



**Calhoun: The NPS Institutional Archive**  
**DSpace Repository**

---

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

---

1963

Cost accounting in the appropriation  
operation and maintenance, Marine Corps.

Lukeman, Anthony.

George Washington University

---

<https://hdl.handle.net/10945/11881>

---

*Downloaded from NPS Archive: Calhoun*



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

**Dudley Knox Library / Naval Postgraduate School**  
**411 Dyer Road / 1 University Circle**  
**Monterey, California USA 93943**

<http://www.nps.edu/library>

NPS ARCHIVE  
1963  
LUKEMAN, A.

COST ACCOUNTING IN THE  
APPROPRIATION OPERATION AND MAINTENANCE,  
MARINE CORPS

ANTHONY LUKEMAN

Library  
U. S. Naval Postgraduate School  
Monterey, California









COST ACCOUNTING IN THE APPROPRIATION  
OPERATION AND MAINTENANCE, MARINE CORPS

by

Anthony Lukeman  
Captain, U. S. Marine Corps  
Bachelor of Arts  
Dartmouth College  
1954

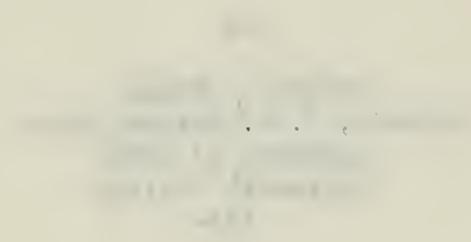
A thesis submitted to the Faculty of the  
School of Government, Business and  
International Affairs of The George Washington  
University in partial satisfaction of  
the requirements for the degree of  
Master of Business Administration

June 5, 1963

Thesis directed by  
Arlin Rex Johnson, Ph. D.  
Professor of Business Administration

~~SECRET~~

CONFIDENTIAL - SECURITY INFORMATION



CONFIDENTIAL - SECURITY INFORMATION

CONFIDENTIAL

CONFIDENTIAL - SECURITY INFORMATION

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION . . . . .	1
II. PROBLEMS AND POLICIES . . . . .	6
"Cost" Defined	
Time Delay	
Relationship with Allotment Accounting	
The Marine Corps Job Order Number System	
Maximum Mechanization Prohibited	
Marine Corps Stock Fund Transactions	
Public Voucher Transactions	
Variable Quality Systems Exist	
Retraining Required upon Transfer	
Policies and Problems Restated	
III. REPORTS . . . . .	20
The Quarterly O&M Cost Report	
Motor Vehicle Cost Reports	
Utilities Cost Reports	
The Quarterly Project Status Report (Maintenance)	
The User Charges Report	
Laundry and Dry Cleaning Cost Report	
The Bakery Cost Report and the Bakery Labor Report	
The Utilities Cost Report, Telephone System	
The Fire Department Operating Cost Data Sheet	
Reports of Operation and Maintenance of Family Housing	
IV. CONCLUSION . . . . .	39
BIBLIOGRAPHY . . . . .	43



Section 1

The first part of the document discusses the importance of maintaining accurate records. It states that records are essential for the proper management of the organization and for the protection of its interests. The document emphasizes that records should be kept up-to-date and should be accessible to all authorized personnel. It also notes that records should be stored in a secure and reliable manner to prevent loss or damage.

The second part of the document discusses the importance of maintaining accurate records. It states that records are essential for the proper management of the organization and for the protection of its interests. The document emphasizes that records should be kept up-to-date and should be accessible to all authorized personnel. It also notes that records should be stored in a secure and reliable manner to prevent loss or damage.



## CHAPTER I

### INTRODUCTION

The Marine Corps holds a unique place in the hearts of most Americans. It stands for tough, willing, and able infantrymen. It stands for strength and security in a country which needs assurance that a dedicated military force stands ready to protect it. Yet, its 190,000 men are a small fraction of our country's servicemen, and its budget in Fiscal Year 1963 was about one fifteenth of the total funds available to the Department of the Navy. The Corps's approval by the American people is an emotional acceptance based on remembrance of superior performance when it was needed. There is pride in the memories of Belleau Woods and Tarawa and the Chosin Reservoir.

But resources are not controlled by emotion. Congress appropriates dollars, materials are purchased with the dollars, and dollars allow the Corps to recruit and train human resources -- from privates to generals. In this day of critical examination of resource allocation, no military organization can exist on its reputation. Congress and the people demand a maximum return for the heavy investment in national security. Thus, the question is asked, "How did you spend your dollars?" Congress and the people wonder, "How much of the fifty billion dollars a year we spend on the national defense effort is wasted?" These and similar questions require specific answers, and specific answers require an extensive information system. Part of that information system is discussed in this paper -- the part of it which reports on the Operation and Maintenance Appropriation in the Marine Corps.<sup>1</sup> This is the appropriation which allows the dollars spent for personnel and major equipment

---

<sup>1</sup>Hereafter referred to as the O&M appropriation.



to have effect. That is, it is the catalyst for the funds authorized in the Personnel and Procurement appropriations; the spring in a trigger mechanism which gives life to the men and material and makes a fighting organization out of raw resources.

Congress describes the appropriation quite undramatically, as follows:

For expenses, necessary for the operation and maintenance of the Marine Corps including equipment and facilities; procurement of military personnel; training and education of regular and reserve personnel, including tuition and other costs incurred at civilian schools; welfare and recreation; conduct of schoolrooms, service clubs, chapels, and other instructional entertainment, and welfare expenses for the enlisted men; procurement and manufacture of military supplies, equipment, and clothing; hire of passenger motor vehicles; transportation of things; medals, awards, emblems and other insignia; operation of station hospitals, dispensaries and dental clinics; and departmental salaries; \$192,500,000, of which not less than \$21,318,000 shall be available only for the maintenance of real property facilities; and not to exceed \$2,000,000 is to be available only for the payment of a connection charge to the Beaufort-Jasper Water Authority.<sup>2</sup>

The primary purpose of the appropriation is to support the Fleet Marine Forces in their mission of conducting continuous training as the amphibious landing force for the Naval Establishment. Support activities which aid in this mission include recruiting and recruit training, operation of base-type activities which support the Fleet Marine Forces, both within the continental United States and overseas, the Marine Corps Schools at Quantico, Va., where officers and prospective officers receive concentrated classroom and field instruction, and three major supply installations. Secondary purposes include support of Marines involved in security and service billets for the Navy, training of Marine Corps Reserve Units assigned temporarily to active duty, recreation and welfare, and expenses of operating the headquarters establishment.<sup>3</sup>

---

<sup>2</sup>U.S. Congress, An Act Making Appropriations for the Department of Defense for the Fiscal Year Ending June 30, 1963, and for other Purposes, Public Law 87-577, 87th Congress, 1962, p. 4.

<sup>3</sup>Department of the Navy, Office of the Comptroller, Navy Budget Digest, Fiscal Year 1963. NAVEXOS P-1355, pp. 19-21.



Liberal translated, this means that O&M dollars fund the "guts" of the Marine Corps. These dollars buy fuel, repair parts, and tents. They provide for the maintenance of barracks and family housing. They pay for electronic data processing equipment rental, civilian salaries, newspapers, toilet seats and tires. While other appropriations generally are restricted to a describable list of specific purposes (such as military pay, procurement of major equipment, and support of the reserve establishment), O&M pays for everything left over when the "specifics" have been accounted for.

And therein lies the problem of accounting for O&M costs. The requirements of budgeting and for controlling costs of family housing are a far cry from the requirements of reporting costs associated with motor vehicles. Allocating costs of civilian personnel to jobs is a very different process from determining the cost of a Battalion Land Team exercise in the Caribbean. Standardization of procedures in cost accounting is desirable: this is almost axiomatic. But how does one report on galley equipment and printing costs and indirect overhead charges in the bakery and costs of the utilities distribution system under a single, standardized system? Congress, the Bureau of the Budget, the Department of Defense, and the Navy ask detailed questions, requiring an information system which is responsive -- which can furnish the answers.

