THESIS

REVISION OF THE DOLLAR THRESHOLD FOR PROCUREMENT ITEMS

by

Gerard M. Markarian

June 1986

Thesis Advisor: James Fremgen

Approved for public release; distribution is unlimited
Revision of the Dollar Threshold for Procurement Items

MARKARIAN, Gerard M.

Master's Thesis

June 1986

47

Procurement, Expense, Investment

This Thesis will define and analyze the Department of Defense proposal to revise the method of determining whether items of equipment and financed from Procurement accounts or Operation and Maintenance accounts.

Problems with the method currently in use are explained, along with Congressional objection to the Department of Defense proposal of revision.

Data on the cost of items of equipment are presented and analyzed to determine the adequacy of the current dollar threshold that determines whether items are funded from Procurement accounts or Operation and Maintenance accounts. A method for determining a dollar threshold that will better meet the needs of the Department of Defense and still be acceptable to Congress is explained.
Revision of Dollar Threshold for Procurement Items

by

Gerard Mardik Markarian
Lieutenant, United States Navy
B.S., Illinois Institute of Technology, 1980

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 1986

Author: Gerard Mardik Markarian
Approved by: James M. Fremgen, Thesis Advisor
             James R. Duke, Second Reader
             Willis R. Greer, Jr., Chairman, Department of Administrative Science
             Kneale T. Marshall, Dean of Information and Policy Science
ABSTRACT

This thesis will define and analyze the Department of Defense proposal to revise the method of determining whether items of equipment are financed from Procurement accounts or Operation and Maintenance accounts.

Problems with the method currently in use are explained, along with Congressional objection to the Department of Defense proposal of revision.

Data on the cost of items of equipment are presented and analyzed to determine the adequacy of the current dollar threshold that determines whether items are funded from Procurement accounts or Operation and Maintenance accounts. A method for determining a dollar threshold that will better meet the needs of the Department of Defense and still be acceptable to Congress is explained.
# TABLE OF CONTENTS

I. INTRODUCTION .................................................. 6

II. ACCOUNTING DECISION VS. BUDGETING DECISION ........ 11

III. BACKGROUND .................................................. 14
   A. CURRENT STATUS .............................................. 14
   B. DEFINITIONS .................................................. 16
      1. Operation and Maintenance Items ..................... 16
      2. Procurement Items ....................................... 17
      3. Central Management ..................................... 18
      4. Items of Equipment ..................................... 19

IV. EQUIPMENT FINANCING PROBLEM ............................. 21

V. CONGRESSIONAL ACTION .................................... 25

VI. ALTERNATIVES .................................................. 28
   A. RAISING THE DOLLAR THRESHOLD ......................... 28
   B. FUNDING EQUIPMENT BY CLASSIFICATION ............... 30

VII. ANALYSIS ..................................................... 31

VIII. CONCLUSIONS ................................................. 41

LIST OF REFERENCES ........................................... 44

INITIAL DISTRIBUTION LIST ..................................... 46
LIST OF TABLES

1. PERCENTAGE OF ITEMS OF EQUIPMENT PURCHASED FROM PROCUREMENT AND O&M ACCOUNTS ------------------ 32

2. PERCENTAGE OF DOLLAR VALUE OF ITEMS OF EQUIPMENT PURCHASED FROM PROCUREMENT AND O&M ACCOUNTS--------- 33

3. FUNDS REQUIRING TRANSFER FROM PROCUREMENT TO O&M ACCOUNTS IF DOLLAR THRESHOLD WAS ELIMINATED--------- 34

4. FUNDS REQUIRING TRANSFER FROM PROCUREMENT TO O&M------ 35

5. COMPARISON OF ITEMS OF EQUIPMENT PURCHASED WITH FUNDS REQUIRING TRANSFER AT VARIOUS THRESHOLDS------ 37

6. FUNDS REQUIRING TRANSFER FROM PROCUREMENT TO O&M----- 38

7. PERCENTAGE OF ITEMS OF EQUIPMENT PURCHASED FOR THE DEPARTMENT OF THE ARMY--------------------------- 39
I. INTRODUCTION

In preparation for the fiscal year 1986 budget, the Assistant Secretaries (Financial Management) of the Army, Navy and Air Force requested that the Secretary of Defense propose a change in the method of determining whether items of equipment were to be financed by Procurement funding or Operation and Maintenance (O&M) funding. Previously, items of equipment having a unit value of less than $3,000, and which were not centrally managed, were financed with O&M and were referred to as expenses. Items of equipment having a unit value of $3,000 or more and items centrally managed were financed with Procurement funds and referred to as investments.

O&M funds have always been at the local commander's immediate disposal. They allow him a degree of flexibility in deciding what items of equipment are needed to meet the mission of the command. However, a low dollar threshold on equipment purchases with Operation and Maintenance funds restricts a local commander's discretion in meeting the mission of his command. Obtaining Procurement funds is a difficult and time consuming process (18 months) that is subject to multiple layers of review. In addition, many routine items of equipment (e.g., office equipment) cannot be purchased with O&M funds and therefore must be obtained.
through the slow and difficult process of Procurement funding.

The Department of Defense (DoD) proposed that the dollar threshold for distinguishing between the two types of funding be eliminated and that only items that were designated for central management be financed with Procurement funding.

Congress rejected the proposal because it felt that elimination of the threshold gave too much control to the local commander and that greater sums of money would be spent without adequate review [Ref. 2: pp. 158-159].

