The Charles Stark Draper Laboratory, Inc.

Report on Federal Awards in Accordance with OMB Uniform Guidance
E.I.N. #042505372
July 1, 2016

The Charles Stark Draper Laboratory, Inc.
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July 1, 2016

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Independent Auditor's Report

To the Board of Directors of
The Charles Stark Draper Laboratory, Inc.:

Report on the Financial Statements

We have audited the accompanying financial statements of The Charles Stark Draper Laboratory, Inc. ("Draper"), which comprise the balance sheets as of July 1, 2016 and June 26, 2015, and the related statements of activities and changes in net assets and of cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The Charles Stark Draper Laboratory, Inc. at July 1, 2016 and June 26, 2015, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 20, 2016 on our consideration of Draper's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters for the year ended July 1, 2016. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Draper's internal control over financial reporting and compliance.

PricewaterhouseCoopers LLP

September 20, 2016

The Charles Stark Draper Laboratory, Inc.
Balance Sheets
July 1, 2016 and June 26, 2015

	2016	2015
Assets		
Current assets		
Cash and cash equivalents	$ 51,678,057	$ 56,203,440
Accounts receivable - net of allowance of $848,843 and $2,239,089 in 2016 and 2015 respectively	33,806,996	38,222,364
Unbilled contract costs and fees, net of allowance of $1,994,834 and $1,786,347 in 2016 and 2015, respectively	69,553,743	57,278,891
Other current assets	9,767,097	9,342,567
Total current assets	164,805,893	161,047,262
Long-term investments	270,627,728	216,679,035
Notes receivable	2,013,903	-
Deferred charges and other assets	15,041,115	8,181,883
Deferred financing costs, net	449,693	481,436
Prepaid pension benefits	7,640,832	7,408,734
Property and equipment, net	152,206,939	176,737,514
Total assets	$ 612,786,103	$ 570,535,864
Liabilities and Net Assets		
Current liabilities		
Accounts payable and accrued contract costs	$ 54,606,106	$ 43,216,849
Accrued compensation and related expenses	29,038,385	25,454,795
Other accrued expenses	9,283,012	9,686,772
Total current liabilities	92,927,503	78,358,416
Accrued post retirement benefits	61,467,587	35,850,323
Bonds payable, net of Discount of $ 0 and $140,000 in 2016 and 2015, respectively	45,600,000	48,370,000
Deferred revenue and other long-term liabilities	33,653,443	43,094,781
Total liabilities	233,648,533	205,673,520
Commitments and contingencies	-	-
Unrestricted net assets	379,137,570	364,862,344
Total liabilities and net assets	$ 612,786,103	$ 570,535,864

The accompanying notes are an integral part of these financial statements.

The Charles Stark Draper Laboratory, Inc.
Statements of Activities and Changes in Net Assets
July 1, 2016 and June 26, 2015

	2016	2015
Operating revenues		
Net Revenue	$ 622,549,815	$ 564,646,824
Other income	646,027	1,212,226
Total operating revenues	623,195,842	565,859,050
Operating expenses		
Direct costs		
Subcontracts	280,445,322	260,476,871
Salaries and wages	104,609,594	94,137,885
Employee benefits	28,976,814	27,808,247
Materials, services and rentals	29,440,609	21,927,939
Other, principally travel and equipment	34,611,330	26,828,315
Total direct costs	478,083,669	431,179,257
Indirect costs		
Salaries and wages	73,977,439	65,941,433
Employee benefits and vacations	32,845,119	31,891,838
Materials, services and rentals	28,947,276	21,013,834
Depreciation and amortization	15,195,181	17,398,399
Other	9,070,700	24,626,380
Total indirect costs	160,035,715	160,871,884
Interest expense and fees	1,356,445	3,178,838
Total operating expenses	639,475,829	595,229,979
Increase/(Decrease) in unrestricted net assets from operations	(16,279,987)	(29,370,929)
Non-operating gains/(losses)		
Dividend and interest income	7,418,363	3,324,799
Realized and change in net unrealized gains on long-term investments	(13,014,708)	10,179,684
Other non-operating income, net	1,118,418	6,071,865
Gain on Sale of Condo Units	58,223,701	-
Other changes in pension and post retirement benefits	(23,190,562)	12,599,643
Total non-operating gains/(losses), net	30,555,212	32,175,991
Increase/(Decrease) in unrestricted net assets	14,275,226	2,805,062
Unrestricted net assets, beginning of year	364,862,344	362,057,282
Unrestricted net assets, end of year	$ 379,137,570	$ 364,862,344

The accompanying notes are an integral part of these financial statements.

The Charles Stark Draper Laboratory, Inc.
Statements of Cash Flows
July 1, 2016 and June 26, 2015

	2016	2015
Cash flows from operating activities		
Increase/(Decrease) in unrestricted net assets	$ 14,275,226	$ 2,805,062
Adjustments to reconcile change in unrestricted net assets to net cash provided by operating activities		
Depreciation and amortization	15,195,181	17,398,399
Realized and net change in unrealized gains on long-term investments	13,014,708	(10,179,684)
Other changes in pension and post retirement benefits	23,190,562	(12,599,643)
(Gain)/loss on disposal of property and equipment	(59,442,775)	274,099
Other non-cash adjustments	17,586,596	(23,850)
(Gain)/Loss on extinguishment of debt	-	11,187,772
Changes in operating assets and liabilities		
Accounts receivable	4,415,368	(8,355,136)
Note receivable	(13,903)	-
Unbilled contract costs and fees	(12,274,852)	(8,863,725)
Other current assets	(424,530)	200,755
Deferred charges and other assets	(9,182,227)	(410,347)
Accounts payable and accrued contract costs	2,983,654	12,096,611
Accrued compensation and related expenses	4,564,949	2,827,517
Deferred revenue	(9,790,474)	(1,360,537)
Other accrued expenses	(5,936,414)	(2,779,775)
Net cash provided by operating activities	$ (1,838,931)	$ 2,217,518
Cash flows from investing activities		
Additions to property and equipment	(27,910,228)	(12,837,485)
Proceeds from sale of property and equipment	88,677,010	11,053
Purchase of investment securities	(168,687,172)	(259,238,335)
Loan to Aurora Semiconductors LLC	(2,000,000)	-
Proceeds from sale of NTV investments	-	34,419
Proceeds from sale of investment securities	108,863,938	292,033,836
Net cash used in investing activities	(1,056,452)	20,003,488
Cash flows from financing activities		
Repayment of debt	(1,630,000)	(90,035,786)
Proceeds from issuance of debt-net of issuance cost	-	49,505,338
Change in bond discount	-	36,814
Net cash provided by financing activities	(1,630,000)	(40,493,634)
Net increase in cash and cash equivalents	(4,525,383)	(18,272,628)
Cash and cash equivalents, beginning of year	56,203,440	74,476,068
Cash and cash equivalents, end of year	$ 51,678,057	$ 56,203,440
Supplemental disclosure of cash flow information		
Interest paid	$ 1,424,958	$ 3,078,757
Fixed Assets purchases in accounts payable and in accruals	$ 8,405,603	-

The accompanying notes are an integral part of these financial statements.

1. Summary of Significant Accounting Policies

Corporate Organization and Purpose

The Charles Stark Draper Laboratory, Inc. (Draper) is a membership (nonstock), nonprofit Massachusetts Corporation. Draper engages in activities that contribute to the support and advancement of scientific research, technology and development and in educational activities in the sciences and related subjects. Draper's customers are primarily agencies of the U.S. Government.

Draper intends to continue to be exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. In the event of either liquidation or dissolution of Draper its net assets would be distributed to one or more charitable tax-exempt organizations or governmental agencies.

Fiscal Calendar

Draper's fiscal calendar (FY) ends on the Friday closest to June 30th. Due to this policy, the fiscal calendar may result in the last day of a fiscal year falling on a date other than on June 30. Approximately every fifth year Draper's fiscal year will contain 53 weeks. There are 53 weeks in FY2016 and 52 weeks in FY2015.

Capitalized Software

Certain costs as they relate to purchased hardware, software, and implementation activities have been capitalized in accordance with ASC 350-40, *Intangibles – Goodwill and Other – Internal-Use Software*.

Revenue Recognition

Draper performs research under a variety of contract types for its various customers. Costs are reimbursed and recognized as revenue as they are incurred. Contract fees are recognized in proportion to costs incurred as the contracts are performed or otherwise as specified in the contract.

Some contracts are long-term, meaning that the projects will continue for one year or more. For long-term contracts, GAAP allows revenue to be recognized on a percentage-of-completion basis if circumstances are such that total profit can be estimated with reasonable accuracy and ultimate realization is reasonably assured.

Current income recognized under the percentage-of-completion method is based upon (a) the total income projected for the contract at the time of completion and (b) the expenses incurred to date. The percentage-of-completion can be measured using the proportion of costs incurred versus the total estimated cost to complete the contract. Draper receives advances and performance-based payments from customers that may exceed costs incurred on certain contracts. Draper classifies advance payments and billings in excess of costs incurred as deferred revenue and other long-term liabilities. Costs incurred in excess of billings are classified as unbilled contract costs and fees, net.

Draper receives royalty payments in accordance with the terms of technology agreements. Royalty payments are recorded as other income in the statements of activities and changes in net assets.

Net Assets
The net assets of Draper primarily consist of the excess of operating revenues over operating expenses since commencement of operations, the changes in gains and losses on investments and other non-operating income. All net assets are unrestricted in nature.

Use of Accounting Estimates
The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Deferred Financing Costs
The costs of securing financing are capitalized and amortized, on the straight-line method, over the life of the associated indebtedness. This method approximates the expense that would have been recognized using the effective interest method.

Deferred Charges
Draper recovers overhead costs associated with projects under construction in accordance with Cost Accounting Standards (CAS). As permitted under CAS, overhead costs associated with the development of software systems are recorded as deferred charges and amortized, on the straight-line method, over five years. The Supplemental Retirement Plan for Corporate Officers (SRPCO) will expense any paid charge in the year of retirement.

Property and Equipment
Depreciation of owned equipment (including data processing equipment and software) is computed on the straight-line method using three to five year lives. Leasehold improvements are amortized on the straight-line method over the shorter of the useful lives of the assets or the lease term. Building costs are depreciated on the straight-line method over lives of thirty-nine to forty-two-years.

When assets are retired or otherwise disposed of, the assets and related allowances for depreciation and amortization are eliminated from the accounts and any resulting gain or loss is reflected in the statements of activities and changes in net assets.

In addition to the equipment and buildings acquired by Draper and investments it makes in leasehold improvements, all of which are reflected in the accompanying balance sheets, Draper also uses certain government-furnished equipment for which it is accountable to the U.S. Government.

Independent Research
Draper engages in independent research programs authorized by its Board of Directors. The expenses of such programs are charged to operations as incurred.

Cash and Cash Equivalents
Cash and cash equivalents consist of amounts on hand and highly liquid investments with maturities of three months or less when purchased. Draper maintains the majority of its cash and cash equivalents at two institutions.

Long-Term Investments
Investments are in equity securities and mutual funds with readily determinable fair values based on quoted market prices and collective trust funds and in insurance contracts, private equity, real assets and hedge funds which utilize unobservable data points for fair market value. The fair value of the collective trust funds is based on net asset value (NAV). Certain investments in debt securities are recorded at amortized cost as it is Draper's intent to hold these investments until maturity. The investment goal for the various portfolios is capital preservation while generating returns sufficient to offset the impact of inflation. Realized gains and losses on investment securities are determined by the specific identification method. Dividends are recorded on the ex-dividend date and interest income is recorded on the accrual basis.

New Accounting Pronouncement
On June 26, 2015, Draper adopted FASB ASU 2015-04, *Compensation-Retirement Benefits (Topic 715): Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets.* This ASU provides a practical expedient for measuring an employer's defined benefit obligation and plan assets using the month-end date closest to the entity's fiscal year end as a measurement date when the entity's fiscal year-end does not coincide with a month-end. Draper had adopted the guidance listed above in current fiscal year.

On July 1, 2016, Draper Adopted FASB ASU 2015-07, *Disclosures for Investments in Certain Entities That Calculate Net Value per Share.* This ASU removes the requirement of categorizing investments that are measured at net asset value (NAV) in the fair value hierarchy. Draper had adopted the guidance listed above in the current fiscal year.

2. Long-Term Investments

Draper's long-term investment portfolio consists of the following at July 1, 2016 and June 26, 2015:

	2016	2015
Investment securities		
Cash and money market mutual funds	$ 28,228,623	$ 8,115,431
Global Equity Funds	105,349,856	128,345,845
Global Fixed Income	27,816,116	59,364,998
U.S. large cap equity holdings	-	20,002,276
Comingled Funds - Measured at Net Asset Value	39,762,942	-
Comingled Fund of Funds - Measured at Net Asset Value	67,580,073	-
Insurance contracts and other	343,516	312,249
Total investment securities at fair value	$ 269,081,126	$ 216,140,799
Other investments	1,546,602	538,236
Total investment securities at amortized cost	$ 1,546,602	$ 538,236
Total long-term investments	$ 270,627,728	$ 216,679,035

The following tables present information about the assets that are measured at fair value on a recurring basis as of July 1, 2016 and June 26, 2015 and indicate the fair value hierarchy of valuation techniques we utilized to determine such fair value.

	July 1, 2016	Level 1 Assets	Level 2 Assets	Level 3 Assets
Investment securities				
Cash and money market mutual funds	$ 28,228,623	$ 28,228,623	$ -	$ -
Global Equity Funds	105,349,856	28,658,468	76,691,388	-
Global Fixed Income	27,816,116	-	27,816,116	-
U.S. large cap equity holdings	-	-	-	-
Comingled Funds - Measured at Net Asset Value	39,762,942	-	-	-
Comingled Fund of Funds - Measured at Net Asset Value	67,580,073	-	-	-
Insurance contracts and other	343,516	-	110,379	233,137
	$ 269,081,126	$ 56,887,091	$ 104,617,883	$ 233,137

	June 26, 2015	Level 1 Assets	Level 2 Assets	Level 3 Assets
Investment securities				
Cash and money market funds	$ 8,115,431	$ 8,115,431	$ -	$ -
U.S. investment-grade fixed income funds	-	-	-	-
U.S. large cap equity holdings	20,002,276	20,002,276	-	-
U.S. small cap mutual fund	-	-	-	-
U.S. Treasury and fixed income holdings	-	-	-	-
Global equity funds	128,345,845	55,686,799	72,659,046	-
Global fixed income funds	59,364,998	14,769,361	44,595,637	-
Insurance contracts and other	312,249	-	104,991	207,258
	$ 216,140,799	$ 98,573,867	$ 117,359,674	$ 207,258

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement data. In determining fair value, the use of various valuation approaches, including market, income and cost approaches, are permitted.

A fair value hierarchy has been established based on whether the inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the entity's own assumptions about how market participants would value an asset or liability based on the best information available. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value.

In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities. Draper's Level 1 assets consist of equity holdings and money market funds. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Draper's Level 2 assets consist of variable annuities, mutual funds, and a collective trust fund, all of which are recorded at the net asset value (NAV) provided by the investment company.

Fair values determined by Level 3 inputs utilize unobservable data points for the asset or liability, and include situations where there is little, if any, observable market activity for the asset or liability. Draper's Level 3 assets as of July 1, 2016 consist of insurance contracts associated with the deferred compensation plan. There are no liquidity restrictions associated with any of Draper's investments recorded at fair value.

The change in the fair value of Draper's investments with unobservable data points is shown below:

As of July 1, 2016 there is a $4,392,245 commitment to private equity that will be funded from the existing long term investment assets. Draper had no transfers from Level 2 to Level 1 in the current year.

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	
	Insurance Contracts	**Total Investment Securities**
July 1, 2016		
Balance at beginning of year	$ 207,258	$ 207,258
Transfers to Level 2	-	-
Unrealized appreciation of deferred compensation	25,879	25,879
Balance at end of year	$ 233,137	$ 233,137

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	
	Insurance Contracts	**Total Investment Securities**
June 26, 2015		
Balance at beginning of year	$ 235,583	$ 235,583
Transfers to Level 2	-	-
Unrealized depreciation of deferred compensation	(28,325)	(28,325)
Balance at end of year	$ 207,258	$ 207,258

3. Property and Equipment

Property and equipment are stated at cost. The following is a summary of property, plant and equipment, at cost less accumulated depreciation at July 1, 2016 and June 26, 2015:

	2016	2015
Data processing equipment	$ 29,344,928	$ 27,503,275
Other equipment	109,712,156	118,442,082
Building and leasehold improvements	67,707,733	69,572,150
Building	77,783,480	123,709,047
Land	32,495,864	32,984,487
Construction in progress	15,719,696	3,481,623
	332,763,857	375,692,664
Less: Accumulated depreciation	180,556,918	198,955,150
Property and equipment, net	$ 152,206,939	$ 176,737,514

Depreciation expense was $15,019,123 and $17,194,409 for the years ending July 1, 2016 and June 26, 2015 respectively, while amortization expense was $176,057 and $203,990 for the years ending July 1, 2016 and June 26, 2015, respectively. Draper capitalizes interest cost incurred during the period of construction of capital assets. Interest costs capitalized during the years ended July 1, 2016 and June 26, 2015 were $138,848 and $43,666, respectively.

In January 2016, Draper sold the basement and floors one through four of the north building of the condominium to Schlumberger for $89,500,000 cash. Draper derecognized the assets and recognized $58,223,701 gain on the sale.

In December 2006, Draper completed an addition to the Hill Building at a total cost of $64,383,119. The Hill Building and addition together comprise the One Hampshire at Kendall Square Condominium. In total, Draper has leased 27.2% of the space available in the combined Hill Building and addition. Draper occupies the remainder of this space. Rental income, including parking revenue, included within other non-operating income in the statement of activities and changes in net assets was $5,469,245 and $7,149,348 for the years ended July 1, 2016 and June 26, 2015, respectively. In addition, Draper incurred $1,415,021 and $11,350,110 for its share of common area maintenance costs for the year ended July 1, 2016 and June 26, 2015, respectively. Generally accepted accounting principles require lease income to be recognized on a straight-line basis, which differs from the timing of rental payments in certain of Draper's lease agreements. Revenue recorded in advance of rental payments was $3,792,385 as of July 1, 2016 and is included in deferred charges and other assets in the accompanying balance sheet.

Minimum future rental payments on noncancelable leases to be received as of July 1, 2016 are as follows:

Year	
2017	$ 9,465,026
2018	4,482,578
2019	3,482,577
2020	1,504,343
	$ 18,934,524

4. Capital Facilities Allowances and Unreimbursable Expenses

Capital facilities allowances of $2,471,588 in FY2016 and $2,123,436 in FY2015 are included in the statements of activities and changes in net assets.

During FY2016 and FY2015, certain expenses were either subsidized by Draper or were not reimbursed under the terms of Draper's contracts with its various customers. Total unreimbursed expenses included in indirect costs were $24,392,037 and $11,524,342 for FY2016 and FY2015, respectively, and consist principally of otherwise allowable overhead costs as well as unallowable personnel related and administrative expenses and charges incurred in excess of funded contract amounts. Total Draper funded projects and cost sharing were approximately $13,263,880 and $1,039,281 in FY2016 and FY2015, respectively.

5. Commitments and Contingencies

Draper leases office space, laboratory facilities and certain equipment. Such leases expire at various dates through the FY2021, with options to extend for additional periods. The office space and laboratory facility lease payments are subject to escalation for increases in real estate taxes and operating expenses. Certain equipment is also rented on a short-term basis and charged to contracts. Total rent paid (exclusive of certain equipment rentals which are charged directly to contracts) was $2,130,291 and $1,873,219 in FY2016 and FY2015, respectively.

Minimum annual rental commitments under such leases (subject to certain escalation provisions) are as follows:

Year	Building	Equipment	Total
2017	$ 2,481,823	$ 241,561	$ 2,723,384
2018	2,170,935	232,268	2,403,203
2019	1,650,696	232,268	1,882,964
2020	1,297,771	232,268	1,530,039
2021	922,575	-	922,575
Thereafter	1,069,915	-	1,069,915
	$ 9,593,715	$ 938,365	$ 10,532,080

All payments to Draper for work performed on contracts with agencies of the U.S. Government are provisional payments which are subject to adjustment upon audit by the Defense Contract Audit Agency (DCAA). Audits through FY2014 have been completed and rates have been finalized and recorded through FY2014.

In 2007, Draper established a liability for environmental cleanup costs associated with soil contamination at a test facility under the requirements of ASC 410-30, *Asset Retirement and Environmental Obligations – Environmental Obligations*. Draper has compiled estimates of the cleanup costs under various scenarios and will update those estimates as conditions change in future periods. Due to the long-term nature of the remediation activities, Draper has discounted the expected future expenditures to the current period, using a rate of 5.66%. At July 1, 2016, Draper's recorded liability was $942,068.

Draper is subject to routine legal proceedings incidental to its business. While the ultimate liability from the proceedings is difficult to determine, in the opinion of management, the results of these proceedings will not have a material adverse effect on Draper's financial position or results of operations.

6. Pension and Other Post-retirement Benefit Plans

Draper has three defined benefit pension plans and one post-retirement benefit plan providing health care benefits to retired employees. The current period cost of administering these benefit plans is included within operating activities as an indirect cost. The remaining changes to the benefit obligations are recorded in other changes in pension and post-retirement benefits as a part of non-operating activities in the statement of activities and change in net assets.

The following schedules provide summary information concerning Draper's benefit plans for the years ended July 1, 2016 and June 26, 2015:

	Pension Benefits		Medical Benefits	
	2016	2015	2016	2015
Benefit obligation at end of year	$ 172,586,760	$ 143,463,697	$ 25,118,127	$ 33,365,223
Fair value of plan assets at end of year	127,251,327	131,908,874	16,615,722	16,478,455
Unfunded status of the plans	$ (45,335,433)	$ (11,554,823)	$ (8,502,405)	$ (16,886,768)
Consolidated balance sheets				
Current liabilities	$ -	$ -	$ -	$ -
Noncurrent assets	7,640,832	7,408,734	-	-
Noncurrent liabilities	(52,976,265)	(18,963,557)	(8,502,405)	(16,886,768)
Unfunded status of the plans	$ (45,335,433)	$ (11,554,823)	$ (8,502,405)	$ (16,886,768)
Net period benefit cost	$ 2,560,254	$ 4,882,055	$ 612,533	$ 1,525,410
Amounts not yet reflected in net periodic benefit cost and included in unrestricted net assets:				
Accumulated actuarial loss (gain)	$ 43,601,144	$ 12,274,528	$ (943,566)	$ (1,404,221)
Prior service costs (benefits)	3,705	4,941	(8,490,449)	-
Transition Obligation	420,095	525,119	-	-
	$ 44,024,944	$ 12,804,588	$ (9,434,015)	$ (1,404,221)

The Retirement Plan for Employees (RPE) provides retirement benefits paid from the net assets available for plan benefits. Retirement benefits are paid to participants in equal monthly payments beginning in the month following retirement and continue until death. Payments to a surviving spouse are made at a reduced level. This plan comprises approximately 90% of Draper’s pension benefit obligations and plan assets.