Questions in detail have not always been asked. There has existed a real rapport between the Corps and the Congress, characterized by straight answers to generally friendly questioning.<sup>4</sup> A few well respected and knowledgeable Marines appear before Congress to justify and satisfy. Major Wilcox

---

<sup>4</sup>For an excellent discussion of this rapport, see Major Edward A. Wilcox, USMC, "Marine Corps Appropriations: A Study of the Congressional Process." Masters Thesis submitted to the faculty of the School of Government, Business and International Affairs, The George Washington University, June 1962.



describes one of the most successful of these Marines in the post WW II period:

At that time, and for a decade prior, the Quartermaster General was Major General William P. T. Hill, U.S. Marine Corps. He had been appearing before Congress year after year to support the Marine Corps' requirements for appropriations. He knew Marine Corps requirements and the Congressmen, and the Congressmen knew, trusted and respected General Hill. It was a very satisfactory relationship nurtured over a period of years.<sup>5</sup>

It was during General Hill's tour as Quartermaster General, however, that it became apparent that national security was to become a continuing cost, and a large one. The people, thus Congress, became concerned. The trend was toward "business" methods of accounting for the huge dollar spending, presumably because these were the only methods available. New terms crept into the Marine's vocabulary. Alongside "Gung Ho!" and "short round" slithered phrases such as "accrual accounting" and "performance budgeting." In early 1953 a young Brigadier General, medal of honor winning David M. Shoup, was assigned duty as the Corps's first Fiscal Director. The Corps was going to do whatever was required to justify its requests for funds and account for their use, but it was going to put a Combat Marine in charge of relating dollars constantly to mission.

Today (1963) the Marine Corps has been in the performance budgeting business for about ten years. Its witnesses at Congressional hearings are armed with financial facts. Questions requiring detailed answers are anticipated; detailed records allow detailed reports which are the ammunition for detailed answers. There are no more Generals like W. P. T. Hill, who carried the financial records of the Marine Corps in his right rear pocket. Now, the Marine Corps (according to the script) can put its finger on every O&M dollar: the why and the where and the who of its use.

This paper raises a basic question and attempts to answer it: Of what

---

<sup>5</sup>Ibid., p. 28.



value is this detailed accounting for costs in the O&M appropriation? Value is viewed as it affects the mission of the Corps: by definition, any accounting which aids the Marine Corps in its mission will be considered valuable, and any accounting which does not assist in the mission or detracts from the mission will be considered to have no value or a negative value. Costs and costing will be defined and discussed. Marine Corps policies will be examined, and the cost reports (which represent information gathered in furtherance of those policies) will be scrutinized. Conclusions will be drawn as to the value of these reports as information -- particularly insofar as they lead or fail to lead to action in furtherance of the mission of the Corps. Finally, a general conclusion on the value of the cost information system in the O&M appropriation will be stated, with recommendations for strengthening the system where it appears to be weak.



## CHAPTER II

### PROBLEMS AND POLICIES

"Cost" defined. In the O&M appropriation, "cost" means "disbursement of funds", with one exception -- family housing. This is seldom the case in cost accounting in industry, where "costs" are usually recognized when material is used or services are rendered.<sup>1</sup> In accounting for costs involved in maintenance of family housing, the Marine Corps uses the term "costs" in the industrial sense, as described above. In this one area, then, cost accounting is on the accrual basis; that is, "costs" are recognized as material is consumed or as services are rendered, rather than at the time the material or services are paid for. In all other O&M cost accounting, "cost" is synonymous with payment.

Time delay. It is readily seen that this system has some built-in deficiencies, not the least of which is the requirement to account for two different types of costs. This problem will be treated in greater detail later in this paper. Another problem involves the time delay between the action requiring accounting and the recording of the disbursement of funds. For example, consider the contractor who fails to submit an invoice, or who is slow in invoicing. Cost reports will never record the transaction until the invoice is received, verified, and paid. Or, consider the company which bills once a month for service or materials furnished throughout the month. How long after the transaction will the cost be recorded and reported? Suppose that a Base Maintenance Officer relies upon cost reports to tell him how

---

<sup>1</sup>cf., Clarence B. Nickerson, Cost Accounting (New York: McGraw-Hill Book Company, Inc., 1954), pp. 1-14.



his spending compares with the budget, but costs appearing on the report are a week to six weeks old. Perhaps he should keep some type of informal record, but Marine Corps policy abandoned this crude and makeshift arrangement some time ago, in favor of centralized responsibility for accumulation and reporting of all accounting information. Thus:

It is mandatory to establish a single accounting office to coordinate and supervise all the functions of accounting which are applicable to each field activity concerned. This includes not only allotment accounting, but all the accounting functions performed for maintenance, bakeries, telephone systems, fire department, motor transport, and laundries. Only in this manner can the requirements for an integrated accounting system . . . be met.<sup>2</sup>

The order authorizes and directs field commanders to deviate from instructions in other orders and manuals in order to establish a coordinated system, under the comptroller, which is responsive to the needs of the Corps.

Relationship with allotment accounting. Another broad area involving problems and policies is the relationship between the functions of allotment accounting and cost accounting. During the early years of O&M cost accounting, some activities were not balancing cost reports with disbursements reported for the same period on the allotment accounting reports. This lack of coordination is understandable: "costing" was something new, a shiny, potentially extremely useful tool. In many activities throughout the Marine Corps, its development was purposefully kept separate from fund resources accounting in an attempt to develop the tool in an unfettered, imaginative manner. The balancing requirement was officially stated in January, 1960:

Integration of Accounting Records. Accounting records attempt to gather in a systematic manner the financial information relating to the operations of the organization. Accounting reports summarize this

---

<sup>2</sup>Marine Corps Order 7310.27 of April, 1961.



financial information for higher echelons. Accounting for fund resources is the accounting function which controls the obligation of appropriated funds. The cognizance of this function over appropriated funds ceases when obligations have been liquidated, i.e., when disbursements have been made. Other accounting functions are mainly concerned with the functional distribution and/or reporting on the expenditures (disbursements) for internal use or external use at higher echelons. Within a given activity all expenditures may be accumulated in a systematic manner through the use of cost records. The cost records are the source of expenditure data for other reporting requirements, and this data must be derived from the basic source, the fund resources records. In order to achieve maximum utilization of the existing accounting system and to assure that accounting records and reports are consistent in that the data reported reflects disbursements of appropriated funds made available to the activity, the following principles will govern:

1. Cost accounting records (mechanized job order accounting, where applicable) are subsidiary to allotment accounting records.
2. Cost accounting records and allotment accounting records are in agreement with or reconcilable to each other expenditure-wise.
3. Disbursements (expenditures) are recorded when:
  - a. An issue is made from a stores account.
  - b. A payment is made by a disbursing officer.
  - c. An adjustment is made affecting one of the above.<sup>3</sup>

Because of the separate beginnings and growth of cost accounting and allotment accounting and their consequent "marriage" as required in the order quoted above, the Marine Corps accounting system is not truly integrated. A strong accounting officer can do much to achieve integration, primarily through rotating civilian personnel in various billets throughout the department. However, the press of "getting the work out" often seems to prohibit this cross-training. Illustrative of the lack of complete integration of accounting functions is an incident which occurred at one major Marine Corps base.

Assurance that the thousands of stock fund expenditure documents are correctly posted to allotment accounting records each month is essential for

---

<sup>3</sup>Marine Corps Order 7301.28 of 18 January, 1960.



many reasons. One reason is that cost documents may be reproduced by machine from the stock fund expenditure documents at some point in the cycle of processing before posting to the allotment accounting records. If posting errors are not detected, cost records and allotment records will be out of balance. Similarly, any of these items not posted to allotment records must be reported to the cost section, so that the matching cards may be deleted from the cost "deck". Again, transactions from the previous month which were not posted at that time but are to be posted during the current month must be reported to the cost section for appropriate action. There are literally hundreds of ways in which allotment records and cost records may fail to balance, through errors of commission or omission. For example, at the Marine Corps Base, Camp Lejeune, North Carolina, in order to solve the balancing problems which had led to considerable friction between the allotment accounting section and cost accounting section, a staff non-commissioned officer was assigned to full-time duty as a coordinator between the two sections. One might think that a billet of "coordinator" would be unnecessary in a comparatively tightly controlled unit such as an accounting office. Yet, the volume of transactions and separate purposes of these sections (accentuated by their separate growth and a semi-permanent staff of civilian clerks in each section) made it mandatory.

On the other hand, the accounting system is well integrated in another respect. The Marine Corps job order numbering system requires that transactions (commitments or obligations of funds) be assigned a "job order number" at the time they are initiated. This number remains with the transaction throughout the allotment accounting cycle of commitment, obligation, and expenditure, and is available for use in the cost accounting system. This system represents the basis for a truly integrated accounting structure. For



example, budgets can be prepared by job order number, and the budgeted amounts "loaded" in a computer by job order number. As the budget execution phase is accomplished, actual commitments, obligations, and expenditures can automatically be compared against the budgeted figure as desired. The computer can be instructed to prepare special exception reports when expenditures (or commitments or obligations) reach a certain percentage of budget, or exceed budget, or for many other reasons. In addition, the job order system gives the ability, normally, to prepare machine reports from existing records in response to requirements of higher authority.