Congress did recognize that the dollar threshold was too low to allow the local commander an adequate amount of flexibility and raised the threshold to $5,000 [Ref. 3: pp. 80-81]. This was equal to the threshold the General Accounting Office (GAO) had established for capitalization of equipment.

DoD would like local commanders to be able to obtain more of the items of equipment they need to run their commands without going through the Procurement process. The solution proposed by DoD would allow a great deal of equipment to be purchased with O&M dollars. Congress is concerned with limiting the amount of funds that it does not control. A compromise needs to be reached between DoD and
Congress that will balance the local commander's need for flexibility and Congressional desire to control funds.

Establishing the dollar threshold for the capitalization of equipment is a separate decision from establishing the threshold for funding the equipment. The purpose of this thesis is to analyze various dollar thresholds for funding of equipment and thus determine the amount that will best meet the needs of both DoD and Congress.

Various dollar thresholds were examined. The number of items of equipment that a local commander could obtain with O&M funds at each threshold was compared with the amount of funds requiring transfer from Procurement accounts to O&M accounts. The comparison led to interesting conclusions. Raising the dollar threshold from the current $5,000 to $25,000 allows local commanders to purchase a much higher percentage of items of equipment with O&M funds and only requires a modest transfer of funds.

Chapter II explains the confusion of the accounting decision with the budgeting decision. Many people who are not familiar with the issues of this problem often do not have the distinction between the two decisions clear in their minds. The similarity of terms and dollar thresholds for these decisions are explained as is the reason for the necessity to keep these two decisions separate.
Chapter III explains how the equipment is obtained at the current time. The DoD proposal to eliminate the dollar threshold is also explained here. Terminology that may have different meanings and terms that may be unknown to those unfamiliar with the subject are defined here as they are used in this thesis.

Chapter IV explains the equipment financing problem as envisioned by DoD. Examples of uneconomical decisions made by local commanders as a result of the low dollar threshold are given.

Chapter V explains the reasons for Congressional objection to the DoD proposal and the action that Congress has taken on this issue.

Chapter VI explains a solution to this problem that was originally rejected by DoD, raising the dollar threshold. This was originally rejected because it was not the optimal solution; that is, it did not completely eliminate the problem of restrictions on the local commander's discretion. In the light of Congressional rejection of the DoD proposal, it would be advantageous to reexamine this alternative and choose a dollar threshold that will eliminate as much of DoD's problem as possible.

Chapter VII is an analysis of the way to go about choosing a dollar threshold. Data on numbers of items of equipment purchased and cost of items of equipment leads to
a choice of a dollar threshold that should be acceptable to both Congress and DoD.

Chapter VIII contains the conclusions and recommendations. The dollar threshold should be raised to $25,000 immediately. A longer term solution should also begin, which would be the establishment of a system to classify certain types of equipment with the hope of getting Congress to suspend the dollar threshold of equipment so classified. Congress may be convinced that certain types of routine equipment may not be worth Congressional review.
II. ACCOUNTING DECISION VS. BUDGETING DECISION

An element of confusion in connection with the revision of the dollar threshold of Procurement funds is mixing the accounting decision with the budgeting decision. This is understandable because of the similarity of terms and similar dollar thresholds, but it is important to realize the difference between the two. They are, in fact, two separate decisions.

From a cost accounting point of view, costs can be classified in two ways; as capital expenditures and as revenue expenditures (Ref 4:p. 23). Capital expenditures are intended to benefit future periods and revenue expenditures are intended to benefit the current period only. Capital expenditures are also referred to as investments and revenue expenditures, as expenses. Organizations usually establish a policy to differentiate between the two. Investments and expenses can be differentiated by a dollar threshold, where items costing more than the threshold amount are investments and items costing less than that amount are expenses. They can also be differentiated by average service life; items expected to last longer than a certain period of time are investments, and items with a shorter life are treated as expenses. A combination of both
a dollar threshold and a service life threshold is normally used. Investments commonly have more controls placed over them and will be accounted for differently from expenses. In the Federal Government, GAO standards require that all durable items of equipment having service lives of two or more years and costing $5,000 or more be considered investment items [Ref. 4]. Previous to 1984, the dollar threshold was $1,000. For budgeting purposes, rules have been established for DoD to distinguish between items that are to be obtained from Procurement accounts and items to be obtained from O&M accounts. Before 1981, items costing under $1,000 and not centrally managed were to be obtained from O&M accounts and all others from Procurement accounts. At the time, this dollar threshold was the same as in the accounting decision, so the term "investment item" became synonymous with "procurement item", and the term "expense item" became synonymous with "operation and maintenance item". The dollar threshold for the budgeting decision was raised to $3,000 in 1981 and to $5,000 in 1986. The dollar threshold for the accounting decision was raised to $5,000 in 1984. These similar thresholds and identical terminology have led to the confusion that these decisions are inherently related. In fact, there is no reason why the thresholds should be the same. The threshold for the
accounting decision is not an issue with DoD. It is only the
budgeting decision threshold with which it is concerned.

In considering the DoD proposal to eliminate the dollar
threshold, it is important to keep in mind that raising or
eliminating the dollar threshold for the budgeting and
funding decisions will not alter the threshold for the
accounting decision. If the DoD proposal were adopted and
items of equipment costing more than $5,000 could be pur-
chased with O&M funds, those items would still be accounted
for according to GAO standards. If such an item's service
life was greater than two years, it would be treated as a
capital expenditure.

