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## Program accounting: Proposed statement of position, revised draft June 3, 1981

American Institute of Certified Public Accountants. Accounting Standards Division. Program Accounting Task Force

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REVISED  
DRAFT  
JUNE 3, 1981

PROPOSED  
STATEMENT OF  
POSITION

PROGRAM ACCOUNTING

Prepared by

PROGRAM ACCOUNTING TASK FORCE  
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AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

## TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Scope of Statement	2
Description of Program Accounting	2
Program Events	3
The Division's Conclusions	5
Criteria for Use of Program Accounting	4
U.S. Government Contracts	6
Determining the Demand for a Product	7
Program Revenues	8
Program Costs	9
Program Estimates	9
Provisions for Anticipated Revenue Deficiencies	10
Changes in the Size of a Program	10
Changes in Estimates	11
Information to be Disclosed	11
Application of the Method	12
Transition	12
Appendix A - Rationale for Program Accounting	13
Appendix B - Explanation of Data	18

Introduction

1

1. Program accounting has been developed in practice as a method of accounting for the costs of certain products manufactured for delivery under production type contracts. Under that method, costs are accumulated and accounted for by programs instead of by individual units or individual contracts. A program consists of the estimated number of units of a product to be produced by an enterprise in a continuing, long term production effort for delivery under existing and anticipated contracts. The program is used as the accounting cost center for accumulating costs and allocating costs to cost of sales. Although the program method of accounting is used in some industries and is discussed in the Securities and Exchange Commission's Accounting Series Release No. 164, it is not discussed in the authoritative accounting literature.<sup>1</sup>

2. Since the method has become generally accepted in some limited circumstances and since methods of applying it vary, the accounting standards division believes that criteria for the use of the method and guidance on its application should be provided and included in the accounting literature.

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<sup>1</sup> Accounting Series Release No. 164, Notice of Adoption of Amendments to Regulation S-X to Provide for Improved Disclosures Related to Defense and Other Long-Term Contract Activities, prescribes and illustrates disclosure requirements for long-term contracts or programs.

Scope of Statement

3. This statement presents the accounting standards division's recommendations on accounting for contracts under the program method of accounting. It specifies criteria for the use of the method, procedures for applying the method, and information on programs that should be disclosed in financial statements. This statement is intended to be an extension of SOP 81-1, "Accounting for the Performance of Construction-Type and Certain Production-Type Contracts." Most production-type contracts are covered by SOP 81-1, and thus appropriate guidance is provided in that statement. However, there are certain infrequent contracting conditions that may warrant, but not mandate, the program method of accounting discussed in this statement of position.

Description of Program Accounting

4. For the purposes of this statement, the program method of accounting is a method under which a contractor estimates (a) the number of units to be produced and sold in a program, (b) the period over which the units can reasonably be expected to be produced, and (c) their expected selling prices, production costs, and the gross profit margin for the total program. An enterprise recognizes as revenue under the program the selling price of units produced when a unit is completed and accepted by the customer or, in some instances, recognizes revenue on a percentage-of-completion basis on each unit in production. The amount reported as cost of sales is determined by applying the estimated cost of sales percentage for the total program (expected total

capitalizable program costs divided by expected total program 1  
revenue) to the amount of revenue reported. The enterprise 2  
reports as an asset production costs incurred in excess of 3  
amounts reported as cost of sales. Appendix A to this statement 4  
is a discussion of the rationale for the method. 5

Program Events 6

The typical events that constitute a program are as follows: 7

- a. Management evaluates marketability of pro- 8  
duct alternatives and forms initial judg- 9  
ments as to product configuration, total 10  
program quantity, production rates, 11  
pricing, profitability and cash flows. 12
- b. The enterprise conducts initial basic en- 13  
gineering and production feasibility stu- 14  
dies to determine the specifications to 15  
which contractual commitments may be made. 16  
The enterprise reevaluates product pricing 17  
based on cost studies. 18
- c. The enterprise obtains initial firm orders 19  
for the product and makes an economic com- 20  
mitment to the entire program. 21
- d. The enterprise completes final product de- 22  
sign, production and subcontract planning, 23  
and engineering testing. 24
- e. The enterprise fabricates and assembles pro- 25  
duction tooling and initial production units. 26
- f. The enterprise conducts product test and ob- 27  
tains if necessary, regulatory certification. 28