The Marine Corps Job Order Number System. The Marine Corps job order number system should not be a problem. It is designed to be simple, standard, yet comprehensive. In practice, however, it is not simple, not standard, and is only as comprehensive as each local activity allows it to be.

Headquarters, Marine Corps has prescribed a fourteen digit JON<sup>4</sup> system with digit positions indicating certain information and the digits themselves indicating other information. A representative JON might be 02 2 12345 667809. The first two digits represent the station or activity, the third digit represents the fiscal year in which the transaction took place, the next five digits are a code which breaks down into all required appropriation information, and the last six digits are reserved for local use.

The JON appearing above, then, might be decoded as follows:

02: Marine Corps Base, Camp Lejeune, North Carolina

2: Fiscal Year 1962

12345: Appropriation 1721106, Subhead 2710, Bureau Control Number

12002, Expenditure Account Number 44551 (Operation and

Maintenance of "encumbered public quarters"), sub-purpose

---

<sup>4</sup>Job Order Number



sidewalk maintenance.

667809: Base Maintenance Officer's Account, shop 78, ninth month.

Only the first three digits really are standardized. Headquarters Marine Corps has assigned an activity number to each unit or station responsible for cost accounting (the first two digits), and the fiscal year is self explanatory; but each activity does its own coding with the last eleven digits. Consequently, the Corps has failed to realize the full benefits of mechanization, a complex of variable quality systems has grown up, and a retraining and reorientation problem exists.

Maximum Mechanization Prohibited. In order to understand the mechanization problem, it is first necessary to have a general knowledge of the Marine Corps allotment accounting system, sources of and types of documents available to the system, and a further knowledge of the relationship between allotment accounting and cost accounting. Several types of transactions will be traced, with comments on mechanization presently existing and mechanization possible.

Marine Corps Stock Fund Transactions.

1. A using unit requisitions material from the local depot of the Marine Corps Stock Fund.
2. The local depot ("Stock Account") prepares a punched card which includes, among other data, a job order number.
3. If the material is in stock, it is issued, and the information on the punched card is electronically "transceived" to the closest major area Stock Fund Supply Depot (Albany, Ga., or Barstow, Calif.)
4. The information "updates" supply records at the major supply



depot. A stock fund "expenditure card" is prepared for each issue transaction. All expenditure cards are mailed daily to the allotment accounting activity of the unit which drew the material.

5. Expenditure cards are machine-matched against "obligation" cards which have been forwarded to the allotment accounting activity by the local stock account at the time of "transceiving".
6. During the machine process (EAM or 1401 computer) of matching expenditures with obligations, the expenditure cards are reproduced in the format desired by the local activity and forwarded to the cost accounting section. These cards then, either individually or in the form of summary cards, become input for the Marine Corps Stock Fund portion of cost reports.
7. Proper coordination between allotment accounting and cost accounting sections assures that cost and allotment records will agree for the month in stock fund expenditures recorded and reported.
8. The major area supply depot, meanwhile, forwards to Headquarters, Marine Corps, a deck of cards identical to those mailed to the allotment accounting activities. These cards are entered in the "Navy Accounting Register," along with all other disbursements. A copy of this register is mailed to each allotment accounting activity monthly, and disbursements recorded on the fund resources ledgers of the field activity must be reconciled to disbursements recorded on the Navy Accounting Register.

Public Voucher Transactions. Public voucher transactions, as used here, refer to those transactions involving material or services which are



paid for by the local disbursing office or Navy Regional Finance Office by check. A public voucher is a document describing the transaction and authorizing a specific amount to be paid. It is the record of the disbursement which is forwarded to the allotment accounting activity for recording on the fund resources ledger. The voucher includes, among other data, the job order number which appeared on the original request for material or services. Examples of public voucher transactions are material purchases from private industry citing O&M funds (normally permitted only when the Marine Corps Stock Fund cannot supply the item, but also under certain other conditions), payment for utility service, payment for services rendered under maintenance service contracts, and payments to contractors performing other work funded by the O&M appropriation.

The cost accounting section may receive notice of the transaction in a number of ways. It may receive a copy of the public voucher from the disbursing office or from the allotment accounting section after posting to the fund resources ledgers has taken place. Each of these methods has disadvantages, however. In the first case, there is a problem of coordination to determine exactly which documents were posted during each month and that each was properly posted by dollar amount; and in both cases there is a necessity for extra copies and extra handling of paper documents. The best method used commonly in major activities is to produce mechanized cost copies of public voucher transactions as a by-product of the allotment accounting posting process. A "card coupler" or punched paper tape device is attached to the posting machine, and applicable cost documents are produced automatically as the operator posts public voucher transactions. These cards are then used as input to the cost reports. As in the case of stock fund transactions, public voucher transactions are reported to the various Navy Regional Finance Offices and appear for



reconciliation on the Navy Accounting Registers. Thus, allotment records, cost records and registers must agree or be reconcilable. Corrections. As in the case of public vouchers, corrections are produced as a by-product of the allotment accounting action and are forwarded to the cost accounting section. Most corrections require reporting through the system, resulting in their appearance on the Navy Accounting Register. Civilian Labor. Mechanized cards, produced as a by-product of the payroll process, are forwarded directly to the cost accounting section by either the data processing section or the civil payroll section. These expenditures are reported through the system and appear for reconciliation on the Navy Accounting Register.

The purpose of the foregoing discussion has been to emphasize the great potential which exists for a standard mechanized system. At all large activities, the cost accounting section is furnished mechanized cards which, in turn, are used in preparing reports. But, where maintenance of sidewalks for Capehart Housing may be JON 02-2-12345-667809 at Marine Corps Base, Camp Lejeune, N.C., the same type of work will be described by an entirely different job order number at the Marine Corps Recruit Depot, Parris Island, S.C. Result: consolidation in detail is impossible at the level of Headquarters Marine Corps without extensive manual processing. Headquarters, therefore, requires a quarterly O&M cost report which does not include the fine distinctions gathered at the local level, and thus fails to capitalize on information which is available in the system.

There is, of course, another side to the "standardization story," and the present system is supported by many who work with it or with the information available from it. This side emphasizes that less detail is required or desired at the Headquarters level than is necessary at the activity level.



Supporters say that local commanders should be given the authority to collect as much or as little cost information as they require in order to perform their mission and fulfill requirements of higher authority; that a standardized system would infringe on the commander's authority. The appeal in these arguments is that they are sound -- management should not be burdened with masses of unneeded information, and commanders in the field should have full authority to accomplish their missions. However, the arguments are used out of context with the organization of the Marine Corps.

First, the Corps is not a large industrial concern. In most cases, what is of interest to the commander at one base-type activity will be of interest to commanders of all similar activities. Similarly, one Fleet Marine Force commander has essentially the same reporting requirements as another. Headquarters is interested in information summarized at the expenditure account level in most cases; yet, in the area of family housing, it is interested in groupings of EAN's<sup>5</sup>, and in subdivisions of EAN's. A standardized cost system built around the expenditure account number would be of advantage to all levels of command.

Secondly, the commander's authority in the cost reporting area is weakened under the present system, rather than strengthened. Because of normal rotation and career planning, a General Officer will seldom retain command of a large activity for more than two or three years. He is, therefore, somewhat at the mercy of the cost system which exists when "reports in." He can cause it to be changed (after it comes to his attention that it is not performing its job to his satisfaction), but will seldom be able quickly to recognize its weaknesses. This recognition will be difficult because the system is the

---

<sup>5</sup>Expenditure Account Numbers



creature of subordinates who have created and nursed it and believe in it. These technicians will, naturally, be resistant to changes desired by a "three-year boss." The system, in other words is coveted by its keepers.

A standardized system would not be subject to the same objections. Field commanders would have full confidence in and excellent knowledge of the capabilities of the system (through experience), and technicians would not have a possessive and protective interest in the details of "their" particular system.

Variable Quality Systems Exist. Variation in quality of cost accounting systems is one result of the Marine Corps approach to job order numbers. Two examples will emphasize the problem.