The literature on the subject of the dollar threshold
for the budgeting decision refers to expense/investment
criteria. This terminology is easily confused with the
budgeting decision. In order to avoid confusion when
discussing the budgeting decision in this thesis, the dollar
threshold shall be referred to as a Procurement or O&M
decision.
III. BACKGROUND

A. CURRENT STATUS

The Assistant Secretaries requested the change in determining whether items of equipment were to be financed with Procurement funding or O&M funding to solve budget execution problems [Ref. 1]. Local commanders were making uneconomical lease versus purchase decisions because of the difficulty of obtaining Procurement funds. Also, many routine items, such as office equipment, can be purchased only with Procurement funds.

A request for Procurement funds can take up to 18 months to get approved. A Procurement budget call goes out to the local commanders, and they then submit their requests for funding. Each of these requests moves up the chain of command, where the requests from different local commands are in competition for limited resources. As these requests move through the review process, routine items such as office equipment can be in direct competition with high visibility items, such as equipment necessary to support weapons systems. Many items are cut early in the review process; but if an item makes it through this review to the President's budget, it still needs to be approved by Congress. If the request for Procurement is rejected at any point during the
18 month process, the local commander can do one of three things; start the 18 month process over, give up, or try to get around the problem. Getting around the problem is often done by entering into a costly leasing arrangement. None of the alternatives appealed to the Military Departments, and so they recommended the elimination of the dollar threshold in the definition of an investment item for budgeting and funding.

The request of the Assistant Secretaries (Financial Management) went to the Assistant Secretary of Defense (Comptroller), who formed a joint-service working group which developed the proposal to eliminate the dollar threshold, and estimated the funds required to be transferred from Procurement accounts to O&M accounts [Ref. 5]. The proposal was formulated in Program Budget Decision 707 and the changes were entered in the President's budget for submission to Congress [Ref. 6].

Congress did recognize that a problem existed but was reluctant to make such a drastic policy change [Ref. 3: pp. 150-159]. Congressional concern seemed to center on the increase in absolute dollars of the O&M accounts in recent years. Congress believed that O&M costs tended to be 80-85 percent fixed, and any increases in this type of funding would be difficult to cut at a later date [Ref. 3: p. 155]. Also, there was concern about local commanders having so
much control of funds. Congress was reluctant to give up its voice on how the funds were spent. Instead of eliminating the dollar threshold, Congress chose to raise it to $5,000, which was the U.S. General Accounting Office's recommended capitalization threshold. This number, as previously stated, was chosen for the accounting decision. There is no reason why it should also be used in the budgeting decision.

B. DEFINITIONS

In order to avoid confusion, some terms that may not have universally accepted definitions are defined here to show their meanings in this thesis.

1. **Operation and Maintenance Items**

   The definition of O&M items will be the same as an expense item for budgeting and funding purposes as given in the Navy Comptroller (NAVCOMPT) Manual, Volume 7 [Ref. 7: p. 5-1]. As discussed earlier, this thesis will not use the term expense item when referring to the budgeting decision. Using the same term for both the accounting decision and the budgeting decision would only add to the confusion. An O&M item is consumed in operating and maintaining DoD. The following are examples of those costs that are to be classified as O&M items:
1. Labor of civilian and military personnel, including contractual labor;

2. Rental payments on leases for equipment and facilities;

3. Food, clothing, and petroleum, oil, and lubricant items;

4. Expendable supplies and materials;

5. Items designated for stock fund management in the central supply system. These are items designated as Navy Stock Account and Marine Corps Stock Fund Account. This includes items actually issued from inventory and standard items (i.e., listed in the supply Management Lists) which are not stocked in the supply system but are authorized for local purchase;

6. Maintenance, repair, overhaul, and rework of investment items, including real property facilities;

7. Assemblies, spares, and repair parts which are not designated for centralized individual item management by an inventory control point in the central supply system; i.e., not designated as Appropriation Purchases Account or Marine Corps Appropriation Stores Account;

8. General motion picture procurement and development;

9. All other equipment items not in the preceding categories that have a unit value of less than $3,000 and which are not designated as Appropriation Purchases Account or Marine Corps Appropriation Stores Accounts. (Ref. 7:p. 5-1)

2. **Procurement Items**

   Procurement items are defined as costs of capital assets of DoD, such as real property and equipment that provide new or additional military capabilities or maintain existing capabilities. Procurement items include all items of equipment, including assemblies, spares, and repair parts, which are subject to centralized management and asset
control by an inventory manager or an inventory control point in the central supply system. All items of equipment having a unit value above the current dollar threshold of $5,000 are considered Procurement items. [Ref 7:p. 5-2]

All construction is considered Procurement. This includes the cost of the land and rights therein; the erection, installation, or assembly of a new facility; the addition, expansion, extension, alteration, conversion, or replacement of an existing facility; and the acquisition of a facility or the relocation of a facility from one location to another. Construction differs from repair in that repair only keeps the facility in its customary state of operating efficiency without expected future benefit. Repairs would be considered an O&M item. [Ref. 7:p. 5-2]

3. Central Management

Central management is a management concept whereby an inventory manager in the supply system is assigned responsibility for procurement and management of certain items of equipment. This responsibility would include inventory level, inventory maintenance (repair versus replace), inventory distribution, disposal control, or any other central control requirements. [Ref. 8:p. 6]

Whether or not an item is centrally managed is decided by the logistics organization of each service. The decision to manage an item centrally is based upon economic benefit,
demand, availability, need for standardization, or other criteria which would warrant central control of an item. Since each service makes its own decision on whether an item is centrally managed, it is possible for a particular item to be centrally managed in one service and not in another. In fact, this frequently occurs. [Ref. 8:p. 6]

4. Items of Equipment

There is not a single, all-encompassing definition used by DoD for an item of equipment. One definition that is used by DoD is:

Charges for personal property of a durable nature— that is, which normally may be expected to have a period of service of a year or more after put into use without material impairment of its physical condition. Includes charges for services in connection with the initial installation of equipment when performed under contract. Excludes commodities that are converted in the process of construction or manufacture, or that are used to form a minor part of equipment or fixed property.

