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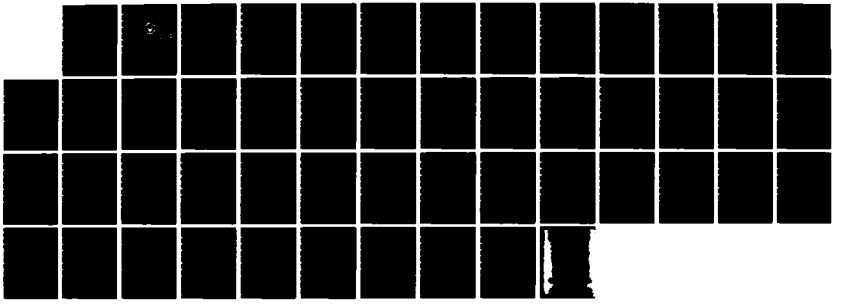

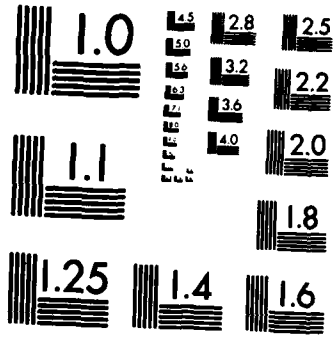

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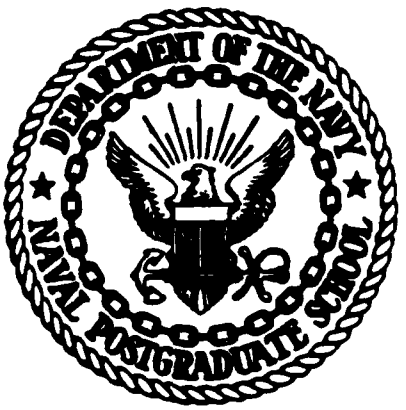

THESIS

AN ANALYSIS OF THE RELATIVE IMPORTANCE
OF THE
COMPTROLLER BILLET ACROSS NAVY ACTIVITIES

by

Russell P. McPadden

December 1983

Thesis Advisor: William J. Haga

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An Analysis of the Relative Importance of the Comptroller Billet Across Navy Activities

by

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ABSTRACT

This study examines the level of correlation between the billet requirements for Navy comptrollers and the organizational importance of their respective commands within the Navy hierarchy. Data were collected on the comptroller billets at 148 Navy shore activities which have military comptrollers. Each comptroller billet was ranked on paygrade, required education and experience. Commands were ranked according to overall command characteristics. Pairwise correlations were made of comptroller billet rankings with command rankings.

The correlations obtained were not strong. The Navy has not standardized comptroller functions and responsibilities, allowing comptroller positions to evolve separately throughout the Navy. An ongoing trend is for commands to upgrade their requirements for comptroller talent. The lack of standardized billets prevents adequate forecasting of manpower needs.

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I. INTRODUCTION

A. GENERAL

At Navy activities, the comptroller oversees the functions of budgeting, accounting, disbursing, and internal review. He is also responsible for promoting efficiency and effectiveness in the performance of the command's missions [Ref. 1]. The amount of training and experience required to hold the comptroller billet varies across Navy activities. The officer personnel who are able to fill these jobs represent a valuable resource to the Navy. A logical assumption is that those individuals with greater training and experience will be assigned to relatively more important jobs than those who are less qualified. This study will use this assumption to examine the distribution of personnel to fill comptroller billets.

Within the military, it is common knowledge as to how an individual's experience and training are assessed. Officers are grouped by paygrade and may also be assigned a subspecialty code (SSC). The SSC identifies the level of education and amount of relevant experience that an individual has in a given functional area (such as financial management). This study combines the criteria of paygrade and SSC together to measure the relative value of an individual's ability. Because comptroller billets are specified using the same criteria, billets can also be assigned a ranking based on this relative value. Billets calling for more senior paygrades and higher SSC's can be ranked above other comptroller billets.

This ranking procedure is one method of identifying which comptroller billets are more important than others.

This study also examines the relationship between the comptroller and the mission and structure of his command. At any activity, the tasks being performed are shaped by Navy-wide procedures as well as by the unique features of each facility. This study looks at several command characteristics as they vary across activities to see if any can be used as an indicator of how important a given comptroller billet is to the Navy.

B. LITERATURE REVIEW

Within the Navy's system for managing manpower and personnel is the requirement to relate manpower requirements to each command's overall mission and workload. Each command is viewed as an aggregate of work centers that are categorized by functional areas. This functional orientation recognizes the similarity of tasks performed throughout the Navy's shore establishment. Each functional area is treated separately in the process of developing Navy-wide manpower standards [Ref. 2].

The Navy has two Manpower and Material Analysis Centers which use industrial engineering techniques to develop standards for computing manpower requirements. They use the functional categorization of work centers to perform their analyses and to obtain separate staffing standards for each functional area.

The Navy Manpower and Material Analysis Center, Pacific (NAVMMACPAC) had the task of developing the staffing standard for the work center that encompasses Navy field activity comptrollers. This standard (FIN. 00.001) was prepared in 1980 and does not apply to commands that are considered to be headquarters activities. It covers the shore activity comptroller and his immediate staff of up to ten individuals. It is based upon the view that the

comptroller is essentially the manager of budgeting and accounting services for the command. The standard resulted from data obtained at 18 sites. It applies to 151 activities in the United States and overseas. It provides for either a military or civilian comptroller and permits a similar option for each member of his immediate staff [Ref. 3].

