recipients, in that it understates their cost share. The report should be revised to show actual amounts (in the case of agreements that were not completed as of the date of the DCAA review, the report can give only an interim status of actual cost shares).

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Final Report Reference

	SUMMARY OF FINDING	LOCATION(s) IN DRAFT REPORT	COMMENT
Page 52	The recipients reduced their cost share by using prior IR&D, Government-funded research, and charges for depreciated equipment.	Executive Summary, p. ii, 1st ¶. Section A., p. 9, 3rd ¶.	The report should not state that recipients "reduced their cost share." Insofar as agreements officers accepted prior IR&D, Government-funded research, and charges for depreciated assets as recipients' cost sharing contributions, this statement unfairly impugns the recipients for complying with the terms of the agreements they had negotiated with the Government.
Revised Page 10	In March 1998, the DDR&E issued guidance that prohibited the acceptance of prior IR&D as recipient cost share.	Section A., p. 10, last ¶.	The DDR&E issued that guidance in December 1997.
Page 52	Nine recipient consortium members used $3.5 million of rental expenses for existing assets and software as cost share. These facilities and equipment charges were also charged to the consortium members' overhead accounts, and using the items as cost share represents the same costs claimed twice. In many cases, the facilities and equipment were fully or partially depreciated assets that were originally purchased under other Government awards. In addition DCAA reported that the consortium members' fair market value estimates were not fully supported and, in some cases, exceeded the initial purchase price.	Section A., p. 11, 3rd ¶.	We agree with the OIG that there needs to be better guidance on how to value contributions related to fully depreciated assets because the DCAA reports suggest that some of these contributions were not good-quality cost sharing. However, this finding appears to generalize from a few examples to imply that the entire $3.5 million should have been disallowed as cost sharing, and that is not necessarily the case. Reasonable use charges for fully depreciated assets are allowable charges to Government contracts, grants, and cooperative agreements, in accordance with all of the Federal cost principles (Part 31 of the Federal Acquisition Regulation and OMB Circulars A-21, A-87, and A-122). Therefore, the finding should either identify the specific amounts for the nine consortium members that the OIG believes are in excess of reasonable use charges, or revise the statement to recognize that a portion of the $3.5 million may be reasonable and allowable.
Page 52	The DDR&E guidance does not prohibit recipients from using Government-funded research as cost sharing	Section A , p. 12, 2nd ¶.	The finding is factually incorrect. The report should be revised to recognize that the DDR&E guidance states that recipients are to provide their cost share from non-Federal resources that are available to them unless there is specific authority to use other Federal resources for the cost share.
Page 52	The audit provisions in the agreements did not comply with DoD audit policy.	Section A , p 13, 1st ¶	We believe that a finding of noncompliance is not justified in this case. The finding appears to relate to the two subsequent paragraphs of the draft report, which describe requirements in DoD Directive 7600.2, "Audit Policies." That Directive applies to internal audits of DoD organizations and to audits of contractors and subcontractors that receive procurement contracts. Procedures for audits of agreement types other than contracts are not clearly delineated. Therefore, the Directive is ambiguous in its application to audits of recipients of assistance instruments. A finding of noncompliance with the audit policy in the Directive appears to be unwarranted, and the focus instead should be on what policy the DoD should establish.

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ATTACHMENT 1: Comments on the Findings of the Draft Report **Page 3 of 5**

SUMMARY OF FINDING	LOCATION(s) IN DRAFT REPORT	COMMENT	Final Report Reference
DoD officials were not always aware of the actual cost to the Federal Government for "other transaction" agreements. This condition occurred because portions of the cost contributions subsequently allocated to Federal contracts were not visible to agreements officers and because agreements officers were not trained on the effect of current IR&D on recipient cost share.	Executive Summary, p. ii, 2nd ¶. Section B., p. 17, 1st ¶.	We believe that this finding is incorrect because it is based on the assumption that a recipient's IR&D costs, if later reimbursed by the Government, are Federal funds. However, as noted in Attachment 2, in the response to recommendation B.1.: -The Congress has stated that R&D costs incurred by a firm through participation in consortia or cooperative agreements should be fully reimbursable as IR&D, to the extent that they are otherwise reasonable, allocable, and allowable. This statement viewed from the perspective of the consortia or cooperative agreements, rather than from the perspective of procurement contracts to which the IR&D later is charged, essentially is that Federally reimbursed IR&D may be used as recipients' cost share. -That statement is consistent with an earlier policy that Congress set in law, that amounts spent for IR&D are to be considered as private funds of the recipient, rather than Federal funds, for purposes of determining technical data rights; and -IR&D costs are legitimate and necessary costs of doing business for firms in technology-dependent sectors and the firms pass those costs along to their customers.	Page 53
Use of IR&D helps reduce the cost and risk associated with a recipient's cost share.	Section B , p. 17, 2nd ¶ Section B., p. 19, 1st ¶ (for two specific agreements). Section B., p. 19, 2nd ¶.	We disagree. We think that a company in a sector dependent on new technology invests its own funds in R&D in order to stay competitive. There is risk involved in every investment of those R&D dollars, whether the cost subsequently is passed along to Government customers or private sector customers. A firm has incentive to invest only in the projects that it deems likely to succeed; nonproductive R&D projects lead to higher prices for future products and processes with no commensurate technological advance. Those could be prices quoted to the Government, if the firm does Government business, which affects the firm's ability to compete for future Government contracts.	Page 53
A nontraditional or new contractor to DoD who participates in an "other transaction" agreement may not have an IR&D account and therefore could not be reimbursed by the Government because it had no Government contracts to which it could allocate IR&D costs. It therefore would be at a competitive disadvantage relative to a traditional DoD contractor.	Section B., p. 17, 3rd ¶. Section B., p. 20, 2nd ¶	We do not agree that a nontraditional firm with no other Government business would be at a competitive disadvantage. A nontraditional firm passes the costs of its internal R&D investment to its private sector customers through the prices it charges them for its products. That is analogous to a Government contractor passing those costs of doing business along to its customer, the Government.	Page 53