NOTE: This object may consist of both (a) equipment that is not capitalized (not set up in property accounts) and (b) equipment that is capitalized. In determining subclasses for administrative use, agencies may appropriately maintain such distinction. [Ref. 9:p. 24]

Another definition in use appears in the DoD Accounting Manual:

Equipment includes capitalizable property as follows:

(1) Weapons systems (for example, ships, tanks, and planes).

(2) Personal property (for example plant equipment), that complements real property. That is, movable property that has not been incorporated into real property.
(3) Personal property (for example, computer software) not otherwise classified. [Ref. 10:p. 36-18]
IV. EQUIPMENT FINANCING PROBLEM

It is at the local activity level where the equipment financing problem is most acute. Local commanders that are contemplating purchasing items of equipment costing $3,000 or more have a great deal of difficulty obtaining Procurement funding. Much of this equipment is not available through the central supply system. Items such as base support equipment are in competition for resources with more visible items, such as weapons systems, throughout the budget process and often must give way to them. Long delays are experienced in purchasing anything with Procurement accounts. Local commanders are often forced to make uneconomical decisions to get the job done.

The leasing of Automatic Data Processing Equipment, (ADPE), exemplifies the uneconomical decisions that have been made. The House of Representatives, Committee on Appropriations, hearings of 1984 addressed this problem. Representatives of the GAO gave the following testimony:

The Department of Defense will account for almost 60 percent of the $1.1 billion the Government will spend to lease general purpose computer equipment this year. Our work indicates that millions of these dollars can be saved if managers will seek and apply existing alternatives to existing leasing practices. ...agencies tend to retain costly obsolete equipment and, when that equipment is leased for such prolonged periods, to pay rents that have
exceeded original purchases prices, in some instances by 300 to 400 percent. [Ref. 8:p. 16]

The GAO representatives noted that known savings opportunities were bypassed at eight ADPE installations because Procurement funds were not available. These installations continued to lease obsolete equipment, that if procured, would have resulted in savings ranging from 30 to 60 percent of the funds being used to lease the equipment. GAO personnel testified that a communications controller at a Defense installation had been leased for so long that the rent paid amounted to five times its purchase price. An 11-year-old optical reader at a Defense installation had been leased for a total charge of more than three times its purchase price. [Ref. 8:p. 17]

Testimony such as this led to appropriations of $150 million to the Defense Industrial Fund to begin a buy out of these uneconomical ADPE leases [Ref. 8:p. 17]. This amount is insufficient to complete a buy out of all uneconomical leases, but it is a start.

The problem goes beyond that of ADPE, and it is in all services. The hearings noted a Navy unit which was currently leasing 12 trucks for $78,000 a year. Each truck could have been bought for $8,000, for a total of $96,000. Over five years, this costs the Navy an extra $294,000. An Air Force command failed to take the opportunity to save
$2.7 million over four years because of its inability to obtain $950,000 in Procurement funds to purchase the word processors they were leasing. An Army unit which leases three items of office equipment for $875,000 a year indicated that if Procurement funds had been available, it could have purchased all three pieces for $86,000 and save almost $800,000 a year. [Ref. 8:pp. 17-18]

In FY 1984, the Air force kept track of uneconomical repairs being performed on its motor vehicles due to the unavailability of funds to procure replacement vehicles. In that fiscal year the Air Force spent an additional $24.1 million because funds were not available to purchase 27,957 vehicles [Ref. 8:p. 18].

In order to understand how decisions such as these were made, one must keep in mind that it is the local commander's frustration with a system that allows, and even encourages, behavior such as uneconomical leasing and uneconomical repair that leads to these decisions. These uneconomical decisions are almost always made after the attempt to obtain Procurement funds has failed. Since the requirement for the item requested still exists after the Procurement funding has been rejected, the local commander, in an attempt to meet the mission of his command, must use the funds that are available to obtain the items of equipment. Even though using O&M funds to enter into an uneconomical leasing
agreement is not the best way to proceed, local commanders feel that it is the only alternative open to them.

So much time is spent in the often fruitless pursuit of Procurement funds that it is a major source of frustration for local commanders. The issue is further complicated by equipment that is subject to price change, especially during periods of high inflation. Items that start out costing less than the threshold are ordered with O&M funds only to have the price rise above the threshold before delivery. The command then has to contend with auditors who question the decision to use O&M funds.
V. CONGRESSIONAL ACTION

The House of Representatives' Committee on Armed Services expressed concern over the DoD proposal to eliminate the dollar threshold in determining whether items are funded with Procurement or O&M funds. The following appears in its report (Ref. 2:p. 158):

From a congressional perspective, however, multi-million dollar equipment items would be purchased with little major command and congressional oversight. High-dollar value, long-life equipment would be categorized as expenses rather than investments in the budgeting system, thus diluting appropriation integrity. As a result of reduced oversight, opportunities for procurement abuse would increase. Also, the proposal is not in consonance with the Department of Defense planning, programming, and budgeting system and the U.S. General Accounting Office's recommended capitalization (investment) threshold of $5,000. Accordingly, the committee recommends that the proposal be rejected.