Manpower claimants are the various headquarters elements within the Navy that serve as coordinators of manpower requirements for their respective subordinate activities [Ref. 4]. The manpower claimants provided the list of 151 activities that are covered by the staffing standard for comptroller services. This list omits many similar shore activities without explanation. The staffing standard also does not indicate how the sample of the 18 surveyed activities was chosen. NAVMMACPAC says that a computer is used to generate random samples. These random samples are then screened to ensure that different sizes of commands are represented. Also, subordinates are sought from a cross-section of the major claimants. Finally, adjustments are made to economize on travel costs needed to visit the survey sites [Ref. 5].

The standard itself is based upon the number of billets a command has authorized for its budgeting and accounting work centers. This represents the workload factor that was chosen as the independent variable in the analysis. The monthly man-hours performed by the comptroller and his immediate staff are the dependent variable. For the 18 surveyed sites, the two variables were measured and then evaluated using the following statistical models:

1) Simple Linear

2) Parabolic

3) Ratio (Hyperbolic)

4) Gecmetric (log-log)

5) Multilinear

The best fit was obtained using the following simple linear relationship:

$$Yc = 139.2869 + 9.5872X$$

where Yc = required man-hours per month
and X = the number of finance-related billets authorized for the command

Two cther workload factors were considered and evaluated in the NAVMMACPAC study. One was the number of personnel directly supervised by the comptroller. The other was the total number of military billets and civilian positions authorized at the activity. Neither of these approaches worked as well as the model explained earlier, which had a coefficient of determination (r squared) of 0.8506 and a standard error of the estimate of 137.98.

The underlying concept used in any staffing standard developed by NAVMMAC is to define workload in terms that derive frcm the command's mission. One deficiency of the current comptroller standard is that it derives from the number of billets in two other work centers (budgeting and accounting). The problem is that neither of these work centers has an applicable staffing standard. No suitable model has been developed for evaluating the workload of a budget staff. For example, NAVMMACPAC has found that total dollars budgeted is a poor indicator because of the wide range of transactions that are possible with the same amount of money. In the case of predictors for accounting work centers, their workload has undergone numerous recent changes due to the widespread automation of their duties, as well as the ongoing effort to integrate disbursing and accounting activities [Ref. 6].

Rather than treating the comptroller as part of a work center, this study examines just the comptroller's billet itself. Also, it only examines the billets designated as military positions. This is due to the greater decentralization that occurs in determining the grade qualifications of civilian positions. Rather than sampling a limited number of commands, all activities (including manpower claimants and other headquarters) are examined based on the presence of a military comptroller. Because data on nearly 150 commands were collected and analyzed, all of the data elements were chosen prior to any quantitative analysis. Subsequent chapters describe the relationship between comptroller functions and the data elements herein analyzed.

II. METHODOLOGY

A. SCOPE OF RESEARCH

The Navy has over 500,000 uniformed personnel assigned to hundreds of ships and shore stations. No ships have actual comptroller billets, so this study is limited to shore facilities. While a Naval facility may seem like a single entity, it may encompass numerous separate organizations. For instance, the Norfolk Naval Base includes the Norfolk Naval Station as well as a separate Naval Air Station. Each of these is a distinct organization and has its own comptroller. This thesis uses the term "command" to refer to any Navy organization which is considered to be a distinct entity. The word "activity" is used interchangeably with command, but is considered to be a more general term. It is a more appropriate term for including organizations which have no operational assets that can be commanded.

The scope of this study is limited to commands which had military comptrollers. Because this could bias the study, the policy regarding the allocation of billets between military and civilian personnel was reviewed. Navy and Defense Department policy calls for a mix of civilian and military personnel in all management billets. The lack of warfare-related skills and legal restrictions pertaining to combat are the primary factors that limit civilian assignments. In the case of comptroller billets, it is intended that if the comptroller billet is filled by a military member, then the deputy comptroller should be a civilian, and vice versa. This allows for continuity in an area that often relies on corporate memory in handling sensitive problems. The

overall split of military and civilian comptroller (and deputy) positions must also satisfy the related goal of providing attractive career opportunities for both. [Ref. 7]. The effect of Navy and Defense Department personnel policies should be to produce an equitable split of comptroller billets between military and civilian personnel. Whether such an equitable split existed is an hypothesis that was not tested because of a problem in equating military and civilian qualifications. No definitive means exist for establishing equivalent grades [Ref. 8].

B. DATA COLLECTION

1. Comptroller Data

The Naval Military Personnel Command (NMPC) maintains all personnel and billet information in a central data base. One of the devices used to classify billets is the Naval Officer Billet Classification (NOBC) code. The NOBC code of 1050 identifies a billet as a comptroller position. A file extract was sought from NMPC using this code. NMPC responded with a listing of 301 comptroller billets. In many instances, this listing showed more than one 1050 billet at a single activity. Therefore, these commands had to be examined to identify which of these billets was the actual comptroller.

The same NMPC list also gave the corresponding title of each 1050 billet. This way, the actual comptroller could be determined in most cases. The billet paygrade was also shown to assist in identifying the senior 1050 position for each command. Navy-wide policy dictates that comptrollers work directly under their commanding officers. Thus, senior 1050 billets were selected as the actual comptrollers, as a tie-breaking criterion where more than one 1050 position in

a command was labelled as a comptroller. For instance, an officer may be in a billet described as "Comptroller Division Head." However, he would be overlooked in favor of a more senior officer at the same command who held a billet called "Assistant Chief of Staff for Resource Management." This step was necessary because of the wide range of titles used throughout the Navy to identify the comptroller billet. On the other hand, if a command had only one 1050 billet and its title was "Budget Analyst," or, "Deputy Comptroller," then the command was excluded from the remainder of the study because it did not have a military comptroller.

In this fashion, 148 commands were selected as having military comptrollers. These data were verified by a cross-check against information provided by a staff element under the Chief of Naval Operations (OP-921). OP-921, which is also part of the Office of the Navy Comptroller (NCB-1), provided paygrade data, and was the primary source of Subspecialty Code (SSC) data. In the few instances of conflicting paygrade data, the latter source was taken to be more accurate because it was more current. This second source was limited, however, because it only showed data for the billets that required SSC's. Twenty-four of the billets required no SSC's.