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ATTACHMENT 1: Comments on the Findings of the Draft Report **Page 4 of 5**

SUMMARY OF FINDING	LOCATION(s) IN DRAFT REPORT	COMMENT
Page 26 If training on IR&D was provided to agreements officers, they would understand recipients' actual and potential costs and could better negotiate "other transaction" agreements. and If the negotiator were knowledgeable of the effects of IR&D reimbursement, the negotiator might be able to better negotiate and increase the recipient's actual cost contribution.	Section B., p. 19, 2nd ¶. Section B., pp. 19-20, Examples 1-3. Section B., p. 20, 1st ¶.	We do not agree that agreements officers should negotiate to get recipients to provide higher amounts of cost sharing, to compensate for IR&D reimbursements. Trying to offset for IR&D contradicts Congressional intent that current IR&D be allowed as recipients' cost sharing contributions. Moreover, there's a consistency issue. The draft report proposes to devalue a Government contractor's IR&D as cost sharing because the Government reimburses a portion of those costs. To be consistent, one would also have to devalue a nontraditional firm's contribution of its internal R&D funds if the firm recovered those costs of doing business from its commercial customers. However, we believe that neither of these devaluations is appropriate.
Page 53 DoD should show the effects of IR&D reimbursement in its reports to Congress because excluding those reimbursements from the reports does not fully disclose to Congress and senior DoD officials the full cost of "other transactions" to the Government.	Section B , p. 21, 2nd ¶.	We disagree. IR&D funds are private funds of the recipient, notwithstanding later reimbursement of those costs of doing business by either Government or private sector customers.
Page 53 "Other transactions" are increasing, which may affect the amount of IR&D. Senior acquisition officials and individual program managers need to understand that increases in indirect costs on recipients' Government contracts could result from increased use of "other transactions" to attract more recipient IR&D.	Section B., p. 22, 2nd ¶.	We do not think that the increased use of these agreements is likely to have a significant effect on the overall amount of IR&D. Generally, we think that a firm makes a business decision on how much to invest in R&D at the "macro" level, taking into account its total sales and how the R&D investment would increase prices to its Government and/or private sector customers and thereby affect its competitiveness. For a Government contractor, that latter factor involves the effect of IR&D on its indirect cost rates. At the "micro" level, project-by-project decisions on where to invest the R&D funds should not alter the higher level business decision on total R&D investment.
Page 54 Use of research tax credits helps reduce the cost and risk associated with a recipient's cost share. and If training on the R&D tax credit was provided to agreements officers, they would understand recipients' actual and potential costs and could better negotiate "other transaction" agreements.	Section B., p. 17, 2nd ¶ Section B., p. 18, 3rd ¶. Section B., p. 19, 2nd ¶. Section B., p. 19, 2nd ¶. Section B , pp. 19-20, Examples 1-3.	We disagree because we believe that adjusting cost sharing amounts to compensate for the R&D tax credit would undercut the national policy basis for that tax credit, as explained further in our response to recommendation B.1. (see Attachment 2).

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SUMMARY OF FINDING	LOCATION(s) IN DRAFT REPORT	COMMENT
The majority of research recipients did not identify specific benefits from using "other transactions."	Executive Summary, p. ii, 3rd ¶. Section C., p. 23, 1st ¶. Section C., pp. 25-26, subsection entitled "Benefits of 'Other Transaction' Agreements."	As stated in the memorandum covering this attachment, this statement is not very meaningful because the review included only traditional DoD contractors and none of the nontraditional firms involved in the consortia. The portion of the report addressing this survey of firms should be deleted unless the survey is broadened to include a representative sample of nontraditional firms.
DCAA identified four firms for research agreements that used indirect cost rates other than their provisionally approved DoD rates (i.e., the rates that they use to develop interim progress billings on their DoD contracts). One firm under a research agreement overstated incurred costs by $63,000 because it had a proposed overhead rate instead of the approved rate. This is a timing issue because the firm was reimbursed more than if provisional rates had been used.	Section C., p. 25, 4th ¶.	The finding incorrectly implies that the Government paid $63,000 to the recipient consortium sooner than it would have done if the firm had used a provisionally approved indirect cost rate. However, the research agreements reviewed by the OIG provided for Government payments to the consortia based on programmatic milestones and not on incurred costs.

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ATTACHMENT 2:
RESPONSES TO THE RECOMMENDATIONS

SECTION A., "CONTRACTOR COST SHARING" (pp. 7-16)

Page 16

Recommendation A.1. We recommend that the Director, Defense Research and Engineering (DDR&E) include in DoD directives, instructions, or regulations "other transaction" agreement guidance that precludes using Government-funded research and provides a reasonable use charge for fully depreciated assets as contractor cost share.

Response: The DDR&E partially concurs with this two-part recommendation.