Early in 1962, a conference was held at the Marine Corps Supply Center, Albany, Ga. In attendance were supply representatives from all east coast stock accounts and fiscal representatives from major east coast activities. In addition, Headquarters, Marine Corps and the west coast supply center (Barstow, Calif.) were represented. One of the agenda items concerned "loading" and erasing the computer tape at the supply center with job order numbers. The representative from the data processing section at Albany requested that fiscal officers find a way to keep to a minimum consistent with their requirements job order numbers loaded on the tape. He pointed out that the tape running time (random access was not available) at the supply center was a cause of major concern, and that "dead", duplicate, and unnecessary job order numbers took up just as much tape room as "live" numbers. He expressed the opinion that there were enough job order numbers loaded on the tape to "account for the world," and requested the fiscal officers to do something about it.<sup>6</sup>

---

<sup>6</sup>The author was one of the conferees.



Discussion brought out the fact that each activity used a different system for utilization of job order numbers. One activity was using four hundred and fifty JON's, while another was using over thirty-five hundred, and a third was using over twelve thousand! Their missions were different, but each had a requirement for a fairly extensive set of JON's, and difference in mission did not account for the difference in number of job order numbers loaded. One activity included part of the EAN in the job serial position of the JON. Another had a completely coded system which required the use of a locally prepared index to decode.

Another example which might suggest variable quality in systems involves staffing of the various cost accounting sections throughout the Corps. The Marine Corps Base (supporting a Marine Infantry Division) at Camp Joseph H. Pendleton has a cost section consisting of twenty billets, including one GS-9, one GS-6, two GS-5's, seven GS-4's, four GS-3's, and the remainder military personnel. The base at Camp Lejuene, also supporting a Division, has a section consisting of seven billets, with the senior rank a GS-7. Similarly, the Supply Center at Albany, Ga. has fifteen cost billets, while the Supply Center at Barstow, Calif. has seven.<sup>7</sup>

It is realized that differences in personnel strength do not indicate necessarily that there is a different quality of output; however, since missions and requirements are quite similar at the two bases and the two Supply Centers, there seems little justification for the wide discrepancy in staffing. Either the input is less efficient at Albany and Pendleton or these sections are performing more functions than their counterparts at Lejeune and Barstow. If the latter is the case, then it becomes necessary to determine if the

---

<sup>7</sup>This information is taken from Marine Corps tables of organization. In addition, the most recent reports to Headquarters indicate that the cost sections at the four activities were all up to strength at the time of writing.



functions are required at Albany and Pendleton and, if so, who is performing them at Lejeune and Barstow. Then, of course, the organizational structures should be compared for efficiency and the results made known to all activities. Cost accounting personnel, perhaps more than many others, should be aware of the need for the most efficient use of available resources.

Retraining Required Upon Transfer. The points emphasized in the preceding pages lead to the third disadvantage of non-standardization of cost systems. It need not be belabored. It is obvious that a trained cost accounting man (military or civilian) will find it necessary to relearn much of the routine of his job upon transfer to a new activity. In addition, commanders and staff officers must become familiar with the capabilities and limitations of the system at each new base to which they are assigned.

Policies and Problems Restated. It has been indicated that the policy of the Marine Corps is to have an integrated accounting system, responsive to the requirements of fund accounting and cost reporting. Further, it has been stated that certain problem areas exist in achieving the goal stated in that policy. Specifically, "cost" normally means expenditure. Thus, "cost" reports are after the fact to the extent that their operational value is impaired. Secondly, the integration of allotment accounting and cost accounting has been a slow process, characterized by difficulties emanating from separate lines of growth and purpose. Third, the Marine Corps job order number system is not completely standardized. Attention will be directed in the next chapter to the fruits of the cost accounting effort: its value to field commanders and to Headquarters Marine Corps. Operator and Maintenance cost reports will be examined in some detail. The object of this examination will be to form a further basis upon which to build an answer to the essential question of this



paper: Of what value is detailed cost accounting in the O&M appropriation in accomplishing the mission of the Marine Corps?



## CHAPTER III

### REPORTS

The function of any cost accounting system is to provide information -- good information. In order to deserve the title, good information must inform correctly; therefore, it must be an exact representation of data and be understood by the recipient. Information is the passive element in the process of communication. It is like a tin can being kicked down the street: when it finally comes to rest, it may or may not be the same shape as when it was manufactured. The "kicking game" of information flow progresses from the original event to observance of the event to recording of the event, then normally to a series of form changes of the recording designed to describe the event for particular purposes, then to an analysis of and reaction to the recording.

The cost accounting system, then, must be considered as an information system. Its purpose is to express raw data in financial terms. The raw data, as has been noted previously, is in most cases an expenditure of funds. The tests of any information system: How accurately is the raw data converted into cost data? Do various form changes distort the information? Is the information presented, finally, in a form which allows accurate analysis and reaction? And, is action actually taken as a result of the information? Each of the O&M cost reports will be discussed with these criteria used as a probe to uncover its effectiveness or ineffectiveness as an information device.

The Quarterly O&M Cost Report. This report covers all expenditure transactions under the O&M appropriation for all fiscal years, except expenditures for family housing. A listing of unliquidated obligations for the



current year O&M allotments is submitted with the quarterly O&M cost report at the end of the second, third and fourth quarters. Expenditures are reported by type: public voucher, stock fund, civilian labor, military labor, ASA material (material purchased originally through the procurement appropriation and issued to a using activity as a statistical charge) and "equipment operation." In addition, expenditures are reported by purpose and summarized by various categories of appropriation data. Unliquidated obligations are summarized by appropriation data and purpose.

This report represents an accurate conversion of the raw data into report form (expenditures and obligations for which expenditures have not been posted to the records), and in its final form, is an accurate representation of expenditures and unliquidated obligations by category. However, in order to decide whether or not it represents useful information, action taken as a result of the reports must be examined.

The Fiscal Division of Headquarters Marine Corps considers this report extremely valuable. Numerous interviews with headquarters personnel established that the quarterly O&M report is a basic source of "on call" information from which answers to unanticipated questions can be drawn. In addition, the information is utilized as a management tool by the Facilities Management Division to compare costs of similar efforts at different activities and at the same activity during different years. Further, the Department of Defense requires an annual report of "real property maintenance activities," (the information for which is derived from the quarterly cost reports).

The reports are of little or no use to field activities. They have the same information available in much greater detail (job order numbers) and are not greatly concerned with an EAN summarization. This situation is common



to most activities and to most reports. In response to questions concerning the value of cost reports at the activity level, one accounting officer says,

As for the cost reports you mentioned, I felt there was no need to fill-in your . . . chart, because the answer "none" applies to all from our viewpoint, as long as we're being practical. At the same time, many would undoubtedly classify the same in a "nice to know" category disregarding the value of such information in relationship to the expense of cluttering up one's operation or mind with data which will serve no purpose. Consequently, I maintain that "none" is the proper answer. You should know too that we distribute to operating personnel only some of the reports and further, that these are provided as a matter of courtesy rather than from necessity, or for the sake of their value.<sup>1</sup>

The reasons behind this feeling are of interest, since they represent one basic difficulty (previously referred to in the section on policies and problems) in any organization information system: the problem of what is needed at what level -- what is enough information, and what is too much. The author asked his correspondent why he felt the way he did about the cost system. His answer follows:

To answer your question "Why"? Think the only answer hinges upon the relative level of command and responsibility. We gain our answers at the job order level. We must for budgeting determine expenses by expenditure account, (for budget preparation and submission, because higher authority requires the budget in that format -- not because that summarization is useful at the local level) and in some cases report costs by EAN; otherwise, we would care little about the EAN level. Meanwhile, CMC uses the EAN in much the same manner as we use the JON, and in certain cases they can gain answers at this level. We know, however, that oftentimes they ignore this level generally and speak in terms of budget project. Others often speak in terms of budget activity or appropriation depending upon the level of their respective responsibility. This breakdown has certain merit, but I have always felt much could be gained as well as saved if we could eliminate a couple of these categories. Likewise, I am confident that changes could combine allotment accounting reports together with cost reports to alleviate reporting demands and simultaneously provide improved reports reflecting greater full-disclosure.

The quarterly cost report is a general recapitulation, by type, of all O&M expenditures except those for maintenance and operation of family housing. The remaining reports are specific and sometimes technical in nature.

---

<sup>1</sup>Personal letter to the author from the accounting officer at a major Marine Corps activity.



Since a great deal of effort, on a continuing basis, goes into motor vehicle cost recording and reporting, and since this area is in many respects representative of the type of cost effort required throughout the operation and maintenance appropriation, it will be discussed in some detail. Many of the reasons for extensive costing become apparent when the motor transport requirements are examined. Some generalizations will be drawn at the conclusion of the discussion of motor vehicle cost reporting which are applicable to the other reports. The remaining reports, then, will be discussed in less detail where the generalizations apply.