Using these two sources, data were extracted for all 148 commands that were the basis of this study. In addition to each billet's paygrade and SSC, the total number of officers assigned at each command was obtained from the NMPC listing. The use of this data is discussed in the next section.

2. Command Data

Having obtained information about the comptroller billets, the next objective was to obtain relevant data on the characteristics of each command. Data were obtained

from existing documents that showed characteristics common to each command. Also, these data had to be relevant to the comptroller functions as well as serve as a device for judging the relative importance of each command. Data on operating budgets comes immediately to mind as an option, but is not centrally available. Also, operating budget data are not relevant to Navy Industrial Fund (NIF) activities that are supported by dollars transferred from other Navy units in exchange for NIF services. These "sales" data were obtained for the Navy's 50 NIF activities, but, only 20 of them have military comptrollers. This number was too small for a separate analysis of NIF activities. Budgets are also difficult to equate to workloads, as was discussed in Chapter I. It was therefore decided not to work with variables that derive from the magnitude of dollars budgeted.

Because the command characteristics sought had to be related to the the determination of the comptroller's grade level, a review was made of the the criteria used to assess the paygrade requirements for any officer billet. There is no exact formula; it depends on the complexity of tasks, the command's organizational level, and the grade levels of subordinates and superiors [Ref. 9].

a. Factors Affecting Officer Billet Requirements

The complexity of tasks was not a factor which could be measured by using existing documentation from a central source. The one exception to this was to consider NIF activities as entailing more complex comptroller tasks than are required at other commands. As was discussed earlier, the NIF activities were not analyzed separately. Chapter III describes some results obtained when NIF activities were excluded from the sample data.

Since the comptroller works directly for the commanding officer as his advisor on financial matters, the

paygrade of the commanding officer is a likely factor in determining the requirements for the comptroller [Ref. 10]. This data would also be useful since it is common to all 148 studied commands. The Biennial Officer Billet Summary (Senior Officer Edition) is an official Navy publication that contains paygrade information for commanding officers below the grade of Commodore (O-7) [Ref. 11]. The U.S. Naval Institute Proceedings is an unofficial, but highly authoritative periodical which has an annual summary of all flag officers (paygrades O-7 through O-10) and their billets [Ref. 12]. The May 1983 edition was used and verified against the 1982 edition [Ref. 13]. This was done because officers are not always re-assigned when they are promoted, which would overstate the grade level of a particular billet. Between the two issues, the only change that affected the 35 flag billets in the study was the recent re-instatement of the Commodore designation for the O-7 paygrade. Previously, O-7 corresponded to the rank of Rear Admiral (lower half) and O-8 applied to Rear Admiral (upper half). The distinction was of significance mainly for pay purposes, and was not shown as part of the flag officer summary in the annual Proceedings articles. Three of the 35 billets were shown as O-7 billets in 1983 but were listed differently in 1982. The 1983 edition was the source of the data used in the study.

Information regarding organizational level was also viewed as relevant to the comptroller billet. His position is critical to explaining reports and justifying budgets up the chain of command. One measure of organizational level is the echelon of command. It shows the position of an activity relative to the Chief of Naval Operations (CNO), whose staff acts as the source of all operational funds. While echelon of command is not an expression used in budgeting, it does mirror budgeting hierarchies and indicates the overall proximity of an

activity to the Navy's ruling powers. Also, manpower claimants are all designated as Echelon 2 activities. Manpower claimants have an influential role in the approval process for all billet requirements, including comptrollers. Lower echelons have more layers to deal with during the annual review of billet requirements. The CNO maintains a current list of the echelon of command for the entire shore establishment [Ref. 14].

This reference served as a ready data source for another relevant aspect of organizational level - the number of subordinate commands. The assumption is that even though two commands may be equally close to the top of the Navy hierarchy the one with the greater number of subordinates will have a greater claim to resources, including comptroller talent. The echelon listing is organized to permit a count of each command's subordinate activities.

b. Total Officers Assigned

The final data element used here was a backup device that related to other characteristics. This is the total number of officers assigned to each activity. Data on all of the department heads at each command was initially desired, but was difficult to obtain and manipulate. The primary purpose of the desired data was to assess the relative seniority of the comptroller versus other department heads. As mentioned, the paygrade of any officer billet is partly determined by the grade levels of its subordinates. It follows that a command with a large number of officers will have more senior department heads than one with fewer officers assigned. Since a relative indicator was all that was desired, the officer total was used.

All data collected was seen as belonging to one of two groups of variables:

1. Comptroller Characteristics

A) Paygrade

B) Subspecialty Code

2. Command Characteristics

A) Commanding Officer's Paygrade

B) Echelon of Command

C) Number of Subordinate Commands

D) Total Number of Officers Assigned

C. INSTRUMENTATION

1. Introduction

For all 148 activities, each characteristic regarding the comptroller billet and the command itself was treated as a separate variable and assigned a numerical value. These values were used to establish a rank order. No values were considered to have any ratio or interval significance. That is, no attempts were made to equate a billet of paygrade O-6 to twice the value of an O-3 billet. It was merely assumed that an O-6 billet should be valued higher than an O-5, and so on.

2. Comptroller Variables

Using the same relative ranking that the Navy uses, the highest comptroller paygrade was considered to be O-6. As with all of the variables used, this highest ranking was assigned a value of one. Paygrades O-5 through O-2 were assigned the values of two through five respectively. Appendix A shows this ranking and summarizes the number of cases that tied for the same rank.