- g. Units are routinely produced on a continuing basis over an extended period. 1  
2
6. Costs incurred in (a) through (d) and in (f) represent the types of costs that should be charged to expense as period costs.<sup>2</sup> The program method applies only to production tooling and inventoriable costs. 3  
4  
5  
6
7. Program costs are capitalized and are charged to cost of sales as revenues are recognized under the program, so as to report a gross profit percentage equal to the estimated gross profit percentage on the program quantity. Because of volume efficiencies and improvement in the performance of repetitive tasks, unit costs are expected to decrease as additional units are produced<sup>3</sup>. 7  
8  
9  
10  
11  
12  
13

The Division's Conclusions 14

Criteria for Use of Program Accounting 15

8. The program method of accounting may be considered for use in circumstances in which a contractor meets all of the following criteria: 16  
17  
18
- a. The design, development, production planning, tooling, production of initial units, and 19  
20

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<sup>2</sup> Research and development costs are charged to expense as incurred in accordance with FASB Statement No. 2, Accounting for Research and Development. 21  
22  
23

<sup>3</sup> Accounting for the cost of production tooling by deferral and amortization does not, of itself, constitute program accounting. 24  
25  
26

- final testing of the product require a substantial commitment of resources and several years to complete. 1
- 2
- 3
- b. Production units are expected to be routinely produced over an extended period. 4
- 5
- c. Pricing of the product is expected to be relatively level over all units or to correlate closely with changes in specific prices associated with direct production costs. 6
- 7
- 8
- 9
- d. Pricing of the product is based on the anticipation of decreasing unit production costs over time. 10
- 11
- 12
- e. Because of the long lead time, technology involved, and high initial investment associated with a program, it is unlikely that unforeseen competition will significantly reduce the demand for the product during the estimated production period for the program accounting quantity. 13
- 14
- 15
- 16
- 17
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- 19
- f. The enterprise is one of a small number of producers of the type of product being produced, and sells the product in a market with a limited number of identified customers. 20
- 21
- 22
- 23
- 24
- g. The enterprise can demonstrate an estimated demand for its product, expressed by customers, 25
- 26



in a number of units, or a range of the 1  
number of units, that will recover costs to 2  
be incurred under the program. 3

h. The enterprise can demonstrate its ability 4  
to finance and produce the program product. 5  
For example, the enterprise has previously 6  
financed and produced similar products. 7

i. The enterprise is able to make reasonably 8  
dependable estimates of the number of, 9  
or range of numbers of, units to be pro- 10  
duced and sold, the length of time to 11  
produce and sell them, and their asso- 12  
ciated production costs and selling prices. 13

j. At the beginning of a program, the enter- 14  
prise will have obtained firm contracts for 15  
units of the product that will not, by them- 16  
selves, recover the costs of the initial and 17  
early production effort. 18

U. S. Government Contracts 19

9. The program method of accounting should generally not be 20  
used for contracts with the U.S. Government, because (a) the 21  
procurement and appropriation procedures of the U.S. Government 22  
preclude reasonably dependable estimates of demand for a program 23  
product beyond units to be sold under existing contracts and (b) 24  
the pricing and termination provisions of U.S. Government con- 25  
tracts generally provide for the recovery of the contractor's 26  
investment in the production effort. 27

Determining the Demand for a Product

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10. Demonstration of the demand for the product as discussed in this statement means that evidence should be available that provides reasonable assurance for financial and accounting reporting purposes of customer demand for the number of units included in the program (program accounting quantity). The demand for a program product is often estimated to fall within a range. In those circumstances, the program accounting quantity should be the number of units at the lower end of the range. Further, assurance as to the number of units of a program product that can be sold generally increases as marketing experience increases. Accordingly, a greater degree of conservatism is normally warranted in estimating the program accounting quantity in the earlier stages of a program.

11. Documentation of demand may include, for example, carefully prepared market studies, firm orders, and letters of intent from prospective customers. If a contractor is not the only source for a program product, the contractor must not only demonstrate the demand for the product, but must also provide reasonable evidence to support its estimated share of the total market.

12. If the contractor using program accounting is a subcontractor and produces a product to be delivered to a prime contractor under subcontracts, the subcontractor should obtain documentation from or through the prime contractor that provides reasonable assurance of the program quantity. The number of units included in the subcontractor's program accounting quantity should not exceed the number of units implicit in the program accounting

quantity used by the prime contractor plus a conservative estimate of the number of units the prime contractor will likely need for replacement spares. The subcontractor should be able to provide reasonable assurance that it, rather than other subcontractors, will obtain the follow on orders from the prime contractor beyond the number of units supported by firm orders from the prime contractor. The type of evidence that might provide reasonable assurance would be, for example, a contractual commitment from the prime contractor that the subcontractor will be the sole source of supply for the program product or the subcontractor owns the designs, tooling, and test equipment for the program product and the cost of the investment in those items is such that it would be too expensive for the prime contractor to acquire the program product from other subcontractors. If the prime contractor does not use the program method of accounting, the subcontractor will probably be unable to obtain the evidence necessary to support its use of the method.