The Retirement Plan for Staff Members (RPSM) provides a Surviving Spouse's Benefit, which provides a supplement for married participants who transferred to Draper from the Massachusetts Institute of Technology prior to July 2, 1976, and a Minimum Pension Benefit, which provides a minimum level of retirement benefits based upon years of service and final average salary, through a group annuity; the plan was frozen during 2009. This plan, together with the Supplemental Retirement Plan for Corporate Officers and Retiree Medical Benefit Plan (RMP), comprises the remainder of Draper's benefit obligations and plan assets.

The Retiree Medical Benefit Plan provides post-retirement Medicare supplemental health insurance and prescription drug benefits. Draper will continue to provide the same (capped) level of contribution for each participant of the post-retirement medical plan.

Benefit Obligations
The components of the change in total benefit obligation and the applicable assumptions for determining benefit obligations are shown below:

	Pension Benefits		Medical Benefits	
	2016	2015	2016	2015
Benefit obligation at beginning of year	$ 143,463,697	$ 151,976,481	$ 33,365,223	$ 31,783,648
Actuarial loss/(gain)	9,924,630	1,948,045	-	-
Service cost	2,443,944	2,656,125	1,085,394	1,402,516
Interest cost	5,910,915	5,779,956	1,183,548	1,232,461
Plan participants' contributions	-	-	2,202,641	3,114,605
Change in assumptions	15,574,971	(11,955,364)	(9,548,938)	(81,658)
Benefits paid	(4,731,397)	(6,941,546)	(3,169,741)	(4,086,351)
Benefit obligation at end of year	$ 172,586,760	$ 143,463,697	$ 25,118,127	$ 33,365,223
Accumulated benefit obligation	$ 171,326,100	$ 142,277,821		
Weighted-average assumptions				
Discount rate	3.34%	4.09%	3.40%	4.10%
Rate of compensation increase	3.00%	3.00%	N/A	N/A

Benefit Cost

The components of the net periodic benefit cost recognized in the statements of activities and changes in net assets, and the applicable assumptions for determining benefit costs, are shown below:

	Pension Benefits		Medical Benefits	
	2016	2015	2016	2015
Service cost	$ 2,443,944	$ 2,656,125	$ 1,085,394	$ 1,402,516
Interest cost	5,910,915	5,779,956	1,183,548	1,232,461
Expected return on plan assets	(7,664,868)	(7,283,911)	(1,138,698)	(1,109,567)
Loss on Settlement	-	687,621	-	-
Amortization of prior service cost	1,236	1,236	(517,711)	-
Amortization of transition obligation	105,024	105,024	-	-
Amortization of net actuarial loss	1,764,003	2,936,004	-	-
Net periodic benefit cost	$ 2,560,254	$ 4,882,055	$ 612,533	$ 1,525,410
Changes in plan assets and benefit obligations recognized in unrestricted net assets				
Net loss (gain)	$ 33,090,619	$ (9,986,125)	$ (8,547,505)	$ 428,746
Amortizations:				
RPE	(1,696,535)	(2,808,300)	-	-
RPSM	-	-	-	-
SRCPCO	(173,728)	(233,964)	-	-
RMP	-	-	517,711	-
Total Amortizations	(1,870,263)	(3,042,264)	517,711	-
Total recognized in unrestricted net assets	$ 31,220,356	$ (13,028,389)	$ (8,029,794)	$ 428,746
Total recognized in net periodic benefit Cost and unrestricted net assets	$ 33,780,610	$ (8,146,334)	$ (7,417,261)	$ 1,954,156
Weighted-average assumptions				
Discount rate	4.09%	4.02%	4.10%	3.95%
Expected long-term return on plan assets	7.00%	7.00%	7.00%	7.00%
Rate of compensation increase	3.00%	3.00%	N/A	N/A

Amortizations of pension benefit prior service costs, transition obligations and actuarial gains and losses in FY2017 are expected to be $1,236, $105,024, and $ 2,962,774, respectively. Amortization of medical gains and losses in FY2017 is expected to be $1,035,421.

Assumptions
The discount rate is determined annually based on census information, the timing of future benefit payments and yield curve data from the Citigroup Yield Curve, as this is used for Retiree Plan for Employees, Retirement Plan for Staff Employees, and Supplemental Retirement Plan for Corporate Officers. The closest rate between Citigroup and Mercer Yield is used for Retirement Medical Plan as of the valuation date for calculating net periodic benefit cost, and as of year-end for financial statement disclosure.

The expected long-term rate of return assumption represents the expected average rate of return on current and future funds invested to provide for benefit obligations. This assumption is determined based on a number of factors, including historical market index returns, historical plan return data, anticipated long-term asset allocation of the plans and plan expenses. Draper recognizes differences between the expected return on assets and the actual return over the remaining service life of the applicable participants. This amount is included in net periodic pension cost as a component of the amortization of actuarial gains and losses and is expected to be $2,962,774 in FY2017.

Assumed health care cost trend rates at July 1, 2016 and June 26, 2015 were as follows:

	2016	2015
Health care cost trend rate for pre-65 coverage assumed for next year	N/A	6.96%
Health care cost trend rate for post-65 coverage assumed for next year	6.96%	7.20%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	2027	2027

Assumed healthcare costs trend rates can have a significant effect on the amounts reported for health care plans. A one-percentage point change in the assumed health care cost trend rates would have the following effects at July 1, 2016 and June 26, 2015:

	Medical Benefits	
	2016	**2015**
Impact of 1% increase in assumed health care cost trend rates		
Effect on total of service and interest cost components	N/A	$ 153,756
Effect on postretirement benefit obligation	N/A	1,103,714
Impact of 1% decrease in assumed health care cost trend rates		
Effect on total of service and interest cost components	N/A	(131,106)
Effect on postretirement benefit obligation	N/A	(965,282)

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 (providing Medicare Part D – Prescription Drug benefits) was reflected in Draper's accounting results assuming that Draper will continue to provide the same (capped) level of contributions for each participant of the post-retirement medical plan. However, any federal subsidy received will be applied to reduce the retiree participants' share of the cost.

Effective January 1, 2016, the post-65 retirees were moved to the private Medicare exchange. Draper also increased its contributions for pre-65 retirees. As a result of the change, Draper will no longer receive Medicare Prescription Drug subsidies for this plan.

Plan Assets
The components of the change in total plan assets are shown below:

	Pension Benefits		Medical Benefits	
	2016	2015	2016	2015
Fair value of plan assets at beginning of year	$ 131,908,874	$ 129,972,781	$ 16,478,457	$ 15,559,292
Actual return on plan assets	13,310	6,537,893	137,265	599,163
Employer contributions	-	2,302,543	967,100	1,291,746
Plan participants' contributions	-	-	2,202,641	3,114,605
Benefits paid	(4,731,397)	(4,639,003)	(3,169,741)	(4,086,351)
Fair value adjustments	60,540	(2,265,340)	-	-
Fair value of plan assets at end of year	$ 127,251,327	$ 131,908,874	$ 16,615,722	$ 16,478,455

The investment objectives for the assets of the plan are to meet or exceed current and future benefit payments while minimizing employer contributions. Investment policies and strategies governing the assets of the plans are designed to achieve investment objectives within the constraints of a prudent level of portfolio risk and diversification. Risk management practices include the use of investment managers and maintenance of a portfolio diversified by asset class, investment approach and securities holdings, and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

Draper's pension plans weighted-average asset allocations by asset category are as follows:

	RPE			RPSM			Total Pension
		Asset Allocation			Asset Allocation		
	Fair Value	Range	Actual	Fair Value	Range	Actual	
July 1, 2016							
U.S. fixed income	$ 19,568,625	16-30%	18%	$ -	-	-	$ 19,568,625
Global equity funds	54,147,563	45-60%	52%	11,129,635	40-60%	50%	65,277,198
U.S. real estate fund	10,355,673	5-10%	10%	-	-	-	10,355,673
Insurance contracts	20,723,666	15-30%	20%	11,326,165	40-60%	50%	32,049,831
	$ 104,795,527			$ 22,455,800			$ 127,251,327
June 26, 2015							
U.S. fixed income	$ 18,390,421	16-30%	17%	$ -	-	-	$ 18,390,421
Global equity funds	57,775,832	45-60%	53%	11,663,497	40-60%	52%	69,439,329
U.S. real estate fund	10,170,197	5-10%	9%	-	-	-	10,170,197
Insurance contracts	23,036,213	15-30%	21%	10,872,714	40-60%	48%	33,908,927
	$ 109,372,663			$ 22,536,211			$ 131,908,874

The disclosure provisions of ASC 820, *Fair Value Measurements and Disclosure*, were adopted as of fiscal year 2010 for benefit plan assets. The following tables present information about the assets that are measured at fair value on a recurring basis as of July 1, 2016 and June 26, 2015 respectively, and indicate the fair value hierarchy of the valuation techniques we utilized to determine such fair value.

	July 1, 2016	**Level 1 Assets**	**Level 2 Assets**	**Level 3 Assets**
Investment securities				
U.S. fixed income	$ 19,568,625	$ -	$ 19,568,625	$ -
Global equity fund	65,277,198	-	65,277,198	-
U.S. real estate fund	10,355,673	-	10,355,673	-
Insurance contracts	32,049,831	-	-	32,049,831
	$ 127,251,327	$ -	$ 95,201,496	$ 32,049,831

	June 26, 2015	**Level 1 Assets**	**Level 2 Assets**	**Level 3 Assets**
Investment securities				
U.S. fixed income	$ 18,390,421	$ -	$ 18,390,421	$ -
Global equity fund	69,439,329	-	69,439,329	-
U.S. real estate fund	10,170,197	-	10,170,197	-
Insurance contracts	33,908,927	-	-	33,908,927
	$ 131,908,874	$ -	$ 97,999,947	$ 33,908,927

In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets and liabilities. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Draper's Level 2 assets consist of variable annuities, all of which are measured at the NAV provided by the investment company.

Fair values determined by Level 3 inputs utilize unobservable data points for the asset or liability and include situations where there is little, if any, observable market activity for the asset or liability. Draper's Level 3 assets as of July 1, 2016 consist of insurance contracts, the value of which was provided by the insurance company and reviewed for reasonableness by Draper. There are no liquidity restrictions associated with any of Draper's plan assets measured at fair value.

The change in the fair value of Draper's benefit plan assets with unobservable data points is shown below:

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	**Insurance Contracts**
July 1, 2016	
Balance at beginning of year	$ 33,908,927
Purchases	1,505,462
Total gains	1,366,839
Benefits paid	(4,731,397)
Balance at end of year	$ 32,049,831
June 26, 2015	
Balance at beginning of year	$ 34,651,386
Purchases	2,512,617
Total gains	1,383,927
Benefits paid	(4,639,003)
Balance at end of year	$ 33,908,927

Draper's Retiree Medical Benefit Plan weighted-average asset allocations by asset categories are as follows:

	Fair Value	Asset Allocation Range	Asset Allocation Actual
July 1, 2016			
Investment-grade fixed income fund	$ 3,128,111	12-26%	19%
High-yield bond fund	1,173,881	3-11%	7%
Domestic equity funds	8,820,588	33-73%	53%
International equity funds	2,294,377	3-24%	14%
Real estate securities fund	1,198,765	5-11%	7%
	$ 16,615,722		
June 26, 2015			
Investment-grade fixed income fund	$ 3,115,974	12-26%	19%
High-yield bond fund	1,163,711	3-11%	7%
Domestic equity funds	9,277,737	33-73%	56%
International equity funds	2,008,417	3-24%	12%
Real estate securities fund	912,616	5-11%	6%
	$ 16,478,455		

All of the Retiree Medical Benefit Plan assets are mutual funds traded in active markets for identical assets (Level 1 assets).

Contributions and Benefits
Draper does not anticipate making any contributions to the RPSM, SRPCO or the RPE in FY2017. The Retiree Medical Plan was funded on a "pay as you go" basis in FY2016 and FY2015.

Estimated future benefit payments, which reflect future service as appropriate, are as follows:

	Pension Benefits	Medical Benefits
FY2017	20,744,000	1,105,248
FY2018	5,514,000	1,177,124
FY2019	6,306,000	1,244,699
FY2020	5,690,000	1,305,346
FY2021	7,323,000	1,362,726
FY2022-FY2026	36,730,000	7,452,996

7. Deferred Charges and Other Assets

As permitted under CAS, overhead costs associated with the PeopleSoft software implementation projects are recorded as deferred charges and are being recovered over five years as charges to indirect contract costs. At July 1, 2016 and June 26, 2015, the balance of these costs was $0 and $29,432, respectively.

8. Line of Credit

In FY2016 and FY2015, Draper did not make any withdrawals or payments under its short-term line of credit arrangements. Currently, Draper has short term lines of credit with Bank of America and BNY Mellon. At July 1, 2016 and June 26, 2015, there were no balances outstanding under the credit facilities. The lines of credit may be renewed annually.

9. Bonds Payable

On January 29, 2015 the Laboratory issued $50,000,000 in taxable Series 2015 bonds to advance refund and defease $80,000,000 of Series 2008 tax-exempt bonds. The $50,000,000 in Series 2015 proceeds, together with other available funds, were used by Draper to advance refund, redeem and defease the 2008 Series Bonds and to pay certain costs of issuance. As a result of the defeasement, the Laboratory experienced an $11,187,722 loss on the sale.

The 2015 Bonds have no restrictive covenants of a financial nature. The estimated fair value of the Series 2015 Bonds was $49,974,194 on July 1, 2016.

The 2015 Bonds have been issued in sixteen groups with varying maturity dates and interest rates, as follows:

Maturity Date	Interest Rate	Maturity Amount
September, 2016	0.72%	2,770,000
September, 2017	1.12%	2,790,000
September, 2018	1.65%	2,820,000
September, 2019	1.98%	2,870,000
September, 2020	2.28%	2,925,000
September, 2021	2.49%	2,990,000
September, 2022	2.69%	3,065,000
September, 2023	2.89%	3,150,000
September, 2024	3.04%	3,240,000
September, 2025	3.14%	3,340,000
September, 2026	3.24%	3,445,000
September, 2027	3.34%	3,555,000
September, 2028	3.44%	3,675,000
September, 2029	3.54%	3,800,000
September, 2030	3.59%	3,935,000
		$ 48,370,000

The following is a summary of Draper's bonds payable at July 1, 2016 and June 26, 2015:

	2016	2015
Outstanding bonds	$ 48,370,000	$ 50,000,000
Less: bond discount	-	-
Total bonds payable	$ 48,370,000	$ 50,000,000

10. Asset Retirement Obligations

During FY2016 and FY2015, Draper recognized the following changes to the fair value of its conditional asset retirement obligations:

	2016	2015
Fair value of liability at beginning of year	$ 7,177,478	$ 6,853,059
Liabilities settled	(247,577)	(103,897)
Accretion of fair value	448,592	428,316
Fair value of liability at end of year	$ 7,378,493	$ 7,177,478

11. Florida and Aurora Semiconductor LLC

On June 30, 2008, Draper entered into agreements with the State of Florida Office of Tourism, Trade and Economic Development (State of Florida) as well as the counties of Pinellas and Hillsborough, the Florida High Tech Corridor Counsel (FHTCC) and the University of Florida Research Foundation (USF). The State of Florida agreed to provide $15,000,000 all of which was substantially received by the close of FY2012. Another $15,000,000 of matching awards was received from the various other parties. The matching awards were in the form of equipment, donated facilities, and rent incentives over the next ten years as follows:

1. Pinellas County provided $2,000,000 to be used by Draper for the purchase of equipment;
2. FHTCC provided $985,873 worth of equipment to Draper;
3. USF provided $2,000,000 to Draper to be used for the purchase of leasehold improvements;
4. Hillsborough County agreed to fund $976,000 of rent obligation as well as $2,920,398 for the purchase of equipment and an additional $2,000,000 for leasehold improvements

During FY2015, Draper commenced restructuring of its Florida operations and concurrently entered into negotiations with all of the interested parties. As part of this restructuring, Draper paid the County of Hillsborough $3,000,000 in amounts due under the contract.

In FY2016 Draper and Pinellas County determined that the equipment security interest had expired, and no amendment was needed. The final headcount measurement was determined in August 2016 and a payment was made. The FHTCC granted Draper the option of purchasing 4 of the 5 pieces of MCM process equipment funded by their $1,000,000 grant in 2009. The agreed upon purchase price was $270,000, which was paid this year and completes the FHTCC transaction. Draper terminated its lease with USF by paying a $968,981 termination fee. Draper derecognized $402,309 in outstanding rent liability and recognized a $566,672 loss on the transaction. Draper retired the leasehold

improvement assets granted by USF and Hillsborough County for loss of $1,881,448 which was offset by the reversal of $1,796,240 from related deferred revenue, resulting in a net loss of $85,208. The Hillsborough granted assets were retired for a loss of $860,210 which was offset by a gain of $860,210 from derecognizing the related deferred revenue, resulting in no loss. Draper does not believe there are any material amounts due under the remaining contracts.

In January 2016, Draper loaned Aurora Semiconductor LLC $2,000,000. This is a two year, 2.75% interest bearing note with interest payments due to Draper on a quarterly basis.

In January 2016, Draper has leased to Aurora Semiconductor LLC the land, building, and equipment at its St. Petersburg, Florida location. At the end of the lease term, Aurora Semiconductor LLC has the option to purchase the aforementioned provided an event of default has not occurred. Draper accounted for the transaction as a Sales Type lease using classification criteria under ASC 842-10-25-2. Under ASC 842-30-40-1 and ASC 842-30-25-1 guidance, Draper derecognized the leased assets and recognized a $4,934,454 gain.

There is a potential for future license revenue streams of up to $14,500,000 with Aurora Semiconductor LLC. Draper also entered into a licensing agreement with Aurora Semiconductor LLC granting Aurora Semiconductor LLC the use of Draper's iUHD Technology. Royalties are based on revenue generated from the use of the technology and is a percentage of that revenue. This percentage starts at 8% in 2016 and decreases to 5% in 2019 and continues through 2023, after which no royalties will be due to Draper.

Aurora Semiconductor LLC is a startup company. As with any startup, there is always risk that the company may not meet its financial obligations. At this time, Draper does believe that Aurora Semiconductor will be able to meet its future financial obligations.

12. Results of Operations

Total operating revenue is $623,195,842 in FY2016 and $565,859,050 in FY2015. The majority of our revenue is with the U.S. Government and related agencies. A contract change order is included in the operating revenue total. There are pending change orders that total approximately $922,553 at the end of FY2016 compared to $1,984,226 at the end of FY2015.

Direct expenses are $478,083,668 in FY2016 compared to $431,179,258 in FY2015. Indirect costs are $160,035,715 in FY2016 and $160,871,884 in FY2015.

13. Subsequent Events

Draper has performed an evaluation of subsequent events through September 20, 2016, which is the date the financial statements were available to be issued.

The Charles Stark Draper Laboratory, Inc.
Supplemental Schedule of Expenditures of Federal Awards
July 1, 2016

Federal Grantor/Pass-Through Program or Cluster Title	CFDA Number	Direct	Pass-through	Pass Through Entity	Pass-Through Entity Identifying Number	Primary Awarding Identifying Number	Total	Passed to Sub-Recipients
Department of Defense:								
Department of the Air Force	12.RD	$ (495)	$ -	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-12-C-0072	FA8750-12-C-0072	$ (495)	$ -
	12.RD	1,628,786	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-12-C-0261	FA8750-12-C-0261	1,628,786	1,006,688
	12.RD	873,513	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-12-C-0293	FA8750-12-C-0293	873,513	-
	12.RD	66	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-13-C-0281	FA8750-13-C-0281	66	-
	12.RD	52,779	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-14-C-0056	FA8750-14-C-0056	52,779	-
	12.RD	429,847	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-14-C-0246	FA8750-14-C-0246	429,847	-
	12.RD	348,114	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-15-C-0131	FA8750-15-C-0131	348,114	-
	12.RD	1,936,627	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-15-C-0242	FA8750-15-C-0242	1,936,627	269,309
	12.RD	8,363	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-04-C-0003	FA8750-04-C-0003	8,363	7,059
	12.RD	-	(143)	APPLIED TECHNOLOGY ASSOCIATES	SUBCONTRACT NO. 200301SC	F33657-03-C-2020	(143)	-
	12.RD	-	105,624	BAE SYSTEMS	31-5147301-1	FA8214-13-C-0001	105,624	-
	12.RD	-	(968)	BAE SYSTEMS	781390-2	F33657-99-D-0028	(968)	-
	12.RD	-	206,419	BAE SYSTEMS	823402	F33657-99-D-0028	206,419	-
	12.RD	-	605,915	BAE SYSTEMS	926944	F33657-99-D-0028	605,915	-
	12.RD	-	421,673	BOEING COMPANY	1111672	FA8214-15-C-0001	421,673	-
	12.RD	664	-	EGLIN AIR FORCE BASE	FA8651-11-D-0197/0002	FA8651-11-D-0197/0002	664	-
	12.RD	1,052,955	-	EGLIN AIR FORCE BASE	FA8651-12-D-0342	FA8651-12-D-0342	1,052,955	11,351
	12.RD	(1,246)	-	EGLIN AIR FORCE BASE	FA8651-09-C-0136	FA8651-09-C-0136	(1,246)	-
	12.RD	-	15	GENERAL DYNAMICS - AIS	51ESM485720	FA8219-12-C-0002	15	-
	12.RD	-	98	GENERAL ELECTRIC AIRCRAFT ENGINES	201-LY-LOA43236	NOT ON FILE	98	-
	12.RD	217,455	-	HQ United States Air Force / A2I	IPA	IPA	217,455	-
	12.RD	-	98,172	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	129746	15-D-7000 (RH01)	98,172	-
	12.RD	-	8,848	LEIDOS, INC.	P010155442	FA9451-09-C-0384	8,848	-
	12.RD	-	(344)	LINCOLN LABORATORY	7000157348	FA8721-05-C-0002	(344)	-
	12.RD	-	1,791	LINCOLN LABORATORY	PO7000163737	FA8721-05-C-0002	1,791	-
	12.RD	-	(336)	LOCKHEED MARTIN - SUNNYVALE	8100004328	F04701-02-C-0003	(336)	-
	12.RD	-	734,102	NORTHROP GRUMMAN MISSION SYSTEMS	7500098936	F42610-98-C-0001	734,102	-
	12.RD	-	7,021	Northrop Grumman Systems Corp.	8FF-IPDDM-DRAPER-13	FA8750-07-D-0027	7,021	-
	12.RD	-	48,569	PAR Government Systems Corporation	SC-111714-100	W911QY-13-D-0100	48,569	-
	12.RD	-	109,527	PAR Government Systems Corporation	SC-111715-200	W911QY-13-D-0100	109,527	-
	12.RD	-	36,092	PAR Government Systems Corporation	SC-111723-001	W911QY-13-D-0100	36,092	-
	12.RD	-	222,101	PAR Government Systems Corporation	SC-111732-100	W911QY-13-D-0100	222,101	-
	12.RD	-	928,082	PAR Government Systems Corporation	SC-111733-300	W911QY-13-D-0100	928,082	-
	12.910	-	19	PRINCETON UNIVERSITY	1717	FA8650-09-1-7943	19	-
	12.RD	-	(44)	RAYTHEON - TEWKSBURY	P.O. 53-HBC9-BR-0009	F05604-02-F-0166	(44)	-
	12.RD	-	103	RAYTHEON BBN TECHNOLOGIES CORP	9500011792 - BBN 14107	FA8750-12-C-0026	103	-
	12.RD	-	26,361	RAYTHEON BBN TECHNOLOGIES CORP	9500012361	FA8750-12-C-0084	26,361	-
	12.RD	-	(312)	RAYTHEON BBN TECHNOLOGIES CORP	PO# 9500010753	FA8750-11-C-0074	(312)	-
	12.RD	-	4,987	RT LOGIC	RTL-SC1108-C	F04701-96-C-0025	4,987	-
	12.RD	-	(2,813)	SCIENCE APPLICATIONS INTERNATIONAL CORP	SAIC Subcontract P010077902	FA8750-11-C-0064	(2,813)	-
	12.RD	3,708,629	-	Space & Missile Systems Center	FA8807-12-C-0005	FA8807-12-C-0005	3,708,629	766,058
	12.RD	-	719	Vencore Services and Solutions, Inc.	1000009700	FA7022-11-D-0004	719	-
	12.RD	-	347	Vescent Photonics, Inc.	None	FA8651-14-M-0149	347	-
	12.RD	3,025,700	-	WRIGHT LABORATORY	FA8650-13-C-7325	FA8650-13-C-7325	3,025,700	408,582
	12.RD	1,170,076	-	WRIGHT LABORATORY	FA8650-15-C-7543	FA8650-15-C-7543	1,170,076	387,102
	12.RD	(436)	-	USAF DIRECTORATE FOR ISR INNOVATIONS A2Q	VICTOR KUCHAR (IPA)	N/A	(436)	-
	12.RD	66,722	-	AIR FORCE MATERIAL COMMAND - HANSCOM	FA8726-15-C-0010	FA8726-15-C-0010	66,722	-
	12.RD	73,991	-	AIR FORCE MATERIAL COMMAND - HANSCOM	FA8726-16-C-0012	FA8726-16-C-0012	73,991	-
	12.RD	-	49,481	AOSense, Inc.	AOSC2015072801	FA9453-15-M-0467	49,481	-
	12.RD	-	74,870	The Perduco Group, Inc.	Drap-001	NOT GIVEN	74,870	-
	12.RD	-	86,302	University of Dayton Research Institute	RSC15062	FA8650-11-D-5401/0004	86,302	-
	12.RD	215	-	BALLISTIC MISSILE OFFICE	F04704-90-C-0020	F04704-90-C-0020	215	-
	12.RD	-	364	HONEYWELL INC - TEMPE AZ	PURCHASE ORDER A00005029	NOT ON FILE	364	-
	12.RD	-	480	RAYTHEON - MARLBOROUGH	PO 53-55M8-BR-0001	F05604-00-F-0038	480	-
	12.RD	-	(69)	RAYTHEON - MARLBOROUGH	P.O. 53-8888-BR-0029	F19628-85-C-0004	(69)	-
	12.RD	-	(4,304)	RAYTHEON - SUDBURY	P.O. 53-8888-HC-95002	F19628-85-C-0004	(4,304)	-
	12.RD	-	104	NICHOLS RESEARCH CORPORATION	SUB. NO. NRC-CPLE-97-0013	F04701-93-C-0010	104	-
	12.RD	-	1,616	UTC Aerospace Systems	2411848	FA8527-08-D-0008-OTBD	1,616	-
Subtotal Department of the Air Force		**14,592,327**	**3,770,468**				**18,362,795**	**2,856,149**