SSC's were applicable to 124 of the 148 comptroller billets. Appendix B describes the criteria used by the Navy in assigning these codes. The SSC's found in the data collection were ranked on a one through five scale, as shown in Appendix A. A value of five denotes that no SSC is required for a billet.

To obtain a consolidated ranking of comptroller billets, both above variables were combined together. This was done by viewing the paygrade variable as dominant over the SSC. That is, a billet that requires a paygrade of O-6 with no SSC was ranked higher than a billet calling for an O-5 with even the highest SSC. This is because the promotion standards are far more rigorous than the SSC standards. Also, promotion criteria recognize education and experience factors, whereas SSC criteria are far narrower in scope. Finally, graduate-level degrees are far more prevalent among senior officers, so that SSC's become more redundant as paygrades go up. Appendix C shows the combined rankings produced by sub-ranking each paygrade by SSC. The values ranged from 1 through 16. This range was considered to be more meaningful in dealing with 148 activities.

3. Command Variables

The paygrade of the commanding officer was treated like that of the comptroller, only the range went as high as O-10. This received the rank of one. A value of five was assigned to paygrade O-6, which corresponds to the most junior commanding officers in the study. Appendix D summarizes this ranking scheme.

Echelon of command was already numbered in a manner that was appropriate to the study. Echelon 1 identifies an activity as part of the CNO's staff. Echelon 6 refers to a command that is five tiers below the CNO in the Navy's hierarchy. Appendix D summarizes this data.

The number of subordinate commands per activity ranged from none to well over 100. This highest amount was assigned a value of one. The great many commands with no subordinate activities were all assigned a value of 22. There were 20 different amounts in between, with very few ties for the same ranking. This data is presented in Appendix E.

Medical and non-medical activities could not be ranked together by using the same scale because of the relatively high number of medical officers (including doctors, nurses and administrators) as compared to the officer totals for non-medical commands. To produce a ranking by using the total number of officers assigned, the 148 commands were categorized as to whether they were medical activities. The rankings for the 20 medical commands were obtained by using a separate scale. Appendix F shows both ranking schemes which led to an overall range of 1 through 24.

In order to obtain a broader scale for ranking commands, it was decided to expand on the dominant characteristic - the paygrade of the commanding officer. The commanding officer's paygrade is a direct indicator of the relative importance of an activity to the Navy's overall mission and priorities. His position is the most visible and influential regarding a command's relationships with outside activities.

To expand on the one through five ranking of commanding officer paygrades, the other variables of echelon, number of subordinate commands, and total number of officers were all considered independently. Each of these was separately combined with the paygrade variable, but no attempt was made at combining more than two variables in any manner. Because the paygrade variable was considered dominant, the other variables were only used to add differentiation within paygrades; they were never used to overturn the previous paygrade rankings.

The combination of the echelon and paygrade variables produced a ranking that ranged 1 through 14. These data are summarized in Appendix G.

The other variables -- number of subordinate commands and the total number of officers -- were compressed into smaller scales before being combined with the paygrade variable. These new combined rankings ranged from 1 through 17 and 1 through 25 respectively. Appendices H and I summarize this information.

D. ANALYSIS

All of the data collected was coded using the previous ranking schemes, and then loaded onto magnetic disk. All automated support was obtained using the Naval Postgraduate School's IBM model 370 which has a 3033 attached processor. The data analysis was performed using the Statistical Package for the Social Sciences (SPSS).

As was discussed earlier, all data had been converted to ordinal rankings for each variable. Lacking any ratio or interval data, non-parametric analysis was the only SPSS program option used. This program can generate two types of rank-order correlation coefficients - Kendall's Tau and Spearman's Rho. The chief difference is that Kendall's Tau is more meaningful when the data contain a large number of tied cases. Both methods produce correlation coefficients between -1.0 and +1.0. However, Kendall's Tau tends to be lower in absolute value [Ref. 15]. For each correlation performed, both coefficients were produced.

Correlation coefficients were obtained by comparing the overall comptroller ranking (1 through 16) in turn against five command rankings, shown below.

1) Number of subordinate commands

2) Total number of officers assigned

3) Commanding Officer's (C.O.) paygrade combined with echelon of command

4) C.O. paygrade combined with number of subordinate commands

5) C.O. paygrade combined with total number of officers assigned

Both coefficients were used to assess the correlation between the comptroller rankings and the five command rankings shown above. A strong positive correlation would indicate that a highly ranked command would also have a highly ranked comptroller billet. Weak correlations would indicate that no relationship exists between the comptroller billet rankings and the command variables used in the study. Negative correlations would indicate that highly ranked comptrollers are assigned to commands which have low rankings based on the other variables. This could be the case if commands with low ranking commanding officers are compensated by having a larger share of the comptroller talent.

III. FINDINGS

The first set of correlation coefficients was obtained by pairing the five command variables with the comptroller rankings for all 148 commands. The results (shown in Appendix J) ranged from +.157 to +.399 for Kendall's Tau. The values for Spearman's Rho ranged from .202 to .526. For both coefficients, the strongest correlation occurred with the combined ranking of C.O. paygrade and number of officers assigned. The Tau value obtained was seven percentage points higher (Rho: .13 higher) than the results for the next closest variable (C.O. paygrade combined with the number of subordinate commands).

As discussed in Chapter II, the factor of job complexity may affect comptroller billet requirements, but is a difficult attribute to measure. One way to examine job complexity is to consider NIF comptroller billets separately from the other commands. The average comptroller billet ranking for the 20 NIF activities is 4.2. The rank of 4 equates to the highest paygrade (O-6), but with no SSC. The average ranking for NIF comptrollers is well above the average for the 128 non-NIF billets (7.1). The rank of 7 corresponds to the paygrade of O-5 with an SSC of S (significant experience). It was therefore decided to recompute the correlation coefficients by excluding the 20 NIF commands.

