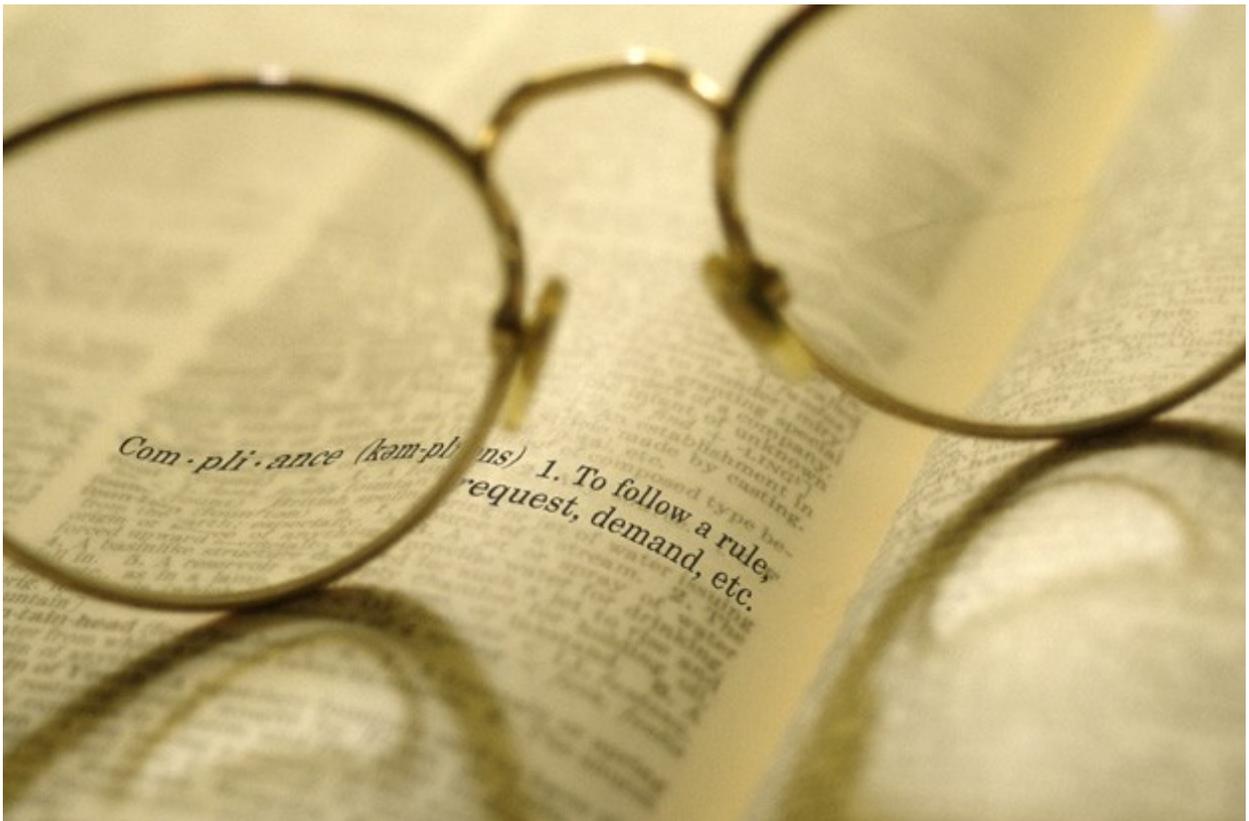




**Small Business Development Centers**  
*Helping businesses start, grow, and prosper.*

## A GUIDE TO FEDERALLY-FUNDED RESEARCH BUDGETING AND ACCOUNTING



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# FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

## INTRODUCTION

The purpose of this guide is to provide a Principle Investigator (one who is applying for Federal Research and Development Funding) with an approach to the preparation of the financial section of a proposal and to introduce accounting concepts for managing and accounting for a federally funded award.

Research and development are major factors in the growth and progress of industry and the national economy. The expense of carrying on research and development programs is beyond the means of many small-businesses, and such businesses are handicapped in obtaining the benefits of research and development programs conducted at government expense. These small-businesses are thereby placed at a competitive disadvantage. This weakens the competitive-free enterprise system and prevents the orderly development of the national economy. It is the policy of the Congress that assistance will be given to small businesses to enable them to undertake and to obtain the benefits of research and development (R&D) in order to maintain and strengthen the competitive-free enterprise system and the national economy.

One such program specifically designed for small technology businesses is the **Small Business Innovation Research (SBIR) /Small Business Technology Transfer (STTR) program**.

Although this guide is primarily designed to help individuals and small companies without a strong financial background prepare for any federally-funded project, there will be numerous references to the SBIR/STTR program. This does not imply that the guiding principles will not work on other federally funded opportunities, but since the SBIR/STTR program is by far the largest of the federal R&D grant opportunities, we will focus more on this program rather than other funding opportunities such as Broad Agency Announcements and Unsolicited Proposals to the various federal agencies.

Briefly, SBIR /STTR is the Small Business Innovation Research / Small Business Technology Transfer program created by the Small Business Innovation Development Act of 1982. This act requires federal agencies to allocate part of their extramural<sup>1</sup> R&D budgets to small companies

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<sup>1</sup> the term "extramural budget" means the sum of the total obligations minus amounts obligated for such activities by employees of the agency in or through Government-owned, Government-operated facilities, except that for the Department of Energy it shall not include amounts obligated for atomic energy defense programs solely for weapons activities or for naval reactor programs, and except that for the Agency for International Development it shall not include amounts obligated solely for general institutional support of international research centers or for grants to foreign countries. U.S. Code Title 15, Chapter 14 A § 638

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(fewer than 500 employees) through a competitive bidding process. The objectives of the program are:

- To increase opportunities for small companies in federally funded research.
- To stimulate technological innovation.
- To encourage private sector participation in commercialization of new technologies.

To meet these objectives the program is set-up in three discriminate phases:

**Phase I** is designed to determine, insofar as possible, the scientific and technical merit and feasibility of ideas that appear to have commercial potential.

**Phase II** is designed to further develop proposals submitted in a Phase I proposal which meets particular program needs. Awards are made based on the scientific and technical merit and feasibility of the proposals, as evidenced by the Phase I proposal, considering, among other things, the proposal's commercial potential, as evidenced by:

- the small business concern's record of successfully commercializing SBIR or other research;
- the existence of second phase funding commitments from private sector or non-SBIR funding sources;
- the existence of third phase, follow-on commitments for the subject of the research; and
- the presence of other indicators of the commercial potential of the idea.

**Phase III** is the commercial applications of SBIR-funded research or research and development<sup>2</sup> funded by non-Federal sources of capital or, for products or services intended for use by the Federal Government, by follow-on non-SBIR Federal funding awards. Additionally, Phase III awards from non-SBIR Federal funding sources are used for the continuation of research or research and development that has been competitively selected using peer review or scientific review criteria.

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<sup>2</sup> The term "research" or "research and development" means any activity which is a systematic, intensive study directed toward greater knowledge or understanding of the subject studied; a systematic study directed specifically toward applying new knowledge to meet a recognized need; or a systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. U.S. Code Title 15, Chapter 14 A § 638

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Essentially, the Small Business Innovation Research program provides small, technology-based companies an opportunity to conduct research and development of new ideas that will provide a benefit to the U.S. government. The program helps to minimize the risk involved in conducting R&D for a small tech based company and provides an economical path to an entrepreneur's overall financing strategy.