The House of Representatives' Committee on Appropriations addresses the proposal to eliminate the dollar threshold with the following (Ref. 3:p. 80):

The Committee believes that simply raising the dollar threshold is not the answer to this problem. The operation and maintenance account is a one-year appropriation, yet the competitive acquisition process is such that execution of a contract may not be feasible in a one year period. Raising the dollar threshold may, in fact, encourage the Department to use uneconomical practices such as leasing or non-competitive purchases. Furthermore, while it may be desirable to shift more responsibility to the local commands to purchase equipment without the overburdensome oversight of the headquarters, it is doubtful local purchasing offices would be able to handle this tremendous workload without extensive training and additional manpower. We also doubt that headquarters
oversight would be reduced, it is quite likely to increase due to the nature of operation and maintenance funds.

If the dollar threshold were raised and DoD continued to pursue uneconomical practices, then it is true that raising the dollar threshold would be a mistake. But if raising the dollar threshold allows local commanders to solve their problems without using uneconomical practices, there is no reason for them to continue to make uneconomical decisions. They would be motivated to use their O&M funds in the most economical manner, and allowed to obtain more of the items of equipment they need to meet their mission.

The argument that there would be an increase in the administrative burden at the local level is not necessarily true. The current system of attempting to obtain procurement funds is an administrative burden that would be reduced if the threshold were increased.

The Senate bill reflected the DoD initiative to eliminate the dollar threshold and provided for the transfer of $529.7 million from procurement accounts to O&M accounts to fund the non-centrally managed items. The House amendment rejected the proposal and prohibited the use of O&M funds in FY 1986 for any items whose price was $3,000 or more. The conferences agreed to raise the threshold to $5,000 and transfer $100 million from Procurement accounts to O&M accounts to
purchase the additional items of equipment resulting from
the change. [Ref. 12:p. H6635]
VI. ALTERNATIVES

In dealing with the equipment financing problem, there are other alternatives to consider in addition to elimination of the dollar threshold. Since Congress has chosen not to eliminate the threshold, DoD might attempt to find a dollar threshold that is deliberately chosen to correct a significant portion of the problem, while maintaining a level of control that is acceptable to Congress.

A. RAISING THE DOLLAR THRESHOLD

When the issue of the equipment financing problem first came up, the Assistant Secretary of the Navy (Financial Management) rejected the idea of simply raising the dollar threshold [Ref. 11:p. 3];

... we are opposed to an upward change to the $3000 threshold. Such a revision would not solve the systematic problem, just as raising the threshold from $1000 to $3000 has not. This measure provides only temporary relief and shifts the problem to a new dollar level.

Raising the threshold $2,000 every few years might do little than keep up with inflation, without solving the basic problem. If the dollar threshold were raised to a significantly higher amount, $25,000, $50,000, or even $100,000, it would give a greater degree of flexibility to the local commander, even though the problem would not be
completely solved. Raising the threshold would seem more politically feasible than eliminating it all together. With Congress already rejecting the idea of elimination of the threshold, it might not be difficult to convince the Military Departments that raising the dollar threshold significantly is better than leaving it at $5,000.

In order to get a dollar threshold limit that would be high enough to solve the majority of DoD's financing problem, DoD's accounting system would have to be able to provide information on percentages of items of equipment purchased below different threshold amounts, based on both dollar values of items of equipment and numbers of items purchased. This information must be readily available each year if a reasonable threshold is to be set and adjusted periodically, as necessary. With this information one could determine the percentage of items of equipment that could be purchased at different dollar thresholds. The higher the percentage, the greater the portion of the equipment financing problem it would solve. This could be balanced against the amount of funds needed to be transferred from Procurement to O&M. The lower this percentage is, the more control Congress retains. These are the two important figures necessary to decide a dollar threshold.
B. FUNDING EQUIPMENT BY CLASSIFICATION

Another alternative to the equipment financing problem would be to fund equipment purchased, regardless of cost, with either Procurement or O&M funds, based on a classification of the equipment. This would be difficult to implement because there is no current system in place that classifies all the items of equipment in a unique way. That is, items of equipment are classified in many different ways, with certain items appearing in more than one classification. However, a classification system could be established to separate certain items of equipment that Congress may have less interest in, such as office equipment. Equipment classified in this way would be exempt from the dollar threshold. It may prove impossible to implement this system completely, because of the large number of items of equipment that DoD purchases; but if this system were used in addition to raising the dollar threshold it could prove useful.
VII. **ANALYSIS**

The DoD estimate of $529.7 million for the funding of non-centrally managed items out of O&M funds is less than two-tenths of one percent of the total FY 1986 defense budget of $266 billion. The total O&M budget, including the $100 million transfer from Procurement referred to in Chapter V, is $75 billion. The funds remaining in Procurement accounts are $93 billion (Ref. 13). Non-centrally managed items of equipment costing more than $5,000, whether funded through O&M or Procurement accounts, would amount to less than one percent of the funding in the account.

In view of the relatively modest amounts involved, the DoD proposal would not seriously affect the amount of control Congress has over Defense dollars. However, Congress is very reluctant to give up any control of funds. DoD, therefore, needs to demonstrate that the current dollar threshold is inadequate to give the necessary flexibility to local commanders to accomplish their mission. DoD also needs to demonstrate that raising the threshold will give more flexibility to a local commander at a sacrifice of only a small amount of Congressional control. The threshold needs to be raised to the point where any further increase would give a small increase in flexibility and a proportionally larger
sacrifice of Congressional control. In economic terms, the dollar threshold should be raised to the point where the marginal benefit of flexibility to local commanders equals the marginal cost of a lack of Congressional control.