The accompanying notes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards.

The Charles Stark Draper Laboratory, Inc.
Supplemental Schedule of Expenditures of Federal Awards
July 1, 2016

Federal Grantor/Pass-Through Program or Cluster Title	CFDA Number	Direct	Pass-through	Pass Through Entity	Pass-Through Entity Identifying Number	Primary Awarding Identifying Number	Total	Passed to Sub-Recipients
Department of the Army	12.RD	-	65,623	ALION SCIENCE & TECH	SUB1134016-001	FA4600-06-D003	65,623	27,772
	12.RD	-	359,160	ALION SCIENCE & TECH	SUB1134016-002	FA4600-06-D003	359,160	-
	12.RD	(6,982)	-	BALLISTIC MISSILE DEFENSE ORGANIZATION	HQ0006-09-C-0004	HQ0006-09-C-0004	(6,982)	-
	12.RD	-	3,505	BATTELLE	439808	W91CRB-11-D-0002	3,505	-
	12.RD	-	(37)	BATTELLE	US001-0000318950	W91CRB-11-D-0002	(37)	-
	12.RD	-	(82)	BETH ISRAEL DEACONESS MEDICAL CENTER	1025062	W81XWH-07-2-0011	(82)	-
	12.420	-	68	CENTER INTEGRATION MED & INNOVATIVE TECH	CIMIT DOD 217223	W81XWH-09-2-001	68	-
	12.420	-	(30)	CENTER INTEGRATION MED & INNOVATIVE TECH	217419	W81XWH-09-2-0001	(30)	-
	12.RD	-	14	CENTER INTEGRATION MED & INNOVATIVE TECH	CIMIT FUND #212131	DAMD17-02-2-0006	14	-
	12.RD	-	(257)	CENTER INTEGRATION MED & INNOVATIVE TECH	CIMIT DOD - Fund #218656	DAMD17-02-2-0006	(257)	-
	12.RD	-	(3)	CENTER INTEGRATION MED & INNOVATIVE TECH	Fund 203147	DAMD17-02-2-0006	(3)	-
	12.RD	-	(4)	CENTER INTEGRATION MED & INNOVATIVE TECH	Fund 203150	DAMD17-02-0006	(4)	-
	12.RD	-	(864)	CENTER INTEGRATION MED & INNOVATIVE TECH	Memorandum of Agreement	DAMD17-02-2-0006	(864)	-
	12.RD	-	547,704	Chemring Detection Systems	153772	W911SR-14-C-0045	547,704	-
	12.RD	274	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	W31P4Q-15-C-0033	W31P4Q-15-C-0033	274	-
	12.431	-	98	DESERT RESEARCH INSTITUTE	656.2203	W9124R-11-D0211	98	-
	12.RD	-	4	HARVARD UNIVERSITY	01-130114-00	W81XWH-0702-0011	4	-
	12.RD	-	(1,853)	HONEYWELL INC - MINNEAPOLIS MN	B54030352 / SAP No. 4200048270	DAAE30-01-BAA-0101	(1,853)	-
	12.RD	-	7	KAMAN AEROSPACE CORPORATION	300737R	DAAE30-01-0800	7	-
	12.431	-	589	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710003220	W911NF-12-2-0039	589	-
	12.RD	(111)	-	MATERIAL CMD ACQUISITION - YUMA / ROME	W9124R-09-C-0011	W9124R-09-C-0011	(111)	-
	12.RD	(1,279)	-	MATERIEL CMD ACQUISITION CTR - YUMA	W9124R-11-C-0005	W9124R-11-C-0005	(1,279)	-
	12.RD	11,157	-	MATERIEL CMD ACQUISITION CTR - YUMA	W9124R-11-C-0016	W9124R-11-C-0016	11,157	-
	12.RD	55	-	MATERIEL CMD ACQUISITION CTR - YUMA	W9124R-13-C-0006	W9124R-13-C-0006	55	-
	12.RD	(836)	-	MATERIEL CMD ACQUISITION CTR - YUMA	W9124R-09-C-0004	W9124R-09-C-0004	(836)	-
	12.RD	1,364,349	-	NATICK R&D CENTER	W911QY-12-C-0136	W911QY-12-C-0136	1,364,349	163,962
	12.RD	55,286	-	NATICK R&D CENTER	W911QY-15-P-0031	W911QY-15-P-0031	55,286	-
	12.RD	534,620	-	NATICK R&D CENTER	W911QY-15-C-0006	W911QY-15-C-0006	534,620	110,000
	12.RD	1,665,916	-	Natick Soldier Systems center	W911QY-15-C-0005	W911QY-15-C-0005	1,665,916	-
	12.RD	-	(2)	ORBITAL RESEARCH INC.	Orbital/Draper SBIR Agreement	W15QKN-07-C-0094	(2)	-
	12.RD	-	9,759	PAR Government Systems Corporation	SC-111720-005	W911QY-13-D-0100	9,759	-
	12.RD	-	1,976,568	PAR Government Systems Corporation	SC-111731-200	W911QY-13-D-0100	1,976,568	530,500
	12.RD	-	(708)	PAR Government Systems Corporation	SC-111804-004	W911QY-11-D-0014	(708)	-
	12.RD	-	16	PAR Government Systems Corporation	SC-111921-013	W911QY-12-D-0010	16	-
	12.RD	-	325,893	PAR Government Systems Corporation	SC-111746-001	W911QY-13-D-0100	325,893	-
	12.431	-	749,777	Partners HealthCare Research Management	224785	W911NF-14-2-0045	749,777	109,655
	12.RD	852,580	-	PICATINNY ARSENAL	W15QKN-12-C-0131	W15QKN-12-C-0131	852,580	100,000
	12.RD	1,997,355	-	PICATINNY ARSENAL	W15QKN-14-C-0048	W15QKN-14-C-0048	1,997,355	-
	12.RD	2,464,376	-	PICATINNY ARSENAL	W15QKN-15-C-0114	W15QKN-15-C-0114	2,464,376	-
	12.RD	-	617,997	ProActive Technologies, Inc.	MSA-PAT-2015001-00010	W900KK-14-D-0001	617,997	-
	12.RD	-	591,932	ProActive Technologies, Inc.	MSA-PAT-2015001-00017	W900KK-14-D-0001	591,932	-
	12.RD	-	346,101	ProActive Technologies, Inc.	MSA-PAT-2015001-00020	W900KK-14-D-0001	346,101	-
	12.RD	-	147,703	ProActive Technologies, Inc.	MSA-PAT-2015001-00044	W900KK-14-D-0001	147,703	-
	12.RD	-	2,107	RADIANCE TECHNOLOGIES	14S-3048	W9113M-13-D-0006	2,107	-
	12.RD	-	45,156	RAYTHEON - TUSCON	PO 4200823067	HQ0276-10-C-0005	45,156	-
	12.RD	-	6,452,100	RAYTHEON - TUSCON	PO 4200942586	HQ0276-10-C-0005	6,452,100	193,800
	12.RD	-	725,390	RAYTHEON - TUSCON	4201205786	W911NF-16-C-0001	725,390	-
	12.RD	-	5,928,557	RAYTHEON - TUSCON	4201249942	HQ0276-10-C-0005	5,928,557	1,216,114
	12.RD	-	(94)	ROCKWELL COLLINS INC	4504101378	W31P4Q-09-C-0534	(94)	-
	12.RD	-	(47)	SCIENTIFIC SYSTEMS COMPANY INC	1548-DRAPER	W15P7T-12-C-H205	(47)	-
	12.RD	-	2,185	Sigmatech, Inc.	SIG-14-DA-0012-0001	W31P4Q-11-A-0009	2,185	-
	12.RD	58,153	-	STRATEGIC SYSTEMS PROGRAMS	N00030-14-G-0050	N00030-14-G-0050	58,153	-
	12.420	-	(8)	THE BRIGHAM AND WOMEN'S HOSPITAL INC	107996	W81XWH-09-2-0001	(8)	-
	12.RD	-	134,564	THE MITRE CORPORATION	109687	W56KGU-14-C-0010	134,564	-
	12.RD	-	60	UNIVERSITY OF CALIFORNIA SAN DIEGO	10320855	W911NF-11-C-0210	60	-
	12.RD	1,010	-	US Army - Aberdeen Proving Ground	W911SR-12-C-0020	W911SR-12-C-0020	1,010	-
	12.RD	(5,296)	-	US ARMY PEO STRI / ACQUISITION CENTER	W900KK-10-C-0025	W900KK-10-C-0025	(5,296)	-
	12.RD	934	-	US ARMY PEO STRI / ACQUISITION CENTER	W900KK-09-C-0038	W900KK-09-C-0038	934	-
	12.431	712	-	US ARMY RDECOM ACQ CTR	W911NF-10-1-0268	W911NF-10-1-0268	712	-
	12.RD	20	-	US ARMY RDECOM ACQ CTR	W911NF-12-C-0091	W911NF-12-C-0091	20	-
	12.RD	147,736	-	US ARMY RDECOM ACQ CTR	W911NF-14-C-0107	W911NF-14-C-0107	147,736	82,820
	12.RD	836,436	-	US ARMY RDECOM CONT CTR - ADELPHI	W56KGU-14-C-0035	W56KGU-14-C-0035	836,436	-
	12.420	126,965	-	USA MEDICAL RESEARCH ACQUISITION ACTVTY	W81XWH-10-1-0785	W81XWH-10-1-0785	126,965	-
	12.420	(52)	-	USA MEDICAL RESEARCH ACQUISITION ACTVTY	W81XWH-11-4-0827	W81XWH-11-4-0827	(52)	-
	12.RD	-	(267)	WinTec Arrowmaker	ARL-DP.001/ ARL-DP.002	W91CRB-09-C-0126	(267)	-
	12.RD	(1)	-	MISSILE COMMAND	DAAH01-99-C-R246	DAAH01-99-C-R246	(1)	-
	12.RD	(31,341)	-	MISSILE COMMAND	W31P4Q-05-C-R201	W31P4Q-05-C-R201	(31,341)	-
	12.RD	-	(4)	L-3 COMMUNICATIONS CORPORATION	SN1752	DAAE20-03-D-0150/0002	(4)	-
	12.RD	-	(331)	STARA Technologies, Inc.	1039-017-1	W9	(331)	-
	12.RD	-	(240)	SUNY AT BINGHAMTON	SUBCONTRACT NO. 240-6762A	DAAD17-00-C-0149	(240)	-
Subtotal Department of the Army		**10,072,035**	**19,027,803**				**29,099,838**	**2,534,624**

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The Charles Stark Draper Laboratory, Inc.
Supplemental Schedule of Expenditures of Federal Awards
July 1, 2016

Federal Grantor/Pass-Through Program or Cluster Title	CFDA Number	Direct	Pass-through	Pass Through Entity	Pass-Through Entity Identifying Number	Primary Awarding Identifying Number	Total	Passed to Sub-Recipients
Department of the Navy	12.RD	-	(50)	ASSETT, INC.	200810	N00014-07-M-0307	(50)	-
	12.RD	-	12	ASSETT, INC.	2011-006-001	N00024-10-C-6259	12	-
	12.RD	-	0	HONEYWELL INC - LAS CRUCES NM	4204479844	N66001-12-C-4178	0	-
	12.RD	-	553	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	100921	N00024-03-D-6606	553	-
	12.RD	-	(1,184)	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	101961	N00024-03-D-6606	(1,184)	-
	12.RD	-	36,109	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	131967	N00024-13-D-6400	36,109	-
	12.RD	-	2,805	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	119282	N00024-13-D-6400	2,805	-
	12.RD	-	11	KAZAK COMPOSITES INCORPORATED	P.O. KCI-3250	N00014-05-M-0256	11	-
	12.RD	-	(4,236)	LOCKHEED MARTIN - MITCHEL FIELD	4100161409	N00030-10-C-0018	(4,236)	-
	12.RD	-	619,562	LOCKHEED MARTIN - MITCHEL FIELD	4101776484	N00030-10-C-0015	619,562	-
	12.RD	-	232,368	LOCKHEED MARTIN - MITCHEL FIELD	4101910803	N00030-13-G-0045	232,368	173,922
	12.RD	-	4,371,801	LOCKHEED MARTIN - MITCHEL FIELD	4102094586	N00030-15-C-0045	4,371,801	-
	12.RD	-	479,417	LOCKHEED MARTIN - MITCHEL FIELD	4102246492	N00030-14-C-0002	479,417	-
	12.RD	-	498,446	LOCKHEED MARTIN - MITCHEL FIELD	4102383581	N00030-16-C-0002	498,446	-
	12.RD	-	1,010,420	LOCKHEED MARTIN - MITCHEL FIELD	4102396825	N00030-16-C-0045	1,010,420	-
	12.RD	-	1,408	LOCKHEED MARTIN - MOORESTOWN	Letter Auth 1 June 2012	N00024-11-C-5106	1,408	-
	12.RD	1,332	-	NAVAL SURFACE WARFARE CENTER CARDEROCK	N00167-06-D-0001	N00167-06-D-0001	1,332	-
	12.RD	797,728	-	NAVAL SURFACE WARFARE CENTER CARDEROCK	N00167-13-D-0008	N00167-13-D-0008	797,728	-
	12.RD	546,746	-	NAVAL UNDERSEA WARFARE CENTER NEWPORT	N66604-10-D-0215	N66604-10-D-0215	546,746	29,597
	12.RD	-	46	NORTHROP GRUMMAN ELECTRONIC SYSTEMS	NG P.O. 8140000284	N00014-06-D-0055	46	-
	12.RD	1,576	-	OFFICE OF NAVAL RESEARCH	N00014-06-D-0171	N00014-06-D-0171	1,576	-
	12.RD	358	-	OFFICE OF NAVAL RESEARCH	N00014-12-C-0053	N00014-12-C-0053	358	-
	12.RD	162,830	-	OFFICE OF NAVAL RESEARCH	N00014-13-C-0103	N00014-13-C-0103	162,830	50,870
	12.RD	319,116	-	OFFICE OF NAVAL RESEARCH	N00014-14-C-0174	N00014-14-C-0174	319,116	34,081
	12.RD	127,288	-	OFFICE OF NAVAL RESEARCH	N00014-15-C-0038	N00014-15-C-0038	127,288	-
	12.RD	(14)	-	OFFICE OF NAVAL RESEARCH	N00014-03-C-0182	N00014-03-C-0182	(14)	-
	12.RD	113,177	-	OFFICE OF NAVAL RESEARCH	N00014-16-C-3014	N00014-16-C-3014	113,177	-
	12.RD	-	79,757	SCIENCE APPLICATIONS INTERNATIONAL CORP	P010204259	N00178-04-D-4119	79,757	-
	12.RD	-	(123)	SCIENTIFIC SYSTEMS COMPANY INC	P.O. NO. 1278	N00014-99-C-0428	(123)	-
	12.RD	(2,224)	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-11-C-4101	N66001-11-C-4101	(2,224)	-
	12.RD	78,738	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-12-C-4033	N66001-12-C-4033	78,738	-
	12.RD	593,452	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-13-C-4011	N66001-13-C-4011	593,452	51,204
	12.RD	257,059	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-15-C-4006	N66001-15-C-4006	257,059	108,187
	12.RD	15,537	-	STRATEGIC SYSTEMS PROGRAMS	N00030-05-C-0007	N00030-05-C-0007	15,537	15,537
	12.RD	6,966	-	STRATEGIC SYSTEMS PROGRAMS	N00030-06-C-0003	N00030-06-C-0003	6,966	7,516
	12.RD	6,367	-	STRATEGIC SYSTEMS PROGRAMS	N00030-07-C-0001	N00030-07-C-0001	6,367	6,367
	12.RD	2,431,014	-	STRATEGIC SYSTEMS PROGRAMS	N00030-08-C-0010	N00030-08-C-0010	2,431,014	248,304
	12.RD	363,090	-	STRATEGIC SYSTEMS PROGRAMS	N00030-09-C-0008	N00030-09-C-0008	363,090	162,838
	12.RD	2,037,793	-	STRATEGIC SYSTEMS PROGRAMS	N00030-09-C-0011	N00030-09-C-0011	2,037,793	1,302,609
	12.RD	1,801,853	-	STRATEGIC SYSTEMS PROGRAMS	N00030-10-C-0015	N00030-10-C-0015	1,801,853	534,481
	12.RD	4,705,949	-	STRATEGIC SYSTEMS PROGRAMS	N00030-11-C-0005	N00030-11-C-0005	4,705,949	1,036,656
	12.RD	1,846,063	-	STRATEGIC SYSTEMS PROGRAMS	N00030-11-C-0014	N00030-11-C-0014	1,846,063	1,789,471
	12.RD	12,033,689	-	STRATEGIC SYSTEMS PROGRAMS	N00030-12-C-0005	N00030-12-C-0005	12,033,689	5,872,230
	12.RD	39,765,296	-	STRATEGIC SYSTEMS PROGRAMS	N00030-13-C-0005	N00030-13-C-0005	39,765,296	7,450,269
	12.RD	22,670,164	-	STRATEGIC SYSTEMS PROGRAMS	N00030-13-C-0007	N00030-13-C-0007	22,670,164	13,381,469
	12.RD	48,847,141	-	STRATEGIC SYSTEMS PROGRAMS	N00030-14-C-0001	N00030-14-C-0001	48,847,141	44,301,425
	12.RD	20,166,019	-	STRATEGIC SYSTEMS PROGRAMS	N00030-14-C-0054	N00030-14-C-0054	20,166,019	7,548,616
	12.RD	17,398,164	-	STRATEGIC SYSTEMS PROGRAMS	N00030-14-G-0050	N00030-14-G-0050	17,398,164	2,885,073
	12.RD	25,318,453	-	STRATEGIC SYSTEMS PROGRAMS	N00030-15-C-0003	N00030-15-C-0003	25,318,453	23,899,312
	12.RD	73,867	-	STRATEGIC SYSTEMS PROGRAMS	N00030-15-PA-0001	N00030-15-PA-0001	73,867	-
	12.RD	129	-	STRATEGIC SYSTEMS PROGRAMS	N00030-04-C-0003	N00030-04-C-0003	129	129
	12.RD	(294)	-	STRATEGIC SYSTEMS PROGRAMS	N00030-04-C-0005	N00030-04-C-0005	(294)	-
	12.RD	(0)	-	STRATEGIC SYSTEMS PROGRAMS	N00030-04-C-0007	N00030-04-C-0007	(0)	-
	12.RD	(38,492)	-	STRATEGIC SYSTEMS PROGRAMS	N00030-06-C-0002	N00030-06-C-0002	(38,492)	(38,492)
	12.RD	82,459,676	-	STRATEGIC SYSTEMS PROGRAMS	N00030-16-C-0014	N00030-16-C-0014	82,459,676	16,711,922
	12.RD	280,588	-	STRATEGIC SYSTEMS PROGRAMS	N00030-16-PA-0001	N00030-16-PA-0001	280,588	-
	12.RD	(1,230)	-	STRATEGIC SYSTEMS PROGRAMS	N00030-98-C-0004	N00030-98-C-0004	(1,230)	-
	12.RD	-	775,721	SYSTEMS PLANNING AND ANALYSIS, INC.	SPA-SC-2211-15-0001	N00030-14-C-0021	775,721	-
	12.RD	-	2,292	THE PENNSYLVANIA STATE UNIVERSITY	LS12-23/S13-02	N00024-12-D-6402-0062	2,292	-
	12.RD	-	6,041	TRITON SYSTEMS INC	TSI-2365-10-81564	N00024-10-C-4129	6,041	-
	12.RD	716,805	-	NAVAL UNDERSEA WARFARE CENTER KEYPORT	N00253-15-C-0004	N00253-15-C-0004	716,805	291,169
	12.RD	-	(20,313)	BOOZ ALLEN & HAMILTON	100556SB0D	N00178-04-D-4024	(20,313)	-
	12.RD	-	667	LOCKHEED MARTIN - ARCHIBALD	3527-P-66202	NOT ON FILE	667	-
	12.RD	-	7	STANFORD UNIVERSITY	PY 28920B	N66001-03-1-8942	7	-
	12.RD	-	459	SYSENSE INC	Subcontract V1.6	N0014-99C-C-0324	459	-
	12.RD	-	0	Neany, Inc.	NICA-DRP-10-0037	N68335-10-C-0395	0	-
	12.RD	-	115	Neany, Inc.	NICA-DRP-10-0038	N68335-11-C-0261	115	-
	12.30	394	-	FLEET INDUSTRIAL SUPPLY CENTER SAN DIEGO	N00244-11-1-0012	N00244-11-1-0012	394	-
	12.RD	-	344	MILLI SENSOR SYSTEMS & ACTATORS INC	PURCHASE ORDER NO. 298203	N00178-11-C-1014	344	-
	12.RD	20,556	-	NAVAL SURFACE WARFARE CENTER DAHLGREN	N00178-16-D-0001	N00178-16-D-0001	20,556	-
	12.RD	(16)	-	JOINT BATTLE CENTER	N62688-02-P-0061	N62688-02-P-0061	(16)	-
	12.RD	-	319	LOCKHEED MARTIN - ORLANDO	88MMYX048	N00024-02-C-2302	319	-
Subtotal Department of the Navy		**285,922,701**	**8,092,774**				**294,015,475**	**127,854,763**