Program Revenues

13. In most instances, the sales value of the product at the time the unit is delivered or accepted by the customer is recognized as revenue under the program method. However, when the time required to manufacture a unit of the product extends over an unusually long period of time, such circumstances may warrant recognizing revenue on a percentage-of-completion basis. When percentage-of-completion is used, revenue should be recognized only on units under firm contracts based on reasonably dependable estimates of the extent of physical completion of the units.

<u>Program Costs</u>	1
14. Costs that are deferrable under the program method include	2
both direct and indirect costs incurred in the production effort,	3
including	4
• materials	5
• direct labor	6
• subcontractor charges	7
• tooling	8
• applicable overhead	9
The costs of unforeseen production disruptions, excessive	10
rework costs, and other unanticipated costs may be so abnormal as	11
to require treatment as current period charges.	12
15. Costs of the following type are not program costs and	13
should be charged to expense in the period incurred:	14
• selling and marketing	15
• market and product research and development	16
• general and administrative	17
• product testing and evaluation.	18
<u>Program Estimates</u>	19
16. A contractor may sometimes estimate program costs and	20
revenues in ranges. If the contractor can determine the amounts	21
within the ranges that are most likely to occur, those amounts	22
should be used in accounting for the program. If the most likely	23
amounts cannot be determined, the lowest probable level of gross	24
profit in the range should be used in accounting for the program	25
until the results can be more reliably estimated. However,	26
estimating the final outcome may sometimes be impractical except	27
to be sure that a loss will not be incurred. In those circum-	28

stances, a contractor should use a zero estimate of the gross profit rate until the results can be more reliably estimated.

Provisions for Anticipated Revenue Deficiencies

17. If the estimated costs to be incurred plus unamortized program costs exceed the estimated future revenues from sales of the program accounting quantity, the amount of the excess should be charged to income currently.

Changes in the Size of a Program

18. A contractor should periodically review its estimate of units to be sold. If it becomes evident that the program accounting quantity previously estimated exceeds the program accounting quantity currently estimated, the lower program accounting quantity should be used. Because of the subjective nature of the estimates, the program accounting quantity first estimated should be increased only when the number of units under firm orders clearly indicates that an increased program accounting quantity is justified.

19. Events may sometimes demonstrate clearly that the total market for the product or the company's market share has increased; for example, the development of a major new product derivative (a modification of the original program product). The derivative often cannot be accounted for as a separate program because the initial investment in the basic product benefits the new product. Also, production of the derivative may entail use of the same production line facilities and tooling as the basic product. Although the derivative may justify an increase in the estimated program accounting quantity, care must be exercised in determining the extent of the increase. The market for the derivative is

likely to overlap the market for the basic product so that 1  
estimated sales of the derivative would not be wholly in addition 2  
to the program accounting quantity for the basic product. 3

Changes in Estimates 4

20. Since program accounting emphasizes average gross profit 5  
and since certain program costs must be incurred several years 6  
before the program is completed, the total gross profit on the 7  
program will normally differ from that initially estimated. 8  
Under the program method, revisions in the estimated gross profit 9  
rate to be earned during the remaining portion of the program 10  
should be accounted for prospectively current and future periods 11  
(see illustrations in Appendix B) unless a provision for antici- 12  
pated revenue deficiencies is required under paragraph 17. If 13  
the effects are material, paragraph 33 of APB Opinion 20, Ac- 14  
counting Changes, applies. 15

Information to Be Disclosed 16

21. A contractor using the program method of accounting should 17  
disclose in the notes to its financial statements the following 18  
for each significant program: 19

- a. a description of the program accounting method 20
- b. the estimate of total program accounting quan- 21  
tity and changes , if any, in that estimate from 22  
the preceding period 23
- c. the cumulative number of units delivered 24  
and the undelivered units under firm order 25
- d. discussion of risks and uncertainties as- 26  
sociated with 27