First and foremost, federally-funded programs should not be the ultimate goal of a small technology based business but rather part of the overall financial strategy of business growth. Small businesses considering the use of federal funds should have a good understanding of the programmatic requirements of each program and a clear understanding of their market niche. Federally-funded awards can help a company to begin the developmental stages of a new process or product. Follow-on commercial funding opportunities are often necessary to help a company through the commercialization process of their new technology.

Federally-funded proposal evaluation criterion involves the scientific and technical merits of the proposed research, the qualifications of the Principal Investigator and company, and the ability to address the soliciting agency's needs. Although it is not the most critical evaluation criteria in the federal review process, a well-prepared cost proposal (budget) creates a positive company image and enhances a submitted proposal. Like the technical sections of a proposal, the budget should suggest that you and your company are knowledgeable and competent.

### SBIR BUDGETING GUIDE

#### A. Background

A ***budget*** is a statement of future plans which identifies expected revenues and resources to be expended in achieving an organization's goals during a specified period. Budgets also serve as a tool to measure performance by comparing actual actions with plans. In general, a budget:

- a. Is stated in monetary terms.
- b. Covers a specific period of time.
- c. Implies commitment and serves as a motivational tool to achieve stated goals.
- d. Is compared to actual performance, with variances being analyzed and explained.

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A key goal in federally-funded proposals is to complete the innovation process by bringing to market the product or process developed during the feasibility and development stages of the program. Technology commercialization must be considered at each stage of the R&D process and should be part of a company's long-range budgeting or planning.

Normally, long-range planning provides general direction covering a three to five year period and forms the basis from which a more detailed plan, encompassing a shorter period is developed. However, many technologies, specifically in the IT industry, long-term may be measured in months rather than years. Nonetheless, it is critical that all budgets reflect very accurate, detailed information to ensure a rapid, profitable deployment of the technology. The budget addresses the direction of the company regarding new markets or products, market share, profit objectives, and sources of new capital. Plans for future operations should provide for alternative courses of action for various conditions that may arise. Long-range planning should be an ongoing process which forces a company to review goals, take advantage of new opportunities, and lessen the impact of pending threats when necessary.

To complement and carry out the goals of the long-term plan, a company should develop an annual budget. **Annual budgets** are comprehensive plans for a shorter budget period, typically one year. They are developed through the coordinated planning of all functions and activities within an organization. Each department or function within an organization participates in the budgeting process by developing an operating budget for its direct areas of responsibility. An **operating budget** includes a forecasted net income statement which summarizes anticipated resources and revenues, direct costs, and indirect costs.

A **program budget** can be part of the company's operating budget and/or part of a specific departments' operating budget. A federal cost proposal is best identified with this type of budget. A program budget is a summary document used to forecast direct labor, material, and other costs, including overhead requirements needed to meet a forecasted cash stream.

Within federally funded programs the **cash stream**, or available funding limit, will vary drastically, depending on the type of proposal one submits. These opportunities will vary from a few thousand dollars to several million dollars, depending on the specific agency's budget and the type of proposal submitted.

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For example, an SBIR Phase I may be funded at as little as \$70,000 while a Broad Agency Announcement may be well in excess of several million dollars. Working with these varying limits, and understanding the resource allocation necessary to prepare an effective proposal, demonstrates the ability of a company to match the proposed project amounts to long-range plans being established. In preliminary management discussions, a company should envision their long-range goals when deciding to participate in a federally funded program. Consideration should be given to, among other things, total project cost, timing, resource allocation, and research fit with the company's capabilities and growth expectations.

### **B. Federal Cost Proposals**

When presenting the cost budget in a federal proposal, the preparer is concerned with presenting the tangible costs of the project. Familiarity with applicable cost regulations is necessary when participating in the federal program. Not all project related costs incurred during the performance of a federal award will be recoverable. This includes such items as entertainment expenses; donations and contributions; donated services and property; employee, morale, health and welfare costs; fund raising and investment cost; idle facilities and idle capacity costs to name just a few.

The *Federal Acquisition Regulations (FAR)* were established to provide uniform policies and procedures for acquisitions by most federal agencies. Part 31 of the Federal Acquisition Regulations sets the compliance requirements for pricing, determination, negotiation, and allowance of costs.

Each agency provides explicit instructions for the preparation of a federal proposal. Standard budget forms are normally provided with the Program Solicitation and should be used in the final submission of a proposal. The proposal should adhere to individual proposal requirements of the particular agency.

Significant questions or concerns which may arise during the budgeting of a federal proposal should be addressed with the corresponding agency. It is important that enough information is provided to allow an agency to understand how the applicant plans to use the requested funds in the contract/grant when awarded.

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Some of the common considerations in formatting a federal proposal budget are the classifications of direct, indirect, and general and administrative (G&A) costs. The categories are defined in the federal regulations as follows:

- **Direct Costs** - Any cost which is identified specifically with a particular contract award, commercial job, or manufacturing process; referred to in the FAR as a final cost objective. Direct costs are not limited to items which are incorporated in the end products as material or labor. Costs identified specifically with a contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those costs objectives. Clearly, a direct cost benefits a single cost objective.
- **Indirect Costs** - Broadly defined, indirect costs are those incurred by an organization simply to exist. Perhaps most clearly defined by the National Institute of Health "indirect costs are those costs of an institution which are not readily identifiable with a particular project or activity but are nevertheless necessary to the general operation of the institution and the conduct of its activities. The costs of operating and maintaining buildings, grounds and equipment, depreciation, general and department administrative salaries and expenses, and library costs are the type of expenses usually considered as indirect costs."
- In theory, all such costs might be charged directly; practical difficulties, however, preclude such an approach. Therefore, they are usually grouped into common pool(s) and distributed to those institutional activities benefited through a cost allocation process. The end product of this allocation process is an indirect cost rate(s) which is then applied to individual grant and contract awards to determine the amount of indirect costs chargeable to the award.
- Simply, indirect costs are any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives.
- **General and Administrative (G&A) Costs** - Any management, financial, and other expense which is incurred by or allocated to a business unit and which is for the general management and administration of the business unit as a whole. G&A expense does not include those management expenses whose beneficial relationship to cost objectives can be more directly measured by a base other than a cost input base representing the total activity of a business unit during a cost accounting period.

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Some common expenses in each of these categories include:

<i><b>DIRECT</b></i>	<i><b>INDIRECT</b></i>	<i><b>G&amp;A</b></i>
Labor	Supervision	Office Salaries
Materials	Supplies	Stationery
Travel	Maintenance	Telephone
Special Testing	Depreciation	Postage
Equipment	Utilities	Bank Charges
Consultants	Rent	Legal Expenses

**Table 1.** These examples are not intended to be all-inclusive, but are presented to provide a representation of the costs classifications.