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The Charles Stark Draper Laboratory, Inc.
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Federal Grantor/Pass-Through Program or Cluster Title	CFDA Number	Direct	Pass-through	Pass Through Entity	Pass-Through Entity Identifying Number	Primary Awarding Identifying Number	Total	Passed to Sub-Recipients
Defense Advanced Research Projects Agency	12.RD	901,187	-	AIR FORCE RESEARCH LABORATORY - ROME NY	FA8750-15-C-0088	FA8750-15-C-0088	901,187	224,367
	12.RD	587,621	-	Army Contracting Command - Redstone	W31P4Q-15-C-0002	W31P4Q-15-C-0002	587,621	173,547
	12.RD	-	40	Case Western University	RES506893	N66001-12-C-4173	40	-
	12.910	633	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	N66001-11-1-4191	N66001-11-1-4191	633	-
	12.RD	(1,288)	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	DARPA IPA (D. Urban)	DARPA IPA (D. Urban)	(1,288)	-
	12.RD	(1,641)	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-11-C-0045	HR0011-11-C-0045	(1,641)	-
	12.RD	(957)	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-11-C-0078	HR0011-11-C-0078	(957)	-
	12.RD	129,120	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-14-C-0115	HR0011-14-C-0115	129,120	85,889
	12.RD	2,302,251	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-15-C-0009	HR0011-15-C-0009	2,302,251	174,750
	12.RD	275,885	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	IPA	IPA	275,885	-
	12.RD	(913)	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	DARPA IPA (D. Neyland)	DARPA IPA (D. Neyland)	(913)	-
	12.RD	1,296,630	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-15-C-0110	HR0011-15-C-0110	1,296,630	40,649
	12.RD	1,616,633	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-15-C-0138	HR0011-15-C-0138	1,616,633	267,472
	12.RD	167,544	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	#233	#233	167,544	-
	12.RD	1,144,681	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-16-C-0036	HR0011-16-C-0036	1,144,681	-
	12.RD	62,623	-	DEFENSE ADVANCE RESEARCH PROJECTS AGENCY	HR0011-16-C-0100	R0011-16-C-0100	62,623	-
	12.RD	-	3,218	HONEYWELL INTERNATIONAL GOLDEN VALLEY MN	4204479844	N66001-12-C-4178	3,218	-
	12.RD	-	(10)	LOCKHEED MARTIN - SUNNYVALE	DW 241340	W911W6-04-C-0053	(10)	-
	12.RD	-	(1,261)	MICROSEMI FREQUENCY AND TIME CORPORATION	PK60131BV	N66001-09-C-2057	(1,261)	-
	12.RD	-	354,750	NovaWurks Inc.	0023-SC13-001	HR0011-14-C-0023	354,750	-
	12.RD	-	240,930	RAYTHEON - TUSCON	PO 4201126378	HR0011-15-C-0081	240,930	-
	12.RD	25,000	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-11-C-4187	N66001-11-C-4187	25,000	26,255
	12.RD	2,900,649	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-15-C-4019	N66001-15-C-4019	2,900,649	25,000
	12.RD	306,220	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-15-C-4029	N66001-15-C-4029	306,220	-
	12.RD	248,670	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-16-C-4020	N66001-16-C-4020	248,670	-
	12.RD	706,211	-	SPAWAR SYSTEMS CENTER SAN DIEGO	N66001-16-C-4002	N66001-16-C-4002	706,211	320,000
	12.RD	-	48	TELEDYNE SCIENTIFIC & IMAGING, LLC	B9F535954	HR0011-09-C-0016	48	-
	12.RD	-	22,703	UNIVERSITY OF MASSACHUSETTS WORCESTER	6143809/6135000/RFS2012018	HR0011-11-C-0095	22,703	20,409
	12.RD	722,660	-	US ARMY RDECOM ACQ CTR	W911NF-15-C-0042	W911NF-15-C-0042	722,660	-
	12.RD	185,353	-	US ARMY RDECOM ACQ CTR	W911NF-16-C-0006	W911NF-16-C-0006	185,353	52,446
	12.RD	-	451	Virgin Galactic, LLC	Draper 001	HR0011-12-9-0008	451	-
	12.RD	2,825,641	-	WRIGHT LABORATORY	FA8650-15-C-7532	FA8650-15-C-7532	2,825,641	1,054,207
	12.RD	-	4	SYSTEM PLANNING CORPORATION	SPC-DRAPER-01-D-0003	MDA972-01-D-0003	4	-
	12.RD	-	(31)	LOCKHEED MARTIN - ARCHIBALD	L/M PO 5231-P-66730	N0019-06-P5-AR016	(31)	-
Subtotal Defense Advanced Research Projects Agency		**16,400,414**	**620,844**				**17,021,257**	**2,464,992**
Intelligence Advanced Research Projects Activity	99.UNKNOWN	81,743	-	IARPA R&D CONTRACTS	2014-14071000012	2014-14071000012	81,743	76,395
	99.UNKNOWN	-	60,006	Next Century Corporation	16040001	2016-16041100002	60,006	-
Subtotal Intelligence Advanced Research Projects Activity		**81,743**	**60,006**				**141,748**	**76,395**
Missile Defense Agency	12.RD	-	745,400	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	121615	HQ0147-12-D-0004	745,400	-
	12.RD	-	2,015,026	LINCOLN LABORATORY	7000299112	FA8721-05-C-0002	2,015,026	-
	12.RD	-	18	The University of Alabama in Huntsville	2013-124	HQ147-12-C-6022	18	-
Subtotal Missile Defense Agency		**-**	**2,760,445**				**2,760,445**	**-**
Maryland Procurement Office	12.RD	90	-	MARYLAND PROCUREMENT OFFICE	H98230-10-C-1565	H98230-10-C-1565	90	-
Subtotal Maryland Procurement Office		**90**	**-**				**90**	**-**

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Other Government (DoD)	12.RD	-	21	BATTELLE	US001-0000396394	H92222-XX-C-XXXX	21	-
	12.351	40,866	-	Defense Threat Reduction Agency	HDTRA1-11-1-0012	HDTRA1-11-1-0012	40,866	38,716
	12.RD	263,510	-	Defense Threat Reduction Agency	HDTRA1-12-C-0061	HDTRA1-12-C-0061	263,510	31,184
	12.RD	428,112	-	Defense Threat Reduction Agency	HDTRA1-13-C-0019	HDTRA1-13-C-0019	428,112	14,049
	12.RD	710,513	-	Defense Threat Reduction Agency	HDTRA1-16-C-0007	HDTRA1-16-C-0007	710,513	-
	12.RD	-	109,344	DIGITAL INFUZION	F-BAA-Analytics-3322014-03-Dra	HDTRA1-15-C-0003	109,344	-
	12.RD	144,750	-	DIGITAL INFUZION	Subk_F-BAA-OneHealth-2102015-0	Subk_F-BAA-OneHealth-2102015-0	144,750	-
	12.RD	(857)	-	DoD MODELING SIMULATION COORDINATION OFC	Frank Mullen IPA	N/A	(857)	-
	12.300	-	82	HARVARD UNIVERSITY	1.23745E+12	N00014-12-1-0451	82	-
	12.RD	(1,234)	-	HQ USSOCOM SORDAC-K	H92222-12-C-0010	H92222-12-C-0010	(1,234)	-
	12.RD	629,251	-	HQ USSOCOM SORDAC-K	H92222-12-C-0011	H92222-12-C-0011	629,251	-
	12.RD	896,948	-	HQ USSOCOM SORDAC-K	H92222-12-C-0054	H92222-12-C-0054	896,948	-
	12.RD	200,728	-	HQ USSOCOM SORDAC-K	H92222-14-C-0035	H92222-14-C-0035	200,728	-
	12.RD	433,638	-	HQ USSOCOM SORDAC-K	H92222-15-C-0037	H92222-15-C-0037	433,638	35,735
	12.RD	(275)	-	HQ USSOCOM SORDAC-K	H92222-11-C-0007	H92222-11-C-0007	(275)	-
	12.RD	-	(873)	LEIDOS, INC.	P010160369	HDTRA1-14-D-0008-0003	(873)	-
	12.RD	-	6,521,167	LEIDOS, INC.	P010166674	HDTRA1-14-D0008 DO 9	6,521,167	-
	12.RD	-	87,614	MRIGlobal	656-110903-1	HDTRA1-15-C-0013	87,614	-
	12.RD	(249)	-	Office of Naval Research - Global	N/A	N/A	(249)	-
	12.RD	-	857,110	ProActive Technologies, Inc.	MSA-PAT-2015001	W900KK-14-D-0001	857,110	100,000
	12.RD	-	(137)	SOUTHWEST RESEARCH INSTITUTE	B99012CDM	N47156-09-C-4582	(137)	-
	12.RD	380,652	-	STRATEGIC SYSTEMS PROGRAMS	N00030-14-G-0050	N00030-14-G-0050	380,652	-
	12.RD	-	16	THE JOHNS HOPKINS UNIVERSITY	SUBCONTRACT NO. 868394	NMA501-03-C-0003	16	-
	12.RD	-	425	NORTHROP GRUMMAN OCEANIC SYSTEMS	P.O. NO. 8140000243	H94003-04-D-0004	425	-
Subtotal Other Government (DoD)		**4,126,353**	**7,574,769**				**11,701,122**	**219,683**
Other Gov DoD	12.RD	-	26,892	ALION SCIENCE & TECH	SUB1138204-001	HDTRA1-14-D-0002 DO 0005	26,892	-
	12.RD	-	274,399	BATTELLE	US001-601537-1	UML-2012-BATT-001	274,399	-
	12.617	-	120,907	State of Connecticut	15ECD0002PS	HQ00051410049	120,907	-
Subtotal Other Gov DoD		**-**	**422,198**				**422,198**	**-**
Total Department of Defense		**331,195,662**	**42,329,306**				**373,524,968**	**136,006,606**
Department of Commerce	11.RD	1,493	-	NATIONAL INST OF STANDARDS AND TECHNOLOG	70NANB9H9201	70NANB9H9201	1,493	-
	11.RD	119,280	-	US DEPARTMENT OF COMMERCE	IPA	IPA	119,280	-
	11.RD	49,991	-	US DEPARTMENT OF COMMERCE	IPA Agreement	IPA Agreement	49,991	-
Total Department of Commerce		**170,763**	**-**				**170,763**	**-**
Department of the Interior	15.RD	(4,740)	-	DEPT OF INTERIOR NATIONAL BUSINESS CTR	D11PC20058	D11PC20058	(4,740)	-
	15.RD	4,265	-	Department of Interior/Nat'l Bus Ctr	D11PC20065	D11PC20065	4,265	7,426
Total Department of the Interior		**(475)**	**-**				**(475)**	**7,426**
Department of Transportation	20.RD	-	202	KAMAN AEROSPACE CORPORATION	310941R	DOTC-11-01-INIT068	202	-
Total Department of Transportation		**-**	**202**				**202**	**-**

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National Air and Space Administration	43.RD	-	294,998	Analytical Mechanics Associates, Inc.	1601-TEAMS2-DRA	NNL12AA09C	294,998	-
	43.RD	-	(69)	AURORA FLIGHT SCIENCES CORPORATION	AFS10-0116	N/A	(69)	-
	43.RD	-	781	AURORA FLIGHT SCIENCES CORPORATION	GA-12452	NAS15-10000	781	-
	43.RD	-	1,657	BOSTON UNIVERSITY	P.O. NO. GC 169366 NGA	GRANT NAG5-10801	1,657	-
	43.RD	-	25,087	DEEP SPACE SYSTEMS INC.	LMIDIQ-013	NNJ06TA25C	25,087	-
	43.007	15	-	GODDARD SPACE FLIGHT CENTER	NNX11AR25G	NNX11AR25G	15	-
	43.009	60	-	GODDARD SPACE FLIGHT CENTER	NNX12AQ58G	NNX12AQ58G	60	-
	43.RD	-	11,733	JACOBS TECHNOLOGY INC	ESSSA 040	NNM12AA41C	11,733	-
	43.RD	-	7,081	JACOBS TECHNOLOGY INC	SVT05-011	NNM05AB50C	7,081	-
	43.RD	89	-	JET PROPULSION LABORATORY	1505917	1505917	89	-
	43.001	-	9,933	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	117092	NNX13AM53G	9,933	-
	43.RD	3,044,768	-	JOHNSON SPACE CENTER	NNJ11HA31C	NNJ11HA31C	3,044,768	5,200
	43.RD	1,097,276	-	JOHNSON SPACE CENTER	NNJ16HK08B	NNJ16HK08B	1,097,276	-
	43.RD	-	4,060	LOCKHEED MARTIN - DENVER	8100000923	NNJ06TA25C	4,060	-
	43.001	(351)	-	NASA Shared Services Center	NNX11AO92G	NNX11AO92G	(351)	-
	43.001	(3,969)	-	NASA Shared Services Center	NNX12AH81G	NNX12AH81G	(3,969)	-
	43.007	10,834	-	NASA Shared Services Center	NNX14AM90G	NNX14AM90G	10,834	6,987
	43.RD	18	-	NASA Shared Services Center	NNA12AB11C	NNA12AB11C	18	-
	43.RD	-	-	NASA Shared Services Center	NNA13AC79P	NNA13AC79P	-	-
	43.RD	2,599	-	NASA Shared Services Center	NNM14AA02A	NNM14AA02A	2,599	-
	43.003	131,283	-	NASA Shared Services Center	NNX15AP28G	NNX15AP28G	131,283	-
	43.002	-	175,517	NATIONAL SPACE BIOMEDICAL RESEARCH INST	HFP03401	NCC 9-58 11	175,517	-
	43.RD	-	7,192	ORBITAL SCIENCES CORPORATION	3020802014	NNJ08TA32S	7,192	-
	43.RD	-	-	ORBITAL SCIENCES CORPORATION	SUBCONTRACT LSG-0108-03	NAS8-01100	-	-
	43.RD	-	1,418,984	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	Letter Subcontract SV5-85006	JPL 975569 via NASA NNN06AA01C	1,418,984	-
	43.RD	-	(2)	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	09-PO-400-0000177007	NASA	(2)	-
	43.RD	-	663,725	SOUTHWEST RESEARCH INSTITUTE	F99073DRC	NNL13AQ00C	663,725	-
	43.001	134	-	STENNIS SPACE CENTER	NNX10AJ84G	NNX10AJ84G	134	-
	43.RD	-	(1,980)	Wyle Laboratories, Inc.	T72063	NAS9-902078	(1,980)	-
	43.RD	-	-	AMES RESEARCH CENTER	NNA10DG32C	NNA10DG32C	-	-
	43.RD	107,074	-	AMES RESEARCH CENTER	NNA15BB07B	NNA15BB07B	107,074	-
Total National Air and Space Administration		**4,389,831**	**2,618,698**				**7,008,529**	**12,187**
National Science Foundation	47.070	-	1	CHILDRENS HOSPITAL BOSTON	322644	CNS-0932015	1	1
	43.RD	-	76	JET PROPULSION LABORATORY	1310538	NAS7-03001	76	0
	47.050	12,446	-	THE NATIONAL SCIENCE FOUNDATION	AGS-1242889	AGS-1242889	12,446	0
Total National Science Foundation		**12,446**	**77**				**12,523**	**1**
Department of Energy	81.RD	-	410,442	BATTELLE ENERGY ALLIANCE, LLC	152440	DE-AC07-05ID14517	410,442	-
	81.089	-	9	BROWN UNIVERSITY	402	DE-FE0004498	9	-
	81.049	-	(29)	BROWN UNIVERSITY	355	DE-SC0001556	(29)	-
	81.089	-	(23)	Case Western University	RES506578	DE-FE0007270	(23)	-
	81.RD	-	15	SANDIA NATIONAL LABORATORIES	1195872	DE-AC04-94AL85000	15	-
	81.RD	-	22	SANDIA NATIONAL LABORATORIES	1396540	DE-AC04-94AL85000	22	-
	81.RD	-	28,321	Radiation Monitoring Devices, Inc.	C16-03	DE-SC0011891	28,321	-
Total Department of Energy		**-**	**438,756**				**438,756**	**-**

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Department of Health and Human Services	93.846	-	(148)	CYTEX THERAPEUTICS INC	N/A	2R42AR055414-02	(148)	-
	93.396	-	(1,423)	MASSACHUSETTS GENERAL HOSPITAL	217050	1UH2AR059655-01	(1,423)	-
	93.310	-	(3,915)	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710002660	R01EB10246	(3,915)	-
	93.396	-	76,365	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710003425	1-R33-CA174550-01	76,365	-
	93.837	-	180,377	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710002990	R01 HL107503	180,377	-
	93.173	425,146	-	NATIONAL INSTITUTES OF HEALTH	1R01DC1309-01	1R01DC1309-01	425,146	96,124
	93.173	282,241	-	NATIONAL INSTITUTES OF HEALTH	R01 DC006848-01A2	R01 DC006848-01A2	282,241	56,512
	93.286	4	-	NATIONAL INSTITUTES OF HEALTH	1 RO1 EB006161-01A2	1 RO1 EB006161-01A2	4	-
	93.389	(359)	-	NATIONAL INSTITUTES OF HEALTH	R21RR031253/R21GM1034535	R21RR031253	(359)	-
	93.396	580	-	NATIONAL INSTITUTES OF HEALTH	R21CA131884-01A2	R21CA131884-01A2	580	-
	93.837	3,968	-	NATIONAL INSTITUTES OF HEALTH	R21 HL102685	R21 HL102685	3,968	-
	93.837	(2,068)	-	NATIONAL INSTITUTES OF HEALTH	R21HL106585	R21HL106585	(2,068)	-
	93.853	-	-	NATIONAL INSTITUTES OF HEALTH	1R21NS077285-01A1	1R21NS077285-01A1	-	1,758
	93.855	(277)	-	NATIONAL INSTITUTES OF HEALTH	1R21AI085454-01	1R21AI085454-01	(277)	-
	93.172	(8,403)	-	NATIONAL INSTITUTES OF HEALTH	R01HG003828-04	R01HG003828-04	(8,403)	-
	93.867	135,938	-	NATIONAL INSTITUTES OF HEALTH	1R21EY026360-01	1R21EY026360-01	135,938	-
	93.113	-	145,046	NORTHWESTERN UNIVERSITY	60037699 TCSDLI/PO PUR0893162	4UH3TR001207-03	145,046	-
	93.846	-	(6)	Partners HealthCare Research Management	221448	UH3AR059655-03	(6)	-
	93.396	-	8	THE BRIGHAM AND WOMEN'S HOSPITAL INC	103577	5R01HL092836	8	-
	93.837	-	84,407	THE BRIGHAM AND WOMEN'S HOSPITAL INC	Subaward No. 112483	U54HL119145-02	84,407	-
Total Department of Health and Human Services		**836,769**	**480,711**				**1,317,480**	**154,395**
Department of Homeland Security		46,849	-	DEPARTMENT OF HOMELAND SECURITY	HSHQDC-10-C-00012	HSHQDC-10-C-00012	46,849	-
		1,734,762	-	DEPARTMENT OF HOMELAND SECURITY	HSHQDC-15-C-B0047	HSHQDC-15-C-B0047	1,734,762	446,566
Total Department of Homeland Security		**1,781,611**	**-**				**1,781,611**	**446,566**
Other Contracts	99.UNKNOWN	-	4,482,558	Ball Aerospace And Technologies Corp.	14JKK00012	HR0011-15C-0021	4,482,558	20,777
	99.UNKNOWN	(171)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*0334116*000	2009*0334116*000	(171)	-
	99.UNKNOWN	5,663	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*0732828*000	2009*0732828*000	5,663	-
	99.UNKNOWN	1,584	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*1031708*000	2009*1031708*000	1,584	-
	99.UNKNOWN	17,720	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2010*0489228*000	2010*0489228*000	17,720	-
	99.UNKNOWN	(761)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2010*0838203*000	2010*08338203*000	(761)	-
	99.UNKNOWN	(1,370)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B11-2010350G002	B11-2010350G002	(1,370)	-
	99.UNKNOWN	52,453	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B11-2011163G001	B11-2011163G001	52,453	-
	99.UNKNOWN	(14,183)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B11-2011167G007	B11-2011167G007	(14,183)	-
	99.UNKNOWN	(1,718)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B11-2011234G010	B11-2011234G010	(1,718)	-
	99.UNKNOWN	145,657	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2011343G007	B12-2011343G007	145,657	-
	99.UNKNOWN	(338)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012030G004	B12-2012030G004	(338)	-
	99.UNKNOWN	4,259,000	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012068G003	B12-2012068G003	4,259,000	167,581
	99.UNKNOWN	1,183	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012077G002	B12-2012077G002	1,183	-
	99.UNKNOWN	1,414,947	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012152G001	B12-2012152G001	1,414,947	-
	99.UNKNOWN	1,827	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012157G010-001	B12-2012157G010-001	1,827	-
	99.UNKNOWN	317	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012157G010-002	B12-2012157G010-002	317	-
	99.UNKNOWN	1,854,431	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012157G010-004	B12-2012157G010-004	1,854,431	214,500
	99.UNKNOWN	1,182	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B12-2012248G007	B12-2012248G007	1,182	-
	99.UNKNOWN	439,764	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-002	B13-201374G005-002	439,764	-
	99.UNKNOWN	2,764,767	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-003	B13-2013074G005-003	2,764,767	-
	99.UNKNOWN	233,780	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-004	B13-2013074G005-004	233,780	-
	99.UNKNOWN	1,327,229	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-005	B13-2013074G005-005	1,327,229	-
	99.UNKNOWN	548,111	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-006	B13-2013074G005-006	548,111	-
	99.UNKNOWN	771,431	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013205G001	B13-2013205G001	771,431	-
	99.UNKNOWN	560,113	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B14-2014073G005	B14-2014073G005	560,113	-
	99.UNKNOWN	65,827	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B14-2014200G001-001	B14-2014200G001-001	65,827	-
	99.UNKNOWN	113,755	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B14-2014200G001-002	B14-2014200G001-002	113,755	-
	99.UNKNOWN	707,279	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B14-2014220G002-001	B14-2014220G002-001	707,279	-
	99.UNKNOWN	239,947	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B15-2015028G003	B15-2015028G003	239,947	-
	99.UNKNOWN	260,413	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B15-2015069G005	B15-2015069G005	260,413	-
	99.UNKNOWN	1,067	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B15-2015085G003	B15-2015085G003	1,067	-
	99.UNKNOWN	1,457,703	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B15-2015166G009	B15-2015166G009	1,457,703	-

The accompanying notes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards.