An acceptable definition for flexibility would be the percentage of the number of items of equipment that a local commander could purchase at a particular dollar threshold. Table 1 gives estimates calculated by the House Surveys and Investigative Staff for the percentages of items of equipment that are purchased at various thresholds from both Procurement and O&M accounts [Ref 10:p.30].

**TABLE 1**

**PERCENTAGE OF ITEMS OF EQUIPMENT PURCHASED**

**FROM PROCUREMENT AND O&M ACCOUNTS**

(Based on FY 1983 Requirements)

<table>
<thead>
<tr>
<th>Service</th>
<th>under</th>
<th>under</th>
<th>under</th>
<th>under</th>
<th>under</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$10,000</td>
<td>$25,000</td>
<td>$50,000</td>
<td>$100,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Army</td>
<td>18%</td>
<td>86%</td>
<td>93%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>Navy</td>
<td>26%</td>
<td>81%</td>
<td>88%</td>
<td>93%</td>
<td>98%</td>
</tr>
<tr>
<td>Air Force</td>
<td>62%</td>
<td>85%</td>
<td>85%</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Total</td>
<td>35%</td>
<td>84%</td>
<td>87%</td>
<td>97%</td>
<td>99%</td>
</tr>
</tbody>
</table>

**NOTE:** Navy figures include Marine Corps.

Congressional control can be measured in terms of dollars remaining in Procurement accounts. The House Surveys and Investigative Staff also estimated the percentage of
dollar value of items of equipment purchased with Procurement and O&M funds [Ref 10:p. 30]. This information appears in Table 2:

**TABLE 2**

<table>
<thead>
<tr>
<th>Service</th>
<th>under $10,000</th>
<th>under $25,000</th>
<th>under $50,000</th>
<th>under $100,000</th>
<th>under $200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>3%</td>
<td>54%</td>
<td>70%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>Navy</td>
<td>12%</td>
<td>25%</td>
<td>36%</td>
<td>52%</td>
<td>95%</td>
</tr>
<tr>
<td>Air Force</td>
<td>40%</td>
<td>46%</td>
<td>78%</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Total</td>
<td>18%</td>
<td>42%</td>
<td>61%</td>
<td>83%</td>
<td>98%</td>
</tr>
</tbody>
</table>
The funds that were required in FY 1986 to eliminate the dollar threshold are listed in Table 3 (Ref 2:p. 158).

### TABLE 3

**FUNDS REQUIRING TRANSFER FROM PROCUREMENT TO O&M ACCOUNTS IF DOLLAR THRESHOLD WAS ELIMINATED**

**(FY 1986)**

(In millions of dollars)

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>164.1</td>
</tr>
<tr>
<td>Army Reserve</td>
<td>0.2</td>
</tr>
<tr>
<td>Army National Guard</td>
<td>5.0</td>
</tr>
<tr>
<td>Total Department of the Army</td>
<td>169.3</td>
</tr>
<tr>
<td>Navy</td>
<td>223.3</td>
</tr>
<tr>
<td>Navy Reserve</td>
<td>17.7</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>15.4</td>
</tr>
<tr>
<td>Marine Corps Reserve</td>
<td>0.1</td>
</tr>
<tr>
<td>Total Department of the Navy</td>
<td>256.5</td>
</tr>
<tr>
<td>Air Force</td>
<td>82.1</td>
</tr>
<tr>
<td>Air Force Reserve</td>
<td>1.0</td>
</tr>
<tr>
<td>Air National Guard</td>
<td>4.8</td>
</tr>
<tr>
<td>Total Department of the Air Force</td>
<td>87.9</td>
</tr>
<tr>
<td>Defense Agencies</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>529.7</td>
</tr>
</tbody>
</table>

From this information it is possible to calculate the amount of funds requiring transfer from Procurement accounts to O&M accounts for the dollar thresholds provided in Tables 1 and 2. Table 3 shows that if the threshold were eliminated, $529.7 million would need to be transferred. Tables 1 and 2 provide no figures for Defense Agencies, so subtracting $16 million, this leaves $513.7 million. This
figure needs to be adjusted to 1983 dollars, as the data in Tables 1 and 2 are based on 1983 expenditures. The price deflators for 1986 and 1983 are used to do this, which are 113.7 and 103.9, respectively [Ref. 14:p. 191]. To adjust to 1983 dollars divide 103.9 by 113.7 to obtain .91. Finally, multiply $513.7 million by .91, and $467.5 million is obtained. This is the amount of funds requiring transfer from Procurement accounts to O&M accounts, to eliminate the dollar threshold, in 1983 dollars.

All of the values in Table 3 can be adjusted to 1983 figures. If the adjusted totals for the services are multiplied by the percentages in Table 2, the amount of funds requiring transfer from Procurement accounts to O&M accounts for each threshold is calculated. This information is presented in Table 4.

**TABLE 4**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>UNDER $10,000</th>
<th>UNDER $25,000</th>
<th>UNDER $50,000</th>
<th>UNDER $100,000</th>
<th>UNDER $200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>4.6</td>
<td>83.2</td>
<td>107.8</td>
<td>152.5</td>
<td>154.1</td>
</tr>
<tr>
<td>Navy</td>
<td>28.0</td>
<td>58.4</td>
<td>84.0</td>
<td>121.4</td>
<td>221.8</td>
</tr>
<tr>
<td>Air Force</td>
<td>32.0</td>
<td>36.8</td>
<td>62.4</td>
<td>78.4</td>
<td>79.2</td>
</tr>
<tr>
<td>Total</td>
<td>64.6</td>
<td>178.4</td>
<td>254.2</td>
<td>352.3</td>
<td>455.1</td>
</tr>
<tr>
<td>Percent</td>
<td>13%</td>
<td>37%</td>
<td>53%</td>
<td>73%</td>
<td>94%</td>
</tr>
</tbody>
</table>
The row labeled "Total" in Table 4 shows the amount of funds requiring transfer from Procurement accounts to O&M accounts for each threshold. The row labeled "Percent" compares this number with the total funds required to eliminate the dollar threshold. For example, if the threshold were set at $10,000, $64.6 million would need to be transferred from Procurement accounts to O&M accounts.

