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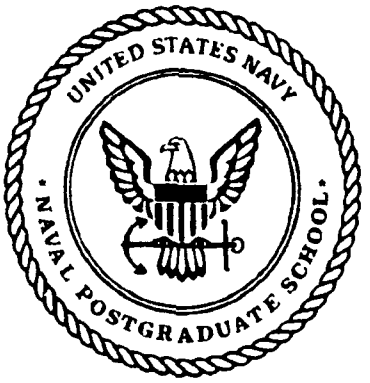

THESIS

PLANNING, PROGRAMMING, AND BUDGETING FOR TRAINING CONDUCTED EN ROUTE BETWEEN PERMANENT DUTY STATIONS: A COMPARISON OF THE MILITARY SERVICES

by

Margaret E. Pinkerton
December, 1991

Thesis Advisor: Professor Richard B. Doyle

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A Comparison of the Military Services

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ABSTRACT

The requirement to provide en route temporary duty training is not unique to the Navy, but is a requirement common to all four military services. This thesis is a comparative study as to how the Navy and its sister services plan, program and budget for active duty personnel training conducted en route between permanent duty stations. Specific attention will be given to the Navy's Temporary Duty Under Instruction (TEMDUINS). This thesis will also examine related programs used by the United States Army, Air Force, and Marine Corps to determine how they manage their en route training activities. The focus will be both on the mechanics of their respective planning, programming and budgeting processes, and managerial interactions and management control procedures used.

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I. INTRODUCTION

A. GENERAL

This thesis will first identify how the United States Navy plans, programs and budgets for its training conducted en route between permanent duty stations through its TEMDUINS (Temporary Duty Under Instruction) program.

There currently seems to be a lack of coordination between the planning, programming, budgeting and execution of the Navy's en route training requirements and the dollars needed to support service members while in school.

Several groups are integral to both the financial and functional success of Navy's TEMDUINS' program:

- The Warfare Program Coordinators (OP-02, 03 and 05), whose actions generate en route training requirements
- The Chief of Naval Operations (OP-11), who establishes and monitors the resulting training quotas
- The TEMDUINS Program Manager (Bureau of Naval Personnel (BUPERS), Pers-203), whose tasking includes the overall management of the TEMDUINS program and
- The Resource Sponsor (OP-120) and Claimant (BUPERS, Pers-02) who are ultimately responsible for funding the member's per diem while in training.

Functional separation of these Navy players has the potential advantages of incorporating actual fleet needs, projecting requirements due to systems changes and managerial

oversight. In reality, however, this separation has more frequently led to confusion, disconnects and parochialism.

A lack of cohesive interaction with these Navy offices has impaired the TEMDUINS program in the past. This is reflected in the program's historical funding shortages during the execution year. In 1977, the program was funded at $6.8 million, and in 1991 $42 million are needed to meet current requirements [Ref. 1]. Some of the deficiencies can be attributed to "fact of life" budget cuts from NAVCOMPT (Comptroller Office of the Navy). However, many TEMDUINS funding problems can be traced to internal sources, including:

- The Resource Sponsor and Claimant being unaware of additional training requirements which exceeded TEMDUINS budget levels.
- Emerging TEMDUINS-supported training needs not being communicated to the Resource Sponsor, Program Manager and/or Claimant in time for POM (Program Objective Memorandum) funding.
- Absence of a mechanism available to the Navy to track and quantify TEMDUINS training requirements so as to develop a comprehensive database. Most critical in such a system would be the ability to identify savings (i.e., deleting unused courses and ensuring that offsets are accounted for as courses phase in and out).
- Lack of a strong OPNAV policy regarding training requirements in general, and the relatively lower status of training as compared to other dollar-intensive Navy programs. In the face of decreasing defense resources, Navy can no longer consider all training as "must have."

This thesis will also examine related programs used by the United States Army, Air Force and Marine Corps to determine how they manage their en route training activities. The focus

will be on both the mechanics of their respective planning, programming, budgeting and execution processes, and managerial interactions and management control procedures used.

B. OBJECTIVE

The requirement to provide en route temporary duty (TDY) training is not unique to the Navy, but is a requirement common to all four military services. Each service uses appropriated Operations and Maintenance funds to centrally support training for military personnel conducted en route between permanent duty stations. The funding reaches the individual service member in the form of per diem in accordance with the Joint Services Travel Regulation (Section U4100). Transportation associated with this type of training is provided through the member's PCS (Permanent Change of Station) orders using Military Personnel (MP) funds.

Given this commonality, it should be feasible to do a comparative analysis among the services to gain an understanding of alternative ways to manage this activity. The main thrust of the thesis will be to examine how the Navy and its sister services plan, program, budget and execute funding to support en route TDY training. The goal will be to identify efficiencies or methodologies the Navy can adapt to better manage the TEMDUINS program and maximize the use of the program's limited funds.

Additional questions to be researched in this thesis are:

- What factors relating to en route TDY training are common to all four services and which are unique?
- How do the respective services program for this type of training in the POM process?
- How are new en route TDY training requirements (i.e., those related to an equipment modification or acquisition) programmed and funded by the services?
- To what level does each service delegate budgeting for this category of training?
- Are specialized computer or management control systems used by the services in planning for en route TDY training?
- What controls are used by the services to maximize the use of funds during the execution year?
- What are the services' respective management policies towards this type of training?