The Charles Stark Draper Laboratory, Inc.
Supplemental Schedule of Expenditures of Federal Awards
July 1, 2016

Federal Grantor/Pass-Through Program or Cluster Title	CFDA Number	Direct	Pass-through	Pass Through Entity	Pass-Through Entity Identifying Number	Primary Awarding Identifying Number	Total	Passed to Sub-Recipients
Other Contracts cont'd	99.UNKNOWN	14	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2008*1166112*000	2008*1166112*000	14	-
	99.UNKNOWN	(4,024)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*0315801*000	2009*0315801*000	(4,024)	-
	99.UNKNOWN	(4)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*0598306*000	2009*0598306*000	(4)	-
	99.UNKNOWN	(70)	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*1046117*000	2009*1046117*000	(70)	-
	99.UNKNOWN	1,345	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	2009*1116624*000	2009*1116624*000	1,345	-
	99.UNKNOWN	747,211	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-007	B13-2013074G005-007	747,211	-
	99.UNKNOWN	2,203,990	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B15-2015190G013	B15-2015190G013	2,203,990	-
	99.UNKNOWN	1,152,299	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-008	B13-2013074G005-008	1,152,299	-
	99.UNKNOWN	38,490	-	BUDGET & FINANCE SYSTEMS ACTIVITY (BFSA)	B13-2013074G005-009	B13-2013074G005-009	38,490	-
	99.UNKNOWN	(1,077)	-	CSS CONTRACTS	2009*1068330*000	2009*1068330*000	(1,077)	-
	99.UNKNOWN	-	78,390	JOHNS HOPKINS UNIV APPLIED PHYSICS LAB	123690	14-D-0037	78,390	-
	99.UNKNOWN	-	(400)	LOCKHEED MARTIN - DENVER	Letter Contract 24440	Classified	(400)	-
	99.UNKNOWN	-	289,450	Lockheed Martin IS&GS Hanover MD	4100908079	H98230-09-C-0645	289,450	-
	99.UNKNOWN	-	313,480	Lockheed Martin IS&GS Hanover MD	4100908079	H98230-09-C0645	313,480	-
	99.UNKNOWN	-	5,143	Lockheed Martin IS&GS Hanover MD	BBMLS9506	H98230-09-C-0645	5,143	-
	99.UNKNOWN	-	32,733	n-ask	2016-02	16-C-0107	32,733	-
	99.UNKNOWN	-	(138)	Rincon Research Corporation	Subcontract 11-7165	11-C-7165	(138)	-
	99.UNKNOWN	-	1,435,167	SANDIA NATIONAL LABORATORIES	1353675	TBD	1,435,167	-
	99.UNKNOWN	-	148,784	SCIENCE APPLICATIONS INTERNATIONAL CORP	P010151053	B13-2012223G003	148,784	-
	99.UNKNOWN	4,703	-	U S GOVERNMENT	08-C-0332	08-C-0332	4,703	-
	99.UNKNOWN	(3,983)	-	U S GOVERNMENT	08-C-3134	08-C-3134	(3,983)	-
	99.UNKNOWN	(4,471)	-	U S GOVERNMENT	11-C-2676	11-C-2676	(4,471)	-
	99.UNKNOWN	-	-	U S GOVERNMENT	12-C-5462	12-C-5462	-	8,819
	99.UNKNOWN	(532)	-	U S GOVERNMENT	12-C-6153	12-C-6153	(532)	-
	99.UNKNOWN	(3,430)	-	U S GOVERNMENT	12-C-6762	12-C-6762	(3,430)	-
	99.UNKNOWN	(6,364)	-	U S GOVERNMENT	12-C-8463	12-C-8463	(6,364)	-
	99.UNKNOWN	6,258,172	-	U S GOVERNMENT	13-C-0067	13-C-0067	6,258,172	238,179
	99.UNKNOWN	18,105	-	U S GOVERNMENT	13-C-0551	13-C-0551	18,105	-
	99.UNKNOWN	56,297	-	U S GOVERNMENT	H-901-00	H-901-00	56,297	-
	99.UNKNOWN	400,823	-	U S GOVERNMENT	H-901-004	H-901-004	400,823	-
	99.UNKNOWN	92,943	-	U S GOVERNMENT	16-G-H001-001	16-G-H001-01	92,943	-
	99.UNKNOWN	1,480,077	-	UUV AA SPONSOR	13-C-5168	12-C-5168	1,480,077	-
	99.UNKNOWN	53,637	-	UUV AA SPONSOR	15-C-5008	15-C-5008	53,637	49,997
	99.UNKNOWN	23,254	-	UUV AA SPONSOR	16-C-5005	16-C-5008	23,254	-
	99.UNKNOWN	-	(140)	LOCKHEED MARTIN - STERLING	LMCO Subcontract RRMJSA901	LM IS&GS SAP Prime 7328	(140)	-
	99.UNKNOWN	-	105,218	L-3 Advanced Programs	2014-SC-4-0180	NRO000-14-C-0090	105,218	51,614
	99.UNKNOWN	20,602	-	Aurora Semiconductor, LLC	33774	33774	20,602	-
Total Other Contracts		**29,756,614**	**6,890,245**				**36,646,860**	**751,466**
Total R&D Cluster Expenditures		**$ 368,143,222**	**$ 52,757,995**				**$ 420,901,217**	**$ 137,378,647**
Total Expenditures of Federal Awards		**$ 368,143,222**	**$ 52,757,995**				**$ 420,901,217**	**$ 137,378,647**

The accompanying notes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards.

The Charles Stark Draper Laboratory, Inc.
Notes to Supplemental Schedule of Federal Expenditures of Federal Awards
July 1, 2016

1. Basis of Presentation

The accompanying Supplemental Schedule of Expenditures of Federal Awards (the "Schedule") has been prepared in accordance with Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). The purpose of the Schedule is to present a summary of The Charles Stark Draper Laboratory, Inc.'s (“Draper") research program for the year ended July 1, 2016, which have been funded by the U.S. Government ("federal awards"). For purposes of the Schedule, federal awards include all federal contracts entered into directly between Draper and the federal government and also between Draper and other primary recipients of federal government funds (pass-through). Because the Schedule presents only the federal award activity of Draper, the Schedule is not intended to, and does not, present either the financial position or changes in net assets of Draper.

The negative expenditure amounts for some of the pass-through awards represent changes made to costs incurred and/or allocated to those awards in the normal course of business.

2. Indirect Costs

Draper recovers indirect costs under contracts and grants at provisional rates negotiated between the cognizant agency (Defense Contract Management Agency ("DCMA")) and Draper. Separate cost rates are negotiated for employee benefits, overhead-off-site and overhead-onsite, contract personnel overhead, plant overhead, and cost of money. Final costs for each fiscal year are determined using Defense Contract Audit Agency (the "DCAA") annual audits and through negotiations with the DCMA Administrative Contract Officer. Draper applies its predetermined facilities and administrative rate when charging indirect costs to federal awards rather than the 10% de minimis cost rate as described in Section 200.414 of the Uniform Guidance. A schedule of cost rates is included in DCAA Audit Report No. 1151-2016T10110001 Independent Auditor’s Report of Charles Stark Draper Laboratory's Compliance with Requirements Applicable to Major Program and on Internal Control over Compliance in Accordance with 2 CFR Part 200, Fiscal Year Ended July 1, 2016 Report 3a.

Report of Independent Auditors on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Directors of
The Charles Stark Draper Laboratory, Inc.

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States the financial statements of The Charles Stark Draper Laboratory, Inc., as of and for the year ended July 1, 2016, and have issued our report thereon dated September 20, 2016.

Internal Control over Financial Reporting

In planning and performing our audit, we considered Draper's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Draper's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of Draper's internal control over financial reporting.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Draper's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

PricewaterhouseCoopers LLP

September 20, 2016

Independent Auditor's Report on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program and on Internal Control over Compliance in Accordance with OMB Uniform Guidance

To the Board of Directors of
The Charles Stark Draper Laboratory, Inc.

Report on Compliance for Each Major Federal Program

We have audited The Charles Stark Draper Laboratory, Inc.'s ("Draper") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of The Charles Stark Draper Laboratory, Inc. major federal program for the year ended July 1, 2016. The Charles Stark Draper Laboratory, Inc. major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In connection with the coordinated audit of Draper as provided for in U.S. Office of Management and Budget ("OMB") Title 2 U.S. *Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), the U.S. Defense Contract Audit Agency ("DCAA") and PricewaterhouseCoopers LLP each performed certain tasks. Responsibilities under the coordinated audit approach were assigned as follows:

1. The DCAA performed specific audit procedures over Department of Defense contracts (DoD) with respect to the following compliance requirements included in the OMB *Compliance Supplement*: activities allowed or unallowed; allowable costs/cost principles; equipment and real property management; period of availability of federal funds; and procurement, suspension and debarment. The DCAA's reports on compliance and internal control are included in the Uniform Guidance Report 3a.
2. PricewaterhouseCoopers LLP performed specific audit procedures over DoD and contracts not sponsored by the Department of Defense (non-DoD) with respect to the following compliance requirements included in the OMB *Compliance Supplement*: cash management; matching, level of effort, and earmarking; program income; reporting; subrecipient monitoring and special tests and provisions. In addition, PricewaterhouseCoopers LLP tested the internal control structure with respect to the above listed compliance requirements as they relate to the major research and development cluster program.
3. PricewaterhouseCoopers LLP also included within its scope for non-DoD contracts the following compliance requirements included in the OMB *Compliance Supplement:* activities allowed and unallowed; allowable costs/cost principles; equipment and real property management; period of availability of federal funds; and procurement, suspension and debarment. In addition, PricewaterhouseCoopers LLP tested the internal control structure with respect to the above listed compliance requirements as they related to the major research and development cluster program.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of Draper's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about Draper's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of Draper's compliance.

Opinion on Each Major Federal Program

In our opinion, Draper complied, in all material respects, with the types of compliance requirements, as described in the responsibilities section above under the coordinated audit approach, which could have a direct and material effect on each of its major federal programs for the year ended July 1, 2016.

Report on Internal Control over Compliance

Management of Draper is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered Draper's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of Draper's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

PricewaterhouseCoopers LLP

March 31, 2017

DEFENSE CONTRACT AUDIT AGENCY

Audit Report No. 1151–2016T10110001 (Revised)
Merrimack Valley Branch Office
100 Burtt Road, Suite 116
Andover, MA 01810-5920

March 29, 2017

Independent Audit Report of Charles Stark Draper Laboratory's Compliance with Requirements Applicable to its Major Program and on Internal Control Over Compliance in Accordance with 2 CFR Part 200 for Fiscal Year Ended July 1, 2016

CONTENTS Page

Audit Report No. 1151-2016T10110001 (Revised) **March 29, 2017**

EXECUTIVE SUMMARY

ABOUT CHARLES STARK DRAPER LABORATORY, INC.

Charles Stark Draper Laboratory, Inc. (CSDL), located at 555 Technology Square, Cambridge, MA, is a not-for-profit research and development laboratory which predominantly focuses on the design, development, and deployment of advanced technological solutions for the Federal government's problems in security, space exploration, healthcare, and energy. CSDL's Cage Code is 51993.

CSDL's Federal awards fall under the designation of a Research and Development (R&D) Cluster. A cluster of programs means Federal programs with different CFDA numbers that are defined as a cluster of programs because they are closely related programs that share common compliance requirements. Since all of CSDL's Federal awards fall under the R&D cluster, CSDL is considered to only have one major Federal program (R&D).

Sales are mainly sole source procurements to the U.S. Government under Cost Plus-Fixed-Fee (CPFF) type contracts. CSDL's total Federal award sales for the Fiscal Year Ended (FYE) July 1, 2016 were $420.9 million.

ABOUT THIS AUDIT

In accordance with the 2 CFR 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, the U.S. Defense Contract Audit Agency (DCAA) and PricewaterhouseCoopers LLP (PwC) performed a coordinated audit of CSDL's R&D Cluster. DCAA's audit responsibility included testing CSDL's compliance with the following compliance requirements included in the 2 CFR 200 Compliance Supplement: activities allowed or unallowed, allowable cost/cost principles, equipment and real property management, period of performance, and procurement and suspension and debarment. This included auditing CSDL's proposed direct and indirect amounts for reimbursement on federal awards contained in its FY 2016 revised final indirect rate proposal, submitted on February 16, 2017. In addition, we also tested CSDL's internal control structure with respect to the five compliance requirements listed above as they relate to CSDL's R&D Cluster. However, our audit of CSDL's R&D Cluster did not include non DoD Federal awards within the Schedule of Expenditures of Federal Awards because we do not have audit cognizance over those Federal awards (see Appendix 4, page 45).

WHAT WE FOUND

We found instances of noncompliance with Compliance Requirement B (Allowable Costs and Cost Principles). Our audit disclosed $8,706,900 of claimed costs that did not meet the requirements of DFARS 231.2015 18, Independent Research and Development and $794,965 of claimed costs that do not meet the requirements of FAR 31.205-4, Determining Allocability. In addition, we identified a deficiency in internal control over compliance that we consider to be a significant deficiency. It pertains to Draper Laboratory's lack of adequate internal control and procedures to ensure timely submission of an adequate incurred cost submission. See Exhibit B for additional details on all four audit findings.

REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM

We have audited CSDL's compliance with five of the applicable compliance requirements described in the 2016 Compliance Supplement that could have a direct and material effect on CSDL's research and development program for the year ended July 1, 2016. The compliance requirements audited by DCAA are as follows:

- Activities allowed or unallowed,
- Allowable cost/cost principles,
- Equipment and real property management,
- Period of performance, and
- Procurement and suspension and debarment

CSDL's independent public accounting firm of PricewaterhouseCoopers LLP (PwC) is responsible for auditing the remaining applicable compliance requirements.

Our audit of the Federal Research and Development cluster did not include $34,969,306 of costs associated with non DoD Federal awards within the Schedule of Expenditures of Federal Awards. CSDL's independent public accounting firm of PricewaterhouseCoopers LLP is responsible for auditing these costs. See Appendix 4, page 45, for more details relating to the Federal awards that we audited and the ones that we excluded from our audit.

We also audited CSDL's proposed direct and indirect amounts for reimbursement on federal awards contained in its revised FY 2016 final indirect rate proposal, submitted on February 16, 2017, to determine if the proposed amounts comply with the terms of federal awards pertaining to accumulating and billing incurred amounts.

Management's Responsibility

CSDL's management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs including the design, implementation, maintenance of internal control to prevent or detect and correct noncompliance due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of CSDL's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with the standards contained in Generally Accepted Government Auditing Standards (GAGAS) issued by the Comptroller General of the United States; auditing standards generally accepted in the United States of America; and 2 CFR 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Those standards and 2 CFR 200 require that we plan and perform the audit to

obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred and whether CSDL's proposed amounts materially comply with the terms of federal awards pertaining to accumulating and billing costs. An audit includes examining, on a test basis, evidence about CSDL's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. The nature, timing, extent of the procedures selected depend on our professional judgment, including an assessment of risks of material noncompliance, whether due to fraud or error, and involve examining evidence about the proposed amounts.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of CSDL's compliance with specified requirements.

Unmodified Opinion on CSDL's Compliance with the Research and Development Cluster

In our opinion, CSDL complied, in all material respects, with the types of requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended July 1, 2016.

The results of our auditing procedures disclosed instances of noncompliance which are required to be reported in accordance with 2 CFR 200 and which are described in the accompanying Schedule of Findings and Questioned Costs as items 2016-001 through 2016-003. Our audit disclosed proposed amounts that do not materially comply with the requirements of laws, regulations, contracts and grants applicable to its Research and Development program, as described below. Our opinion on the Research and Development cluster is not modified with respect to these matters.

CSDL's responses to the noncompliance findings identified in our audit are described in the accompanying Corrective Action Plan for the Current Year, Appendix 3, page 36. CSDL's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

Appendix 4, page 45, includes a Summary Schedule of Claimed Expenditures and Fee by Federal Sponsor. It does not represent the final costs by Federal sponsor as it does not reflect final indirect costs as final indirect rates still have to be negotiated by the Administrative Contracting Officer (ACO). Final amounts will be adjusted after CSDL settles their indirect rates with their ACO. CSDL's Certificate of Final Indirect Cost is provided as Appendix 1, page 33.

REPORT ON INTERNAL CONTROL

Management's Responsibility

CSDL's management is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above for the requirements of laws, regulations, contracts, and grants applicable to its Research and Development program.

Auditor's Responsibility

In planning and performing our audit of compliance, we considered CSDL's internal control over compliance for five of the compliance requirements that could have a direct and material effect on a major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing our opinion on compliance for each major federal program, and to test and report on internal control over compliance in accordance with 2 CFR 200, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of CSDL's internal control over compliance.

Results of Internal Control over Compliance

Our consideration of the internal control over compliance was for the limited purpose described above and was not designed to identify all deficiencies in the auditee's internal control that might be significant deficiencies or material weaknesses and therefore, significant deficiencies or material weaknesses may exist that were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified a deficiency in internal control over compliance, as described in the accompanying Schedule of Findings and Questioned Costs, Exhibit B, page 10, audit finding 2016-004, that we consider a significant deficiency.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis.

A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. In this section, a reasonable possibility exists when the likelihood of the event is either probable or reasonably possible as defined as follows:

- Probable. The event or events are likely to occur.

- Reasonably possible. The chance of the event or events occurring is more than remote but less than likely.
- Remote. The chance of the event or events occurring is slight.

A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement for a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

AUDITOR'S COMMENTS ON SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

We included procedures to assess the reasonableness of CSDL's Summary Schedule of Prior Audit Findings, included as Appendix 2, page 34. We concluded that CSDL adequately presented the status of its corrective action taken regarding our prior audit finding.

EXIT CONFERENCE

We provided a draft copy of the report and discussed the results of our audit with Mr. David Markuson, Principle Director of Finance, Ms Patty McLaughlin, Director of Accounting and Mr. Sean Robertson, Director of Internal Audit and Compliance, in an exit conference held on March 22, 2017. CSDL's current corrective action plan, which addresses the audit finding, is included as Appendix 3, page 36. We did not audit CSDL's corrective action plan, and accordingly, we express no opinion on it.

DCAA PERSONNEL

	Telephone No.
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RESTRICTIONS

1. The For Official Use Only (FOUO) marking placed on this audit report is not a security marking. It is a marking required by DoD Freedom of Information Act (FOIA) regulations. The marking provides notice that the report might contain information that is subject to withholding under FOIA. The FOUO marking is a notice limited to Department of Defense employees.

2. The Defense Contract Audit Agency has no objection to the auditee releasing this report at its discretion for public inspection. DCAA also has no objection to the auditee excluding Appendix 5 of this report from the filing with Federal Clearinghouse due to the proprietary nature of the information included in the appendix.

3. This report is intended solely for the information and use by federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

GOVERNMENT PARTICIPATION IN ALLOCATION BASES

Indirect Category	Government Flexibly Priced Federal Awards	FFP Federal Awards and Commercial Work	Total
General Research Overhead	85.21%	15.10%	100%
Plant Overhead	86.45%	13.70%	100%
Employee Benefits	85.15%	15.20%	100%
Contract Personnel Overhead - General Research OH	80.46%	19.54%	100%
Contract Personnel Overhead - Plant Overhead	80.46%	19.54%	100%
Direct Labor FCCM	86.30%	13.70%	100%

SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Charles Stark Draper Laboratory, Inc.
Fiscal Year Ended July 1, 2016

SECTION I: SUMMARY OF AUDITOR'S RESULTS:

A. Financial Statements:

Information pertaining to the financial statements and the report on the Schedule of Expenditures of Federal Awards can be found in the independent public accountant's audit report.

B. Federal Awards:

1. Type of auditor's report issued on compliance for major programs:

Type of Audit Opinion	
Unmodified	X
Modified	
Adverse	
Disclaimer	

2. Internal control over major programs:

	Yes	None Reported
Material weaknesses were identified.		X
Significant deficiencies identified not considered to be material weaknesses.	X	

3. Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200 Subpart F:

Yes	X
No	

4. Identification of Major Programs:

CFDA Number	Program
N/A	Research and Development Cluster

5. Dollar threshold used to distinguish between Type A and Type B programs:

$3,000,000

6. Auditee classified as a low-risk under 2 CFR 200 Subpart F:

Yes	X
No	

SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Charles Stark Draper Laboratory, Inc.
Fiscal Year Ended July 1, 2016

SECTION II: FINDINGS RELATED TO FINANCIAL STATEMENTS:

Information pertaining to the financial statements and the report on the Schedule of Expenditures of Federal Awards can be found in the independent public accountant's audit report.

SECTION III: FINDINGS RELATED TO FEDERAL AWARDS:

A. INDIRECT EXPENSES (General Overhead Rate)

FY 2016 Questioned Costs -General Overhead Rate		
Audit Finding Number	Description	Questioned Costs
2016-001.	Opportunity Investment Projects (OPPTY)	$ 5,573,042
2016-002.	Independent Research & Development (IR&D) Projects	3,133,858
2016-003.	Sembler Program	794,965
		$ 9,501,865

2016-001. Opportunity Investment Projects (OPPTY)

a. Condition:

Draper Laboratory does not have any written policies and procedures concerning Opportunity Investment Projects (OPPTY). Adequate written policies and procedures are an essential part of internal control to ensure these costs are properly reflected in Draper Laboratory's incurred cost submission.

We have questioned $5,573,042 of proposed Opportunity Investments (OPPTY) costs because Draper Laboratory did not comply with DFAR 231.205-18. The costs proposed represent IR&D costs and the costs are expressly unallowable in accordance with FAR 42.709.

During Fiscal Year 2016, Draper Laboratory modified its IR&D program to create an additional program called Opportunity Investments (OPPTY). Draper Laboratory used this program to capture costs associated with smaller-scale internal research projects and allocated these costs to the company's general overhead rate.

Classifying the small-scale IR&D projects in this way, Draper Laboratory did not follow DFARS 231.205-18 reporting requirements for uploading the IR&D projects into the Defense Technical Information Center (DTIC) system. Based on our testing, we determined that these projects represent IR&D efforts subject to the requirements of DFARS 231.205-18.