● market forecasts	1
● price estimates	2
● cost estimates	3
e. the excess of deferred program costs (produc-	4
tion and related deferred costs (for example,	5
initial tooling costs) over the total cost	6
allocated to units in process and delivered.	7
The portion of that excess that would not	8
be absorbed in cost of sales based on	9
existing firm orders at the latest balance	10
sheet date should also be disclosed.	11
f. The amounts of the components of deferred	12
costs by type of cost (for example, ini-	13
tial tooling or deferred production	14
cost) and the balance sheet classification	15
of the amounts.	16
<u>Application of the Method</u>	17
22. Appendix B to this statement illustrates the financial	18
statement effects of applying the recommendations in this state-	19
ment.	20
<u>Transition</u>	21
23. The accounting standards division recommends the application	22
of the provisions of this statement prospectively for new programs	23
commencing after _____, 19__.	24

APPENDIX A

1

RATIONALE FOR PROGRAM ACCOUNTING

2

1. The program method of accounting has been developed for use in certain limited circumstances as a cost allocation procedure that achieves a practical and reasonable association of costs with revenue over units produced in a program. The reasons given for the use of the method relate primarily to the economics of producing and marketing the program product.

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2. A program product generally

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● has a high unit cost

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● requires a substantial investment of resources

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● requires a long lead time between conception

12

and design and full scale production

13

● has a cost recovery cycle that extends over

14

several years

15

● is characterized by a market with a limited

16

number of end users. Product and market fac-

17

tors are well understood by participants in

18

the market.

19

3. A program product generally involves high technology and

20

labor intensive processes. Significant amounts of research and

21

development costs are incurred before production begins. Further,

22

the initial and early production stages require an enterprise to

23

incur costs that are substantial in relation to the resources

24

available to it. Units produced early in a program require

25

substantially more effort (labor and other resources) than units

26

produced later in a program because of volume efficiencies and

27



the effects of "learning".<sup>1</sup> Learning has significant implications for the level of unit production costs over several years. A program requires the design and fabrication of special tools and equipment, for which the enterprise can only realize economic benefits in connection with the program. The production costs of units produced early in the program and the cost of initial tooling will not be recovered from firm contracts on hand when the costs are incurred. The substantial amount of costs incurred early in the program can only be recovered from sales of units expected to be produced and sold under existing and anticipated contracts over a period of several years. The sales prices of units in a program are market determined and tend to be relatively constant in real terms over the life of the program.

4. The program method of accounting allocates costs on the basis of expected revenue contributions of units included in a program. It provides for a matching of costs with revenue that reflects the decision making process that leads to the economic commitment to a program. If limited to qualifying enterprises and products and applied with adequate disclosures, its

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<sup>1</sup> The learning curve concept is that, within reasonable limits, the knowledge, skills, and techniques involved in the production of a product improve as production of the product continues without material change and that the improvement results in a reduction in the time and material required to produce the product and, therefore, in the cost of the product. Under the concept, the rate of improvement is deemed to be relatively regular and constant for a given product. The learning curve is a statistical device used in predicting production costs and as an aid in planning and controlling production. For a detailed discussion of the concept, see Defense Contract Audit Manual, Appendix F, "Improvement Curve Analysis Techniques," (Washington, D.C.: U.S. Government Printing Office, 1977).

use is considered to provide users of financial statements with the most useful information about performance of the enterprise. 1  
2  
5. The need for the program accounting method concerns the 3  
unique long term nature of production programs. The fiscal year 4  
reporting convention is compatible with the operating cycles of 5  
most manufacturers, given of course the deferral and amortization 6  
of capital costs. For those situations in which production or 7  
construction projects under contract extend beyond the one year 8  
reporting cycle, use of the percentage-of-completion method 9  
overcomes the fiscal year reporting constraints. Production 10  
programs, however, do not meet the criteria of a long term 11  
contract with respect to contractual coverage, but essentially 12  
present the same type of operating cycle reporting problems. 13  
6. Management's commitment to proceed with a program is neces- 14  
sarily based on long term profitability and cash flow analyses of 15  
the entire program, because market constraints and competitive 16  
factors are such that the enterprise's investment can only be 17  
recovered over a period of several years. Production programs 18  
essentially represent independent operating cycles. Each program 19  
is based on a single management commitment decision in which the 20  
discrete profitability of all units of a program is largely 21  
interdependent. In those circumstances, the program accounting 22  
method provides the most meaningful profitability reporting 23  
relative to the program commitment and performance on an annual 24  
reporting basis within the life cycle of the program. The 25  
program commitment in effect is viewed as a single "contract," 26

with the program accounting method simulating percentage-of-comple- 1  
tion long term contract accounting. Program accounting in well 2  
defined circumstances provides an effective means of communicating 3  
major program operating results in financial statements and a 4  
basis for evaluating current and probable future performance. 5