The DDR&E does not concur with the first part of the recommendation on Government-funded research for two reasons. One reason is that the DDR&E guidance for Technology Investment Agreements (TIAs) already states that recipients are to provide their cost share from non-Federal resources that are available to them unless there is specific authority to use other Federal resources for the cost share (the OIG therefore should correct the statement to the contrary in the first sentence of the second paragraph on page 12 of the draft report). The other reason is that the issue raised in the audit report relates to the Commercial-Military Integration Partnership Program, the particular program involved. The OIG finding is that the program office interpreted the statute for that program as providing specific authority to use other Government-funded research as cost sharing. The DDR&E guidance for TIAs is not the appropriate vehicle for addressing this program-specific issue, because the same issue applies for any type of agreement (i.e., procurement contract, grant, cooperative agreement, or other instrument) used to carry out the program.

The DDR&E concurs with the second part of the recommendation on the need for additional guidance concerning the use of fully depreciated assets as recipients' cost share. We intend to issue a DoD Instruction to provide the additional guidance four months after the issuance of the final OIG report.

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Recommendation A.2. We recommend that the Director, Defense Research and Engineering (DDR&E) include in DoD directives, instructions, or regulations "other transaction" agreement guidance that identifies how to design an appropriate access-to-records clause to verify the terms and conditions of the agreement. Guidance should include consideration of risks, materiality, funding involved, contractor past performance, adequacy of contractor business systems, and methodology of payment (cost based or performance based), and the need to verify Government-funded and contractor cost share contributions. The guidance should reference and describe the application of DoD Directive 7600.2, "Audit Policies," and DoD Directive 7600.10, "Audits of State and Local Governments, Institutions of Higher Education, and Other Nonprofit Institutions."

Response: The DDR&E partially concurs. The DDR&E concurs with adding to the TIA guidance references, as appropriate, to the Single Audit Act as implemented by OMB

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Circular A-133 and DoD Directive 7600.10, as well as a discussion of access-to-records provisions. The discussion of the access-to-records provisions will recognize that a purpose of TIAs is to involve commercial firms that traditionally have been reluctant to do cost-type business with the Government due to Government-unique requirements. Consistent with that purpose, the guidance may provide for access-to-records provisions that vary in who is given access, Federal auditors or other independent auditors, and in the records to which they are given access for the purpose of reviewing project expenditures. For any internal guidance that may be issued appropriately without an opportunity for public comment, the DDR&E intends to do so by a DoD Instruction four months after the issuance of the final OIG report. Additional guidance, if needed, would be issued through publication of a proposed and final rule in the Federal Register, a process that may take a year or more.

However, the guidance should not refer to DoD Directive 7600.2, which does not clearly apply to assistance instruments. We restate a 1997 response to this recommendation, from OIG Audit Report 97-114, "Award and Administration of Contracts, Grants, and Other Transactions Issued by the Defense Advanced Research Projects Agency:"

> "Although it is ambiguous whether the limitation on contracting for audit services in DoD Directive 7600.2 applies to instruments other than procurement contracts, the DDR&E concurs with including in the guidance for all types of OTs a requirement for a DoD component to coordinate with the IG, DoD, in individual cases where it either: (1) contracts with a non-Federal independent auditor for audit of a recipient; or (2) requires a recipient to hire an independent auditor (other than the independent auditor that audits the recipient's financial statements, as described in the following paragraph) to conduct an award-specific audit on behalf of the Government.
>
> "However, there should not be a requirement for the IG, DoD, to be consulted in each individual case if DoD policy or the award terms require the recipient to have a "single audit" performed by the independent auditor that audits the recipient's financial statements. A "single audit" would be an expansion upon the audit of the financial statements, to include a review of the internal control structure to provide assurances that the recipient is managing Federal awards in compliance with Federal laws and regulations, and with the terms and conditions of the awards. The assurances provided by "single audits" can obviate or greatly reduce the need for final cost audits of individual awards."

We will work with the OIG to design a process for any coordination with the IG, DoD, that does not delay negotiation of agreements.

Recommendation A.3. We recommend that the Director, Defense Research and Engineering (DDR&E) include in DoD directives, instructions, or regulations "other transaction" agreement guidance that identifies the roles and responsibilities that the Defense Contract Audit Agency has for "other transactions" and the services it can provide to agreement officers. The guidance should be developed in coordination with the Agency and state that agreement officers should

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use the Agency to verify terms and conditions of "other transaction" agreements where the Agency has audit cognizance.

Response: The DDR&E partially concurs. The DDR&E concurs with including language in the TIA guidance to address the roles of the Defense Contract Audit Agency. We intend to develop that language in coordination with the DCAA and issue it by a DoD Instruction four months after the publication of the final OIG report.

The DDR&E does not concur with issuing guidance that explicitly states that the DCAA will be used to verify recipients' compliance with terms and conditions in every case in which the DCAA currently has an audit presence at the recipient. Rather, the policy should parallel the one for other assistance awards to for-profit organizations that was issued in 1998 in Part 34 of DoD 3210.6-R, "The DoD Grant and Agreement Regulations." The policy in Part 34, "Administrative Requirements for Grants and Agreements with For-Profit Organizations," is that any for-profit recipient that expends $300,000 or more per year in Federal awards shall have an audit made for that year. The recipient may elect to engage independent, non-Federal auditors to meet the requirement, may use audits performed by the DCAA or other Federal auditors, or may rely on a combination of non-Federal and Federal auditors in a coordinated audit approach. This policy does not require each recipient that has a DCAA audit presence to meet the requirement through DCAA audits, and the policy was adopted with the concurrence of the IG, DoD. The policy for TIAs should not be more restrictive than the policy in Part 34, and we are not aware of problems that have arisen to justify a policy change in Part 34. Therefore, we intend to work with the OIG and the DCAA to develop a reasonable approach to verification of recipients' compliance with award terms and conditions, and to issue guidance incorporating that policy by a DoD Instruction four months after reaching closure with the OIG on the substance of the policy, if the guidance can be issued appropriately without opportunity for public comment.