The basic source of information in a federal proposal budgeting process is the project work plan with reliance on the annual company budget. Direct project costs are developed through the work plan, while the overall company budget provides assistance in establishing overhead rates. The work plan lists and identifies the tasks necessary to complete the immediate effort. The initial budgeting process should include a detailed analysis of the work plan, specifically, the direct labor and materials needed to complete each task. Methods for this analysis vary by company, although, one suggestion is to utilize a project matrix. (Refer to *Illustration 1*)

A *project matrix* identifies, by task, all of the estimated direct costs necessary to execute a particular project or phase of a larger project. These costs include direct labor for the Principal Investigator and other staff involved in the project. Costs of justifiable equipment and needed materials to perform the research are identified. Also included are other possible direct costs, such as travel, computer services, consultant services, and subcontracts. A considerable portion of this work can be performed as the proposal work plan is being drafted. The Principal Investigator can make budgeting-related notes and matrix entries as he designs the tasks to be performed.

Project costs should be budgeted as accurately as possible. Common federally-funded budget weaknesses include over- and under- budgeting a project. A company will not necessarily be viewed more favorably if it intentionally offers more work than a \$50,000 award allows. This may create an impression that the company is not fully aware of what it takes not only to complete the Phase I project, but the entire innovation process as well. Conversely, a lower than \$50,000 project disguised as such, for obvious reasons, will not generate a favorable review.

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Indirect costs are often overlooked—and are more difficult to quantify—than direct costs, especially for a start-up company. Indirect costs are a viable component of a company's total cost structure and are commonly allowable, with FAR restrictions, for reimbursement in the SBIR program. However, as noted in the definition, they cannot be randomly or directly charged to a project. They must be allocated to the various projects of a company using some equitable base.

Companies submitting SBIR proposals have to identify their indirect costs and allocate a portion to the budgeted cost proposal. This will require estimates of business costs to be incurred and necessitate a review of the company's history, if available. Adequate support should be accumulated or prepared to substantiate budgeted costs, which may be required during the negotiation of an award. Once aware of total overhead costs, companies can calculate and apply established overhead rates to the project matrix to complete the cost proposal.

To estimate and calculate an indirect cost rate, a fair and reasonable base to consistently allocate estimated costs has to be determined. The primary objective is to insure the most equitable application of overhead costs to the projects undertaken. The direct labor costs base is the most widely used method of applying overhead for small SBIR companies. Total costs are used as a base for general and administrative expenses.

The following sections of the FAR<sup>3</sup> provide guidance on the allocation of indirect costs:

FAR 30.418 lists three fundamental requirements as:

- a. A business shall have a **written statement** of accounting policies and practices for classifying costs as direct or indirect, which shall be consistently applied.
- b. Indirect costs shall be accumulated in **indirect cost pools**, which are homogeneous.
- c. Pooled costs shall be allocated to **cost objectives** in a reasonable proportion to the beneficial or casual relationship of the pooled costs to cost objectives.

FAR 31.203(b) states:

"Indirect costs shall be accumulated by **logical cost groupings** with due consideration of the reasons for incurring such costs. Each grouping should be determined so as to permit distribution of the grouping on the basis of the benefits accruing to the several cost

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<sup>3</sup> <http://farsite.hill.af.mil/vffara.htm>

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objectives. Commonly, manufacturing overhead, selling expenses, and general and administrative (G&A) expenses are separately grouped. Similarly, the particular case may require subdivision of these groupings, e.g., building occupancy costs might be separable from those of personnel administration within the manufacturing overhead group. This necessitates selecting a distribution base common to all cost objectives to which the grouping is to be allocated. The base should be selected so as to permit allocation of the grouping on the basis of the benefits accruing to the several cost objectives. When substantially the same results can be achieved through less precise methods, the number and composition of cost groupings should be governed by practical considerations and should not unduly complicate the allocation."

FAR 31.203(c) states:

"Once an appropriate base for distributing indirect costs has been accepted, it shall not be fragmented by removing individual elements. All items properly included in an indirect cost base should bear a *pro rata* share of indirect costs irrespective of their acceptance as government contract costs. For example, when a cost input base is used for the distribution of G&A costs, all items that would properly be part of the cost input base, whether allowable or unallowable, shall be included in the base and bear their pro rata share of G&A costs."

FAR 31.203(e) states ..." A *base period* for allocating indirect costs is the cost accounting period during which such costs are incurred and accumulated for distribution to work performed in that period. ... For contracts subject to modified Cost Accounting Standards (CAS) coverage and for non-CAS-covered contracts, the base period for allocating indirect costs will normally be the contractor's fiscal year. But a shorter period may be appropriate (1) for contracts in which performance involves only a minor portion of the fiscal year, or (2) when it is general practice in the industry to use a shorter period. When a contract is performed over an extended period of time, as many base periods shall be used as are required to represent the period of the contract performance."

Total estimated indirect cost is divided by the total estimated company direct labor dollars to arrive at an indirect cost rate. This rate is then applied as a percentage to the direct labor dollars included in the project matrix to arrive at the total indirect costs for that project. The calculation of the indirect costs rates should utilize cost information of similar periods (i.e. monthly,

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quarterly or annually). If a history does not exist, the indirect cost rate can be calculated based upon realistic projections over similar periods.

### C. Illustrations

Illustrations 1 through 5 present a simplified example of the SBIR budgeting process for a small company. **Examples are for illustration purposes only. The example rates are not intended to indicate the "correct rates" for any federally funded program.**

The illustrations are intended to serve as a guide to the process of establishing indirect costs rates and an SBIR cost proposal. All companies are unique and rates will vary according to size and industry. Issues that may be peculiar to a situation not considered here should be researched in the FAR and/or with the appropriate federal agency.

In Illustration 1, the project matrix summarizes, by task, the direct costs allocated to the anticipated SBIR Phase I project. For the example, it was determined that additional help would be necessary to perform the Phase I project without interruption to the company's product manufacturing. A competent full-time assistant and a part-time clerk would have to be hired to fulfill the Phase I effort. A time allocation summary (Illustration 2) was prepared to identify the available time for the company. Illustrations 3 through 5 provide the indirect and G&A cost analysis for the company. Illustration 6 is the completed cost proposal for the example company's SBIR Phase I project.

Ample time and consideration must be allotted to prepare a final program budget for submission. The first budget draft may be well over or under the \$100,000 limit for a Phase I award. Additional analysis will always be necessary, which may also result in work plan revisions. Many decisions will be made. The final budget should represent the most feasible allocation of resources to work the SBIR project within a company's framework and to the satisfaction of the federal agencies. The budgeting effort will go a long way toward the building of a systematic approach to repeat the process.

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**Illustration 1**

## Small Technology Company SBIR PHASE I PROJECT MATRIX SIX MONTH PROJECT

ANTICIPATED BEGIN DATE MM/DD/YYYY

TASK	EMPLOYEE	DIRECT LABOR RATE	DIRECT LABOR HRS	DIRECT LABOR DOLLARS	TOTAL HOURS/ DOLLARS	TOTAL DIRECT EQUIPMENT	TOTAL DIRECT MATERIALS	TOTAL DIRECT TRAVEL	TOTAL
# 1	P.I.	\$80	75	\$6,000					
	Assistant	\$40	107	\$4,286					
	Technician	\$25	13	\$333					
	Accountant	\$18	52	\$936					
	Clerk	\$10	14	\$139					
					261/ \$11,694	\$5,000	\$1,500	\$0	\$18,194
# 2	P.I.	\$80	38	\$3,000					
	Assistant	\$40	107	\$4,286					
	Technician	\$25	27	\$667					
	Accountant	\$18	0	0					
	Clerk	\$10	70	\$695					
					241/ \$8,648	\$0	\$800	\$1,200	\$10,648
# 3	P.I.	\$80	25	\$2,000					
	Assistant	\$40	54	\$2,143					
	Technician	\$25	80	\$2,000					
	Accountant	\$18	0	0					
	Clerk	\$10	111	\$1,112					
					270/ \$7,255	\$0	\$600	\$0	\$7,855
# 4	P.I.	\$80	63	\$5,000					
	Assistant	\$40	54	\$2,143					
	Technician	\$25	13	\$333					
	Accountant	\$18	0	0					