Motor Vehicle Cost Reports. The basic idea behind extensive cost compilation of motor vehicle repairs is the need for some system to determine when it is most economical to repair and when it is most economical to replace. The Department of Defense policy is firmly stated in a joint publication for use by the three service departments:

Administrative use motor vehicles are subject to the intense scrutiny of the public, the Congress, the Department of Defense, and various staff elements of each of the military services. This necessitates the maintenance and submission of certain statistical data.

The history of motor vehicle management is a story of steady progress in the improvement of concepts and techniques. The adoption of the best practices used in the operation and management of administrative use vehicle fleets, and the use of improved equipment and maintenance techniques, has served to keep military motor vehicle management compatible with the commercial motor vehicle industry.

This publication sets forth sound basic principles of management techniques for operation and maintenance of administrative use motor vehicles which have proved by long experience to be the most efficient and effective in this important function. To achieve maximum value and effectiveness, strict and uniform compliance with the methods and standards prescribed by this publication is essential.<sup>2</sup>

In order to comply with this policy, the Marine Corps has developed a complex system of accumulation of operating and maintenance information for commercial motor vehicles and materials handling equipment. This system is

---

<sup>2</sup>Marine Corps Order P11240.46. This is the Marine Corps designation of the Joint Procedures for Management of Administrative use Motor Vehicles.



designed to provide:

- a. Accurate information relating to cost of operation, maintenance and utilization for budget preparation, establishment of allowances, and recurring reports required by the Commandant of the Marine Corps and higher echelons.
- b. Methods to detect undesirable trends in the cost of operation, maintenance and utilization that may be used by management personnel, both at the activity and Headquarters, Marine Corps.
- c. Accumulation of cost and utilization data in a form adaptable for comparison with similar information developed by the other military services and other governmental agencies.<sup>3</sup>

Expenditure information is compiled by individual vehicle for maintenance costs and by type of vehicle for operation costs. "Costs" include the following types of expenditures:

1. Direct labor, military and civilian: Costs of personnel working in the motor transport maintenance shop, and labor performed on specific jobs by personnel in the paint shop, welding shop, etc. When the vehicle is repaired by a commercial establishment, labor as shown on the billing is reported.

2. Direct material: All materials used in the repair of a vehicle, and replacement parts used in the repair shop. Specific instructions cover the charging of "trade-in" items.

3. Direct Operating costs: Fuels, battery charging, motor oil, anti-freeze, tire chains, tires, tubes, batteries, seat covers, winches, and battery water. Also,

. . . labor incurred by service station attendants and those assigned to grease rack operations. This does not include supply personnel who may be dispensing gas or oil at the gas pump area. It will also include the installation of flag-staff and flag rank plates, safety devices used for military police vehicles, direct costs of dispatchers (operation) and other personnel engaged in vehicle and equipment operation including service station attendants.<sup>4</sup>

---

<sup>3</sup>Marine Corps Order 7310.10B of 27 August 1962.

<sup>4</sup>Marine Corps Order 7310.10B.



4. Indirect maintenance costs (overhead); labor of personnel indirectly chargeable to maintenance and repair work, such as the Motor Transport Officer, maintenance supervisors, janitors, etc., and annual, sick, military, terminal and other leave with pay of all personnel associated with the maintenance and repair operation.

5. Other indirect maintenance costs: Rent for commercial buildings, utilities, and repair of buildings used for maintenance or repair functions. These charges are only accumulated for reserve activities.

6. Indirect operating costs (overhead); Cleaning supplies, indirect labor charges of personnel associated with motor pools and service stations, cost of leave with pay of personnel engaged directly or indirectly in motor pool or service station operations. Costs of repair of buildings and facilities.

7. Other indirect operating costs: Similar to other indirect maintenance costs in paragraph 5. above, but applicable to operations as distinguished from maintenance: also applies only to the Reserve establishment.

It must be noted that there are certain inconsistencies in these requirements. They give an aura of completeness and detail: they suggest extreme care and accuracy in the accumulation of all costs involved in the maintenance and operation of commercial motor vehicles and materials handling equipment. But, what has been left out? What does it cost to accumulate this information? Unfortunately, the order specifically excludes labor costs for fiscal and supply personnel in indirect support of the motor transport facility. Also excluded as a cost is the massive support of the data processing installation -- key punching, machine rental, direct labor, and so forth. In other words, the approach seems to be to include all indirect costs which can be



geographically tied to the motor transport section, but exclude those which are a little too indirect. The line must be drawn somewhere, but the exclusion of accounting and data processing costs must be recognized.

The reader can visualize the extremely tight control measures which are required to collect and report the data by vehicle (in the case of maintenance) and by vehicle type required by the Marine Corps order. Specialized equipment, forms, procedures, and billets are described in detail. Time clocks, multitudinous job order numbers, and seemingly endless recording, punching, sorting, verifying and reporting requirements ad nauseum become necessary.

Attention must be directed, then, to the use to which the resulting information is put, and to the nature of requirements laid down by the Department of Defense, if an accurate appraisal of the value of this type of collecting and reporting is to be accomplished. Here again, as in the quarterly O&M report, the greatest value from the information accumulated accrues to Headquarters. The Marine Corps relies on these reports to support requests for procurement funds for replacement and O&M funds for maintenance and repair of commercial motor vehicles. In addition, Inspector General teams are armed with comparative cost figures for operation and maintenance of this equipment. Ineffective utilization or maintenance practices stand out as costs which differ from norms. (Firm standards have not been established in all cases, but the supply department is actively examining all areas where standards appear feasible.) Headquarters has been able to recommend practices to field activities which have increased efficiency and saved dollars.

That this report has some value to the field commander is certain. Each activity uses the information to a greater or lesser degree, depending upon the size of the motor transport effort and the concern of the Motor



Transport Officer, the Controller, and ultimately, of course, the Commander.

Fortunately, the report does have value to the Marine Corps, since the reporting requirement for its information would still exist even if it were valueless. The following events make the reasons for this requirement clear. The General Accounting Office reported to Congress late in 1962 concerning some of the practices and costs then applicable to motor transport maintenance in the Department of Defense. This report was followed by a letter from DOD to the Comptroller General disputing some of the findings in the report, a reply by the Comptroller General to the Secretary of Defense, and a rebuttal by the Secretary. During the several weeks which passed, a task group was established in the Department of Defense and to make recommendations for an effective, uniform system of cost accumulation, and for other purposes. In short, the "pressure was on." Why? A few excerpts from the GAO report are indicative of the problem.

Our examination disclosed that the repair and maintenance of non-combat vehicles in the Department of Defense is costing about \$66 million a year more than it should, primarily because the Air Force and the Army have not established and administered adequate controls over the level of maintenance activities nor provided a reasonable basis for directing and evaluating the efficiency of maintenance operations. Compared with the Navy, whose effective surveillance of vehicle maintenance results in costs that compare favorably with those experienced by private operators of motor vehicle fleets, the Air Force and Army practices are wasteful and inefficient. If their vehicle maintenance operations were conducted as efficiently as those of the Navy, the Air Force could save about \$55 million a year and reduce its vehicle maintenance staff by 10,000 men and the Army could save about \$11 million a year and reduce its staff by about 2,000 men.<sup>5</sup>

Sixty six million dollars seems like an exceptional amount of money, when it is considered that the total cost of maintenance of 250,000 noncombat vehicles in the Department of Defense is approximately \$160 million per year,

---

<sup>5</sup>General Accounting Office, Examination of Costs and Manpower Involved in Maintenance of Noncombat Vehicles in the Department of Defense. Report to the Congress of the United States by the Comptroller General of the United States. November, 1962. p. 1.



and when it is realized that the estimated savings are based on comparison with the Navy's system, rather than with an ideal or standard. How is it possible to save so much out of so little? An example from the report is illustrative:

McGuire Air Force Base, by January 31, 1961, had spent \$7,438 on repairs to a 1957 station wagon that had cost only \$1,662. Repairs to this vehicle cost about \$1500 during the first year, over \$2,500 in the second year, nearly \$2,100 in the third year, and about \$1,300 in the 7 months ended January 31, 1961. Typical of the heavy maintenance on this vehicle during the last 7 months were replacement of the transmission and other items in August, 1960, at a recorded cost of \$340 and replacement of the engine in September at a recorded cost of \$336.<sup>6</sup>

effective replacement standards and the cost reporting system to back them up prohibit this type of mismanagement in the Marine Corps.