SECTION B., "EFFECT OF INDEPENDENT RESEARCH AND DEVELOPMENT COSTS ON CONTRACTOR COST SHARE" (pp. 17-22)

Page 26

Recommendation B.1. We recommend that the Director, Defense Research and Engineering provide training to "other transaction" agreement officers on how to determine the effects of current independent research and development reimbursement on contractor cost share and provide information to agreement officers on the research tax credit.

Response: The DDR&E does not concur with this two-part recommendation.

With respect to the first part of the recommendation, we do not believe that the Government's determination of the value of a firm's cost sharing contribution should be affected by the amount of independent research and development (IR&D) that is included in the contribution. The Congress has recognized (page 568 of House of Representatives report 102-311, the conference report accompanying the National Defense Authorization Act for Fiscal Years 1992 and 1993) that IR&D costs incurred by a firm through

participation in consortia or cooperative agreements should be fully reimbursable to the extent that the costs are reasonable, allocable, and otherwise allowable. This statement viewed from the perspective of the consortia or cooperative agreements, rather than from the perspective of procurement contracts to which the IR&D later is charged, essentially is that Federally reimbursed IR&D may be used as recipients' cost share. That's consistent with an earlier policy set by the Congress, in 10 U.S.C. 2320, that amounts spent for IR&D are to be considered as private funds of the recipient, rather than Federal funds, for purposes of determining technical data rights.

Firms invest their internal funds in R&D for future products and processes. Firms that do business in the commercial marketplace recover their R&D investment costs through the prices they charge their customers for goods and services. Firms that do business with the Government under cost-type awards recover the costs in part through indirect costs charged to those awards. In both cases, R&D costs are legitimate and necessary costs of doing business for firms in technology-dependent sectors and the firms pass those costs along to their customers. The customers' reimbursements of a firm's investment of its own funds in R&D should not be a factor in evaluating the firm's cost sharing commitments; whether or not the Government is one of the customers that provided the reimbursements, the funds still should be viewed as the firm's internal funds and not Federal funds or other customers' funds.

With respect to the second part of the recommendation concerning R&D tax credits, we believe that this credit is a matter of national policy. The intent of the credit is to encourage private firms' investment in R&D. Therefore, it would be undercutting national policy if an agreements officer required a firm to invest additional cost sharing to offset the effect of the tax credit. Doing so would be somewhat analogous to reducing a Federal employee's salary if he or she borrowed money to buy a home and received a tax deduction for the mortgage interest; the salary reduction would undercut the national policy basis for the mortgage interest deduction.

Recommendation B.2. We recommend that the Director, Defense Research and Engineering (DDR&E) require that the annual report to Congress on research "other transaction" agreements identify the estimated effects of current independent research and development reimbursement on contractor cost share.

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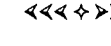
Response: The DDR&E does not concur with this recommendation. The rationale, which is the same as that given in recommendation B.1., is that IR&D reimbursement does not affect a recipient's cost share.



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SECTION C., "CONTRACTOR TREATMENT OF 'OTHER TRANSACTION' AGREEMENTS" (pp. 23-26)

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Recommendation C.1. We recommend that the Director, Defense Research and Engineering establish policy in DoD directives, instructions, or regulations for "other transaction" agreements that requires agreement officers to alert the Defense Contract Audit Agency of a potential Cost Accounting Standard 402 noncompliance on other Government contracts resulting from the contractor's inconsistent accounting treatment of cost shares associated with an "other transaction" agreement.

Response: The DDR&E concurs with amending the guidance to require agreements officers notify the DCAA if they become aware of a potential noncompliance with the Cost Accounting Standard 402. The DDR&E intends to issue guidance to that effect by a DoD Instruction four months after the issuance of the final OIG report.

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Recommendation C.2. We recommend that the Director, Defense Research and Engineering establish policy in DoD directives, instructions, or regulations for "other transaction" agreements that require contractors to use overhead rates, if available, that do not exceed the provisionally approved DoD overhead rates to determine "other transaction" costs.

Response: The DDR&E concurs in part with this recommendation. For any agreement that is structured to provide for Government payments to a firm or consortium based on incurred costs, it is appropriate to issue guidance that requires the firm or any for-profit consortium member with provisional Government billing rates to use those rates or lower rates for accumulating and reporting costs and for requesting payments. For agreements with milestone payment provisions, the Government would make payments of agreed-upon amounts when the milestones are completed. The DDR&E intends to issue guidance on this issue by a DoD Instruction four months after issuance of the final OIG report, if the guidance appropriately can be issued without an opportunity for public comment.

Defense Procurement Comments

OFFICE OF THE UNDER SECRETARY OF DEFENSE

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WASHINGTON DC 20301-3000

ACQUISITION AND TECHNOLOGY

October 26, 1999

DP/DSPS

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL (AUDITING)

SUBJECT: Draft Audit Report on Costs Charged to "Other Transaction" Agreements (Project No. 7AB-0051.01)

I appreciate the opportunity to comment on the subject draft DoD IG audit report. My response addresses the findings and recommendations regarding "other transactions" for prototype projects. The Director, Defense Research & Engineering is responding separately for "other transactions" used for research. "Other transaction" authority is a valuable tool that permits the Department to create business arrangements necessary to attract traditionally non-defense commercial companies and to develop beneficial and innovative strategies when contracting with companies who normally do business with the government.