One of the main requirements for the allowability of IR&D costs is that each individual IR&D project must be entered into the DTIC system no later than three months after the end of the contractor's fiscal year in which the contractor initially incurred the cost or the cost are considered expressly unallowable. Draper Laboratory did not enter the OPPTY project costs into the DTIC system.

From employee interviews and testing of proposed IR&D projects, we performed additional testing of OPPTY projects. We evaluated the purpose and scope of twenty three OPPTY projects and performed a nomenclature review of the descriptions for rest of the projects; we found that a number of OPPTY projects matched the name/scope of IR&D projects. We requested Draper Laboratory's policies and procedures relating to its OPPTY projects in order to determine how Draper Laboratory distinguishes between OPPTY and IR&D for its internal research projects. Draper Laboratory indicated that it didn't have any such policies and procedures and provided a memorandum dated March 2, 2017 (developed after our audit request) that only documented why Draper Laboratory believed the OPPTY project costs are allowable. Adequate policies and procedures for the OPPTY program would include the approval process for setting up a project, documentation of the purpose and intent of the project, and steps for monitoring the projects. Based on our evaluation of these OPPTY projects, we determined that these projects also do not meet the DFARS 231.205-18 requirement that they be of potential interest to the Department of Defense.

A list of the OPPTY projects and their associated costs are as follows:

Opportunity Investment Projects

Project Description	Project No.	Claimed Costs
DFY16 GB Seedlings	33154	$ 551,928
DFY16 GC Opportunity/Seedlings	33221	532,185
Space Systems Opportunity Inve	32822	480,143
Defense Systems Opportunity In	32821	399,722
Columbia Maryland Opportunity	33541	363,372
DFY16 Eng Oppty - Molded Wafer	33773	316,875
Vesfet	33618	298,829
O&G MDD commerce: base	32824	264,083
DFY16 GA Opportunity/Seedling	33277	244,641
Special Ops Opportunity invest	32823	224,091
Commercial Opportunity investm	32826	182,650
Strategic Systems Opportunity	32820	161,265
Rainbow Dash Sensor Fab	34098	136,275
CAR T proof of concept	34257	133,139
Engineering Opportunity Invest	32819	120,988
Microphysiological Systems	33555	118,222
Y16 Eng Op - Vision Deep Integ	33813	101,414

RD Electronic interface & Test	34240	100,252
Secure & Assured Systems Oppor	33808	87,130
Image & Data Analytics Opportu	33807	77,304
EDNA	34338	77,253
O&G MDD commerce: add'l	33626	60,478
Autonomous Cars	33921	59,297
BioMed Solutions Opp Investment	33803	57,291
Nuclear Power	33919	49,926
Wet-AMD opportunity fund init	33211	48,334
Pathogen Monitor	34228	41,437
Organ on a Chip	34260	41,353
DFY16 Oppty - A Berlin	34002	36,813
Transport MDD	33918	28,782
Elect Util MDD	33917	28,719
Hyperloop	33920	27,764
LF Due Diligence	33215	27,146
TRANSFORM DBS - RampUp & Plan	34256	19,896
SSAAS Seedling	33441	16,988
Bose	33254	12,750
COTS ++ exploratory analytic	33440	10,858
Hollow Fiber Transfiltration	33319	9,903
DFY16 Oppty - Fault Tolerant S	34004	6,001
Ling/TDT/Ripple Commercialize	34258	5,265
DFY16 Oppty_ Human System Tech	34061	4,231
Eng Training at DFCI	34259	4,030
TDT opportunity fund initiative	33212	4,019
Total		$ 5,573,042

b. Criteria:

DFARS 231.205-18, Independent Research and Development and Bid and Proposal, specifies that costs are allowable only if they meet the following requirements:

(c) Allowability.

(iii) For major contractors, the following limitations apply:

(A) The amount of IR&D/B&P costs allowable under DoD contracts shall not exceed the lesser of—

(1) Such contracts' allocable share of total incurred IR&D/B&P costs; or

(2) The amount of incurred IR&D/B&P costs for projects having potential interest to DoD.

(B) Allowable IR&D/B&P costs are limited to those for projects that are of potential interest to DoD, including activities intended to accomplish any of the following:

(1) Enable superior performance of future U.S. weapon systems and components.

(2) Reduce acquisition costs and life-cycle costs of military systems.

(3) Strengthen the defense industrial and technology base of the United States.

(4) Enhance the industrial competitiveness of the United States.

(5) Promote the development of technologies identified as critical under 10 U.S.C. 2522.

(6) Increase the development and promotion of efficient and effective applications of dual-use technologies.

(7) Provide efficient and effective technologies for achieving such environmental benefits as: improved environmental data gathering, environmental cleanup and restoration, pollution reduction in manufacturing, environmental conservation, and environmentally safe management of facilities.

(C) For annual IR&D costs to be allowable -

(1) The IR&D projects generating the costs must be reported to the Defense Technical Information Center (DTIC) using the DTIC's on-line input form and instructions at http://www.defenseinnovationmartketplace.mil;

(2) The inputs must be updated at least annually and when the project is completed; and

(3) Copies of the input and updates must be made available for review by the cognizant administrative contracting officer (ACO) and the cognizant Defense Contract Audit Agency auditor to support the allowability of the costs.

Memorandum from the Office of the Under Secretary of Defense to the Director, Defense Contract Management Agency and Director, Defense Contract Audit Agency, dated February 3, 2014:

This memorandum was a clarification of Defense Federal Acquisition Regulation Supplement Requirement of Major Contractors to Report Independent Research and Development projects. Within this memorandum, it states:

> *"Contractors must report projects generating IR&D costs by entering them into the secure portal at the Defense Innovation Marketplace no later than three months after the end of the CFY in which the contractors initially incur the cost."*

c. Recommendation:

We recommend that Draper Laboratory establish Policies and Procedures for these OPPTY project costs as part of its Internal Control to properly reflect these costs in its incurred cost submissions.

d. Draper Laboratory's Reaction:

The contractor's reaction follows verbatim.

The DCAA report indicates that the OPPTY projects are IR&D, as opposed to other allowable indirect expenses and even if the projects were entered into the DTIC database as IR&D, they would be unallowable because they are not of potential interest to DoD. The DCAA draft report is correct that Draper did not enter the projects into the DTIC database, as Draper does not consider these costs to be IR&D, but rather either Manufacturing and Production Engineering costs under FAR 31-205-25 or Selling costs under FAR 31-205-38 as described below.

OPPTY projects not IR&D – As cited in the DCAA report, the DFARS requires IR&D to meet one of the following definitions:

(1) Enable superior performance of future U.S. weapon systems and components.

(2) Reduce acquisition costs and life-cycle costs of military systems.

(3) Strengthen the defense industrial and technology base of the United States.

(4) Enhance the industrial competitiveness of the United States.

(5) Promote the development of technologies identified as critical under 10 U.S.C. 2522.

(6) Increase the development and promotion of efficient and effective applications of dual-use

(7) Provide efficient and effective technologies for achieving such environmental benefits as: improved environmental data gathering, environmental cleanup and restoration, pollution reduction in manufacturing, environmental conservation.

The OPPTY projects questioned by DCAA as IR&D would not meet the above requirements during 2016. OPPTY projects could turn into major efforts that would meet one of the above referenced IR&D requirements, but none currently do.

The DCAA report stated that based on employee interviews and testing, DCAA concluded that a number of OPPTY projects matched the name/scope of IR&D projects. Without details of which projects they are referring to, Draper is unable to respond to this point. We are aware of only one OPPTY project that has similar nomenclature with an IR&D project.

In Draper's view, the questioned projects clearly do not meet the definition of IR&D, for example:

1. ***Project 32819**- Includes a focused look at trends in commercial-off-the-shelf technology and developing an analytical framework to assess the critical dimensions of the problems space.*
2. ***Project 32824**- Studies and research into magnetometry-based corrosion detection market, and support for business development efforts.*

3. ***Project 33920***- *Identification of technologies applicable to hyperloop systems and understanding of other entities in this space.*

Draper does not understand how the OPPTY projects would not be of interest to DOD; for example, a few of the project descriptions are as follows:

1. ***Project 32821***- *Series of small internal projects authorized by the principal director to support the expansion or creation of key capabilities (i.e., Tactical UAV GPS-Denied Navigation, Digital Night Vision Capability, Precision Munitions Modeling, Advanced Wind Estimation).*
2. ***Project 32820***- *Team developed a Precision Voltage Resistor (PVR) and tested it on an off the shelf development board with a Draper designed Fixed Programmable Gate Array (FPGA).*
3. ***Project 33813***- *Investigated the role new computing technology could have on Draper's GPS/INS Deep Integration robust navigation algorithms and software. In addition, we explored how this Deep Integration update could be integrated with Draper's Vision Aided Navigation software for a more robust performance in GPS-challenged environments.*

OPPTY costs: Manufacturing and Production Engineering, Selling Costs - Draper previously made the point to DCAA that the OPPTY costs are similar to and thus fall under the FAR cost principles of Manufacturing and Production Engineering and Selling costs. FAR 31-205(d) applies here.[1]

31.205-25 -- Manufacturing and Production Engineering Costs.

(a) The costs of manufacturing and production engineering effort as described in (1) through (4) of this paragraph are all allowable:

(1) Developing and deploying new or improved materials, systems, processes, methods, equipment, tools and techniques that are or are expected to be used in producing products or services;

(2) Developing and deploying pilot production lines;

[1] *(d) Section 31.205 does not cover every element of cost. Failure to include any item of cost does not imply that it is either allowable or unallowable. The determination of allowability shall be based on the principles and standards in this subpart and the treatment of similar or related selected items. When more than one subsection in 31.205 is relevant to a contractor cost, the cost shall be apportioned among the applicable subsections, and the determination of allowability of each portion shall be based on the guidance contained in the applicable subsection. When a cost, to which more than one subsection in 31.205 is relevant, cannot be apportioned, the determination of allowability shall be based on the guidance contained in the subsection that most specifically deals with, or best captures the essential nature of, the cost at issue.*

(3) Improving current production functions, such as plant layout, production scheduling and control, methods and job analysis, equipment capabilities and capacities, inspection techniques, and tooling analysis (including tooling design and application improvements); and

(4) Material and manufacturing producibility analysis for production suitability and to optimize manufacturing processes, methods and techniques.

FAR 31.205 -25 defines allowable Manufacturing and Production Engineering Costs. While Draper does not generally perform "production", at (a) (1) the cost principle addresses developing and deploying new or improved materials, systems, processes, methods to be used in producing services, and improving equipment capabilities and capacities. Some OPPTY projects have objectives aligned with the (a) (1) description and thus are better aligned with Manufacturing and Production Engineering Costs, and not IR&D.

Selling costs are defined in FAR 31.205-38. Certain OPPTY projects are allowable as selling costs.

FAR 31-205(d) is also relevant here.[1] *As described in the footnote below, Section 31.205 Selected costs does not cover every element of cost. The determination of allowability shall be based on the treatment of similar or related selected items. The OPPTY costs are most similar to the FAR Manufacturing and Production Engineering Costs and Selling Costs.*

In addition, certain other OPPTY projects fall under the FAR cost principle of FAR 31.205-38 Selling Costs.

31.205-38 -- Selling Costs.

(a) "Selling" is a generic term encompassing all efforts to market the contractor's products or services, some of which are covered specifically in other subsections of 31.205. The costs of any selling efforts other than those addressed in this cost principle are unallowable.

(b) Selling activity includes the following broad categories:

(1) Advertising. Advertising is defined at 31.205-1(b), and advertising costs are subject to the allowability provisions of 31.205-1(d) and (f).

(2) Corporate image enhancement. Corporate image enhancement activities, including broadly targeted sales efforts, other than advertising, are included within the definition of public relations at 31.205-1 (a), and the costs of such efforts are subject to the allowability provisions at 31.205-1 (e) and (f).

(3) Bid and proposal costs. Bid proposal costs are defined at 31.205-18 and are subject to the allowability provisions of that subsection.

(4) Market planning. Market planning involves market research and analysis and general management planning concerned with development of the contractor's

business. Long-range market planning costs are subject to the allowability provisions of 31.205-12. Other market planning costs are allowable.

(5) Direct selling. Direct selling efforts are those acts or actions to induce particular customers to purchase particular products or services of the contractor. Direct selling is characterized by person-to-person contact and includes such efforts as familiarizing a potential customer with the contractor's products or services, conditions of sale, service capabilities, etc. It also includes negotiation, liaison between customer and contractor personnel, technical and consulting efforts, and individual demonstrations, and any other efforts having as their purpose the application or adaptation of the contractor's products or services for a particular customer's use. The cost of direct selling efforts is allowable.

(c) Notwithstanding any other provision of this subsection, sellers' or agents' compensation, fees, commissions, percentages, retainer or brokerage fees, whether or not contingent upon the award of contracts, are allowable only when paid to bona fide employees or established commercial or selling agencies maintained by the contractor for the purpose of securing business.

The following are examples that fall under Selling Costs principles and are of interest the DoD:

1. ***Project 33541****- Setup up and operations of a remote office specifically to support business with a specific government customer. (re: (5) Direct selling efforts)*
2. ***Project 33921****- Develop market approaches applicable to autonomy and understanding of other entities in this space. (re: (4) Market planning)*

In summary, Draper believes the DCAA questioned OPPTY costs are more appropriately designated as Manufacturing and Production Engineering Costs or Selling costs rather than IR&D description, and also that they are of interest to DoD.

We are including exhibit A (see Draper Laboratory's full response in Appendix 3 of this audit report for this exhibit) which references the projects in question along with our classifications in accordance with our review of the FAR guidelines as noted above. We did find one project that upon review, we felt was more in line with IR&D and have classified as such project 33808 Secured Assured System OPPR ($87K).

e. Auditor's Response:

Draper Laboratory's response does not provide any additional information that would change our testing results. First of all, Draper Laboratory points out that the OPPTY projects do not meet the DFARs criteria for allowable IR&D costs. However, this does not mean that these OPPTY projects do not represent IR&D projects. It only means that the costs associated with these OPPTY (IR&D) projects are not allocable to DoD contracts.

Draper then states that three of the OPPTY projects are of interest to DoD. If these OPPTY projects were of interest to the DoD, as stated by Draper Laboratory, then they should have been uploaded into the DTIC system.

Draper Laboratory's response seeks to make a connection with the OPPTY project costs and FAR 31.205-25 (Manufacturing and Production Engineering Costs) as well as FAR 31.205-38 (Selling Costs). However, nothing provided by Draper Laboratory during the audit or in its response to this audit finding supports that connection. This is more apparent giving consideration to a section FAR 31.205-25 not included in the contractor's reaction. It states the following:

FAR 31.205-25 (b) (Manufacturing and Production Engineering Costs)

(b) This cost principle does not cover –

(1) Basic and applied research effort (as defined in 31.205-18(a)) related to new technology, materials, systems, processes, methods, equipment tools and techniques. Such technical effort is governed by 31.205-18, Independent research and development costs and bid and proposal costs; and

(2) Development effort for manufacturing or production materials, systems, processes, methods, equipment, tools, and techniques that are intended for sale is also governed by 31.205-18.

This part of FAR 31.205-25(b) highlights FAR 31.205-18 concerning IR&D to ensure costs that are IR&D in nature are only subject to the requirements of FAR 31.205-18.

In regards to Draper Laboratory's reference to selling costs, these costs are more of a general function of companies that are typically more broad-based in nature rather than set up as specific projects to meet with particular customers to induce them to purchase particular products or services. Furthermore, our tests disclosed that only Draper Laboratory's engineers charged these projects as opposed to employees whose function relate to direct selling. In addition, our FY 2016 employee interviews did not disclose any instances of engineers performing the direct selling function for the contractor.

Finally, Draper Laboratory brings into its position FAR 31.205(d) which states that: "…allowability shall be based on the guidelines contained in the subsection that most specifically deals with, or best captures the essential nature of, the cost at issue." Considering this FAR citation and our testing of the OPPTY projects, we conclude that FAR 31.205(d) instead makes the proposed costs subject to FAR 31.205-18, Independent Research and Development and Bid and Proposal.

2016-002. Independent Research and Development (IR&D) Projects

a. Condition:

Draper Laboratory does not have any written policies and procedures concerning its IR&D program. Adequate written IR&D policies and procedures are an essential part of internal control for ensuring that only allowable IR&D costs are claimed.

We have questioned $3,133,858 in IR&D costs proposed by Draper Laboratory that do not meet the DFAR 231.205-18 requirement for allowable IR&D costs. The proposed costs are expressly unallowable in accordance with FAR 42.709. A summary of those five projects are as follows:

Questioned IRAD Projects

Project	Project Number	Amount Claimed	Note
Draper Fellows	30780	1,627,126	1
DLF Supervisor	32805	165,674	2
IR&D Program Administration	32456	360,038	3
Microphysiological Systems	32523	169,605	4
Personalized Predictive Assay	32461	811,415	5
Total IRAD Questioned		$ 3,133,858	

Explanatory Notes:

1. Draper Fellows– Project 30780:

   We questioned $1,627,126 of Independent Research and Development (IR&D) costs claimed under this internal research project because Draper did not properly provide adequate documentation in the Defense Technical Information Center (DTIC) system to allow the determination of potential interest to the Department of Defense DoD as required by DFARS 231.205-18.

   Draper Laboratory combined 60 individual IR&D projects into one IR&D project and identified it as "Draper Fellows Project 30780" in the DTIC system. As a result, Draper Laboratory did not properly identify the applicability of each project to the DoD and status of effort. The details behind each project are required for determining if there is potential interest to the Department of Defense. Therefore, these costs are expressly unallowable.

   Draper Laboratory typically sponsors between 40 – 60 fellows each year and incurs the cost of the fellows' tuitions and monthly stipends and records the individual fellow research cost by Project Activity ID under the Draper Fellows project code. For FY 2016, Draper Laboratory combined the work of all the Fellows IR&D

projects into one category called "advanced electronics". However, our testing of this IR&D project disclosed that it actually represented 60 separate projects and that Draper Laboratory did not detail the potential interest to the Department of Defense of each project. In addition, because Draper Laboratory reported the Fellow IR&D projects in summary in the DTIC, Draper Laboratory omitted the required information for the individual project such as Project Title, Primary Defense Technology Area and Subarea, Status of Effort, Targeted Department of Defense (DoD) Organization, and Technology Readiness Level for these projects. Ultimately the goal of the DTIC system is to share industry IR&D information to better inform current and future acquisition and Science & Technology program planning. Therefore, without the required information, the Government does not know if a technology exists, if it was previously funded by the taxpayer and retained rights of the technology, or if the project is of interest to the DOD. These requirements exist for all IR&D projects regardless of costs proposed.

2. DLF Supervisor – Project 32805:

   We questioned $165,674 of Independent Research and Development (IR&D) costs claimed under this internal research project because it directly relates to the Draper Fellows IR&D program questioned above. This IR&D project captures the labor associated with Draper Laboratory employees who are assigned to the Fellows for one-on-one mentoring like a supervisor. The Draper Laboratory employees are assigned to the fellows based on their field of research.

3. IR&D Program Administration – Project 32456:

   We have questioned $360,038 of IR&D project 32456 Independent Research and Development (IR&D) costs claimed; the project is not of potential interest to the DoD as required by DFARS 231.205-18.

   During our testing, we determined that IR&D Administration project costs consist of supervisory activities, unreported IR&D activities, and community outreach activities. Details of activities follow:

   - Activity 001, Staff – recorded costs for the Director of IR&D and IR&D Administrator, for reporting, budgets, and other administrative duties.
   - Activity 002, Initiatives – recorded the cost of small projects that were not planned, but deemed beneficial to Draper.
   - Activity 003, MIT IAP "Independent Activity Period" Projects – represents costs for temporary interns from the Massachusetts Institute of Technology (MIT).

- Activity 004, Phase 1 Abstract Review – represents the cost of reviewing papers for future IR&D projects.
- Activity 005, MakeMIT – represents the cost of a "hackathon event" put on by MIT.
- Activity 006, DFs Selection & Planning – represents costs associated with time spent reviewing potential Draper Fellows candidates, and
- Activity 007, HS Prgm Selection – represents costs for time spent designing a FY 2017 high school engineering event.

Although, these costs represent different activities, Draper Laboratory reported them in DTIC as one IR&D program under the "Advanced Electronics, Electronic Materials" community of interest. Draper Laboratory did not properly provide adequate documentation in the Defense Technical Information Center (DTIC) system to support the determination of its potential interest to the DoD as required by DFARS 231.205-18.

4. Microphysiological Systems– Project 32523:

We have questioned $169,605 of Independent Research and Development (IR&D) costs claimed under project 32523. The work performed was originally initiated in response to receipt of a sponsored award from the Massachusetts Institute of Technology (MIT). After the end of this contractual effort, Draper Laboratory elected to internally fund the additional microfluidic platform efforts and did not support that the project represents IR&D efforts that were of potential interest to the DoD as required by DFARS 231.205-18.

5. Personalized Predictive Assay – Project 32461

We have questioned $811,415 of IR&D project 32456 Independent Research and Development (IR&D) costs claimed because we determined that the costs incurred under this project were not of potential interest to the DoD in accordance with DFARS 231.205-18.

Our testing disclosed that the goal of this IR&D project is to use a microfluidic platform to maintain samples of a patient's cancer tumor(s) to identify which treatment would best treat the patient. Draper reported this project in DTIC identifying "Biomedical, Clinical and Rehabilitative Medicine" as the primary Community of Interest (COI). However, individualized cancer research is not included in the Defense Technical Information Center (DTIC) Communities of Interest (COI) that are identified under DFARS 231.205-18.

b. Criteria:

Per DFARS 231.205-18, Independent research and development and bid and proposal costs are allowable only if they meet the following requirements:

(c) Allowability.

(iii) For major contractors, the following limitations apply:

(A) The amount of IR&D/B&P costs allowable under DoD contracts shall not exceed the lesser of—

(1) Such contracts' allocable share of total incurred IR&D/B&P costs; or

(2) The amount of incurred IR&D/B&P costs for projects having potential interest to DoD.

(B) Allowable IR&D/B&P costs are limited to those for projects that are of potential interest to DoD, including activities intended to accomplish any of the following:

(1) Enable superior performance of future U.S. weapon systems and components.

(2) Reduce acquisition costs and life-cycle costs of military systems.

(3) Strengthen the defense industrial and technology base of the United States.

(4) Enhance the industrial competitiveness of the United States.

(5) Promote the development of technologies identified as critical under 10 U.S.C. 2522.

(6) Increase the development and promotion of efficient and effective applications of dual-use technologies.

(7) Provide efficient and effective technologies for achieving such environmental benefits as: improved environmental data gathering, environmental cleanup and restoration, pollution reduction in manufacturing, environmental conservation, and environmentally safe management of facilities.

(C) For annual IR&D costs to be allowable—

(1) The IR&D projects generating the costs must be reported to the Defense Technical Information Center (DTIC) using the DTIC's on-line input form and instructions at http://www.defenseinnovationmartketplace.mil;

(2) The inputs must be updated at least annually and when the project is completed; and

(3) Copies of the input and updates must be made available for review by the cognizant administrative contracting officer (ACO) and the cognizant Defense Contract Audit Agency auditor to support the allowability of the costs.