Table 5 compares the data in Tables 1 and 2. A review of Table 5 shows that a great deal of flexibility can be gained by DoD from a modest amount of funds being transferred to O&M. The columns labeled "Cumulative" compare the dollar value of items of equipment purchased with the number of items of items purchased at each threshold. The columns labeled "Incremental" compare the increase in these figures from the previous threshold. A logical place to set the threshold would be one that allows a large number of items to be purchased for a relatively small increase in the dollar value.

Looking at the $25,000 threshold, it can be seen that 84% of the number of items of equipment DoD purchases with Procurement and O&M accounts can be obtained with a threshold of $25,000. This would require the transfer of only 42% of the funds required to completely eliminate the threshold. This translates to about $202.5 million in FY 1983 ($529.7 million x .91 x .42). Looking at the incremental
column, increasing the threshold from $10,000 to $25,000 allows 49% more items to be purchased by local commanders and only a 24% increase in funds transferred.

**TABLE 5**

**COMPARISON OF ITEMS PURCHASED WITH FUNDS REQUIRING TRANSFER AT VARIOUS THRESHOLDS**

<table>
<thead>
<tr>
<th></th>
<th>UNDER $10,000</th>
<th>UNDER $25,000</th>
<th>UNDER $50,000</th>
<th>UNDER $100,000</th>
<th>UNDER $200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUM INC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CUM INC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CUM INC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CUM INC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ARMY**

| $ VALUE  | 3% - 54% 51% 70% 16% 99% 29% 100% 1% |
| # OF ITEMS | 18% - .86% 68% 93% 7% 99% 6% 100% 1% |

**NAVY**

| $ VALUE  | 12% - 25% 13% 36% 11% 52% 16% 95% 43% |
| # OF ITEMS | 26% - 81% 55% 88% 7% 93% 5% 98% 5% |

**AIR FORCE**

| $ VALUE  | 40% - 46% 6% 78% 32% 98% 20% 99% 1% |
| # OF ITEMS | 62% - 85% 23% 85% 0% 98% 13% 99% 1% |

**TOTAL**

| $ VALUE  | 18% - 42% 24% 61% 19% 83% 22% 98% 15% |
| # OF ITEMS | 35% - 84% 49% 87% 3% 97% 10% 99% 2% |

**CUM = CUMULATIVE INC = INCREMENTAL**

In addressing a question from the Office of the Secretary of Defense on the impact of the $5,000 threshold, the Navy Comptroller Office collected data on the impact of various thresholds on the amount of funds requiring transfer to O&M accounts in FY 1987 [Ref. 15]. This information is presented in Table 6.

37
TABLE 6
Funds Requiring Transfer from Procurement to O&M
(Based on FY 1987 Requirements)
(in millions of dollars)

<table>
<thead>
<tr>
<th>Appn</th>
<th>$5,000</th>
<th>$25,000</th>
<th>$50,000</th>
<th>$100,000</th>
<th>NO THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;MN</td>
<td>20.3</td>
<td>59.7</td>
<td>78.1</td>
<td>100.0</td>
<td>203.7</td>
</tr>
<tr>
<td>O&amp;MNR</td>
<td>6.3</td>
<td>11.7</td>
<td>15.1</td>
<td>16.5</td>
<td>26.6</td>
</tr>
<tr>
<td>O&amp;MNC</td>
<td>1.2</td>
<td>15.2</td>
<td>22.7</td>
<td>26.2</td>
<td>32.8</td>
</tr>
<tr>
<td>O&amp;MNCR</td>
<td>-</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27.8</td>
<td>87.1</td>
<td>116.6</td>
<td>143.5</td>
<td>263.9</td>
</tr>
</tbody>
</table>

The figures in the row labeled "Total" in Table 6 should be compared with the row labeled "Navy" in Table 4. In FY 1983, $58.4 million would have to be transferred from Procurement to O&M accounts in the Navy's budget if the threshold were raised to $25,000. In FY 1987, the amount is estimated at $87.1 million. For a $100,000 threshold, the amounts for 1983 and 1987 are $121.4 million and $143.5 million, respectively. Differences will occur each fiscal year due to inflation, different items on the budget, and errors in estimations.

If DoD pushed to raise the threshold to $25,000 for FY 1987 instead of eliminating the threshold, the Navy would require only 33% (87.1/263.9) of the funds needed to be transferred to eliminate the threshold. This would still
leave Congressional control over 67%. In FY 1983 a $25,000 threshold would have allowed the Navy to purchase 81% of its items of equipment with O&M funds. This would be lower in FY 1987 due to the effects of inflation, but it still should be high enough to meet the needs of the local commander.

The Department of the Army did look into the effect of inflation on raising the dollar threshold [Ref. 16]. Table 7 shows the number of items of equipment purchased with Procurement dollars for three fiscal years at the $5,000 and $25,000 levels.