7. Program accounting is an inventory costing procedure with 6  
the inventory cost center broadly defined to include all of the 7  
units in the existing and anticipated contracts constituting the 8  
program accounting quantity. Thus, a program, like the contracts 9  
of which it is composed, meets the definition of an asset and has 10  
the characteristics of an asset. Program costs are deferred in 11  
much the same way as inventory costs are deferred under the 12  
several cost flow procedures acceptable under GAAP. Statement of 13  
Financial Concepts No. 3, "Elements of Financial Statements of 14  
Business Enterprises," defines an asset as 15

...probable future economic benefits 16  
obtained or controlled by a particular 17  
entity as a result of past transactions 18  
or events. 19

The Statement also states that the three essential characteris- 20  
tics of an asset are 21

- (a) it embodies a probable future benefit 22  
that involves a capacity, singly or 23  
in combination with other assets, to 24  
contribution directly or indirectly to 25  
future net cash inflows. 26
- (b) a particular enterprise can obtain 27  
the benefit and control others' 28  
access to it, and 29
- (c) the transaction or other events giving 30  
rise to the enterprise's right to or 31  
control of the benefit has already oc- 32  
curred. 33

8. In the context of the definition of an asset, the program 1  
represents the enterprise's asset and the associated deferred 2  
program costs represent a measurable attribute of the asset in 3  
the same way that costs incurred for inventory or contracts 4  
represent attributes of the product being produced for sale or 5  
delivery. The benefits associated with the asset are the cash 6  
flows that the program generates. The cash flows under the 7  
program meet the test of being "probable" as that term is used in 8  
SFAC No. 3. Recognition of the item as an asset is also consis- 9  
tent with the accrual, deferral, and allocation procedures 10  
underlying present generally accepted accounting principles. 11  
Paragraph 85 of SFAC No. 3 states: 12

Accrual accounting uses accrual, 13  
deferral, and allocation procedures whose 14  
goal is to relate revenues, expenses, 15  
gains, and losses to periods to reflect 16  
an enterprise's performance during a 17  
period instead of merely listing its 18  
cash receipts and outlays. Thus, recog- 19  
nition of revenues, expenses, gains, and 20  
losses and the related increments or 21  
decrements in assets and liabilities -- 22  
including matching of costs and revenues, 23  
allocation, and amortization -- is the 24  
essence of using accrual accounting to 25  
measure performance of business enter- 26  
prises. The goal of accrual accounting 27  
for a business enterprise is to account 28  
in the periods in which they occur for 29  
the effects of transactions and other 30  
events and circumstances, to the extent 31  
that those financial effects are recogni- 32  
zable and measurable. 33

APPENDIX B

ILLUSTRATION OF THE APPLICATION

OF

PROGRAM ACCOUNTING

PROGRAM ACCOUNTING  
EXAMPLE APPLICATION

Explanation of Data:

The data used in the illustration are for an assumed program with an initial program accounting quantity of 100 units. At the inception of the program, the units are assumed to have an average selling price of \$30.0 million and an estimated average production cost of \$19.6 million. For ease of presentation, all dollar amounts are stated in millions of dollars. An initial program life of four years is assumed to facilitate the illustration of a complete program. Accounting for changes in estimates and size of the program are also illustrated.

This example does not illustrate the substantial design and developmental costs, which would be incurred prior to initial deliveries. It also does not reflect ongoing general and administrative expenses and product development costs. Such costs would be accounted for as period expense and do not effect the accounting results of application of the program accounting method.

PROGRAM ACCOUNTING  
EXAMPLE APPLICATION

Market Forecast:

The market forecast of deliveries over time is the basis for planning production, including procurement considerations, labor resources, and tooling requirements. The costs of production are then estimated based on these production plans. The initial program quantity on which the financial reporting is based should represent a highly probable market quantity. Accordingly, subsequent increases in the program quantity can frequently result.