The IG report reviewed the financial and cost aspects of two early DARPA prototype "other transactions" totaling $466M, out of a FY94-98 universe of 95 "other transactions" totaling $1.1B. I am pleased that there were no reported deficiencies impacting final costs paid by the government for prototype "other transactions". While several of the IG recommendations are based upon circumstances not found on the "other transactions" for prototype projects reviewed, some of these recommendations will add value to our current framework for implementing prototype "other transactions", and I have agreed to incorporate them in any guidance we may issue.

There are two issues in the IG report that are of particular concern.

Congressional Reports - IR&D and Research Tax Credit. The IG believes that agreements officers should reduce offeror proposals to reflect potential IR&D costs to be reimbursed under government contracts, and research tax credits that will result in reduced income to the U.S. Treasury. Based on this belief, the IG states that DoD reports to Congress have not fully disclosed the cost of the agreements. I strongly disagree. The reports to Congress were based on the negotiated amounts included in the agreements.

I do not agree that the recipient cost share should be reduced if some portion is reimbursed by the government as IR&D costs. We have always treated IR&D costs as private contractor expenditures when determining technical data rights, and it would be inconsistent to treat them as federal funds for determining cost share for "other transactions". We believe the Congressional intent on this matter is clear.

I also do not agree that the recipient cost share should be reduced if the recipient is entitled to a research tax credit. We have never considered the implications of federal taxes in pricing our contracts, in part because we do not want to interfere with the tax incentives that have been granted by the Congress without regard to whether a company does business with the government. It would be virtually impossible to predict the amount of any tax credit a company might be entitled to receive, and there would be no benefit to the government from doing so.

It is inappropriate to portray this disagreement on the treatment of complex overhead and tax issues as a failure to disclose the cost of the agreements. The report needs to be changed to remove this inaccurate portrayal.

"New Contractors". The IG report asserts that 2.5% of DoD cost on prototype "other transactions" went to "new contractors". I believe the appropriate measure of "new contractor" participation is by agreement rather than by company. Using this as the basis after updating the OIG database for other known participants, we found that approximately 36% of the agreements attracted at least one "new contractor". The DoD cost on these agreements is approximately 24% of total DoD prototype cost.

In addition, I believe modification to the percentage of new participants is required because I understand that companies that formed new business units and those that do a very small percentage of Defense work were categorized as traditional contractors. Further, categorization based on location may not be a valid measure of "new contractors" because a location may be a comprised of multiple segments (commercial and government).

Our percentages appropriately exclude the two FY99 EELV awards. These awards are the only FY99 awards included in the IG numbers. Inclusion of these two high value awards to traditional DoD contractors in a database of FY90-98 information, significantly distorts the data. I urge you to expand the Table 2 analysis to include the Department's measures

of "new contractor" participation by agreement and to use the FY90-FY98 information as the baseline throughout this report, with supplemental information provided on EELV.

Attached are concerns I have with the accuracy of a number of statements made in the report. I appreciate having the opportunity to comment on the draft report and look forward to continuing to work with you on this matter.

Eleanor R. Spector
Director, Defense Procurement

Attachments:
1. Comments on Recommendations
2. Comments on Findings

Final Report Reference

DODIG DRAFT AUDIT REPORT ON COSTS CHARGED TO "OTHER TRANSACTION" AGREEMENTS (PROJECT NO. 7AB-0051.01)

OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION AND TECHNOLOGY)/DIRECTOR DEFENSE PROCUREMENT COMMENTS ON RECOMMENDATIONS

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Recommendation A.1: DDP include in DoD directives, instructions, or regulations "other transaction" agreement guidance that precludes using Government-funded research and overvalued assets and provides a reasonable use charge for fully depreciated assets as contractor cost share.

DDP Response: Concur. USD(AT&L) is considering issuing a Directive that would mandate the use of the "Other Transactions" Guide for Prototype Projects. I plan to include in the guide a restriction on research and development funded as a direct cost under a government contract, grant, or other agreement from being used as a contractor cost share unless specifically authorized. The guide will also provide the key factors to consider in determining the amount, if any, of a usage charge for fully depreciated assets used as a contractor cost share.

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Recommendation A.2: DDP include in DoD directives, instructions, or regulations "other transaction" agreement guidance that identifies how to design an appropriate access-to-records clause to verify the terms and conditions of the agreement. Guidance should include consideration of risks, materiality, funding involved, contractor past performance, adequacy of contractor business systems, and methodology of payment (cost based or performance based), and the need to verify Government and contractor cost share contributions. The guidance should reference and describe the application of DoD Directive 7600.2, "Audit Policies", and DoD Directive 7600.10, "Audits of State and Local Governments, Institutions of Higher Education, and Other Nonprofit Institutions".

DDP Response: Partially Concur. The "other transaction" guide will include the various factors to be considered in developing clauses that permit access to the records that are necessary to verify compliance with the requirements of agreements that provide for interim or final reimbursement based on actual costs incurred. DDP will work with the IG to establish appropriate policy regarding the applicability of DoD Directives 7600.2 and 7600.10. There must be some flexibility incorporated into the application of DoD Directive 7600.2 to "other transactions" that permits the use of independent auditors when government auditors do not have audit cognizance. DDP will work with the IG to establish guidelines for determining when independent auditors

Attachment 1

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may be used and will provide the IG with an annual listing of any independent auditors used.