What generalizations can be drawn, then, from the area of motor transport cost reporting? First, Congress is actively interested in the soaring cost of national defense, to the point where it requires (indirectly, through the General Accounting Office) detailed accounting when it feels that "seat of the pants" judgement leads to waste and inefficiency. For example:

We brought our findings and conclusions to the attention of the office of the Secretary of Defense and the Departments of the Army, Navy, and Air Force. We proposed that the Secretary of Defense consider prescribing for the three military departments uniform maintenance standards and reporting systems, in order to provide effective surveillance and control over the efficiency and economy of vehicle maintenance.<sup>7</sup>

Second, the Department of Defense is usually responsive to the desires of Congress. Third, when both or either the Congress and the Department of Defense require detailed accounting, the services gain or lose prestige and respect in the eyes of both, depending upon how well they carry out the requirements. (Note the extremely favorable comparison of Navy's motor vehicle cost controls with those of the Army and Air Force.) Fourth, this gain or loss of respect and prestige will indirectly affect the individual service's success

---

<sup>6</sup>Ibid., p. 19.

<sup>7</sup>Ibid., p. 2.



in obtaining both O&M funds and procurement funds in many instances. In other words, cost controls have a great deal of value just because Congress says they do, aside from any management value which they may have for the individual services.

The remaining O&M cost reports will be examined briefly in this context.

Utilities Cost Reports. Three utilities cost reports are required. The purposes of these reports are (1) to determine the cost of utilities produced and distributed, (2) to evaluate the results of utility operations against engineering standards, (3) to provide data for submission to the Department of the Navy, (4) to provide basic rate data for establishing unit rates and for guidance and use in budgeting, and (5) to assist in analysis of utility operations by the local commander.<sup>8</sup>

One report is submitted by all field activities which do not generate prime steam electricity but do purchase or produce utility service (steam, electricity, water, sewage, gas, trash disposal, telephone or ice). Another is submitted by the Marine Corps Recruit Depot, Parris Island, S.C., which is the only Marine Corps activity which does generate prime steam electricity. The third form is a statement of sales, submitted by all field activities which sell utility service. The sales report is fairly self-explanatory and serves the useful purpose of indicating dollar amounts of utility service to activities which must be billed. The other two reports are representative of a concerted program throughout the Naval Service in the conservation of utilities, and provide information used by the Facilities Management Division at Headquarters for rate setting. This is a dull but necessary task, since electricity (for example) which is paid for by the station O&M appropriation is used for a

---

<sup>8</sup>cf., Marine Corps Order 7310.24B of 25 October, 1962.



variety of purposes, many of them not properly chargeable to O&M. Reimbursement is required for this service, and must be based on some justifiable rate which includes not only the cost of the electricity as charged by the utility company, but also some part of the cost of distribution aboard the base. Thus, for example, the utility reports provide information upon which the rate charged to the United States Naval Hospital, Camp Lejeune, N.C. is determined, since the hospital receives its electricity through the base distribution system and reimburses the O&M, MC appropriation for the full cost of providing that service. Here again, there is a requirement from the Department of Defense for a report (annually) which makes accumulation of some of the data collected for these reports mandatory.

The Quarterly Project Status Report. (Maintenance). This report deals primarily with amount obligated and percentage of completion of various repair and construction projects. Costs (expenditures) are shown only when the project is completed. Costs of military labor, civilian labor, and all ASA material must be reported, but no attempt is made to collect indirect charges.

The purposes of the report are to:

- (1) Review and evaluate the progress of approved projects.
- (2) Plan availability of maintenance funds by comparing actual with estimated costs for approved projects.
- (3) Provide record experience of cost data for future project estimates.
- (4) Estimate budgetary maintenance requirements.
- (5) Inform, in the case of new construction, when the facility has been completed and is beneficially occupied.
- (6) Monitor the authorized ceiling and organization strength of maintenance personnel.
- (7) Provide activity population data.<sup>9</sup>

This report has accurate information content, since all costs except military labor are accumulated by job order number at the time of incurrence,

---

<sup>9</sup>Enclosure (1) to Marine Corps Order 7310.29 of 1 July, 1961.



variety of purposes, many of them not properly chargeable to O&M. Reimbursement is required for this service, and must be based on some justifiable rate which includes not only the cost of the electricity as charged by the utility company, but also some part of the cost of distribution aboard the base. Thus, for example, the utility reports provide information upon which the rate charged to the United States Naval Hospital, Camp Lejeune, N.C. is determined, since the hospital receives its electricity through the base distribution system and reimburses the O&M, MC appropriation for the full cost of providing that service. Here again, there is a requirement from the Department of Defense for a report (annually) which makes accumulation of some of the data collected for these reports mandatory.

The Quarterly Project Status Report.(Maintenance). This report deals primarily with amount obligated and percentage of completion of various repair and construction projects. Costs (expenditures) are shown only when the project is completed. Costs of military labor, civilian labor, and all ASA material must be reported, but no attempt is made to collect indirect charges.

The purposes of the report are to:

- (1) Review and evaluate the progress of approved projects.
- (2) Plan availability of maintenance funds by comparing actual with estimated costs for approved projects.
- (3) Provide record experience of cost data for future project estimates.
- (4) Estimate budgetary maintenance requirements.
- (5) Inform, in the case of new construction, when the facility has been completed and is beneficially occupied.
- (6) Monitor the authorized ceiling and organization strength of maintenance personnel.
- (7) Provide activity population data.<sup>9</sup>

This report has accurate information content, since all costs except military labor are accumulated by job order number at the time of incurrence,

---

<sup>9</sup>Enclosure (1) to Marine Corps Order 7310.29 of 1 July, 1961.



and estimates are not necessary. It has limited use as a recurring report at the field activity level. All information appearing in it, except for cost of military labor, is available in either the allotment accounting or cost accounting system on demand, and there is little need to know the status of each project precisely at the end of each quarter. This report is useful to the Facilities Management Division as a current indicator of actual use of O&M dollars in major repair and minor construction projects as opposed to planned use. Reallocation of funds can be effected when projects lag and there is the possibility of using the dollars more effectively on other projects.

The User Charges Report. The requirement for this report is remarkable in that it specifies that, "Costs shall be determined or estimated on the basis of presently available accounting records. No additional . . . operations will be performed solely for this purpose."<sup>10</sup> This amounts to informing the field that the report is a requirement of higher authority (in this case, the Bureau of the Budget) which is only important enough to require a small major effort, rather than a major major effort.

The government has adopted the policy that those private individuals and organizations which receive some special benefits "above and beyond those which accrue to the public at large" should pay for them. Examples would be transportation service specifically benefitting an "identifiable recipient," such as railroad siding service, school bus transportation, dockage and port handling; fire protection; fees for copying, certification and search of records; utilities; laundry services, and so forth. "User charges" should also be accumulated under certain conditions of lease or sale of government property or land. Costs to be reported include both direct and indirect costs,

---

<sup>10</sup>Marine Corps Order 7310.34 of 24 August, 1962.



including, but not limited to:

- a. Salaries, employee leave, travel expense, cost of fee collection, postage, materials and supplies used, operation and maintenance of buildings and equipment (including depreciation when appropriate), and personnel costs other than direct salaries (e.g., retirement and employee insurance.
- b. A proportionate share of the management and supervisory costs.
- c. A proportionate share of military pay and allowances, where applicable.
- d. The cost of research, establishing standards and regulations to the extent they are determined to be properly chargeable.<sup>11</sup>

It is not possible to collect the required information by recipient using the existing accounting records. It is equally impossible to "estimate" these charges with any degree of accuracy. Fortunately, the User Charges Report is required only once a year.

Laundry and Dry Cleaning Cost Report. The Marine Corps is in the laundry business, too, and keeps detailed records in order to check on the efficiency of its operations. The general requirement for keeping this information is that laundries will "pay for themselves." That is, receipts from reimbursable work will equal costs of operation in the long run.

Further, it is the policy of the Marine Corps that paying customers (governmental and private parties) will reimburse the Marine Corps for costs actually incurred. Thus:

Rendering reimbursable services at a loss is tantamount to the Marine Corps subsidizing other military services or government activities, enlisted services and authorized individual service. Therefore, periodic surveys will be performed to evaluate active price lists to ascertain where more realistic prices should be established which would enable the activity to recapture costs of operation.<sup>12</sup>

It is apparent that detailed cost accumulation is required in order to

<sup>11</sup>Ibid.