C. RESEARCH METHOD

Research for this thesis was conducted in three steps. First, service documents, directives and papers related to TDY en route were reviewed to identify documentation of planning, programming, budgeting or execution procedures. The purpose of this step was to establish a common base between the services, if possible. As no data was found, the search was broadened to financial management control systems, both within the Department of Defense and in the civilian sector. Focusing on financial management control systems seemed to be

a natural expansion as it appears to be a factor in the Navy's problems with the TEMDUINS' program.

The second step was to interview personnel involved with TDY en route in each of the military services. Through temporary duty assignments to Washington, D.C., interviews were conducted with respective Army, Navy, Air Force and Marine program principals. Questions tendered were aimed to identify similarities and differences between how Navy and the other services' management of the TDY en route issue. Personal interviews were invaluable as it proved easier to reach a common base for discussion in person than over the telephone. Also, the author was able to gather additional directives and research material during these meetings.

The last step was to correlate and integrate the gathered information to identify recommendations for improving the Navy's management of the TEMDUINS program. The result of lessons learned from the analysis of TEMDUINS may also have potential application to other Navy programs.

D. THESIS ORGANIZATION

This thesis consists of five chapters:

Chapter I, Introduction, briefly outlines the focus of this thesis and familiarizes the reader with the subject of TEMDUINS and TDY en route training.

Chapter II, Background, describes the present budget environment for the Operations and Maintenance appropriation.

Chapter III, Planning, Programming, Budgeting and Execution for the Navy's TEMDUINS Program, addresses the management processes currently used by the Navy in dealing with this program.

Chapter IV, Variations on a Theme: How Other Services Manage En Route TDY Training, describes the procedures followed and controls implemented by the Navy's sister services for the planning, programming and budgeting of their TEMDUINS-equivalent programs.

Chapter V, Evaluation of TEMDUINS' Financial Management Control System, relates the Navy's management of TEMDUINS to traditional financial management control system theories.

Chapter VI, Conclusions and Recommendations, identifies the conclusions resulting from research conducted and recommendations for improvement in the control and financial management of the TEMDUINS program. Subsidiary questions for future research topics are also included.

II. BACKGROUND

A. DEFENSE DOLLARS IN TODAY'S FEDERAL BUDGET

"You may blame the War Department for a great many things," General Douglas MacArthur said in 1953, "but you cannot blame them for not asking for money. That is one fault to which we plead not guilty." [Ref. 2:p. 84] Things have not changed greatly since 1953 in that the Department of Defense (DoD) continues to ask Congress for money. DoD's success has been tempered, however, by politics and the economy. Defense dollars used to dominate the federal budget, though their position has now been usurped by entitlements. These entitlements, or non-discretionary funds, are mandatory payments to congressional constituents. Yet, defense spending still receives the most attention, largely because so much of it is "discretionary" spending. While the defense appropriation represents less than 25 percent of the federal budget, it accounts for more than 75 percent of the federal government's discretionary funds [Ref. 3:p. 85]. As a result, DoD is now in the unenviable position of competing for dollars against the people that put Congress into office, and, since defense appropriations are discretionary, having the easiest funds to cut. To survive in this environment, DoD must maximize its fiscal operations. As noted by Adelman and

Augustine, "In the twenty-first century, dollars and yen may ultimately be more important than bullets and bombs." [Ref. 3:p. 77].

B. INVESTMENT VS. OPERATING BUDGETS

A great deal of emphasis has been placed on DoD and Navy's procurement budgets for roughly the last 10-15 years. The investment budget, comprised of Research and Development (R&D) and Procurement appropriations, dominated the defense budget in years past.

It is questionable as to whether or not this viewpoint is still accurate, however. The operating budget, comprised of Military Pay and Allowances and Operations and Maintenance appropriations, actually represents a far larger share (60 percent) of the 1991 defense budget than the investment budget did. Further, the Military Pay and Allowances (29 percent) and the Operations and Maintenance (31 percent) budgets each alone rival the Procurement budget in size in the FY 1991 Presidential budget. [Ref. 4:p. 190] The resources provided by these two major budget categories are critical to national defense as they reflect the cost of America's uniformed manpower and the daily functions of the defense establishment. In other words, these two appropriations provide for our basic defense "readiness." [Ref. 3:p. 100]

The President's FY-1992 Budget submission to Congress indicates that the non-investment appropriations now represent

an even larger share of the defense budget [Ref. 4:p. 190]. One reason for this increase is that the costs have risen for "additional training and maintenance demands associated with the increasing cost and complexity of each new generation of equipment" [Ref. 3:p. 98].