TABLE 7

<table>
<thead>
<tr>
<th>YEARS</th>
<th>$5000</th>
<th>$25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 1983</td>
<td>42%</td>
<td>93%</td>
</tr>
<tr>
<td>FY 1984</td>
<td>37%</td>
<td>89%</td>
</tr>
<tr>
<td>FY 1985</td>
<td>27%</td>
<td>82%</td>
</tr>
</tbody>
</table>

The data in Table 7 are strictly for Procurement accounts, so they cannot be compared with the information in Table 1. However, Table 7 does show that many of the items that a $5,000 threshold would have allowed to be purchased
in FY 1983 could not be purchased in FY 1985. By now the situation is undoubtedly worse. The number of items of equipment that can be purchased with the $25,000 threshold has also gone down, but not as much. This does show that, while a $25,000 threshold may now allow the local commander adequate flexibility, it may have to be adjusted again at a later date as prices rise.
VIII. CONCLUSIONS

In reviewing the problem that local commanders are having with equipment financing, it is clear something needs to be done. DoD's solution of eliminating the dollar threshold for the budgeting decision would be effective, but it is drastic. Given Congress' history of tight control over DoD and the low thresholds of the past, it seems unrealistic for the short term to assume that Congress will relinquish so much control.

Congress, in raising the threshold to $5,000 (the GAO criterion for the accounting decision) picked a level that seemed convenient at the time but did not address directly the issue of the optimal threshold for the budgeting decision.

In view of the political reality of Congress failing to approve DoD's recommendation, DoD must now make the case for a dollar threshold that will allow maximum flexibility to the local commanders and that will require the minimum amount of funding transferred from Procurement to O&M accounts. This change would not completely solve the problem but would go a long way toward relieving the local commanders' situation of often being responsible for
millions of dollars of equipment and being unable to approve the purchase of routine office equipment.

A dollar threshold of $25,000 seems to take care of a great deal of the problem at a cost that might be acceptable to Congress. In order to get the threshold raised, DoD needs to make clear the distinction between the accounting decision and the budgeting decision. With this in mind, there is no reason why the dollar threshold for the budgeting decision should be set at $5,000. The limit should be raised not only to allow local commanders flexibility but also to allow them to meet mission objectives without becoming trapped in situations where they resort to uneconomical leasing arrangements or uneconomical repair.

If a new higher threshold is established, it must be done with the understanding that it may need adjusting from time to time. Prices are constantly changing; but if the threshold were set now at a reasonable level of $25,000 or even higher, it may need to be adjusted only every few years. Since this is a serious problem, DoD's accounting system would need to be able to collect the data on the numbers of items of equipment purchased at the existing dollar threshold, and at anticipated future thresholds. Comparison of these data with the amount of funds required to obtain this equipment would allow Congress to adjust the dollar threshold. The lack of this complete data at
this time hurts DoD's chances of getting the dollar threshold raised.

Another solution which should be pursued is classification of equipment. This would be virtually impossible to implement completely on all items of equipment throughout DoD. Certain items of equipment, such as office equipment, are not difficult to classify; and Congress may be convinced that, for certain classifications of equipment, it is not worth Congressional review of spending. For items so classified, the dollar threshold could be abolished.
LIST OF REFERENCES


<table>
<thead>
<tr>
<th>No.</th>
<th>Distribution List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Defense Technical Information Center</td>
</tr>
<tr>
<td></td>
<td>Cameron Station</td>
</tr>
<tr>
<td></td>
<td>Alexandria, Virginia 22314-6145</td>
</tr>
<tr>
<td></td>
<td>No. Copies 2</td>
</tr>
<tr>
<td>2.</td>
<td>Dudley Knox Library, Code 0142</td>
</tr>
<tr>
<td></td>
<td>Naval Postgraduate School</td>
</tr>
<tr>
<td></td>
<td>Monterey, California 93943-5000</td>
</tr>
<tr>
<td></td>
<td>No. Copies 2</td>
</tr>
<tr>
<td>3.</td>
<td>Department Chairman, Code 54</td>
</tr>
<tr>
<td></td>
<td>Department of Administrative Sciences</td>
</tr>
<tr>
<td></td>
<td>Naval Postgraduate School</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
<tr>
<td>4.</td>
<td>James M. Fremgen, Code 54 Fm</td>
</tr>
<tr>
<td></td>
<td>Department of Administrative Sciences</td>
</tr>
<tr>
<td></td>
<td>Naval Postgraduate School</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
<tr>
<td></td>
<td>Department of Administrative Sciences</td>
</tr>
<tr>
<td></td>
<td>Naval Postgraduate School</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
<tr>
<td>6.</td>
<td>Robert L. Panek</td>
</tr>
<tr>
<td></td>
<td>Deputy Director, Budget and Management Policy and Procedures Division</td>
</tr>
<tr>
<td></td>
<td>Office of the Comptroller</td>
</tr>
<tr>
<td></td>
<td>Washington, DC 20350</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
<tr>
<td>7.</td>
<td>Lt. Gerard M. Markarian</td>
</tr>
<tr>
<td></td>
<td>1 Birmingham Drive</td>
</tr>
<tr>
<td></td>
<td>Northport, NY 11768</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
<tr>
<td>8.</td>
<td>Defense Logistics Studies Information Exchange</td>
</tr>
<tr>
<td></td>
<td>U.S. Army Logistics Management Center</td>
</tr>
<tr>
<td></td>
<td>Fort Lee, Virginia 23801</td>
</tr>
<tr>
<td></td>
<td>No. Copies 1</td>
</tr>
</tbody>
</table>
END

11-86

DTIC