For the purpose of this example, sales values are assumed to be \$30 million per unit for the initial program quantity, and \$34 million for the derivative units first recognized in the third delivery year. Except for the increased program quantity, no changes in delivery forecasts or sales price estimates are assumed. Also, no price or cost escalation due to inflation is assumed for the purpose of this example as the accounting result would not be significantly affected.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	Total Units	Total Estimated Sales Values
Forecast as of first delivery year:								
Under contract	7	9	12				28	\$ 840
Not under contract		<u>22</u>	<u>26</u>	<u>24</u>			<u>72</u>	<u>2,160</u>
Total forecast (unchanged until third year)	7	31	38	24			100	\$ 3,000

Change in market forecast and recognition of increased program quantity due to development of derivative:

Original quantity				(14)	7		(7)	(210)
Derivative quantity				<u>18</u>	<u>9</u>	<u>10</u>	<u>37</u>	<u>1,258</u>
Actual final deliveries	7	31	38	28	16	10	130	
Total sales values recognized	\$210	\$930	\$1,140	\$912	\$516	\$340		\$ 4,048

PROGRAM ACCOUNTING  
EXAMPLE APPLICATION

Cost Estimates:

The cost estimates by unit decrease substantially due to a significant learning curve factor. The high technology labor intensive nature of the product allows for such unit cost reductions by both the contractor and its major subcontractors. Accordingly, the unit costs reductions are principally related to direct labor costs and major subcontracted production. Although not reflected in this example, increasing prices and rates due to inflation would normally result in corresponding increases in sales prices such that the program gross profit rate would be minimally affected.

Cost Estimates:

As of first delivery year:

<u>Unit.</u>	<u>Year</u>	<u>Estimated Unit Production Cost</u>	<u>Program Tooling and Equipment</u>	<u>Total Program Costs</u>
1		\$ 64		
2		52		
3		45		
4		40		
-		-		
-		-		
100		<u>15</u>		
	1	\$1,960	\$ 620	\$2,580

As of delivery year:

2	1,954	620	2,574
3	2,660	710	3,370
4	2,642	710	3,352
5	2,640	710	3,350
6	2,634	710	3,344

The total estimated program costs are adjusted each year to reflect actual costs to date and revisions in estimates of balance to go costs. Reductions in these estimates over time reflect the use of conservative estimates for financial reporting purposes. The degree of conservatism appropriate depends on the forecasting and estimating risks associated with the program.

The substantial change in the cost estimates in the third year reflects the increase in the program quantity and introduction of a derivative. Only certain additional tooling and equipment is necessary for the derivative. Most tooling necessary for the derivative is assumed to be common to the original configuration. Although not apparent in the total program estimate, the derivative would have its own learning curve factor.



PROGRAM ACCOUNTING

EXAMPLE APPLICATION

Calculation of Cost of Sales Percentages Applied:

This schedule illustrates a method of determining the program cost of sales percentage to be applied to each year's sales such that changes in estimates are recognized prospectively as of the current year. Total sales and costs estimates are per Exhibits 1 and 2.

	<u>Program Sales</u>	<u>Program Costs</u>	<u>Cost of Sales Percent Applied to Current Year Sales</u>
Year 1: Total program estimates	<u>\$3,000</u>	<u>\$2,580</u>	<u>86.0%</u>
Year 2: Total program estimates	\$3,000	\$2,574	
Less amounts recorded in prior years	210	181	
	<u>\$2,790</u>	<u>\$2,393</u>	<u>85.8%</u>
Year 3: Total program estimates	\$4,048	\$3,370	
Less amounts recorded in prior years	1,140	979	
	<u>\$2,908</u>	<u>\$2,391</u>	<u>82.2%</u>
Year 4: Total program estimates	\$4,048	\$3,352	
Less amounts recorded in prior years	2,280	1,916	
	<u>\$1,768</u>	<u>\$1,436</u>	<u>81.2%</u>
Year 5: Total program estimates	\$4,048	\$3,350	
Less amounts recorded in prior years	3,192	2,657	
	<u>\$ 856</u>	<u>\$3,344</u>	<u>81.0%</u>
Year 6: Total program estimates	\$4,048	\$3,344	
Less amounts recorded in prior years	3,708	3,075	
	<u>\$ 340</u>	<u>269</u>	<u>79.1%</u>

The relatively large decrease in the cost of sales percent in the third year is principally due to the recognition of the derivative and increase in program quantity. The deferred production costs balance is then effectively amortized over the larger quantity.

PROGRAM ACCOUNTING

EXAMPLE APPLICATION

Actual Discrete Costs:

The actual discrete costs for completed units by delivery year are summarized below. This data is necessary for purposes of calculating the deferred production costs balances.

<u>Year</u>	<u>Deliveries</u>	<u>Discrete Cost Values (excluding tooling)</u>
1	7	\$ 300
2	31	710
3	38	610
4	28	584
5	16	290
6	<u>10</u>	<u>140</u>
	<u>130</u>	<u>\$2,634</u>