The results for the 128 non-NIF activities are also shown in Appendix J. The values for Kendall's Tau ranged from .241 to .446, and from .318 to .571 for Spearman's Rho. Once again, the strongest correlation was for the variable C.O. paygrade combined with the total number of officers. Both coefficients were about five percentage points higher

than when the NIF activities were included in the correlation.

Because the strongest correlation existed when using the combined ranking of C.O. paygrade and number of officers, the medical commands were again considered. They had been ranked using a separate scale for their total number of officers assigned (see Appendices F and I). It was therefore decided to exclude these activities (along with the NIF commands) to see what the effect would be on the correlation coefficients. Appendix J shows that no significant change occurred, especially for the variable C.O. paygrade and number of officers. This now had a Tau value of .441 and a Rho of .568, versus the previous values of .446 and .571, respectively.

IV. DISCUSSION OF THE FINDINGS

The absolute values of the correlation coefficients obtained were not large. This can be attributed to four likely causes:

1) Incorrect ranking schemes for handling the variables used in the study.

2) Failure to examine the most relevant factors pertaining to the comptroller billet.

3) Misallocation of comptroller talent by the Navy.

4) A lack of standardized comptroller billet requirements.

These factors will be discussed separately; however, it is likely that some combination of all four factors affected the actual correlations obtained.

A. ALTERNATE RANKING SCHEMES

Perhaps a stronger relationship could be found if alternative ranking schemes were used. One possibility would be to use the same combinations of command variables, but with a weighting procedure that recognizes trade-offs in how the different variables should affect the overall rankings. For instance, one command could have a junior commanding officer, but have a large number of officers assigned. It could be ranked the same as a command with a more senior C.O., but with fewer officers.

A similar weighting scheme could be used when combining all of the command variables simultaneously. Even though

such a scheme might improve the results, it would entail a highly subjective assessment of the relative value of each variable. For instance, there is no objective basis for assigning a weight of 4 to the C.O.'s paygrade, a 3 to the echelon of command, a 2 to the number of officers assigned, and a 1 to the number of subordinate commands. No such attempts were made due to the endless possibilities.

B. DATA ELEMENTS NOT TESTED

1. Current Staffing Criteria

Navy policy for developing manpower standards calls for the use of workload criteria. As discussed in Chapter I, the current staffing standard for the comptroller work center treats the total number of financial department billets as the independent variable. This workload factor determines the number of man-hours spent by the comptroller and his immediate staff. Various break-points were used in order to tie the above results to the billet distribution of the sampled activities. For instance, if more than 83 financial department positions exist at a command, the comptroller should be an O-6. For 83 and under, the staffing standard calls for an O-5 comptroller.

The data needed to test the standard was not readily available; however, a deficiency in the standard was quickly identified. No breakpoints are given for O-4 and below comptroller billets. Of the 148 commands examined, 62 comptroller billets were found to be designated for O-4's and below. Many of these commands were supposedly covered by the staffing standard.

2. Alternative Staffing Criteria

The criteria used in the existing staffing standard focuses more on the daily comptroller functions than does

this study. Any analysis that focuses on routine workloads must obtain data from each individual command. This requires either a massive data collection effort or a careful selection of the survey sample. The manner that the existing staffing standard selected its survey sites probably leaves room for improvement. But, a bigger problem is attempting to improve on the selection of a workload criteria. The identification of any single factor that summarizes the complexity and breadth of the comptroller's workload is infeasible. Unfortunately, factors that summarize the workloads of other financial department billets are equally elusive. This deficiency also lessens the credibilty of the existing staffing standard for the comptroller work center - it lacks a workload basis because it derives from the number of related, but unjustified, finance billets.

The existing staffing standard focuses on the number of subordinates invclved in financial duties. The other factcrs that determine the requirements for any officer billet include the complexity of duties and the paygrade of superiors. The command variables used in this study centered on the commanding officer's paygrade. Although the correlation coefficients obtained were not strong, a significant improvement occurred when the complexity of duties was considered. This was accomplished by treating the NIF commands separately. The difference in results supports the notion that NIF comptrollers have more complex duties than do their non-NIF counterparts.

C. ALLOCATION OF COMPTROLLER TALENT

There is the likelihood that some of the current comptroller billets call for personnel who are either over or under-qualified for their jobs. This may be a primary

factor affecting the strengths of the correlations obtained in the results. For instance, the comptroller billets at both the Naval War College and the Naval Academy specify a paygrade of O-5 with an SSC of P (Master'degree). At the Naval Postgraduate School (NPS), the comptroller billet calls for an O-6 with an SSC of Q (Master's level with proven experience). Either the NPS comptroller is over-qualified, or the NPS billet is more demanding than those at two other very similar commands. None of the command variables used in this study supports a billet difference in NPS's favor. It is interesting to note that neither NPS or the Naval War College is covered by the staffing standard.

Similar unexplained differences occur between other commands. The Naval Air Station (NAS) at Memphis has an O-3 comptroller (SSC of P) whereas other comparable air stations call for P-coded O-5's. It may be that the Memphis comptroller is under-qualified. As mentioned, the staffing standard does not provide for any billets below O-5, even though NAS Memphis is supposedly covered by the standard. The fact that these incongruities occur is less attributable to oversights in the staffing standard than it is a reflection of the overall manpower process. This is addressed later in the next section.

D. STANDARDIZED BILLET REQUIREMENTS

The pattern of comptroller distribution shows that there is no standardization of billet requirements. One exception to this is the fact that all eight Naval Shipyards have O-6 comptrollers with SSC's of Q. Beyond this, there is little consistency among comptroller billets, despite the apparent homogeniety of certain commands. For instance, several overseas naval stations are highly similar in their overall command characteristics. However, the Naval Station at

Keflavik, Iceland calls for a P-coded O-5 comptroller; at Subic Bay, Philippines, an S-coded O-4; and at Adak, Alaska, an S-coded O-3.