Memorandum from the Office of the Under Secretary of Defense to the Director, Defense Contract Management Agency and Director, Defense Contract Audit Agency, dated February 3, 2014:

This memorandum was a clarification of Defense Federal Acquisition Regulation Supplement Requirement of Major Contractors to Report Independent Research and Development projects. Within this memorandum, it states:

> *"Contractors must report projects generating IR&D costs by entering them into the secure portal at the Defense Innovation Marketplace no later than three months after the end of the CFY in which the contractors initially incur the cost."*

c. Recommendation:

We recommend that Draper Laboratory improve internal control and develop detailed IR&D policies and procedures to ensure that only allowable IR&D costs are claimed in future incurred cost submissions.

d. Draper Laboratory's Reaction:

The contractor's reaction follows verbatim.

1. *Draper Fellows– Project 30780, and*
2. *DLF Supervisor – Project 32805:*

Draper Fellows overall project numbers for the overall program and program administration as described above, as opposed to specific project numbers for each Draper Fellow program, were established to streamline the Draper Fellows program administration process. The underlying Draper Fellows program value is that the students are provided the opportunity to gain insight and experience that will benefit their professional devolvement, and will also provide Draper with a benefit from the different insight and work they complete on the research they participate in. Their thesis papers are based on the work they assisted with on the IR&D projects. In prior years, Draper followed the same approach of listing an overall project number including providing an overall Draper Fellows program description when recording these IR&D costs in the DTIC system; that approach was previously audited by DCAA, and no recommendation to change the approach from overall project number to listing each Fellow program was previously made. The costs were previously allowed on the basis that the overall program represents valid IR&D costs; Draper continues to view the costs as valid IR&D costs. If the current DCAA view is that providing the detail by Draper Fellow program is preferable, as it would give the government a better view into the underlying work, Draper could change its DTIC reporting approach accordingly for FY 2017, but we feel the 2016 costs are valid IR&D costs and should be allowable in 2016 as they were in 2015.

3. IR&D Program Administration – Project 32456:

Item 3 is an overall IR&D program administration charge number established to administer the IR&D programs. There are numerous IR&D administration activities involved, and rather than charging time to each individual project, one number was set up to capture all the administration activities needed to run an effective program. If the projects the people are responsible for are of interest to DoD, then the supervision should be allowable and consider as similar to a directly associated cost. Item 3 is an overall IR&D program administration code as in Item 1 above. An overall IR&D program administration code with description was used to record multiple program administration costs in the DTIC system in 2015. The overall IR&D program administration code approach was audited by DCAA, and the associated costs allowed without recommendation. Draper followed the same overall code approach in 2016, and feels the related costs are valid IR&D costs as they were in 2015. The approach to itemize these costs into their components and record each component separately in DTIC can be considered for 2017.

4. Microphysiological Systems– Project 32523:

Microphysiological Systems IR&D was addressed during the audit. This IR&D relates to the warfighter and is under the Medical Chem-Bio Defense (MCBD). Potential applications for this microfluidic platform include therapeutic approaches for capillary leak, sepsis, malaria, viral hemorrhagic fever, all topics of interest to the DOD and its efforts to support the warfighter.

5. Personalized Predictive Assay – Project 32461:

While cancer research may not be specifically listed as an area of DoD interest in the DTIC under COI Biomedical, Clinical and Rehabilitative Medicine (CRM), Draper noted in the response provided previously that Personalized Predictive Assay is developing a platform that mimics human physiological systems which could also be used for other Biomedical areas. By sampling a specific subject, quickly assessing efficacy of a drug treatment can be performed. Cancer is one example, but platform is being developed to also address treatments of emerging diseases, pandemics and bioterrorism. We see this as fitting under Biomedical (ASBREM) under Military Infectious Diseases. This cost should be considered allowable.

e. Auditor's Response:

Draper Laboratory's response does not provide any additional information that would change our testing results.

1. Draper Fellows– Project 30780, and
2. DLF Supervisor – Project 32805:

   First of all, an audit of a contractor's fiscal year does not represent an approval of all of the contractor's processes; we did not specifically approve of this approach under past audits. Also, it is a requirement of the DTIC system, not a viewpoint, that these projects should be individually reported. This requirement exists and provides the only approach that will allow the determination of potential interest to the Department of Defense DoD as required by DFARS 231.205-18.

3. IR&D Program Administration – Project 32456:

   First of all, an audit of a contractor's fiscal year does not represent an approval of all of the contractor's processes; we did not specifically approve of this approach under past audits. We do agree that these costs could be allowable, but they do not meet a Community of Interest in DTIC; therefore, they should not be inputted into DTIC. The government could consider part of the costs allowable as administration costs if the contractor can develop a fair and reasonable allocation of the costs.

4. Microphysiological Systems– Project 32523:

   We agree that the scope of the project fits a community of interest, but Draper Laboratory did not respond to the finding that the Microphysiological Systems project was incurred to complete the work started on an MIT subcontract, which MIT ended before the full scope of the subcontract could be completed. Therefore, it does not meet the definition of IR&D in FAR 31.205-18(a), which is for technical *effort that is not sponsored by a grant or required in the performance of a contract.*

5. Personalized Predictive Assay – Project 32461:

   Draper Laboratory has acknowledged cancer research is not specifically listed as an area of DoD interest in the DTIC under COI Biomedical, Clinical and Rehabilitative Medicine (CRM). Draper Laboratory's focus is on cancer research; we believe that the contractor has not supported that it extends to COIs of interest to the DoD. We believe that, Draper Laboratory, should have identified emerging diseases, pandemics and bioterrorism of interest to DoD and focused its actions and research on these concerns instead.

2016-003. Sembler Program

a. Condition:

Draper Laboratory does not have adequate internal control to prevent costs unallocable to Federal awards from being claimed. We determined that proposed Sembler Program costs were not allocable to Federal awards and did not comply with FAR 31.201-4.

Draper Laboratory's Sembler program acts as a conduit to Draper Laboratory's resources for providing the engineering expertise to startups in order to turn their ideas into technology. Based on our evaluation of this program, we concluded that the associated costs do not meet the FAR 31.201-4 criteria to support the proposed amounts as allocable to Federal awards. Therefore, we have questioned the entire proposed amount of $794,965 for this program.

This program was initially created as an Independent Research & Development project named Mambo, which was subsequently changed to Sembler. The stated purpose of Sembler is to launch an aggregated microfluidic device fabrication service through an e-commerce website to provide biotech startups access to Draper technology, resources, and facilities. Over time, the project was expanded beyond microfluidics to make other laboratory resources and capabilities available.

In order to be allocable to Federal awards, FAR 31.201-4 states that it must:

a. be incurred specifically for a contract;

b. benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or

c. Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown."

Based on the purpose of this program, we concluded that it does not meet any of the three requirements for the costs to be considered allocable to Federal awards.

The questioned amount is not subject to penalties in accordance with FAR 42.709.

b. Criteria:

We evaluated the costs and purpose of the Sembler program to determine if these costs are in compliance with Federal Acquisition Regulations (FAR).

FAR 31.201-4, Determining Allocability, states:

A cost is allocable if it is assignable or chargeable to one or more cost objectives on the basis of relative benefits received or other equitable relationship. Subject to the foregoing, a cost is allocable to a Government contract if it—

(a) Is incurred specifically for the contract;

(b) Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or

(c) Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.

c. Recommendation:

We recommend that Draper Laboratory reevaluate its internal programs to ensure that the function of these programs comply with the criteria in FAR 31.201-4.

d. Draper Laboratory's Reaction:

The contractor's reaction follows verbatim.

The Sembler project was established to provide microfluidic devices to interested customers, including design and development of an ecommerce portal and website to support, process and manage orders. The costs in this project were related to market research and analysis and direct selling efforts associated with this new service.

The project resulted in direct contracts (charged separately to specific contract programs), which helped increase productivity and utilization of the microfabrication facility (Service Center), helping maintain skills and increasing capabilities, knowledge and efficiencies of our processes. The market research also identified additional opportunities for expertise offered by other Draper core capabilities, including design work with customers and interest in similar types of engineering services (e.g., Machine Shop and other fabrication, Simulation Lab and testing services).

We believe this to be an allowable cost under FAR 31.205-38 Selling costs.

e. Auditor's Response:

Draper Laboratory's response does not provide any additional information that would change our testing results. FAR 31.205-38 describes that direct selling costs are focused on inducing "particular customers to purchase particular products or services of the contractor". The Sembler project is not a direct selling activity. The costs incurred for Sembler are intended to assist other companies, primarily biotech startups, by providing access to Draper Laboratory's technology, resources, and facilities that only exist largely due to significant annual DoD funding. Draper Laboratory has asserted that this project has an occasional indirect selling result. We believe that the contractor has not supported the allocability criterion required by FAR 31.201-4 including the costs are incurred in a reasonable proportion to the benefits received.

B. INTERNAL CONTROL OVER COMPLIANCE

2016-004 Inadequate Internal Control and Procedures for Submission of an Adequate Incurred Cost Submission

a. Condition:

Draper Laboratory does not have adequate internal control and procedures to ensure timely submission of an adequate incurred cost submission. During our audit, we determined that the lack of adequate internal control was more significant than originally understood because it did not prevent an incurred cost submission that was inconsistent with accounting practices and rates described in Draper Laboratory's Disclosure Statement and provisionally approved for billing of costs to Federal awards.

CSDL initially submitted its incurred cost proposal for the Fiscal Year ended July 1, 2016 on November 23, 2016. The proposal was reviewed for adequacy and determined not to be adequate. On December 13, 2016 DCAA met with representatives of CSDL to discuss noted inadequacies. We advised Draper Laboratory of issues with 1) the calculation of the government's participation and 2) the identification of the same total indirect expenses for two rates without details of adjustments intended to prevent the allocation of more costs than incurred/proposed. Draper Laboratory did not provide adequate feedback or information for several weeks subsequent to this meeting.

On February 8, 2017, Draper Laboratory submitted a revised incurred cost proposal. The revised incurred cost proposal added an indirect rate that had not been included in the original incurred cost proposal. This revised proposal did not address the questions and concerns identified for the original incurred cost proposal. We found too that the additional rate also shared a pool with another rate and that ultimately more costs were being allocated and claimed than were reflected in the shared pool. We met with representatives of Draper Laboratory on February 14, 2017 to discuss the additional rate and to advise the contractor the submission remained inadequate.

On February 16, 2017 CSDL submitted another incurred cost proposal that corrected prior deficiencies and was determined to be adequate for audit.

FAR 52.216-7(d)(2)(i) requires that the contractor submit an adequate incurred cost proposal within six months of the end of its fiscal year. CSDL's fiscal year ended on July 1, 2016 which means that an adequate incurred cost proposal should have been submitted no later than January 1, 2017. We did not receive an adequate incurred cost proposal until February 16, 2017.

FAR 52.216-7(d)(2)(iii) specifies that an adequate incurred cost proposal shall include a summary of **all** claimed indirect expense rates, including pool, base, and calculated indirect rate. CSDL did not include the Contract Personnel General Overhead (Base) rate in its proposal until its second submission dated February 8, 2017.

b. Criteria:

FAR 52.216-7, - Allowable Cost and Payment states the following:

(d) Final indirect cost rates.

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2) (i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

*(A) Summary of **all** claimed indirect expense rates, including pool, base, and calculated indirect rate.*

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

c. Recommendation:

We recommend that CSDL reevaluate its process for preparing and approving its incurred cost submission and develop formalized policies and procedures for putting together its incurred cost submission. Draper Laboratory need to develop adequate internal control to ensure an adequate submission in accordance with FAR 52-216-7 and its Disclosed Accounting Practices.

d. Draper Laboratory's Reaction:

The contractor's reaction follows verbatim.

Draper will review its internal practices for preparing and approving the incurred cost submission including related policies and procedures. As part of the procedures, we will include the DCAA checklist for determining adequacy of contractor incurred cost proposal in the process next year.

e. Auditor's Response:

We recognize that use of the DCAA checklist for determining adequacy of the contractor incurred cost would be one of the actions that would improve existing company practices. We will follow-up on Draper Laboratory's use of this checklist as well as any additional updates to Draper Laboratory's internal practices for preparing and approving its incurred cost submission under the FY 2017 Uniform Guidance audit.

SCHEDULE OF UNALLOWABLE COSTS SUBJECT TO PENALTY

General Overhead	Questioned Costs	Level One Penalty	Reference
Opportunity Investment Projects	$ 5,573,042	$ 5,573,042	2016-001
Independent Research and Development (IR&D) Projects	$ 3,133,858	$ 3,133,858	2016-002
Total	$ 8,706,900	$ 8,706,900	

Participation of Contracts Subject to Penalty Clause

	Total	Subject to Penalty	Not Subject to Penalty
Allocation Base	$ 110,993,759	$ 82,756,947	$ 28,236,812
Percentage of Base	100.0%	74.6%	25.4%

Questioned Costs Subject to Level One Penalty ($8,706,900 x 74.6%) $ 6,491,865

SCHEDULE N

The Charles Stark Draper Laboratory
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Certificate of Final Indirect Costs
Fiscal Year End - 7/1/2016

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

1. All costs included in the FY2016 incuured cost submission to establish final indirect cost rates for June 27, 2015 through July 1, 2016 are allowable in accordance with the cost principles of the Federal Acquisition Regulation (FAR) and its supplements applicable to the contracts to which the final indirect cost rates will apply; and

2. This proposal does not include any costs which are expressly unallowable under applicable cost principles of the FAR or its supplements.

Firm: The Charles Stark Draper Laboratory, Inc.

Signature: _____

Name of Certifying Official: Elizabeth Mora

Title: Chief Administrative Officer

Date of Execution: February 16, 2017

FAR Part 52.242-4-- Certification of Final Indirect Costs.

As prescribed in 42.703-2(f), insert the following clause:
Certification of Final Indirect Costs (Jan 1997)
(a) The Contractor shall --
(1) Certify any proposal to establish or modify final indirect cost rates;
(2) Use the format in paragraph (c) of this clause to certify; and
(3) Have the certificate signed by an individual of the Contractor's organization at a level no lower than a vice president or chief financial officer of the business segment of the Contractor that submits the proposal.
(b) Failure by the Contractor to submit a signed certificate, as described in this clause, may result in final indirect costs at rates unilaterally established by the Contracting Officer.
(c) The certificate of final indirect costs shall read as follows: (see above)

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Mr. Peter Meade
FAO Manager
DCAA Boston Branch Office
495 Summer Street, Suite 336
Boston, MA 02110-2192

March 21, 2017

Subject: Draft Audit Report No. 02171-2015T1010001

Dear Mr. Meade:

The subject draft audit report questions one item claimed by Draper in our Draper Fiscal Year (DFY) 2015 Incurred Cost Submission which was submitted under the requirements of OMB Circular A-133.

DCAA Finding 2015-001: Unallowable Direct Subcontract Costs (N00030-08-C-0010) - Cost Questioned- $106,584

DCAA Position:

We concluded that the billed costs did not appear to have been incurred during the period of performance of Honeywell's sub award with CSDL or even the period of performance of CSDL's prime contract with the US Navy. The specific invoice in question pertains to Honeywell purchase order SC001-0000000245, Invoice Number 17582716, dated January 22, 2015. It identifies delivery or service dates from 8/26/2012 through 5/30/2014. However, the period of performance of the Honeywell subcontract ended 9/30/2012 and the period of performance of CSDL's prime contract with the US Navy ended 3/15/2013.

CSDL Response:

Draper paid the Honeywell invoice based upon the language contained in the Draper prime contract provided below:

> "Language such as "Due By" in completion Items should be interpreted to identify the due date for a delivery or completion of specified work. This type of language does not prevent deliveries or performance after the specified date. Any delivery or completion of performance after that date shall be considered late and shall result in penalties for late delivery, if applicable under the contract terms. This contract continues in full force and effect notwithstanding any late deliveries or missed deadlines. This clarification applies to all completion items on this contract, as may be added by subsequent modifications."

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The prime contract (CLIN 0006) and the Subcontract with Honeywell are Cost Plus Fixed Fee completion (CPFFC) type efforts. The Navy prime contract allows for costs to be incurred beyond the period of performance of the prime under a completion effort (CPFFC).

Based upon additional research it was determined that Honeywell made an error in the invoice period of performance date which appeared that the work being performed was not within the subcontract period of performance. Honeywell submitted a corrected invoice on March 29, 2016, changing the invoice to show costs were incurred within the subcontract period of performance. Additional inquiries were made via e-mail and voice regarding Honeywell providing backup to prove these costs were with the POP.

On March 21, 2017, Honeywell provided evidence that the cost invoiced, **$106,584,** was within the subcontract period of performance. (summarized below):

ODC	$58, 591
Labor	$ 2,378
Material	$46,961.17
Total:	$107,930.17*

* $1,346.17 difference between cost billed and cost justified is due to rate adjustments

If you have any questions, please feel free to contact me.

Sincerely,

Dora Ramos
Director, Contracts, Subcontracts, Procurement and Property

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Mr. Peter Meade
FAO Manager
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March 24, 2017

Subject: Draft DCAA Audit Report No. 1151-2016T1011 0001

Dear Mr. Meade:

On behalf of Draper Finance and Internal Audit, attached please find our responses to the subject draft audit report findings.

A. INDIRECT EXPENSES

Questioned Costs - Audit Finding Number:

1. 2016-001. Opportunity Investment Projects (OPPTY) $5,573,042
2. 2016-002. Independent Research & Development (IR&D) Projects $3,133,858
3. 2016-003. Sembler Program $794,965

Total Questioned Costs - $9,501,865

1. Opportunity Investment Projects

DCAA Position - Cost Questioned-$5.6M

DCAA issue summary - During Fiscal Year 2016, Draper Lab modified its IR&D program to create an additional program called Opportunity Investments (OPPTY). Draper Lab used this program to capture costs associated with smaller-scale internal research projects and allocated these costs to the company's general overhead rate.

Classifying the small-scale IR&D projects in this way, Draper Lab did not follow DFARS 231.205-18 reporting requirements for uploading the IR&D projects into the Defense Technical Information Center (DTIC) system. Based on our testing, we determined that these projects represent IR&D efforts subject to the requirements of DFARS 231.205-18.

From employee interviews and testing of proposed IR&D projects, we performed additional testing of OPPTY projects. We evaluated the purpose and scope of twenty three OPPTY projects and performed a nomenclature review of the descriptions for rest of the projects; we found that a number of OPPTY projects matched the name/scope of IR&D projects.

Based on our evaluation of these OPPTY projects, we determined that these projects also do not meet the DFARS 231.205-18 requirement that they be of potential interest to the Department of Defense.

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We recommend that Draper Lab establish Policies and Procedures as part of its Internal Control to properly reflect these costs in its incurred cost submissions.

Draper Position

The DCAA report indicates that the OPPTY projects are IR&D, as opposed to other allowable indirect expenses and even if the projects were entered into the DTIC database as IR&D, they would be unallowable because they are not of potential interest to DoD. The DCAA draft report is correct that Draper did not enter the projects into the DTIC database, as Draper does not consider these costs to be IR&D, but rather either Manufacturing and Production Engineering costs under FAR 31-205-38 or Selling costs under FAR 31-205-38 as described below.

OPPTY projects not IR&D – As cited in the DCAA report, the DFARS requires IR&D to meet one of the following definitions:

(1) Enable superior performance of future U.S. weapon systems and components.

(2) Reduce acquisition costs and life-cycle costs of military systems.

(3) Strengthen the defense industrial and technology base of the United States.

(4) Enhance the industrial competitiveness of the United States.

(5) Promote the development of technologies identified as critical under 10 U.S.C. 2522.

(6) Increase the development and promotion of efficient and effective applications of dual-use

(7) Provide efficient and effective technologies for achieving such environmental benefits as: improved environmental data gathering, environmental cleanup and restoration, pollution reduction in manufacturing, environmental conservation.

The OPPTY projects questioned by DCAA as IR&D would not meet the above requirements during 2016. OPPTY projects could turn into a major efforts that would meet one of the above referenced IR&D requirements, but none currently do.

The DCAA report stated that based on employee interviews and testing, DCAA concluded that a number of OPPTY projects matched the name/scope of IR&D projects. Without details of which projects they are referring to, Draper is unable to respond to this point. We are aware of only one OPPTY project that has similar nomenclature with an IR&D project.

In Draper's view, the questioned projects clearly do not meet the definition of IR&D, for example:

1. **Project 32819**- Includes a focused look at trends in commercial-off-the-shelf technology and developing an analytical framework to assess the critical dimensions of the problems space.

2. **Project 32824**- Studies and research into magnetometry-based corrosion detection market, and support for business development efforts.

3. **Project 33920**- Identification of technologies applicable to hyperloop systems and understanding of other entities in this space.

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Draper does not understand how the OPPTY projects would not be of interest to DOD; for example, a few of the project descriptions are as follows:

1. **Project 32821**- Series of small internal projects authorized by the principal director to support the expansion or creation of key capabilities (i.e., Tactical UAV GPS-Denied Navigation, Digital Night Vision Capability, Precision Munitions Modeling, Advanced Wind Estimation).

2.**Project 32820**- Team developed a Precision Voltage Resistor (PVR) and tested it on an off the shelf development board with a Draper designed Fixed Programmable Gate Array (FPGA).

3. **Project 33813**- Investigated the role new computing technology could have on Draper's GPS/INS Deep Integration robust navigation algorithms and software. In addition, we explored how this Deep Integration update could be integrated with Draper's Vision Aided Navigation software for a more robust performance in GPS-challenged environments.

OPPTY costs: Manufacturing and Production Engineering, Selling Costs - Draper previously made the point to DCAA that the OPPTY costs are similar to and thus fall under the FAR cost principles of Manufacturing and Production Engineering and Selling costs. FAR 31-205(d) applies here.[1]

31.205-25 -- Manufacturing and Production Engineering Costs.

(a) The costs of manufacturing and production engineering effort as described in (1) through (4) of this paragraph are all allowable:

(1) Developing and deploying new or improved materials, systems, processes, methods, equipment, tools and techniques that are or are expected to be used in producing products or services;

(2) Developing and deploying pilot production lines;

(3) Improving current production functions, such as plant layout, production scheduling and control, methods and job analysis, equipment capabilities and capacities, inspection techniques, and tooling analysis (including tooling design and application improvements); and

(4) Material and manufacturing producibility analysis for production suitability and to optimize manufacturing processes, methods and techniques.

FAR 31.205 -25 defines allowable Manufacturing and Production Engineering Costs. While Draper does not generally perform "production", at (a) (1) the cost principle addresses developing and deploying new or improved materials, systems, processes, methods to be used in producing services, and improving equipment capabilities and capacities. Some OPPTY projects have objectives aligned with the (a) (1)

[1] (d) Section 31.205 does not cover every element of cost. Failure to include any item of cost does not imply that it is either allowable or unallowable. The determination of allowability shall be based on the principles and standards in this subpart and the treatment of similar or related selected items. When more than one subsection in 31.205 is relevant to a contractor cost, the cost shall be apportioned among the applicable subsections, and the determination of allowability of each portion shall be based on the guidance contained in the applicable subsection. When a cost, to which more than one subsection in 31.205 is relevant, cannot be apportioned, the determination of allowability shall be based on the guidance contained in the subsection that most specifically deals with, or best captures the essential nature of, the cost at issue.