Recommendation A.3: DDP include in DoD directives, instructions, or regulations "other transaction" agreement guidance that identifies the role and responsibilities that the Defense Contract Audit Agency has for "other transactions" and the services it can provide to agreement officers. The guidance should be developed in coordination with the Agency and state that agreement officers should use the Agency to verify the terms and conditions of "other transaction" agreement where the Agency has audit cognizance.

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DDP Response: Concur. The audit guidance I will issue for coordination for inclusion in the "other transaction" guide will require agreement officers to use DCAA when a company business segment has DCAA audit cognizance and the agreement provides for interim or final reimbursement based on actual costs incurred. Use of auditors other than DCAA in such situations would require approval by the IG. For those company business segments that do not have DCAA audit cognizance, DDP would provide the IG with an annual listing of any independent auditors used.

Recommendation B.1: DDP provide training to "other transaction" agreement officers on how to determine effects of current independent research and development reimbursement on contractor cost share and provide information to agreement officers on the research tax credit.

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DDP Response: Nonconcur. Adjusting recipient cost shares for IR&D costs treats such costs as government funds. This ignores the Congressional mandate that IR&D costs be treated as private funds. In addressing the issue of technical data rights, Congress specified in 10 U.S.C. 2320(a)(3) that IR&D funds shall not be considered to be federal funds. It would be inconsistent for the Department to treat IR&D funds as private funds for purposes of determining technical data rights, and as federal funds for purposes of determining cost shares for "other transactions".

In addition, in discussing the use of research "other transactions", the Senate Committee on Armed Services in report

Final Report Reference

DODIG DRAFT AUDIT REPORT ON COSTS CHARGED TO "OTHER TRANSACTION" AGREEMENTS (PROJECT NO. 7AB-0051.01)

OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION AND TECHNOLOGY)/DIRECTOR DEFENSE PROCUREMENT COMMENTS ON RECOMMENDATIONS

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104-267 stated that it intended that the sunk cost of prior research efforts not count as recipient cost share, and that only "...the additional resources provided by the private sector needed to carry out the specific project should be counted." Clearly, Congress recognized that because current IR&D costs are private funds, they may be used as a recipient's cost share.

The IG expresses concern that government contractors have an unfair advantage because they may charge their government contracts for part of the cost of the "other transaction". Commercial companies may also charge their other contracts for the cost of independent research and development effort.

Congress also provided an incentive for research through the research tax credit. Adjusting cost shares for recipients that are eligible to take the credit would inappropriately penalize recipients. This recommendation is also inconsistent with how DoD treats federal income taxes for contracts. DoD does not include federal income taxes in determining reimbursement or computing refunds due under cost-based contracts. Furthermore, it is not practical, and in most cases not possible, to determine if the company qualifies for the research tax credit or how much the credit will be.

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Recommendation B.2: DDP require that the annual report to Congress on research and prototype "other transaction" agreements identify the estimated effects of independent research and development reimbursements on contractor cost share.

DDP Response: Nonconcur. For the same reasons stated in our response to Recommendation B.1, inclusion of IR&D costs in the report to Congress is inappropriate because it would result in treating the costs as federal funds rather than private funds.

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Recommendation C.1: DDP establish policy in DoD directives, instructions, or regulations for "other transaction" agreements that requires agreement officers to alert the Defense Contract Audit Agency of a potential Cost Accounting Standard 402 noncompliance on other Government contracts resulting from the contractor's inconsistent accounting treatment of cost shares associated with an "other transaction" agreement.

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DDP Response: Concur. There will be a requirement that agreement officers notify DCAA if they become aware of a potential noncompliance with CAS 402.

Recommendation C.2: DDP establish policy in DoD directives, instructions, or regulations for "other transaction" agreements that require contractors to use DoD provisionally approved overhead rates, if available, to determine the "other transaction" cost. Page 32

DDP Response: Concur. The "other transaction" guide is planned to include a requirement that, for "other transactions" that provide for interim reimbursement based on actual costs incurred, the interim reimbursement rates will be no higher than provisionally approved indirect rates, when such rates are available.

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Revised

1. Page i, 2nd paragraph, 2nd sentence - This sentence erroneously implies "other transactions" were authorized solely to reduce barriers to commercial companies. Recommend change as follows: "Other transaction" agreements were authorized to reduce barriers to commercial firms in DoD research, to ~~hereby~~ broaden~~ing~~ the technology and industrial base available to DoD, and to foster~~ing~~ new relationships and practices within the technology and industrial base that supports national security.

Revised

2. Page i, 2nd paragraph, last sentence does not recognize the complete scope of the "other transaction" authority - Technical correction recommended as follows: "Other transaction" agreements are generally not subject to statutes or regulations limited in applicability to ~~associated with~~ contracts, grants or cooperative agreements.

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3. Page i - The 4th paragraph states that from October 1, 1989 to October 16, 1998, the DoD issued 302 "other transaction" agreements…of about $7 billion. This dollar amount represents FY90-FY98 awards and the two FY99 EELV awards for $3B. The EELV awards are the only FY99 awards included in the IG numbers. Inclusion of these two high value awards in an aggregate reporting of what is otherwise FY90-98 information, significantly distorts the data. The Department urges the IG to use the FY90-FY98 information as the baseline through out this report, with supplemental information provided on EELV. This is consistent with the approach used by the USD(A&T) in its February 1999 Report to Congress.