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	Clerk	\$10	70	\$695					
					199/ \$8,171	\$0	\$900	\$0	\$9,071
# 5	P.I.	\$80	50	\$4,000					
	Assistant	\$40	54	\$2,143					
	Technician	\$25	67	\$1,667					
	Accountant	\$18	0	0					
	Clerk	\$10	32	318					
					202/ \$8128	\$0	\$500	\$0	\$8,628
			1173	\$43,896	\$43896	\$5,000	\$4,300	\$1,200	\$54,396
EMPLOYEE TOTALS									
	P.I.		250	\$20,000					
	Assistant		375	\$15,000					
	Technician		200	\$5,000					
	Accountant		52	\$936					
	Clerk		296	\$2,960					
			1,173	\$43,896					

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*Illustration 2*

**Small Technology Company  
Analysis of Available Hours  
Budgeting of SBIR Phase I  
Six Month Period beginning MM/DD/YYYY**

<b>Percentages</b>	<b>Labor Distribution Percentages</b>	<b>Hours</b>	<b>DL (1)</b>	<b>DL (2)</b>	<b>IL (3)</b>	<b>G&amp;A (4)</b>	<b>TOTALS</b>
	<b>P.I.</b>	<b>1040</b>	<b>24%</b>	<b>44%</b>	<b>14%</b>	<b>18%</b>	<b>100%</b>
	<b>Assistant</b>	<b>1040</b>	<b>36%</b>	<b>45%</b>	<b>19%</b>	<b>0%</b>	<b>100%</b>
	<b>Technician</b>	<b>1040</b>	<b>19%</b>	<b>35%</b>	<b>46%</b>	<b>0%</b>	<b>100%</b>
	<b>Accountant</b>	<b>1040</b>	<b>5%</b>	<b>15%</b>	<b>35%</b>	<b>45%</b>	<b>100%</b>
	<b>Clerk</b>	<b>1560</b>	<b>19%</b>	<b>32%</b>	<b>41%</b>	<b>8%</b>	<b>100%</b>
	<b>Total %</b>		<b>21%</b>	<b>34%</b>	<b>31%</b>	<b>14%</b>	<b>100%</b>
	<b>Hours</b>	<b>5270</b>	<b>1173</b>	<b>1944</b>	<b>1823</b>	<b>780</b>	<b>5720</b>
<b>Hours</b>	<b>Labor Distribution Hours</b>	<b>Rate</b>					
	<b>P.I.</b>	<b>\$80</b>	<b>250</b>	<b>458</b>	<b>145</b>	<b>187</b>	<b>1040</b>
	<b>Assistant</b>	<b>\$40</b>	<b>375</b>	<b>467</b>	<b>198</b>	<b>0</b>	<b>1040</b>
	<b>Technician</b>	<b>\$25</b>	<b>200</b>	<b>364</b>	<b>476</b>	<b>0</b>	<b>1040</b>
	<b>Accountant</b>	<b>\$18</b>	<b>52</b>	<b>156</b>	<b>364</b>	<b>468</b>	<b>1040</b>
	<b>Clerk</b>	<b>\$10</b>	<b>296</b>	<b>499</b>	<b>640</b>	<b>125</b>	<b>1560</b>
	<b>Total</b>		<b>1173</b>	<b>1944</b>	<b>1823</b>	<b>780</b>	<b>5720</b>
<b>Dollars</b>	<b>Labor Distribution Dollars</b>						
	<b>P.I.</b>		<b>\$20,000</b>	<b>\$36,640</b>	<b>\$11,600</b>	<b>\$14,960</b>	<b>\$83,200</b>
	<b>Assistant</b>		<b>\$15,000</b>	<b>\$18,680</b>	<b>\$7,920</b>	<b>\$0</b>	<b>\$41,600</b>
	<b>Technician</b>		<b>\$5,000</b>	<b>\$9,100</b>	<b>\$11,900</b>	<b>\$0</b>	<b>\$26,000</b>
	<b>Accountant</b>		<b>\$936</b>	<b>\$2,808</b>	<b>\$6552</b>	<b>\$8,424</b>	<b>\$18,720</b>

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	Clerk		\$2,960	\$4,990	\$6,400	\$1,250	\$15,600
	Total		\$43,896	\$72,218	\$44,372	\$24,634	\$185,120
					(1) Direct Labor, Phase I		
					(2) Direct Labor, Company Operations		
					(3) Company Indirect Labor		
					(4) Company General and Admin Labor		

*Illustration 3*

SMALL TECHNOLOGY COMPANY  
 ANALYSIS OF PAYROLL TAXES  
 FOR BUDGETING OF SBIR PHASE I  
 FOR THE SIX MONTH PERIOD BEGINNING  
 September 1, 2004

	<u>TOTAL EMPLOYER PAY</u>				
<u>Wages</u>	<u>FICA</u>	<u>FUTA</u>	<u>SUTA</u>	<u>TAX</u>	
PI	\$83,200.00	\$6,364.80	\$56.00	\$280.00	\$6,700.80
ASST	41,600.00	3,182.40	56.00	280.00	3,518.40
TECH	26,000.00	1,989.00	208.00	910.00	3,107.00
ACTG SUP	18,720.00	1,432.08	149.76	655.20	2,237.04
CLRK/SEC	15,600.00	1,193.40	124.80	546.00	1,864.20
Total					
wages	\$185,120.00	\$14,161.68	\$594.56	\$2,671.20	\$17,427.44

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**Illustration 4**

**SMALL TECHNOLOGY COMPANY  
INDIRECT COST ANALYSIS  
FOR THE SIX MONTH PERIOD BEGINNING  
MM/DD/YYYY**

<u>Indirect labor:</u>	<u>HOURS</u>	<u>RATE</u>	<u>TOTAL</u>
PI	145	\$80	\$11,600
ASST	198	35	6,930
TECH	476	25	11,900
ACTG SUPPORT	364	18	6,552
CLERK/SECRETARY	640	10	6,400
<b>Total Indirect Labor</b>			<b>\$43,382</b>
<b>Indirect Payroll Taxes</b>			
PI (1)		\$5,496	
FA		3,518	
US		3,107	
Office Manager		1,230	
Clerk/Secretary		1,715	
			<b>15,067</b>
Laboratory rental	aver mo=	\$600	3,600
Local travel	per yr=	\$500	250
Gas and Oil			750
Depreciation			3,800
Repairs and Maintenance			1,500
Supplies			1,300
Utilities			1,100
Telephone	Aver per mo =	\$95	570
Insurance			
Property and equipment			520
Auto			600
<b>Total Indirect costs</b>			<b>\$72,439</b>
<b>Total Direct Labor (2)</b>			<b>\$116,114</b>
<b>Indirect Overhead Percentage</b>	<b>(indirect/direct)</b>		<b>62.00%</b>

## FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

<b>(1) PI direct labor Phase I</b>		<b>\$20,000</b>
<b>PI direct labor operations</b>		<b>36,640</b>
<b>PI indirect labor</b>	<b>11,600</b>	<b>68,240</b>
<b>PI total labor</b>		<b>\$83,200</b>
<b>\$68,240/\$83,200</b>		
<b>x PI wage taxes (\$6,701) =</b>		<b>\$5,496</b>
	<b>(2) Total Direct Labor:</b>	
<b>Direct project labor</b>		<b>\$43,896</b>
<b>Direct operations labor</b>		<b>72,218</b>
		<b>\$116,114</b>

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*Illustration 5*

**SMALL TECHNOLOGY COMPANY  
GENERAL AND ADMINISTRATIVE COST ANALYSIS  
FOR THE SIX MONTH PERIOD BEGINNING**

Mm/dd/yyyy

G & A labor:	<u>HOURS</u>	<u>RATE</u>	<u>TOTAL</u>
PI	187	\$80	\$14,960
ASST	0	40	0
TECH	0	25	0
ACTG SUPPORT	468	18	8,424
CLERK/SECRETARY	125	10	1,250
<b>Total G&amp;A Labor</b>			<b>\$24,634</b>
<b>G&amp;A Payroll Taxes</b>			
PI			\$1,205
FA			0
US			0
Office Manager			1,007
Clerk/Secretary			149
			<b>2,361</b>
Office rental	per mo=	\$120	720
Legal services			500
Accounting services			600
Office expenses			120
Miscellaneous supplies			60
Postage/Parcel			150
Telephone	aver/	per mo= \$30	180
Memberships/dues/subscriptions			250
<b>total G&amp;A costs</b>			<b>\$29,575</b>
<b>total costs</b>		<b>\$217,422 (1)</b>	
<b>G&amp;A %</b>			<b>14.00%</b>
<b>(1) total costs:</b>			
estimated direct project labor			43,896
estimated direct operations labor			72,218
estimated direct project equipment			5,000
estimated direct project materials			4,300
estimated direct project travel			1,200
estimated direct operation costs			18,369

## FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

estimated indirect costs	72,439
total estimated costs	217,422

**Illustration 6**

**SMALL TECHNOLOGY COMPANY  
SBIR PHASE I COST PROPOSAL  
FOR THE SIX MONTH PERIOD BEGINNING  
MM/DD/YYYY**

DIRECT LABOR		\$43,896
DIRECT EQUIP		5,000
DIRECT MATERIALS		4,300
DIRECT TRAVEL		1,200
<b>TOTAL DIRECT COSTS</b>		<b>54,396</b>
INDIRECT OVERHEAD PERCENTAGE	62%	
INDIRECT OVERHEAD EXPENCE		27,216 (1)
<b>TOTAL DIRECT PLUS INDIRECT COSTS</b>		<b>81,612</b>
G & A PERCENTAGE	14%	
G & A EXPENSE		11,426 (2)
<b>TOTAL COSTS OF CONTRACT</b>		<b>93,037</b>
PROFIT	7%	6,513 (3)
<b>TOTAL PROJECT COST</b>		<b>\$99,550</b>

(1) Direct labor (\$43,896) multiplied by the Indirect overhead percentage (62%).

(2) Total costs (\$81,612) multiplied by the G&A percentage (14%).

(3) Most SBIR solicitations permit a reasonable profit to the total cost of the contract. The final profit decision rests with the awarding agency.

# FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

## SBIR ACCOUNTING PRIMER

### A. Background

SBIR contractors are required to provide detailed information to awarding agencies concerning contract costs incurred. For the SBIR company, a cost accounting system should capture and classify direct costs, material, labor, etc., and overhead burden. This is necessary, not only for federal reporting and billing purposes, but for effective total cost control as well.

Government contract cost accounting rules are governed by *Cost Accounting Standards (CAS)*, which are included in the FAR, Part 30. Small businesses are exempt from CAS; however, SBIR contracts typically contain a clause requiring a contractor to maintain records using any generally accepted method of measuring costs. The method must be equitable and consistently applied to all costs incurred in performing a contract. FAR 31.203-Indirect Costs, subsection (d) states: "The contractors method of allocating indirect costs shall be in accordance with standards promulgated by the CAS Board, if applicable to the contract; otherwise, the method shall be in accordance with generally accepted accounting principles which are consistently applied."

*Generally accepted accounting principles (GAAP)* are established by the accounting profession ) and are used primarily to ensure the comparability of a public company's financial information. A review of GAAPs related to research and development and contractual reporting will provide background to understanding SBIR cost accounting concepts.

- Financial Accounting Standards Board (FASB) Statement No. 2, [Accounting for Research and Development \(R&D\) Costs](http://www.fasb.org/pdf/aop_FAS2.pdf) ([www.fasb.org/pdf/aop\\_FAS2.pdf](http://www.fasb.org/pdf/aop_FAS2.pdf)) introduces some uniformity into the accounting for R&D. It requires that all R&D costs be expensed when incurred except:
  - Intangible assets that have been purchased from others and have alternative future uses; and
  - Tangible assets that have alternative future uses.

Required financial statement disclosures are the total R&D costs charged to expense for each period for which an income statement is presented. FASB No. 2 identifies R&D costs as:

## FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

- Materials, equipment, and facilities that are acquired for R&D projects and that have no alternative uses;
  - Personnel costs, such as salaries;
  - Intangibles purchased from others that do not have alternative future uses;
  - Contract services for R&D; and
  - Indirect costs, based on a reasonable allocation approach.
- FASB Statement No. 68, Research and Development Arrangements provides guidance on accounting for R&D costs which are funded by other parties. The essential thrust of this statement is to record a liability when an enterprise is required to repay amounts received to conduct R&D, regardless of the outcome of the research. A liability is recorded when the enterprise is obligated or committed (though not required) to repay the funds received for R&D or when conditions surrounding the project indicate that it is probable the amounts will be repaid.

In other arrangements, the enterprise conducting the R&D may be performing contract services for others, in which repayment depends on whether the project is a success. In this situation, the amounts received are treated as advances and costs incurred are charged against the advance account. The party making the advance accounts for its payment as an R&D cost.

**The above FASB Statements specifically state that they do not address government-sponsored research and development conducted for others under a contractual arrangement. They are presented to identify accounting principles governing R&D expenses and reporting.**

- Accounting Research Bulletin (ARB) No. 43, Chapter 11, Government Contracts, Section A - Cost-Plus-Fixed-Fee Contracts ARB No. 43 specifically deals with accounting problems arising under cost-plus-fixed-fee (CPFF) contracts. Note that SBIR Phase II contracts are usually CPFF. Other instruments commonly used for SBIR awards, depending upon the awarding agency, are firm-fixed-price contracts (typically Phase I) and grants. ARB #43 can also be used as guidance for these funding instruments.

This bulletin identifies and answers four important accounting problems common to all CPFF contracts.