There are several reasons for these inconsistencies. As mentioned, the current staffing standard does not apply to all shore activities. 80 of the 148 commands considered in this analysis are not covered by the NAVMMACPAC standard. Also, the standard omits criteria for SSC's as well as for billets below O-5.

Another cause for inconsistency is the lack of organizational or functional standards across commands. The Navy often yields to the prerogatives of the local commander in adapting each activity to its unique circumstances. Consequently, the comptrollers at two seemingly identical facilities may be responsible for different functions due to the decisions of the current or previous commanding officer. For instance, one comptroller may expend much time and effort on the affairs of the local officer's club and package store, while his contemporaries have no such obligations in their prescribed duties. In recognition of this phenomenon, each command is considered separately in the billet review process. The ultimate staffing decision is based on the unique requirements that each command places on its comptroller, not on how other similar commands are staffed [Ref. 16]. This accounts for some of the deviations from the staffing standard.

E. THE GROWTH IN SSC REQUIREMENTS

The final possible cause for the inconsistency among billet requirements is the problem of matching a universe of billets against a community of personnel. People come due for job rotation with a wide range of qualifications. More flexibility is permitted in assigning people to new jobs if

a similar wide range exists in the types of billets available. If all comptroller billets called for SSC's of 2 or higher, the Navy would have fewer jobs for personnel without advanced degrees. It would also have to commit more resources toward graduate education.

Just as each command has the latitude to tailor its own billets, each command is largely on its own when it comes to justifying its billet requirements. The less aggressive commands become the likely candidates for the less qualified comptrollers. Without the perception that better talent is needed, a command may not try to upgrade its comptroller billet.

An analysis of SSC's and comptroller billets over time shows that commands are paying increasing attention to their comptroller requirements. Data obtained from NCB-1 shows the changes that occurred between 1981 and 1983. The number of comptroller-related billets (NOBC 1050) that require SSC's have increased nearly 25 percent (from 168 to 209). This increase can not be attributed to an increase in the number of shore activities or billets, nor has there been a drastic change in Navy-wide financial procedures. There has been an increased emphasis on the optimum use of available resources. More and more commands are realizing that better comptroller talent contributes toward improved command efficiency and effectiveness. The number of comptroller billets with no SSC is now 24, and is likely to grow even smaller in the future.

V. CONCLUSION

This study has found that the distribution of comptroller talent is not strongly correlated with the relative importance of Navy shore activities. The primary reason is that the Navy does not compare billet requirements across commands for purposes of consistency. This stems from the Navy's overriding support for the prerogatives of the local commander to adapt his organization to its unique circumstances. Consequently, comptroller billets have evolved separately throughout the Navy. Does the inconsistency in billet requirements degrade the effective use of comptroller manpower? One answer is to say that no problem exists as long as all of the billets can be filled and each job is adequately performed.

A problem does arise when the impact of a recent trend is considered. The growth in demand for comptrollers with SSC's may exceed the Navy's availability of suitable talent. This is likely to be the case in frequent small-scale situations of filling several billet vacancies at once. Some commands may experience a shortfall of comptroller talent due to competing billet requirements - not enough fully qualified personnel would be available for detailing to all of the job openings. The decision as to which commands get preferential treatment would depend on the subjective priorities of those who control the detailing process. There is no official list which prioritizes commands.

The methodology used in this study offers two improvements for handling the above scenario. The first is the use of standard criteria to establish a rank order among shore activities. A procedure to rank commands should be a matter of top-level Navy policy. This ranking should be readily

available for allocating scarce personnel resources in a manner that is consistent with overall Navy priorities.

The second improvement derives from the study's efforts to relate comptroller billet requirements to various overall command characteristics. This equates to a call for more standardization of comptroller billets - the Navy should review billet requirements with greater concern for consistency between similar commands. This may entail the redefinition of billet responsibilities at those commands which have unusual billet requirements. The biggest drawback to standardization is the challenge it presents to the authority of the local commander. But, the current lack of central direction frustrates adequate manpower planning. The alternative is to be in a passive mode of trying to meet ever-changing demands for qualifications that take years to acquire. Such a practice can not succeed.

APPENDIX A

SUMMARY OF CRITERIA AND RANKINGS FOR COMPTROLLER CHARACTERISTICS

The two comptroller characteristics used in the thesis are paygrade and Subspecialty Code (SSC). Each list below shows the criteria for the rankings assigned as well as the total number of cases that occurred for each ranking. Appendix E provides the explanation of the SSC's that are relevant to the study.

RANKING	PAYGRADE	NR OF CASES
1	O-6	24
2	O-5	62
3	O-4	44
4	O-3	16
5	O-2	2

RANKING	SSC	NR OF CASES
1	Q	22
2	P	78
3	S	22
4	R/H	2
5	NONE	24

APPENDIX B
SUBSPECIALTY CODES AND CRITERIA

The fcllowing list provides a brief description of the Subspecialty Codes (SSC) that are relevant tc this study.

SSC	CRITERIA
D	Doctorate level
E	Bacculaurate degree
H	Master's degree desired, but not required
P	Master's level
Q	Proven Master's level (relevant tour)
R	Proven significant experience
S	Significant experience

APPENDIX C

SUMMARY OF COMBINED COMPTROLLER RANKINGS

The below rankings were obtained by differentiating within each paygrade by Subspecialty Code (SSC). Also shown are the total number of cases that had the same ranking.