Revised

4. Page 1, 1st paragraph, 3rd sentence - Same comment as #1 above. Revise "foster new relationships and practices with commercial technology and industrial firms" to "foster new relationships and practices within the technology and industrial base" consistent with 10 USC 2371(h)(2)(C)(ii).

Revised

5. Page 2, last paragraph, states that "…the 1989 statute authorizing 'other transactions' requires the Secretary of Defense to issue regulations…" and that "…guidance in the memorandums on research and prototype projects is nonmandatory". The statute did not require regulations until the Federal Acquisition Streamlining Act of 1994. Prototype authority was authorized for DARPA in the National Defense Authorization Act

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for Fiscal Year 1994. It was not extended to the military departments until the National Defense Authorization Act for Fiscal Year 1997 and has not been enacted as permanent authority. Consistent with the temporary nature of the authority, the USD(A&T) issued policy guidance on December 14, 1996 and DDP has issued two follow-on memoranda. There is no evidence that the USD(A&T) or DDP policy memoranda are being treated as non-mandatory guidance.

6. Page 3, Table 1, includes the $3B FY99 EELV awards in the FY 1998 845 totals - Consistent with rationale discussed in comment #3, the table should not include the EELV awards in the FY 1998 totals. Page 54

7. Page 3, last paragraph, last sentence begins with a discussion of how DoD cost share was prorated among contractors, but inappropriately concludes by referencing whether contractors were providing funds. The appropriate conclusion should be that the agreements did not always identify the DoD cost share provided to each participating contractor. Revised

8. Page 4, Table 2, identifies a DoD cost-share to new contractors as 2.5% based on a prorated distribution of government dollars (including EELV) to all DoDIG identified prototype contractors. See comments in the DDP cover memorandum and in Comment #3 above. The IG figures derive from a database that does not include all "new contractors" participating in prototype "other transactions" and should be updated. Table 2 should be revised also to include an analysis of the number and value of agreements that involved "new contractors" based on updated information provided to the IG regarding participants not currently included in the database. Page 55

9. Page 5, Table 3b, identifies the number of new and traditional contractors. Not all "new contractors" participating in the prototype "other transactions" are included in the IG database that was used as the source for Table 3b. Our review identified an additional 41 (5 duplicate entities) "new contractors" participating in prototype "other transactions". Page 55

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10. Page 5, last paragraph, recognizes that OSD officials believe "new contractor" participation is appropriately measured by the number of agreements that have "new contractor" participation. This alternative measure should be as prominently displayed as are the tables that reflect the IG philosophy. The number of prototype agreements involving "new contractors" increases to 34 (or 36%) vice 16 (or 17%) when the additional "new contractors" identified by the military departments and defense agencies are included for prototype projects.

Page 55

11. Page 13, 1st and 2nd paragraphs, state that "The variety of audit provisions did not comply with DoD audit policy..." and "DoD Directive 7600.2, 'Audit Policies'... states that DoD components will not contract for audit services unless the audit expertise is not available in DoD audit organizations." Because "other transactions" were not contemplated at the time of issuance of this directive, it is ambiguous whether agreement types other than contracts were covered, especially since solicitations were not issued specifically for audit services. Identifying this as a failure to comply appears to be unwarranted. We agree to work with the IG and incorporate appropriate audit guidance in the "other transactions" guide for prototype projects.

Revised

12. Page 14, 1st paragraph, states that "Guidance for prototype 'other transactions' mentions DCAA...". This paragraph should be revised to include the words on page 11 of the draft DoDIG report on the EELV Program (Project No. 9AD-0085 dated October 15, 1999) regarding DCAA. That quote is: "Director, Defense Procurement, stated in the 'Guide...' that DCAA could provide financial services during the review of the 'other transaction' proposal, during the 'other transaction' period of performance, and on completion of the 'other transaction' agreement. In addition, the guide stated that DCAA could also provide information on the status of the contractors' accounting system or help the agreement's officer determine a fair and reasonable price." The existing guide also states that DCAA is available to provide financial advisory services to the agreements officer to help determine price fairness and reasonableness.

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13. Page 14, 1st paragraph, states that "Since 'other transactions' are somewhat like the buying of commercial spare parts in that standard procurement policies and practices do not apply…". This is incorrect. Recommend deletion of the discussion of commercial items from this paragraph. Commercial items are procured by the use of FAR Part 12, a subset of "standard" contracts. "Other transactions" do not use standard procurement policies because they are a different type of agreement, not because they are a unique subset of contracts. — Page 56

14. Page 14, 1st paragraph, last sentence, refers back to the Table 2 calculations of DoD cost share funding provided to traditional contractors - See above comments above regarding the apparent understatement of "new contractor" participation in "other transactions". — Page 55

15. Page 15, last paragraph, states "We did not identify anyone using these non-mandatory procedures." The IG audit involved awards made by DARPA in 1994 and 1995. The deskbook Guide on "Other Transactions" for prototype projects was published in December 1998. It is not evident that the IG reviewed solicitations issued after this date to support the above statement. The military departments and defense agencies indicate that the guide is being used when an "other transaction" is being considered for a prototype project. — Sentence Deleted

16. Page 15, last paragraph states that "DCAA was not involved in drafting the procedures…". DCAA's written comments of October 9, 1998 were discussed with the DCAA and agreed upon changes were incorporated into the prototype guide. — Sentence Deleted