<sup>12</sup>Marine Corps Order 7310.30 of 13 July, 1961.



comply with these requirements. Cost procedures in this case include, but are not limited to, (1) establishment of cost centers, (2) maintenance of production records by cost center, (3) detailed recording of civilian and military hours worked by cost center, (4) establishment of "standards," both for average unit costs and for man hours of production, (5) establishment and use of a chart of accounts which includes such items as maintenance and repairs to plant equipment, use of utilities, depreciation, and many others, (6) workload percentage, and so forth.<sup>13</sup> An unusual and interesting technique is practiced by the Marine Corps in that funds sufficient to pay for capital replacements in laundries (based upon needed replacements and reimbursements collected during the previous year) are withheld at the Headquarters level and applied through a Headquarters open allotment, rather than allotted to the field commanders. The results of the withholding policy have been an extremely effective program of capital replacement, under which laundry equipment is replaced as the need arises, even though the particular activity receiving the benefit of capital replacement may not have performed sufficient reimbursable work to "pay for" its own replacements.

The Bakery Cost Report and the Bakery Labor Report. These reports are designed to:

- a. Obtain financial data on the operation of Marine Corps Bakeries;
- b. Furnish cost data in a way that will enable the station commanders and the Commandant of the Marine . . . to make comparative cost studies;
- c. Enable the Commandant of the Marine Corps . . . to promulgate a markup for baked products sold in sales commissaries.<sup>14</sup>

Examples of data required in these reports include, (1) pounds of bread manufactured per man-hour, (2) pounds of bread produced per 100 pounds of flour,

---

<sup>13</sup>Ibid.

<sup>14</sup>Marine Corps Order 7310.1C of 26 July 1962.



(3) direct costs, (4) ingredient cost per pound of bread and per pound of pastry, (5) utilities costs, (6) maintenance and housekeeping costs, and so forth.

Commissary stores are often a politically sensitive issue, and it is necessary to insure that bread is not sold to sales commissaries below cost. In addition, the Facilities Management Division utilizes the information to recommend improvements in the administration of Marine Corps bakeries.

The Utilities Cost Report, Telephone System. This report is designed to provide management information to both Headquarters Marine Corps and the field for analysis and control of administrative telephone system operations. Both direct and indirect costs of operating the system are collected and reported quarterly. Some of the indirect costs in this case include charges for use of construction equipment, statistical charges for depreciation, charges for directory listings, contractual costs of leased lines, and use of motor vehicles.<sup>15</sup> These costs are representative (not inclusive) of the extremely varied collection process required for this report.

The report is used by Headquarters to determine the cost of government operated administrative telephone systems, to insure that the best service can be maintained at the least possible cost, through appropriate managerial action.

The Fire Department Operating Cost Data Sheet. The purposes of this report are:

- a. To provide fiscal data regarding structural fire department operating costs and fire protection costs at Marine Corps activities for budgeting and management purposes.
- b. To provide the Commandant of the Marine Corps with current and cumulative data regarding the expenditure of funds for fire protection

---

<sup>15</sup>Marine Corps Order 7310.6A of 9 August 1962.



for the purpose of ascertaining whether or not expenditures are in proportion to the level of fire protection maintained.<sup>16</sup>

Both direct and indirect costs are reported quarterly, in accordance with specific instructions in the Marine Corps Order. This report is unusual in that the requirements for its composition and submission have not been changed since 1956. Cost requirements both internal and external to the Corps have made cost accounting a rapidly changing field. The cry, "Why don't they make up their mind?" has been constantly wailed from the field.

Before discussing the requirements for cost reporting in the area of family housing, one further remark applicable to the reports discussed thus far is considered apropos. All of these requirements, except for the Quarterly Operation and Maintenance Cost Report and the User Charges Report, existed in the Marine Corps before consolidation of all accounting functions under the Fiscal Director in 1959. These reporting requirements are for data which operating management (not accounts) felt were necessary for efficient managerial decision making. The separate branches of the supply department which had responsibility for coordination of activities in the various functional areas discussed saw the need (separately) for recurring cost data as a management tool. It is refreshing to realize that the forms, formulae, and formidable requirements are not the creation of a hierarchy of accountants who are out of touch with operating problems and requirements.

Partially because of the management-supply oriented origin of much of the cost reporting, there exists a close relationship between the cost section of the Marine Corps Fiscal Division and the Facilities Management Division of the Supply Department. This relationship is based upon mutual respect and

---

<sup>16</sup> Marine Corps Order 7310.1 of April, 1956.



understanding. It results in effective use at Headquarters Marine Corps of the cost information flowing in from the field. The "management people" understand the difficulties in and necessity for accurate cost collection, and the accountants have a breadth of understanding of the managerial importance of speed, accuracy, and format in the reporting process.

Reports of Operation and Maintenance of Family Housing. In November, 1961, an advisory panel on military family housing policies reported to the Secretary of Defense the results of a lengthy examination of the subject. One of the recommendations of this panel which was implemented was the establishment of a DOD housing "czar" under the Assistant Secretary of Defense for Installations and Logistics. This deputy secretary has responsibility for administration of all DOD family housing, including new construction and operation and maintenance of existing units. The authority given to the Deputy Secretary for housing was extensive, as it had to be in order for him to fulfill his responsibilities. This authority has not gone unused; on the contrary, one of the real problems in operation and maintenance cost accounting has arisen because of the use of that authority.

As has been mentioned previously, the Marine Corps accounting system is appropriation oriented. Obligations are the key figure on allotment accounting records, and expenditures the basis for cost reports. This system is inimical to accrual accounting, which defines costs as "amounts paid or payable for material consumed or services received."<sup>17</sup> Yet, accrual methods are required in order to comply with the DOD requirements. Thus far, accrual accounting as such is not desired in the Department of the Navy. The instructions read:

It is not the intent of this Instruction to establish an accrual accounting system solely to record accrued costs in the area of family



housing operations. The value of resources applied for expenditures which have not been recorded as of the semi-annual reporting dates, will be computed on the basis of engineer analysis provided by the public works or base maintenance officer . . . Separate . . . work sheets will be prepared as of the semi-annual reporting dates which will include the accrued costs only based on engineer analysis. Beginning with appropriations in FY 1963, the accrued costs as of the end of the semi-annual period covered, less the accrued cost as of the beginning of the period, will provide the total costs, funded and unfunded, for operation and maintenance of family housing for the period reported.<sup>18</sup>

Thus, the Navy and the Marine Corps are forced into what might be termed "informal accrual accounting" for family housing costs. Formal or informal, the requirement results in the necessity for records in addition to the fund resources and cost accounting records used in all other financial accounting. The problem is not great in small activities, since the difference between actual accrued costs and the sum of expenditures and unliquidated obligations can be determined easily. This may be accomplished by a careful review of unliquidated obligations to determine which of these represent material received (thus, theoretically, put to use) and which represent material not yet received; also by a similar review of the unliquidated obligations for labor, utilities, and so forth. The volume of transactions at a major activity, however, prohibits this careful review. Thus, reliance is placed upon "engineer analysis." These estimates are by definition something less than accurate. Headquarters can verify that accrued costs reported from the field are somewhere in the acceptable area between total expenditures and total obligations reported on allotment reports, but has no further method of checking on the accuracy of the reports.

Since this is a relatively new requirement, an assessment of the managerial significance of the housing reports cannot be made at this time; however, there is reason to believe that the housing reports will be used in

---

<sup>18</sup>Enclosure (1) to NAVCOMPT Instruction 11101.7A.



much the same manner as many of those previously discussed: as a management tool to inform Headquarters of the comparative costs of various types of housing at different bases and for different years, and allow management to capitalize on efficient operations and examine inefficient operations critically. The accrual feature of the housing reports will, of course, allow management to take action more quickly than if it were forced to rely on the essentially historical nature of expenditure reports, but the need for this speed is questionable when weighed against the cost and inefficiency of maintaining an informal accrual system in the one area, while maintaining a formal obligation-expenditure system in all other areas.



## CHAPTER IV

### CONCLUSION

It is difficult for many Marines to be enthusiastic about any type of "paper work." The Corps was, is, and will continue to be organized to perform a combat mission. The correlation between laundries and vertical envelopment seems tenuous, at best. The Commanding General of the Second Marine Division doesn't, and shouldn't, care about the amount of flour used per pound of bread, or how the indirect labor costs of the base motor transport shop are computed.