RANKING	PAYGRADE	SSC	NR OF CASES
1	O-6	Q	18
2	O-6	P	4
3	O-6	R	1
4	O-6	NONE	1
5	O-5	Q	4
6	O-5	P	48
7	O-5	S	5
8	O-5	NONE	5
9	O-4	P	24
10	O-4	S	8
11	O-4	H	1
12	O-4	NONE	1
13	O-3	P	2
14	O-3	S	9
15	O-3	NONE	5
16	O-2	NONE	2

APPENDIX D

SUMMARY OF RANKINGS BY ECHELON AND COMMANDING OFFICER PAYGRADE

The below listings show the results obtained when commands were ranked by their echelon and by the paygrade of their commanding officers (C.O.).

RANKING	C.O. PAYGRADE	NR OF CASES
1	O-10	1
2	O-9	10
3	O-8	21
4	O-7	3
5	O-6	113

RANKING	ECHELON	NR OF CASES
1	1	1
2	2	11
3	3	57
4	4	45
5	5	33
6	6	1

APPENDIX E

SUMMARY OF RANKINGS BY NUMBER OF SUBORDINATE COMMANDS

The criteria used to rank commands by their number of subordinate shore activities is shown below. The following types of subordinates were not counted: Ships, Aircraft Squadrons, Marine Corps Detachments, and Construction Battalion (SEABEE) Units.

RANKING	NR OF SUB CMD	NR OF CASES
1	100+	1
2	77	1
3	49	1
4	35	1
5	30	1
6	26	1
7	25	1
8	24	1
9	23	1
10	20	2
11	12	1
12	11	1
13	10	1
14	8	1
15	7	1
16	6	1
17	5	3
18	4	2
19	3	1
20	2	2
21	1	10
22	0	113

APPENDIX F

SUMMARY OF RANKINGS BY TOTAL NUMBER OF OFFICERS ASSIGNED

The listing below shows the criteria and number of cases for the ranking of commands by the total number of officers assigned. The 20 medical commands were ranked separately from 1 through 20. There is a separate column to show the number of officers at these medical commands.

RANKING	NR OF OFFICERS	NR OF MED OFCRS	NR OF CASES
1	198	1109	2
2	161	814	2
3	147	593	2
4	137-139	458	3
5	130	409	2
6	106	369	2
7	97	320	2
8	94-95	263	3
9	87	261	2
10	73-75	254	4
11	66-70	241	5
12	61-65	214	8
13	56-60	209	3
14	51-55	170	4
15	46-50	169	7
16	41-45	153	9
17	36-40	149	17
18	31-35	123	9
19	26-30	105	10
20	21-25	95	14
21	16-20	---	11
22	11-15	---	14
23	6-10	---	9
24	1-5	---	4

APPENDIX G

SUMMARY OF COMBINED RANKINGS BY C.O. PAYGRADE AND ECHELON

The below rankings were obtained by differentiating within each Commanding Officer's paygrade by echelon of command.

RANKING	C.O. PAYGRADE	ECHELON	NR OF CASES
1	O-10	2	1
2	O-9	2	3
3	O-9	7	7
4	O-8	2	4
5	O-8	3	11
6	O-8	4	6
7	O-7	1	1
8	O-7	2	1
9	O-7	4	1
10	O-6	2	2
11	O-6	3	39
12	O-6	4	38
13	O-6	5	33
14	O-6	6	1

APPENDIX H

SUMMARY OF COMBINED RANKINGS BY C.O. PAYGRADE AND NR OF SUB CMD

The below rankings were obtained by differentiating within each Commanding Officer's paygrade by the number of subordinate commands. The number of subordinate commands were compressed ontc a one through five scale versus the 1-22 range of Appendix E. The criteria used for this compressed scale are shown at the end of this appendix.

RANKING	C.O. PAYGRADE	NR OF SUB CMD	NR OF CASES
1	0-10	77	1
2	0-9	23-35	3
3	0-9	10-20	2
4	0-9	5	1
5	0-9	2-4	2
6	0-9	1	2
7	0-8	23-49	5
8	0-8	20	1
9	0-8	5-9	4
10	0-8	2-4	2
11	0-8	0-1	9
12	0-7	10	1
13	0-7	0-1	2
14	0-6	11	1
15	0-6	8	1
16	0-6	2	1
17	0-6	0-1	110

NR OF SUB CMD	NR OF CASES
23+	9
10-20	5
5-9	6
2-4	5
0-1	123

APPENDIX I

SUMMARY OF COMBINED RANKINGS BY C.O. PAYGRADE AND NR OF OFFICERS

The rankings below were obtained by differentiating within each Commanding Officer's paygrade by the total number of officers assigned at each command. The total number of officers was compressed onto a scale of one through nine versus the range of 1-20 shown in Appendix F. The criteria used to obtain this compressed scale are shown at the end of this appendix.

RANKING	C.O. PAYGRADE	NR OF OFFICERS	NR OF CASES
1	O-10	100+	1
2	O-9	100+	6
3	O-9	41-50	1
4	O-9	31-40	2
5	O-9	21-30	1
6	O-8	100+	1
7	O-8	71-100	7
8	O-8	61-70	4
9	O-8	51-60	1
10	O-8	41-50	1
11	O-8	31-40	1
12	O-8	21-30	2
13	O-8	11-20	3
14	O-8	0-10	1
15	O-7	61-70	1
16	O-7	21-30	1
17	O-7	11-20	1
18	O-6	71-100	1
19	O-6	61-70	8
20	O-6	51-60	6

21	0-6	41-50	12
22	0-6	31-40	23
23	0-6	21-30	21
24	0-6	11-20	26
25	0-6	0-10	16

NR OF OFFICERS	NR OF MED OFCRS	NR OF CASES
100+	1109	8
71-100	814	8
61-70	593	13
51-60	401-500	7
41-50	301-400	14
31-40	251-300	26
21-30	201-250	25
11-20	151-200	30
1-10	95-150	17

APPENDIX J
SUMMARY OF ANALYSIS RESULTS

The listings below show the analysis results obtained using the Statistical Package for the Social Sciences (SPSS). For each group of cases analyzed, five pairs of variables were correlated. Among these pairings, the relevant correlations were the combined comptroller rankings (1-16) paired with the five command command characteristics shown in the first column below. For each correlation performed, the two coefficients produced were Kendall's Tau and Spearman's Rho. These coefficients are shown in the second and third columns, respectively.