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description and thus are better aligned with Manufacturing and Production Engineering Costs, and not IR&D.

Selling costs are defined in FAR 31.205-38. Certain OPPTY projects are allowable as selling costs.

FAR 31-205(d) is also relevant here.[1] As described in the footnote below, Section 31.205 Selected costs does not cover every element of cost. The determination of allowability shall be based on the treatment of similar or related selected items. The OPPTY costs are most similar to the FAR Manufacturing and Production Engineering Costs and Selling Costs.

In addition, certain other OPPTY projects fall under the FAR cost principle of FAR 31.205-38 Selling Costs.

31.205-38 -- Selling Costs.

(a) "Selling" is a generic term encompassing all efforts to market the contractor's products or services, some of which are covered specifically in other subsections of 31.205. The costs of any selling efforts other than those addressed in this cost principle are unallowable.

(b) Selling activity includes the following broad categories:

(1) Advertising. Advertising is defined at 31.205-1(b), and advertising costs are subject to the allowability provisions of 31.205-1(d) and (f).

(2) Corporate image enhancement. Corporate image enhancement activities, including broadly targeted sales efforts, other than advertising, are included within the definition of public relations at 31.205-1 (a), and the costs of such efforts are subject to the allowability provisions at 31.205-1 (e) and (f).

(3) Bid and proposal costs. Bid proposal costs are defined at 31.205-18 and are subject to the allowability provisions of that subsection.

(4) Market planning. Market planning involves market research and analysis and general management planning concerned with development of the contractor's business. Long-range market planning costs are subject to the allowability provisions of 31.205-12. Other market planning costs are allowable.

(5) Direct selling. Direct selling efforts are those acts or actions to induce particular customers to purchase particular products or services of the contractor. Direct selling is characterized by person-to-person contact and includes such efforts as familiarizing a potential customer with the contractor's products or services, conditions of sale, service capabilities, etc. It also includes negotiation, liaison between customer and contractor personnel, technical and consulting efforts, and individual demonstrations, and any other efforts having as their purpose the application or adaptation of the contractor's products or services for a particular customer's use. The cost of direct selling efforts is allowable.

(c) Notwithstanding any other provision of this subsection, sellers' or agents' compensation, fees, commissions, percentages, retainer or brokerage fees, whether or not contingent upon the award of contracts, are allowable only when paid to bona fide employees or established commercial or selling agencies maintained by the contractor for the purpose of securing business.

The following are examples that fall under Selling Costs principles and are of interest the DoD:

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1. **Project 33541**- Setup up and operations of a remote office specifically to support business with a specific government customer. (re: (5) Direct selling efforts)

2. **Project 33921**- Develop market approaches applicable to autonomy and understanding of other entities in this space. (re: (4) Market planning)

In summary, Draper believes the DCAA questioned OPPTY costs are more appropriately designated as Manufacturing and Production Engineering Costs or Selling costs rather than IR&D description, and also that they are of interest to DoD.

We are including exhibit A which references the projects in question along with our classifications in accordance with our review of the FAR guidelines as noted above. We did find one project that upon review, we felt was more in line with IR&D and have classified as such project 33808 Secured Assured System OPPR ($87K).

2. Independent Research & Development (IR&D) Projects

DCAA Position - Cost Questioned -$3.1M

1. We questioned $1,627,126 of Internal Research and Development (IRAD) costs claimed under this internal research project because Draper did not properly provide adequate documentation in the Defense Technical Information Center (DTIC) system to allow the determination of potential interest to the Department of Defense DoD as required by DFARS 231.205-18.

2. The DLF Supervisor IR&D project relates to the Draper Fellows IR&D program noted above. This IR&D project captures the labor associated with Draper Lab employees who are assigned to the Fellows for one-on-one mentoring like a supervisor. The Draper Lab employees are assigned to the fellows based on their field of research. Since this IR&D project is directly related to the Fellows IR&D project detailed above, we have questioned the costs proposed.

3. We have questioned $360,038 of IR&D project 32456 Internal Research and Development (IRAD) costs claimed; the project is not of potential interest to the DoD as required by DFARS 231.205-18.

4. We have questioned $169,605 of Internal Research and Development (IR&D) costs claimed under project 32523 (Microphysiological Systems). The work performed was originally initiated in response to receipt of a sponsored award from the Massachusetts Institute of Technology (MIT). After the end of this contractual effort, Draper Lab elected to internally fund the additional microfluidic platform efforts and did not support that the project represents IR&D efforts that were of potential interest to the DoD as required by DFARS 231.205-18

5. We have questioned $811,415 of IR&D project 32456 Internal Research and Development (IRAD) costs claimed because we determined that the costs incurred under this project were not of potential interest to the DoD in accordance with DFARS 231.205-18.

Our testing disclosed that the goal of this IRAD project is to use a microfluidic platform to maintain samples of a patient's cancer tumor(s) to identify which treatment would best treat the patient. Draper reported this project in DTIC identifying "Biomedical, Clinical and Rehabilitative Medicine" as the primary Community

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of Interest (COI). However, individualized cancer research is not included in the Defense Technical Information Center (DTIC) Communities of Interest (COI) that are identified under DFARS 231.205-18.

Draper Position

Items 1. & 2. - Draper Fellows overall project numbers for the overall program and program administration as described above, as opposed to specific project numbers for each Draper Fellow program, were established to streamline the Draper Fellows program administration process. The underlying Draper Fellows program value is that the students are provided the opportunity to gain insight and experience that will benefit their professional devolvement, and will also provide Draper with a benefit from the different insight and work they complete on the research they participate in. Their thesis papers are based on the work they assisted with on the IR&D projects. In prior years, Draper followed the same approach of listing an overall project number including providing an overall Draper Fellows program description when recording these IR&D costs in the DTIC system; that approach was previously audited by DCAA, and no recommendation to change the approach from overall project number to listing each Fellow program was previously made. The costs were previously allowed on the basis that the overall program represents valid IR&D costs; Draper continues to view the costs as valid IR&D costs. If the current DCAA view is that providing the detail by Draper Fellow program is preferable, as it would give the government a better view into the underlying work, Draper could change its DTIC reporting approach accordingly for FY 2017, but we feel the 2016 costs are valid IR&D costs and should be allowable in 2016 as they were in 2015.

Item 3. is a an overall IR&D program administration charge number established to administer the IR&D programs. There are numerous IR&D administration activities involved, and rather than charging time to each individual project, one number was set up to capture all the administration activities needed to run an effective program. If the projects the people are responsible for are of interest to DoD, then the supervision should be allowable and consider as similar to a directly associated cost. Item 3 is an overall IR&D program administration code as in Item 1 above. An overall IR&D program administration code with description was used to record multiple program administration costs in the DTIC system in 2015. The overall IR&D program administration code approach was audited by DCAA, and the associated costs allowed without recommendation. Draper followed the same overall code approach in 2016, and feels the related costs are valid IR&D costs as they were in 2015. The approach to itemize these costs into their components and record each component separately in DTIC can be considered for 2017.

Item 4. Microphysiological Systems IR&D was addressed during the audit. This IR&D relates to the warfighter and is under the Medical Chem-Bio Defense (MCBD). Potential applications for this microfluidic platform include therapeutic approaches for capillary leak, sepsis, malaria, viral hemorrhagic fever, all topics of interest to the DOD and its efforts to support the warfighter.

Item 5. While cancer research may not be specifically listed as an area of DoD interest in the DTIC under COI Biomedical, Clinical and Rehabilitative Medicine (CRM), Draper noted in the response provided previously that Personalized Predictive Assay is developing a platform that mimics human physiological systems which could also be used for other Biomedical areas. By sampling a specific subject, quickly assessing efficacy of a drug treatment can be performed. Cancer is one example, but platform is being developed to also address treatments of emerging diseases, pandemics and bioterrorism. We see this as fitting under Biomedical (ASBREM) under Military Infectious Diseases. This cost should be considered allowable.

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3. Sembler Program

DCAA Position - Cost Questioned -$.7M

The Sembler project was established to provide microfluidic devices to interested customers, including design and development of an ecommerce portal and website to support, process and manage orders. The costs in this project were related to market research and analysis and direct selling efforts associated with this new service.

The project resulted in direct contracts (charged separately to specific contract programs), which helped increase productivity and utilization of the microfabrication facility (Service Center), helping maintain skills and increasing capabilities, knowledge and efficiencies of our processes. The market research also identified additional opportunities for expertise offered by other Draper core capabilities, including design work with customers and interest in similar types of engineering services (e.g., Machine Shop and other fabrication, Simulation Lab and testing services).

We believe this to be an allowable cost under FAR 31.205-38 Selling costs.

B. INTERNAL CONTROL OVER COMPLIANCE

2016-004 Inadequate Internal Control and Procedures for Submission of an Adequate Incurred Cost Submission

Draper Position:

Draper will review its internal practices for preparing and approving the incurred cost submission including related policies and procedures. As part of the procedures, we will include the DCAA checklist for determining adequacy of contractor incurred cost proposal in the process next year.

If you have any questions, please contact me.

Sincerely,

Sean C. Robertson
Director, Internal Audit

EXHIBIT A

Project		Claimed Costs (from DCAA rpt)		Far Clause	Descr
32820	Strategic Sys Oppty PVR	161,265.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Team developed a Precision Voltage Resistor (PVR) and tested it on an off the shelf development board with a Draper designed Fixed Programmable Gate Array (FPGA).
32821	Defense Systems Opportunity In	399,722.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Series of small internal projects authorized by the principal director to support the expansion or creation of key capabilities (i.e., Tactical UAV GPS-Denied Navigation, Digital Night Vision Capability, Precision Munitions Modeling, Advanced Wind Estimation).
32822	Space Systems Opportunity Inve	480,143.00		FAR 31.205-25 Manufacturing and Production Engineering costs	The purpose of this investment is to explore technologies in the arena of Resilient Spaoe Systems, launch systems, and Autonomous Deep Spaoe Navigation. This includes pre-award planning support for phase 2 of the next cargo resupply vehicle development.
32823	Special Ops Opportunity invest	224,091.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Series of small internal projects authorized by the principal director to support the expansion or creation of key capabilities (i.e., Aerial Delivery Concept, Non-Reciprocal RF Material, MicroThin Electronics).
33154	DFY16 GB Seedlings	551,928.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Develop technologies, processes, and capabilities for a variety of end users such as: iUHD, Precision Instrumentation, Celestial-Skyline Navigation, Dielet as a Platform, Electronic Countermeasures
33221	DFY16 GC Opportunity/Seedlings	532,185.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Develop technologies, processes, and capabilities for a variety of end users for Human Systems Technology, Image & Data Analytics, Secure& Assured Assured Systems, Soli Alpha Dev Kit (i.e., enable novel user interaction by measuring micro-gestures using high frequency radar).
33277	DFY16 GA Opportunity/Seedling	244,641.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Develop technologies, processes, and capabilities for a variety end users such as: Data Guided Control (expose hidden objects in complex data sets), Autonomous Systems Technology, Acoustics Apheresis, Wear Neutral Interfaces.
33440	COTS ++ exploratory analytic	10,858.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Preparing a COTS ++ analytic framework for Eng HQ
33773	DFY16 Eng Oppty - Molded Wafer	316,875.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Aurora Semiconductor consulting evaluation on our MCM production process.
33803	BioMed Solutions Opp Investmnt	57,291.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Data analysis to map how to build a higher thruput organ on a chip model
33813	Y16 Eng Op - Vision Deep Integ	101,414.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Investigated the role new computing technology could have on Draper's GPS/INS Deep Integration robust navigation algorithms and software. In addition, we explored how this Deep Integration update could be integrated with Draper's Vision-Aided Navigation software for a more robust performance in GPS-challenged environments.
33920	Hyperloop	27,764.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Identification of technologies applicable to hyperloop systems and understanding of other entities in this space
34004	DFY16 Oppty - Fault Tolerant S	6,001.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Seedling effort to develop a new approach to Fault tolerant systems, leveraging existing FTFC capability, as well as new academic research in resilient distributed systems. (Activities 002-005 not used)
34098	Rainbow Dash Sensor Fab	136,275.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Rainbow Dash Opportunity Investment consisted of projects numbers 34098 and 34240. Efforts were focused on the refined design, development and test needed to qualify a new Secure Systems offering for which there was preliminary business interest.
34240	RD Electronic interface & Test	100,252.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Rainbow Dash Opportunity Investment consisted of projects numbers 34098 and 34240. Efforts were focused on the refined design, development and test needed to qualify a new Secure Systems offering for which there was preliminary business interest.
33212	TDT opportunity fund initiativ	4,019.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Concept development: Perform technology demonstration supporting proof of concept project for Tucker Davis Technologies.
33211	Wet-AMD opportunity fund init	48,334.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Concept development: Apply techniques from dry-AMD to OCT images of Wet-AMD to determine applicability of Draper technology to additional conditions.
34338	EDNA	77,253.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Larger internal investment authorized by the President devoted to creating a key capability around material science technology to eventually support sponsored projects.
33618	Vesfet	298,829.00		FAR 31.205-25 Manufacturing and Production Engineering costs	VesFet is a revolutionary new transistor technology that allows you to achieve dense digital logic, low noise analog performance, and radiation hardened features in a monolithic silicon construction. With the ability to efficiently produce this new transistor technology, the radiation hardened features open up potential opportunities with the strategic Navy, MDA, and long term space missions.
34260	Organ on a Chip	41,353.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Concept development and initial prototypes for laboratory equipment applicable to helping to improve the drug discovery process.
33319	Hollow Fiber Transfiltration	9,903.00		FAR 31.205-25 Manufacturing and Production Engineering costs	Concept development: Determine if transfiltration can be achieved with hollow fiber devices to expand Draper micro fluidic technology offerings.
FAR 31.205-25 Manufacturing and Production Enginr		**3,830,396.00**			
32819	Engineering Opportunity Invest	120,988.00		Far 31.205-38 Selling costs	Includes a focused look at trends in commercial-off-the-shelf technology and developing an analytical framework to assess the critical dimensions of the problems space

Project		Claimed Costs (from DCAA rpt)	Far Clause	Descr
32824	O&G MDD commerc: base	264,083.00	Far 31.205-38 Selling costs	Studies and research into magnetometry-based corrosion detection market, and support for business development efforts
32826	Commercial Opportunity investm	182,650.00	Far 31.205-38 Selling costs	Outreach to venture capital funded entities in Boston/Cambridge. Gain familiarity with new technologies and determine where Draper may be able to work with these firms
33215	LF Due Diligence	27,146.00	Far 31.205-38 Selling costs	Due Diligence effort to ensure a particular Alternative Precision Navigation and Timing technology was credible and the proposed roles for Draper's team was achievable.
33254	Bose	12,750.00	Far 31.205-38 Selling costs	Targeted outreach and technology assessments for engaging with Bose
33441	SSAAS Seedling	16,988.00	Far 31.205-38 Selling costs	Used data to pursue commercialization opportunities
33541	Columbia Maryland Opportunity	363,372.00	Far 31.205-38 Selling costs	Set-up and operations of a remote office specifically to support business with a specific government customer. Proximity to this customer is part of Special Program's strategy to expand offering and support to this customer. This funding supported business development personnel and start up costs not covered by CSDL facilities.
33555	Microphysiological Systems	118,222.00	Far 31.205-38 Selling costs	Draper multi-organ platforms fabrication and delivery to external collaborators to support greater than 14 day organ-on-chip biological studies in support of publications. This funding supported a Lab on Chip and Nature Communications publication.
33626	O&G MDD commerc: add'l	60,478.00	Far 31.205-38 Selling costs	Support technology transfer of magnetometry-based projects in Oil & Gas field
33807	Image & Data Analytics Opportu	77,304.00	Far 31.205-38 Selling costs	Investigated and demonstrated the utility of behavioral fingerprinting with heterogeneous data - potential for large impact for data analytics customers. Investigated the use of passive RF sensing to detect variances in electronics with potential applications for unique device identification as well as damage and failure detection.
33917	Elect Util MDD	28,719.00	Far 31.205-38 Selling costs	Market assessment of Magnetometry technology in electric/gas utility industry
33918	Transport MDD	28,782.00	Far 31.205-38 Selling costs	Market assessment of Magnetometry technology in transportation industry
33919	Nuclear Power	49,926.00	Far 31.205-38 Selling costs	Market assessment of Draper opportunities in the nuclear power industry
33921	Autonomous Cars	59,297.00	Far 31.205-38 Selling costs	Developing market approaches applicable to autonomy and understanding of other entities in this space
34002	DFY16 Oppty - A Berlin	36,813.00	Far 31.205-38 Selling costs	Engage with outside world to identify bold/game changing projects based on Draper capabilities. Give priority to projects that create new competencies / sustainable differentiation for Draper. Mine existing Draper IP/capability. Connect to well defined need, Build proof-of-concept demo, Seek external sponsorship. (Activity 005 not used)
34061	DFY16 Oppty_ Human System Tech	4,231.00	Far 31.205-38 Selling costs	Seedling effort for Exoskeleton Market Research (Human System Technology). Deliverable was a report and identification of Draper focus area for this emerging area.
34228	Pathogen Monitor	41,437.00	Far 31.205-38 Selling costs	Designed a pathogen monitor, secured IP and pursued potential customers
34256	TRANSFORM DBS - RampUp & Plan	19,896.00	Far 31.205-38 Selling costs	Assess project and propose modifications to statement of work and schedule for remaining phases of project; assess technology readiness for application to other programs
34257	CAR T proof of concept	133,139.00	Far 31.205-38 Selling costs	Feasibility and scoping studies on two Draper technologies (acoustic separation and trans filtration microfluidics) to determine their ability to address unmet needs and customer interest in the manufacturing of chimeric antigen receptor T-cells (CAR-T).
34258	Ling/TDT/Ripple Commercialize	5,265.00	Far 31.205-38 Selling costs	Market assessment: support outreach/discussions with consultants for neurotechnology technology transfer opportunities.
34259	Eng Training at DFCI	4,030.00	Far 31.205-38 Selling costs	Market assessment: Draper staff observed CAR-T process at Dana Farber with goal of 1) understanding the process; and 2) looking for opportunities to make improvements.
Far 31.205-38 Selling costs		**1,655,516.00**		
33808	Secure & Assured Systems Oppor	87,130.00	IR&D	Develop Autocoder software module design, integration & test.
IR&D		**87,130.00**		
Grand Total		**5,573,042.00**		

SUMMARY SCHEDULE OF CLAIMED EXPENSES BY FEDERAL SPONSOR

Charles Stark Draper Laboratory
Fiscal Year Ended July 1, 2016

Major Program - R&D Cluster	Federal CFDA/CSFA Numbers	Expenditures Direct	Pass-through	Total
Department of Defense Federal Awards:				
Audited by DCAA				
Department of the Air Force	12	$ 14,592,327	$ 3,770,468	$ 18,362,795
Department of the Army	12	10,072,035	19,027,803	29,099,838
Department of the Navy	12	285,922,701	8,092,774	294,015,475
Defense Advanced Research Program Agency	12	16,400,414	620,844	17,021,258
Intelligence Advanced Research Projects Activit	12	81,743	60,006	141,748
Missile Defense Agency	12	-	2,760,445	2,760,445
Maryland Procurement Office	12	90	-	90
Other Government (DoD)	12	4,126,353	7,996,967	12,123,319
Other Contracts	12	7,819,167	4,587,776	12,406,943
Total Department of Defense Audited by DCAA		$ 339,014,829	$ 46,917,082	$ 385,931,911
Non DoD Federal Awards				
Audited by PwC				
Department of Commerce	11	$ 170,763	$ -	$ 170,763
Department of the Interior	15	(475)	-	(475)
Department of Transportation	20	-	202	202
National Air and Space Administration	43	4,389,831	2,618,774	7,008,605
National Science Foundation	47	12,446	-	12,446
Department of Energy	81	-	438,756	438,756
Department of Health and Human Services:				
National Institutes of Health	93	836,769	480,711	1,317,480
Department of Homeland Security	97	1,781,611	-	1,781,611
Other contracts	99	21,937,448	2,302,469	24,239,917
Total Non DoD Federal Awards Audited by PwC		$ 29,128,394	$ 5,840,912	$ 34,969,306
Total Federal Awards		$ 368,143,223	$ 52,757,994	$ 420,901,217

The above schedule represents the costs and fee claimed by CSDL on Federal awards during FY 2016. It does not represent the final costs by Federal sponsor because it does not reflect final indirect costs as final indirect rates still have to be negotiated by the Administrative Contracting Officer. Final amounts will be adjusted after CSDL settles its indirect rates with the Administrative Contracting Officer.

I. Summary of PWC's Results[1]

Financial Statements

Type of auditor's report issued	Unmodified	
Internal control over financial reporting		
• Material weakness(es) identified?	___ yes	√ no
• Significant deficiency(ies) identified that are not considered to be material weaknesses?	___ yes	√ none reported
Noncompliance material to the financial statements noted?	___ yes	√ no

Federal Awards[1]

Internal control over major programs		
• Material weakness(es) identified?	___ yes	√ no
• Significant deficiency(ies) identified that are not considered to be material weaknesses?	___ yes	√ none reported
Type of auditor's report issued on compliance for major programs PwC – Report 3	Unmodified	
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)	___ Yes	√ no

Identification of major programs

CFDA Numbers	Name of Federal Program or Cluster
Various	Research and Development Cluster

Dollar threshold used to distinguish between Type A and Type B programs	$3,000,000	
Auditee is qualified as low-risk auditee?	√ yes	___ no

[1] This summary represents a summary of work performed by PwC for the compliance requirements and awards within our scope of work as detailed in Report 3 of this coordinated audit. For a summary of work performed by DCAA for the compliance requirements and awards within their scope of work, refer to Report 3a in this Uniform Guidance report.

II. Financial Statement Findings

No matters are reported.

III. Federal Award Findings and Questioned Costs

PWC

None Noted.

DCAA

The DCAA findings can be found in the accompanying DCAA report (Report 3a in this Uniform Guidance report).

Status of Prior Audit Findings

PwC

There are no findings from prior years which require an update in this report.

DCAA

Finding 2015-001

Unallowable Direct Subcontract Costs (N00030-08-C-0010)

DCAA recommends that CSDL reevaluate its policies and procedures for approving subcontract invoices. Especially to verify that its procedures are adequate identify sub award costs that are outside the period of performance of the sub award agreement.

DCAA found one exception whereby a sub award invoice appeared to be outside of the period of performance for the selected contract totaling $106,584. On March 21, 2017, Honeywell provided evidence to show that the costs in question were within the period of performance.

From DCAA Audit Report Number 2171-2015T10110001 dated March 23, 2016

Finding 2014-001

Internal Control over Labor Reporting Corrections

DCAA recommends that CSDL follow their current Time Reporting Handbook for all labor transfers/adjustments to ensure time is properly recorded and approved on Government projects.

DCAA found one exception to Draper's established labor transfer policy. Draper conducted mandatory training on time reporting that included requirements for labor transfers. Training was completed the end of December 2015.

From DCAA Audit Report Number 2171-2014T10110001 dated March 26, 2015