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### **1. When should fees under such contracts be included in the contractor's income statement?**

It is a generally accepted accounting procedure to accrue revenues under certain types of contracts and thereby recognize profits, on the basis of partial performance, where the circumstances are such that total profit can be estimated with reasonable accuracy and ultimate realization is reasonably assured. There is ample precedent for pro rata recognition of profit as the work progresses, if the total profit and the ratio of the performance to date to the complete performance can be computed reasonably and collection is reasonably assured. Depending upon the circumstances, partial performance may be established by deliveries, expenditures, or percentage of completion otherwise determined.<sup>4</sup>

The basic problem in dealing with CPFF contracts is the measure of partial performance, i.e., whether fees should be accrued a) under the established rules as to partial deliveries; b) by percentage of completion otherwise determined, or whether; c) the fees should be accrued as they are billable.<sup>5</sup>

Ordinarily it is acceptable to accrue the fees as they become billable. The outstanding characteristic of CPFF contracts is reimbursement for all allowable costs, plus payment of a fixed fee for the contractor's efforts. The fee appears to be earned when allowable costs are incurred or paid and the fee is billable. Finally, accrual on the basis of amounts billable is ordinarily not a departure from existing rules of accrual on the basis of partial performance, but rather a distinctive application of the rule for determining percentage of completion.

Judgment must be exercised in each case about whether accrual of the fee when billable is preferable to accrual on the usual basis of delivery or percentage of completion. While the approval of the government as to amounts billable would ordinarily be regarded as objective evidence, factors may exist which suggest an earlier or later accrual. Such factors include indications of large differences between estimated and final costs. Examples include situations where: preparatory or tooling-up costs were much more than

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<sup>4</sup> ARB#43,Ch11,par 13

<sup>5</sup> ARB#43,Ch11,par 15

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estimated; raw material needs were greatly and unduly anticipated by advance purchases; or delays in delivery schedules or other circumstances suggest that costs are exceeding estimates. Excess costs may be indicated in some cases to such an extent that accrual of fee before actual production would be unwise. Where such a situation exists the usual rule of deliveries or percentage of completion may be a preferable method of accruing the fee (ARB#43 Ch11, par 17).<sup>6</sup>

If accrual in relation to expenditures is otherwise suitable, it shall be on the basis of amounts billable, since such matters as clerical delays in assembling data for billing should not affect the income statement. Accrual on the basis of 100 percent of the fee is ordinarily preferable since complete performance is to be expected under ordinary circumstances. Care must be exercised, of course, to provide for possible non-realization if there is doubt about the collection of claimed costs or the related fee (ARB#43 Ch11, par 18).<sup>7</sup>

### **2. What amounts are to be included in sales or revenue accounts?**

This problem is whether sales or revenue as reported in the income statement should include reimbursable costs and the fee, or the fee alone. The answer to this question depends upon the terms of the contract and upon judgment as to which method gives the more useful information.<sup>8</sup>

Some CPFF contracts are service contracts under which the contractor acts solely in an agency capacity, whether in the erection of facilities or the management of operations. These appear to call for inclusion in the income statement of the fee alone. For supply contracts, however, the contractor is more than an agent. For instance, he is responsible to: a) creditors for materials and services purchased; b) employees for salaries and wages; and, c) he ordinarily uses his own facilities in carrying out his agreement. His position in many respects is that of an ordinary principal. In view of these facts, and the desirability of indicating the volume of his activities, it appears desirable to include reimbursable costs, as well as fees, in sales or revenues.<sup>9</sup>

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<sup>6</sup> ARB#43 Ch11, par 17

<sup>7</sup> ARB#43 Ch11, par 18

<sup>8</sup> ARB#43,Ch11,par 19

<sup>9</sup> ARB#43,Ch11,par 20

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### **3. What is the proper balance sheet classification of unbilled costs and fees?**

The principal reason for the existence of unbilled costs at any date is the time usually required to assemble data for billing. The right to bill usually exists upon expenditure or accrual, and that right unquestionably represents a receivable rather than an advance or inventory. There is, nevertheless, a difference in character between billed items and unbilled costs and distinction shall be made between them on the balance sheet.<sup>10</sup>

### **4. What is the proper balance-sheet treatment of various items, debit and credit, identified with CPFF contracts?**

In statements of current assets and current liabilities, amounts due to and from the same person are ordinarily offset where, under the law, they may be offset in the process of collection or payment. An advance received on a contract is, however, usually not offset unless it is definitely regarded as a payment on account of contract work in progress, in which event it will be shown as a deduction from the related asset. An advance on a CPFF contract usually is made to provide a revolving fund and is not ordinarily applied as a partial payment until the contract is completed or nears completion. It therefore appears to be preferable to offset advances on CPFF contracts against receivables in connection with the contracts only when it is expected that the advances will be applied in payment of those particular charges. In any case, amounts offset should be clearly disclosed.<sup>11</sup>

## **B. Criteria**

Cost accounting involves systems and procedures which lead from original source documents to journal entries to summary reports. These specially-designed summary reports enable management to control the cost of individual projects as well as the overall company. *Cost accounting systems* support:

- Cost determination and measurement;
- Planning and control; and
- Analysis for decision-making purposes.

A comprehensive cost accounting system will be necessary to determine profitability and to manage commercial business and SBIR projects. The budgeting process is an ideal place for a

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<sup>10</sup> ARB#43,Ch11,par 21

<sup>11</sup> ARB#43,Ch11,par22

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pre-SBIR company to identify and plan for future cost accounting requirements. The annual and program/project budgets identify all the direct and indirect costs of the company to be monitored. The cost accounting system should efficiently measure and record costs related to all program/projects and provide equitable overhead allocation. The system developed should be flexible to support new activity, such as additional SBIR awards or commercial business, with little disturbance to operations.

Federal agencies frequently request a pre-award accounting survey to determine a new contractor's accounting capabilities. There are usually two categories of concern during a pre-award survey. One deals with the financial responsibility of the contractor to perform the contract and the other deals with the adequacy of the accounting system to accumulate cost information required by a federal contract. Small companies designing a cost accounting system to monitor SBIR contracts/grants should be familiar with the requirements of an adequate accounting system. During a *pre-award accounting survey*, the accounting system is reviewed for:

- a. Proper segregation of direct costs from indirect costs.
- b. Identification and accumulation of direct costs by contract. Within the cost accounting system, subsidiary cost records for each cost center (SBIR projects and other company work) should be maintained.
- c. A logical and consistent method for the allocation of indirect costs to the various cost centers.
- d. Accumulation of costs under general ledger control.
- e. A timekeeping system that identifies employees' labor by cost center.
- f. A labor distribution system that charges direct and indirect labor to the appropriate cost objectives.
- g. Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account.
- h. Exclusion of unallowable costs.
- i. Identification of costs by contract line item.

Companies have the flexibility to design an accounting system to meet their specific needs. An acceptable accounting system for SBIR contracts/grants adequately accumulates, identifies, and bills allowable costs to a related government contract and meets the criteria discussed on the previous page.

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### C. Methodology

Accounting for an SBIR award can be supported by a manufacturing concept commonly known as *job order costing*. Under job order costing, each job is an accounting unit identified by some systematic numbering system to which labor, material, and overhead is assigned. For an SBIR contractor, each award would be an accounting unit to which direct costs are charged and indirect costs are allocated. Commercial work of the SBIR contractor would also be treated similarly, receiving direct cost charges and an equitable allocation of indirect costs.

In a manufacturing environment, the costs of each job produced are recorded in subsidiary job cost ledgers. The cost ledgers are reconciled and controlled in the general ledger through a work-in-process control account. Modified for an SBIR contract/grant, this process is very similar. Differences occur in account classification. In a manufacturing concern producing a final product for sale, the work-in-process account is an asset, similar to inventories. For the SBIR contractor, however, the in-process or control account will be classified as an expense, as R&D costs are expended when incurred.