ANALYSIS RESULTS FOR 148 COMPTROLLERS

Command Variable	Tau Val/Sig	Rho Val/Sig
C.O. Paygrade and Echelon	.1569 .007	.2024 .007
Number of Subordinate Commands	.2351 .001	.2835 .001
Nr of Officers Assigned	.2944 .001	.3991 .001
C.O. Paygrade & Nr of Sub Cmd	.3281 .001	.3923 .001
C.O. Paygrade & Nr of Officers	.3993 .001	.5256 .001

ANALYSIS RESULTS EXCLUDING NIP COMPTROLLERS (128 CASES)

Command Variable	Tau Val/Sig	Rho Val/Sig
C.O. Paygrade and Echelon	.2406 .001	.3179 .001
Number of Subordinate Commands	.3281 .001	.3969 .001
Nr of Officers Assigned	.3154 .001	.4180 .001
C.O. Paygrade & Nr of Sub Cmd	.4385 .001	.5268 .001
C.O. Paygrade & Nr of Officers	.4458 .001	.5706 .001

ANALYSIS RESULTS EXCLUDING NIP AND MEDICAL COMMANDS (107 CASES)

Command Variable	Tau Val/Sig	Rho Val/Sig
C.O. Paygrade and Echelon	.2420 .001	.3291 .001
Number of Subordinate Commands	.3412 .001	.4191 .001
Nr of Officers Assigned	.3408 .001	.4600 .001
C.O. Paygrade & Nr of Sub Cmd	.4451 .001	.5423 .001
C.O. Paygrade & Nr of Officers	.4409 .001	.5682 .001

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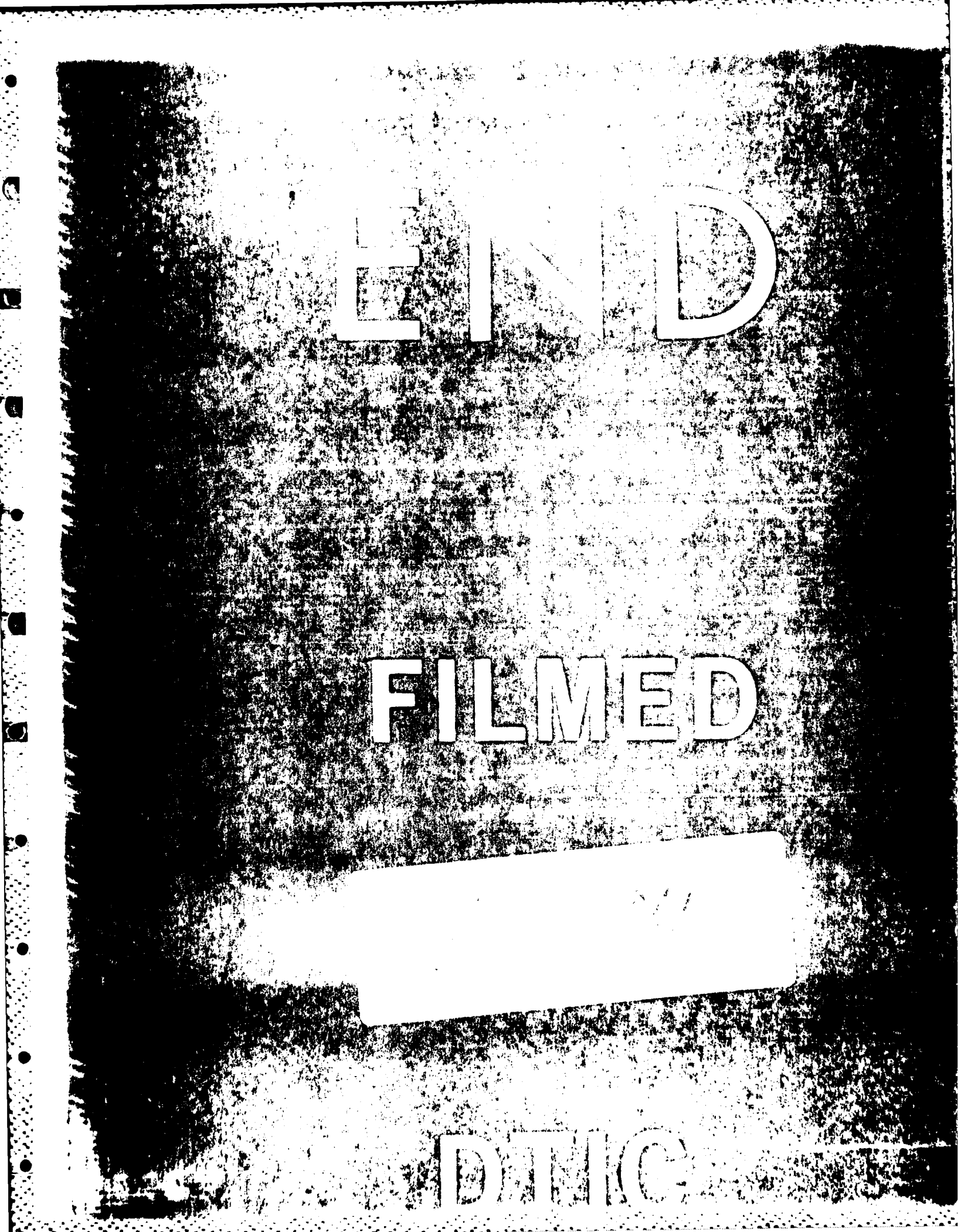
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