17. Page 17, 1st & 2nd paragraphs. The report states that the "Use of IR&D…helps reduce the cost and risk associated with the contractors cost share…" and that "DoD officials were not always aware of the actual cost to the Federal Government for "other transaction" agreements…because portions of cost contributions subsequently allocated to Federal contracts was not visible to agreement officers…". These findings are incorrect because they are based on the invalid assumption that a company's IR&D costs are federal rather than private funds. Congress specified in 10 USC 2320(a)(3) that IR&D funds shall not be considered to be federal funds for purposes of determining technical data rights. — Page 56

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Additionally, the Senate Armed Services Committee (Sen. Rep. 104-267) indicated it intended that the sunk cost of prior research efforts not count as recipient cost share. We can only conclude that future research (including IR&D) is acceptable as recipient cost share. A company invests its own funds in R&D in order to stay competitive. IR&D costs are legitimate and necessary costs of doing business for firms in technology-dependent sectors, and those firms pass those costs along to both their government and commercial customers.

Page 27

18. Page 17, 1st paragraph, states "...reports to congressional and DoD officials did not fully disclose the actual cost to the Federal Government for 'other transaction' agreements" and page 21, 2nd paragraph, states "DoD should show the effects of contractor IR&D reimbursement in its reports to Congress because the reports do not clearly disclose the full cost of 'other transactions' to the Government". Disagree for the same reasons discussed in the cover memorandum and above.

Revised Page 21

19. Page 18, 1st pargraph, references the FY 1977 National Defense Authorization Act. The appropriate reference appears to be the FY 1997 National Defense Authorization Act.

Page 22

20. Page 20, 1st full paragraph, "If the negotiator were knowledgeable of the effects of IR&D reimbursement, the negotiator might be able to better negotiate and increase the contractor's actual cost contribution." For the reasons already discussed, we disagree with the contention that a company's cost share from IR&D should be adjusted based on the extent it is reimbursed by the government.

Page 24

21. Page 20, 2nd paragraph states that "If the agreement negotiator understands the effect of IR&D on contractor proposals, the negotiator can better understand that a new contractor may be at a cost disadvantage in competing with a traditional DoD contractor." Disagree as discussed in our response to Recommendation B.1.

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22. Page 21, 4th paragraph states that "On February 26, 1999, a report to Congress...showed a DoD cost share of $2.3 billion and an estimated contractors' cost share of $2.2 billion." It later recognizes that without EELV "the DoD and contractor cost share

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reported for prototype agreements was $1,337 million and $250 million, respectively." We again recommend that the baseline discussion be of the FY94-98 awards and that the EELV be discussed separately. This is how it was reported in the February 26, 1999 Report's Executive Summary.

23. Page 21-22, last and first paragraph, respectively, states that "Our analysis of the prototype 'other transaction' … showed that the five largest DoD contractors received 73 percent of the $2.3 billion DoD funds" and that when EELV is excluded "the five largest traditional contractors… received 53…percent of the DoD funds…". "The large DoD contractors had IR&D accounts and high IR&D reimbursement rates." The DoD IG analysis did not go below the prime "contractor" level and thus overstates the extent of DoD dollars that ultimately end up with traditional contractors. The relevant factor in an analysis regarding IR&D accounts is not the recipients of DoD cost-share dollars, but should be of the recipients who provided cost-share that was credited to an IR&D account. During FY94-FY98 prototype recipient's cost-share amounted to approximately $250 million. Information is not readily available on the extent the recipients' investment was funded by IR&D. For the EELV awards we know that the majority of the companies' cost share is not coming from IR&D funds. I recommend that this misleading analysis be removed from the audit report.

Page 56

24. Page 22, 2nd paragraph states that "…increases in contractors' indirect costs could result from increased use of 'other transaction' agreements to attract more contractor IR&D". This statement incorrectly assumes that a company does not budget for IR&D funds. However, a company's IR&D funds are limited and allocated to projects having the highest priority. Thus, "other transactions" compete against other potential projects for company IR&D funds. It is incorrect to assume that the IR&D budget will be increased when an "other transaction" is awarded.

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25. Page 24, last paragraph states that "…10 of those contractors did not treat the DoD and contractor cost share as an IR&D project in the contractors accounting systems and therefore did not follow the guidance in the DDP memorandum". The DDP guidance is misrepresented in this paragraph. The DDP

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guidance did not require participants cost share to be charged to IR&D for Technology Reinvestment Projects program. It permitted cost-share to be charged to IR&D if otherwise authorized by FAR 31.205-18(e) and provided notice that, in order to avoid a potential CAS 402 violation when cost-share is charged to IR&D, all costs included pursuant to these agreements should be accounted for as IR&D, with the funds provided by the government treated as a credit to the IR&D project.

Page 57

26. Page 25, Benefits of "Other Transaction" Agreements. The IG used this audit to accomplish a limited survey of seven contractor business managers and contracting officials involved in two prototype "other transactions" to assess the benefits of "other transaction" agreements. Even though all seven prototype respondents identified benefits, such a small sample size can not reasonably be considered a representative analysis of the benefits associated with the use of "other transaction" authority. I recommend the IG consider deleting this discussion from the final report, or at least recognize other efforts undertaken to access the benefits of the "other transaction" authority. Namely, the Department's annual reports to Congress, USD(A&T)'s February 1999 report to Congress, RAND's studies of the Global Hawk and Arsenal Ship, IDA's November 1999 study of research agreements, and the Potomac Institute for Policy Studies January 1999 review of the Technology Reinvestment Program.

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