The fundamental concept in accounting for a federal SBIR award is to adequately and accurately track the related project costs. The accounting system must allow for an audit trail which will enable government auditors to easily trace recorded costs to source documents. A selection of accounts is necessary to begin to monitor and control an award. Depending upon the number of projects and the required internal financial information, companies will design an information system to meet their needs. Usually the company will maintain general ledger control accounts with subsidiary ledger detail support for each activity.

### D. Project Sub-Ledger

Each SBIR contract/grant awarded to a company should be controlled by a subsidiary contract, or project sub-ledger. A *project sub-ledger* gathers all detailed cost information for analyzing and reporting individual projects, government related as well as, independent research or commercial work. All detailed project-related expenses are recorded. The project sub-ledger contains all direct costs, overhead, and G&A expenses applied to the project. The project sub-ledger will support a general ledger control account designed to record all contract related costs. For this primer, this control account will be identified as *Cost of Contract Research (CCR)*. This account is classified as an operations expense for financial statement presentation. The general ledger

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control account can be posted concurrently with the subsidiary ledger or in summary, depending upon the accounting system employed and the volume of transactions.

### **E. Identification**

The cost accounting system should identify and accumulate direct costs by contract/grant by line item. Direct expenses of an SBIR contract/grant will be recorded in the CCR general ledger control account and in the project sub-ledger. Specific identification for a particular contract/grant will be dictated by the negotiated budget. Included are items such as direct labor, equipment, materials/supplies, and travel.

The source of entry to the CCR account will be the Cash Disbursement or Accounts Payable Journal. Journals are used to record all accounting transactions. The use of specific journals provides for the summarization of individual transactions before posting to the general ledger. The form of the cash disbursement journal will vary among firms and can be in a format as simple as a checkbook register. Vendor invoices, lease agreements, and internal documents serve as source documents of original entry which should be systematically filed to create as suitable audit trail.

#### Example entries:

Recording the purchase of direct materials can be accomplished in several ways depending upon the sophistication of the company and accounting capabilities. Assuming that the company does not maintain a materials inventory, the entry for the purchase of direct materials would be:

#### SBIR PHASE I

	<u>contract sub-ledger</u>	<u>debit</u>	<u>credit</u>
CCR		xxx	
SBIR Sub-Ledger - direct materials	xxx		
Cash or Accounts Payable			xxx

*The invoice used to record the journal will identify the specific job(s) or contract/grant number(s) to be used for posting to the subsidiary contract ledger.*

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Operating a materials inventory system would require a requisition from a department head or the principal investigator to transfer the material. The materials inventory account would replace the CCR account in the above entry when recording the purchase of materials. The transfer of materials from inventory to an SBIR contract/grant is recorded as follows:

### SBIR PHASE I

	<u>contract sub-ledger</u>	<u>debit</u>	<u>credit</u>
CCR		xxx	
SBIR Sub-Ledger - direct materials	xxx		
Materials Inventory			xxx

*The materials requisition used to record the journal will identify the specific job or contract/grant number to be used for posting to the subsidiary contract ledger. This procedure provides additional controls over a company's material inventory, which can serve to prevent and detect unintentional or intentional defalcations. The Materials Inventory Control account can also be supported by a sub-ledger which identifies individual inventory items.*

An SBIR contractor can record these entries without posting directly to the sub-ledger. This would require detailed month-end analysis of the accounting records to monitor and post summary totals of contract/project costs. Depending upon transaction volume, this may be feasible. A company has to develop a system which is most practical depending upon the resources they employ.

### **F. Labor Costs**

Direct labor is a direct cost that can be identified specifically with a particular activity. The process of allocating direct labor to individual projects originates in an employee's individual recording of time. Because labor costs are not supported by external documents, a company's timekeeping procedures are critical for governmental and cost accounting principles. The individual employee's understanding and cooperation in timekeeping procedures is the fundamental step in accurate labor cost accumulation. The Defense Contract Audit Agency (DCAA)<sup>12</sup> provides the following suggestions to assure a good timekeeping system:

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<sup>12</sup> <http://www.dcaa.mil/index.html>

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Detailed instructions for timecard preparation should be documented through timekeeping pamphlet and/or company procedure. The instructions should indicate that the employee is personally responsible for:

- a. Recording time on a daily basis.
- b. Recording time on the timecard in ink.
- c. The correct distribution of time by project numbers, contract number or name, or other identifiers for a particular assignment. To ensure accuracy, the project number should be provided in writing to the employee before beginning a project.
- d. Changes to the timecard should be lined through, with the employee's initials beside the change indicating the employee personally made the change and that the change is correct.
- e. Recording all hours worked even if more than 40 hours per week.
- f. Signing the timecard at the end of each work period.
- g. Timekeeping policy should state that the supervisor:
  - 1) Approves and co-signs all timecards.
  - 2) Is prohibited from completing an employee's timecard unless the employee is absent for a prolonged period of time on some form of authorized leave.

The company policy should state that the accurate and complete preparation of timecards is a part of the employee's job. Careless or improper preparation may lead to disciplinary actions under company policies as well as applicable Federal statutes.

The manipulation of charges to a contract may be subject to criminal charges under 18 United States Code (U.S.C.) 1001, which reads as follows:

"Whoever, in any matter within the jurisdiction of any department or agency of the united states knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry shall be fined not more than \$10,000 or imprisoned not more than five years, or both."

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The individual employee timecards are the source document for distributing labor costs to the general ledger and individual project sub-ledgers. The timecards are summarized on a labor distribution report, used to prepare the accounting journal entry.

### G. Segregation

Indirect overhead expenses are controlled through *Overhead Cost Pools*, subsidiary ledgers which accumulate and summarize all indirect costs. Overhead Cost Pools are controlled in the general ledger through the use of an Overhead Control Account.

The steps involved in accounting for overhead are:

- a. Analysis and segregation of overhead transactions;
- b. Journalization of overhead transactions; and,
- c. Posting overhead transactions to the overhead subsidiary ledger and the appropriate control accounts.

The principal original source documents used for overhead are: purchase vouchers or vendor invoices; materials requisitions, if employed; labor summaries; and general journal vouchers. The source of entry to the subsidiary ledger and general ledger is the cash disbursement or accounts payable journal. Overhead Cost Pools are used to record the actual indirect costs incurred by a company.

Simply, an entry to record an overhead expense such as rent is demonstrated here:

	<u>Overhead Cost Pool</u>	<u>Debit</u>	<u>Credit</u>
Overhead Control		xxx	
Laboratory Rent	xxx		
Accounts Payable or Cash			xxx

*The Overhead Cost Pool provides the detail for all overhead expenses and should be reconciled to the overhead control account on a regular basis. Additionally, systems may be set-up to provide for summary posting to the Overhead Control account.*

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## H. Allocation

Allocation of certain costs to individual projects requires analysis each reporting period, preferably monthly. This is necessary to distribute labor and indirect costs equitably among all company projects. The allocation base used to determine indirect cost distribution in a SBIR participating company is typically direct labor costs. After all costs have been posted and the labor distribution analysis is completed, an entry will be required to distribute the overhead cost among the projects of the company. Overhead allocation can be based on:

Actual direct labor dollar percentages - each project or activity receives a proportionate share of the accounting periods recording overhead costs based upon the ratio of actual project direct labor dollars to total direct labor dollars.