He does care about the morale of his troops, however, and many of the base-type activities which are subject to cost reporting requirements have a direct effect upon morale. The Marine who takes a bundle of dirty field uniforms to the base laundry instead of to the local civilian laundry can save a few dollars. The private whose mess hall never seems to run out of fresh bakery products is probably a little happier. The Commanding General cares about some of the other cost accounting activities because of their direct influence upon the amount of service his command can receive for the fewest dollars of appropriated funds spent. Every Commanding General, and most Marines, realize that dollar resources are relatively scarce, and that there is a very real competition for their allocation. For example, a base which can operate an administrative telephone service of five thousand telephones at half the cost of that same service if commercial rates and equipment were used is, theoretically, 2,500 telephones ahead.

Such abstract considerations are not invalid. Budgets are, to a large extent, based upon the previous year's costs. Increases to the budget must be fully justified from the lowest level through to Congress, and always are



subject to the most critical examination. Improvements in efficiency which are made possible through comparative analysis of cost reports can result in dollar savings. These savings often can be applied to other areas in the O&M appropriation where deficiencies exist, thus spreading the same number of dollars further.

In addition, the Marine Corps is faced with the black fact of necessity. It has been stated previously in this paper, and is now reemphasized: what Congress and the Department of Defense want, they will get. The best the Corps can do when an unpopular requirement is placed upon it is to examine that requirement carefully for possible value and then use as much of the information required to be gathered as is considered useful.

There is an alternative: The Corps can object to being in the maintenance and laundry and baking and telephone and commercial motor vehicle and utility businesses, and ask that the Navy, or the Department of Defense step in and run these administrative services. It is the author's opinion, however, that the Corps administers these services in a manner which benefits most Marines, and that a request for relief such as that suggested above would be an abdication of responsibilities which, however mundane, are inherent in the command and administration of a military service.

Value, then, means morale. It means efficient utilization of scarce resources. It means justification of appropriation requests. It means Congressional support. Cost reports and costing are a small but essential part of the Marine Corps's image before Congress; but sometimes the small and technical details are the favorite targets of Congressional attention. Thus:

In many instances the Congress seeks refuge in preoccupation with detail and ignores or avoids consideration of the major policy issues raised by the budget. This tendency seems to be not merely a Congressional



characteristic but a characteristic of human behavior in general. The larger issues are usually the most difficult to grasp and frequently the most unpleasant to confront. The temptation is strong to neglect the main issue and consider detail that is meaningless except in the context of the larger issue. Or one finds the problem incomprehensible as a whole and attempts to gain comprehension of the whole through summation of knowledge about the parts -- frequently with indifferent success. Knowledge of the individual stones is unlikely to show how the Pyramids were built, and knowledge of the individual tactical units of an army is unlikely to add up to a foreign policy.

Such tendencies are particularly noticeable in consideration of the defense budget. With a sigh of relief the committee member, who is as baffled as everyone else about the meaning of national security, finds an item such as "research on secretarial chairs" and goes to work on it to the tune of several pages of hearings.<sup>1</sup>

Cost accounting is not very exotic, certainly not heroic. As a matter of fact, it can hardly be thought of in the same glossary with "Inchon" and "M-14" and "Honest John" and "attack aircraft." Marines have a way of making the best of existing situations, however, and politics and limited resources require an effective cost accounting system.

As has been suggested in previous sections of this paper, O&M cost accounting is not without problems. It is felt that a standardized job order numbering system would alleviate some of these. The problem of time lag between action and recording inherent in expenditure reporting is currently under attack in the stock fund area. (Obligation cards will be used for certain reports which were previously prepared from expenditure cards received from the Supply Centers.) This approach produces many new problems, but is a strong indication of the Corps's active interest in producing useful, timely information. Coordination of allotment and cost accounting efforts can be improved. The necessity to maintain an informal accrual accounting system for family housing as well as the conventional system for all other transactions is

---

<sup>1</sup>Arthur Smithes, The Budgetary Process in the United States (New York: McGraw-Hill Book Co., Inc., 1955), pp. 141-142.



probably only a temporary problem. The author feels that the Department of Defense will either progress with accrual accounting in other areas or, conceivably, recognize the inconsistency of its position in the requirements for reporting on family housing and change it.

On balance, the cost effort in the O&M appropriation is considered to be well directed and of essential value to the continued success of the Corps in obtaining sufficient resources to carry out its mission effectively. Further, it is considered to be an effective tool in the process of recognizing variances from normal, so that appropriate managerial action can be taken. A continued healthy attitude toward costing is essential: it must not be permitted to "wag the dog." Given this attitude, it will remain as an important information system of real value to the Marine Corps.



## BIBLIOGRAPHY

### Books

Nickerson, Clarence B. Cost Accounting. New York: McGraw-Hill Book Co., Inc., 1954.

Smithies, Arthur. The Budgetary Process in the United States. New York: McGraw-Hill Book Co., Inc., 1955.

### Public Laws

U.S. Congress. An Act Making Appropriations for the Department of Defense for the Fiscal Year Ending June 30, 1963, and for Other Purposes. Public Law 87-577, 87th Congress, 1962.

### Department of Defense Documents

Office of the Secretary of Defense. A Program for Improving Financial Management in the Department of Defense. Undated.

Office of the Secretary of Defense. Production of Financial Reports for Appropriated Funds in the Department of Defense with Illustrations for the Area of Operation and Maintenance. Preliminary copy. 1959.

Departments of the Army, the Navy, and the Air Force. Joint Procedures for Management of Administrative Use Motor Vehicles. Marine Corps Order P11240.46. 1962.

Department of the Navy, Office of the Comptroller. Legal Basis for 1962 Navy Budget Estimates by Appropriation. 1961.

Department of the Navy, Office of the Comptroller. Navy Budget Digest, Fiscal Year 1963, NAVEXOS P-1355. 1962.

Department of the Navy, Office of the Comptroller. Reporting Requirements for Maintenance and Operation of Family Housing. NAVCOMPT INSTRUCTION 11101.7A. 1963.

Department of the Navy, Headquarters United States Marine Corps. Bakery Cost Report; Preparation of. Marine Corps Order 7310.1c, 1962.

Department of the Navy, Headquarters, United States Marine Corps. Centralized Cost Accounting; Establishment of. Marine Corps Order 7310.27. 1961.

Department of the Navy, Headquarters United States Marine Corps. Fire Department Cost Accounting System. Marine Corps Order 7310.2. 1956.



- Department of the Navy, Headquarters United States Marine Corps. Laundry and Dry Cleaning Cost Accounting. Marine Corps Order 7310.30. 1961.
- Department of the Navy, Headquarters United States Marine Corps. Motor Vehicle Uniform Reporting System. Marine Corps Order 7310.10B. 1961.
- Department of the Navy, Headquarters United States Marine Corps. Organization and Functioning of the Staff in Financial Planning and Administration. Marine Corps Order 5450.2A. 1960.
- Department of the Navy, Headquarters, United States Marine Corps. Quarterly Operation and Maintenance Cost Report. Marine Corps Order 7310.26B. 1962.
- Department of the Navy, Headquarters United States Marine Corps. Quarterly Project Status Report (Maintenance), NAVMC 10048-FD (Rev. 6-60); Preparation of. Marine Corps Order 7310.29. 1961.
- Department of the Navy, Headquarters United States Marine Corps. Relationships Between Accounting Functions. Marine Corps Order 7301.28. 1960.
- Department of the Navy, Headquarters United States Marine Corps. Telephone Cost Accounting Instructions; Official and Unofficial Telephone System. Marine Corps Order 7310.6A. 1962.
- Department of the Navy, Headquarters United States Marine Corps. User Charges. Marine Corps Order 7310.34. 1962.
- Department of the Navy, Headquarters United States Marine Corps. Utilities Cost Reports and Statement of the Sales of Utilities; Preparation of. Marine Corps Order 7310.24B. 1962.

#### Reports

- General Accounting Office. Examination of Costs and Manpower Involved in Maintenance and Repair of Noncombat Motor Vehicles in the Department of Defense. Report to the Congress of the United States by the Comptroller General of the United States. 1962.

#### Unpublished Material

- Wilcox, Edward A. "Marine Corps Appropriations: A Study of the Congressional Process." Unpublished Master's thesis, School of Government, Business and International Affairs, The George Washington University, 1962.

#### Other Sources

- Headquarters, United States Marine Corps. Personal interviews with representatives of the Fiscal Division and the Facilities and Services Division. November, 1962 through April, 1963.

















thesL893

Cost accounting in the appropriation ope



3 2768 002 12399 4

DUDLEY KNOX LIBRARY