Predetermined Overhead Rate - Each project or activity receives an allocation of overhead based upon a predetermined rate to be applied to project direct labor dollars. Predetermined rates are developed in the budget stage or during historical analysis and are applied to each project during the accounting period.

Contract/Grant Billing Rates - Similar to above, however the agreed upon contract/grant billing rates are used to charge overhead to contracts/grants. This rate is determined by the contracting agency.

An account in the general ledger called ***Overhead Applied*** can be used when allocating overhead to specific projects or activities. The entry will charge the CCR account(s) and also be recorded in the appropriate project sub-ledger(s):

	Project Ledger		---General Ledger---		
			<u>Debit</u>		<u>Credit</u>
CCR				xxx	
Applied Overhead	xxx				
Overhead Applied					xxx

*The general ledger overhead applied account is closed to the actual overhead control account at the end of the accounting period. This transaction is*

## FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

*performed by debiting the overhead applied account and crediting the overhead control account.*

The **Overhead Control Account** can be analyzed monthly after all postings have been made. The debit side of the account represents actual expenses incurred during the period, while the credit side represents the overhead applied. The two sides will rarely equal. A debit balance indicates that overhead has been under-applied and a credit balance means that overhead has been over-applied. These variances must be analyzed by management for proper disposition. They reveal valuable information regarding the efficiency of operations and provide timely information needed to manage federal reimbursement contract/grants.

A company with more than one contract can utilize additional CCR accounts in the general ledger with a corresponding sub-ledger for each. Or, one CCR account can provide control through a subsidiary ledger system segregating the contracts/grants in some reasonable manner.

### **I. Revenue Recognition**

Revenue recognition of work performed under CPFF contracts was discussed earlier during the discussion of ARB No. 43, Chapter 11. It is important to emphasize that revenue under a SBIR contract should be recognized in the same period as allowable and billable costs are incurred. As noted in ARB#43, it is acceptable to accrue allowable costs plus the fixed fee as they become billable. This requires the SBIR company to book a **receivable**. The entries to record revenue and the related receivable are:

	Debit	Credit
SBIR Un-Billed Receivable	xxx	
SBIR Retainage Receivable	xxx	
Contract/Grant Research Revenue		xxx

*Description: To recognize revenue for period on the basis of amounts billable<sup>13</sup> and as a supply contractor<sup>14</sup>. Amount would equal contract/grant related expenses recorded in CCR, and, would also include negotiated profit percentage. The additional debit to Retainage represents the amount the held back until contract/grant completion (Usually 10-15%).*

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<sup>13</sup> ARB#43,ch11,par16

<sup>14</sup> ARB#43,ch11,par20

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	Debit	Credit
SBIR Billed Receivable	xxx	
SBIR Unbilled Receivable		xxx

*Description: To complete transfer of previously unbilled receivables to billed receivables.*

Financial statement presentation and footnote disclosure on accounting policies for revenue recognition and accounts receivable for a manufacturing company involved with SBIR contracts/grants are presented on the following pages:

REVENUE			
Year ended MM / DD,			
	20xx	20xy	
Net sales and revenues:			
Contract research and service revenues	\$15,000	\$12,500	
Manufacturing sales	<u>3,800</u>	<u>5,090</u>	
	<u>18,800</u>	<u>17,590</u>	
Costs and expenses:			
Cost of contract research and services	11,600	10,200	
Cost of manufacturing	3,200	4,100	
Selling, general, and administrative expenses	3,800	2,900	
	<u>18,600</u>	<u>17,200</u>	
Earnings from operations	<u>200</u>	<u>390</u>	

### NOTES TO THE FINANCIAL STATEMENTS

#### *Summary of Significant Accounting Policies:*

*Revenue is recognized when a product is shipped or when service is performed, with the exception of long-term contracts. Revenue on long-term contracts and contracts in progress is recognized under the percentage of completion method, reflecting, where appropriate, a pro rata portion of estimated profit or a reduction to estimated realizable value. Sales under cost-plus-fixed-fee contracts are recorded as costs are incurred and include a pro rata portion of estimated profit.*

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## ACCOUNTS RECEIVABLE

MM/DD

	20xx	<u>20xw</u>
Accounts Receivable, trade		
Amounts billed	3,300	2,700
Retainage	216	156
Unbilled costs	<u>2,400</u>	<u>1,800</u>
	5,916	4,656
Less allowance		
for doubtful accounts	(200)	- 0 -
Net accounts receivable	<u>5,716</u>	<u>4,656</u>

15

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<sup>15</sup> Related footnote disclosure further describes:

*Unbilled costs on contracts in progress represent revenues recognized on contracts for which billings have not been presented to customers as of each balance date presented. These amounts are billed and generally collected within one year.*

*Retainage represents revenues on certain United States Government-sponsored research and development contracts. These amounts, usually 15% of the Company's research fee on each applicable contract, are not collectible until a final cost review has been performed by government auditors. Included in retainage are amounts expected to be collected after one year: \$216 and \$156 at December 31, 20xx and 20xw, respectively. All other accounts receivable are expected to be collected within one year.*

*All contracts with United States Government agencies have been audited and settled through December 31, 20xv. In the opinion of management, any cost disallowances which may be incurred as a result of future government audits for periods after December 31, 20xv, will not be material to the consolidated financial statements. The company has not incurred significant losses as a result of government audits.*



# FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

## SMALL BUSINESS TECHNOLOGY COMPANY PROJECT COST SUMMARY

Date:

Balance	Direct Labor	Direct Material	Direct Travel	Direct Other	Actual Overhead	Subtotal	Actual G&A	Total
Current YTD								
Project-To-Date								
Current YTD								
Project-To-Date								
Current YTD								
Project-To-Date								
Current YTD								
Project-To-Date								
Current YTD								
Project-To-Date								

*Note: The project cost summary reports the current month, year-to-date, and project-to-date balances. This summary reports actual indirect costs. The project ledger reports applied indirect costs. At year-end, the project ledger is reconciled with the project summary to reflect actual costs.*

# FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

## SMALL BUSINESS TECHNOLOGY COMPANY PROJECT STATUS REPORT

**SBIR Project #** \_\_\_\_\_

**Period Ended** \_\_\_\_\_

Line Item	Initial Budget	Incurred this Period	Year-to-Date	Cumulative Year-to-Date
Direct Labor				
Direct Material				
Direct Travel				
Other Direct				
Subtotal				
Actual Overhead				
Actual G&A				
Total Contract Costs				
Fee Percentage				
Contract Revenue				
Billings				
Payments				
Billed Receivable Balance				
Total Labor Hours				



# FEDERALLY FUNDED BUDGETING AND ACCOUNTING GUIDE

## LABOR DISTRIBUTION SUMMARY

Period Ending \_\_\_\_\_

Direct Labor			Type of Labor	Current Balance	Year-to-Date Balance
		Total Direct Labor			
Overhead Labor					
	Supervisor				
	General Support				
	Training				
	Vacation				
	Sick				
	Idle Time				
		Total Overhead Labor			
G &A					
	Accounting				
	Administration				
	Purchasing				
	Sales				
		Total G&A Labor			
Total Labor					