The operating accounts have grown to roughly 60 percent of Program 051 in the FY-1992 President's budget despite heavy reductions imposed by the Budget Enforcement Act (BEA) of 1990 [Ref. 4:p. 190]. A report by the Congressional Budget Office on the President's FY-1992 Budget documents the magnitude of the BEA cuts in defense, finding that:

> Over five years, the largest reductions occur in funding for military personnel and operations and maintenance (O&M). Weapons procurement would fall by $25 billion, while increases for RDT&E through 1994 would be more than offset by reductions in 1995. [Ref. 5:p. 62]

Just **how** bad are these budget cuts? Between fiscal years 1991 and 1996, the MP and O&M appropriations will each be reduced by nearly equal amounts with the combined total reduction exceeding $140 billion. By contrast, investment appropriations will lose only $30 billion in the same time period. [Ref. 5:p. 63]

Based on current budget data, the operating accounts appear to be taking the brunt of the cuts. One federal financial authority predicted that large weapon system acquisition funds would be the target for cuts, because pay and operations costs are relatively fixed during peacetime

[Ref. 6:p. 105]. Are these costs really fixed? Recent history argues they are not as supported by civilian personnel reductions and hiring freezes. Another author's thoughts seem to more closely mirror actions taken in the BEA:

> When Congress must make cuts, they are made along the path of least resistance. Traditionally, this means that when defense is cut the burden falls on the **readiness and manpower accounts of the services**. [Ref. 2:p. 391]

The services and Congress have incentives to cut the operating fund accounts first because: (1) the effects are not concentrated in any one district; (2) these accounts represent 'quick' money - as cuts in budget authority here will immediately reduce outlays; (3) these categories are easier to restore and rebuild (compared to major acquisitions); and (4), if protecting procurement contracts is a goal, manpower and readiness cuts can offset the contract costs. [Ref. 2:p. 391]

C. ARE THE OPERATING FUNDS FIGHTING A LOSING BATTLE?

Why is it so difficult to maintain non-investment appropriations? In part, the problem is that many essential readiness and manpower functions such as recruiting, training, medical care, housing, food, repairs and provision cannot be directly related to major PPBS programs [Ref. 2:p. 352]. This weakens their fiscal posture because, without ties to "hard" programs, they can be difficult to support.

However, even programs that **can** be related to missions suffer from poor linkages between funding and outcomes. GAO reports have found:

> ...no accountability systems linking military capability and rising or falling program funding levels....Since funding is not linked to intermediate outputs, such as increased proficiency or increased readiness, there is no way of determining if the services could achieve the same goals with fewer dollars. [Ref. 2:p. 352]

The impact of budget cuts, regardless of the appropriation, tend to cascade. Reducing a program's budget in one fiscal year results in a reassessment of the "out-year" budget needs (not only to compensate for the lost money, but also to cover cost increases from the inefficiencies introduced by the reduction). The latter change will, in turn, affect the amount of money available for other programs in the "out years"; so this "ripple effect" infiltrates all future budgets affecting many more programs than the one changed by the Congress. [Ref. 6:p. 102]

An example of this can be seen in the next chapter's examination of a small Navy program, TEMDUINS (Temporary Duty Under Instruction). This program exactly fits the above definition of "readiness" since TEMDUINS pays the per diem for active duty service members who are in a training pipeline between permanent duty station assignments.

III. PLANNING, PROGRAMMING AND BUDGETING FOR TEMDUINS

A. CURRENT PLANNING, PROGRAMMING AND BUDGETING FOR TEMDUINS

The Navy programs and budgets for the per diem for en route training for periods less than twenty weeks through the Temporary Duty Under Instruction (TEMDUINS) program. Key players in the process are the Resource Sponsor (OP-120), the Program Manager (Pers-203), the major claimant (Bureau of Naval Personnel (BUPERS), Pers-02) and the service members' detailers (Pers-4/463). A Resource Sponsor in the Navy is responsible for the POM (Program Objective Memorandum) outyear funding for several programs and/or claimancies, but is not involved with their policies. By contrast, a Program Manager's primary concern is the policies defining and guiding his program. He is involved in budgeting in an ancillary fashion, supporting the Resource Sponsor and the claimant.

The Secretary of the Navy and the Chief of Naval Operations have transferred the Navy's fiscal role to the Comptroller Office of the Navy (NAVCOMPT). This responsibility is further delegated to 23 major claimants. Claimants then pass resources down to the Navy field activities for obligation and expenditure as they carry out their respective missions.

The relationship between claimants and their subordinate field activities or programs is often confusing. While they are always fiscally linked, a program or activity's mission and functions may be unrelated to those of its major claimant. As a result, activities and programs must frequently serve two "masters" - an administrative chain of command for funds (via the major claimant) and an operational chain of command for mission-related guidance (through the Program Manager).

Indirectly involved in TEMDUINS planning, programming and budgeting are the Navy Warfare Program Coordinators for Submarine (OP-29), Surface (OP-39) and Aviation (OP-59). One thread, the Navy Training Plan, connects most of these players. How these entities interact (or fail to do so) in supporting TEMDUINS has made the program what it is today.

1. The Navy Training Plan

As mentioned, the Warfare Program Coordinators share in identifying training requirements through the Navy Training Plan (NTP) system. Each time a warfare platform is acquired or modified, a training assessment is done and the impact on currently available training is identified. An evaluation is made as to what training will be needed for the individuals who will be working on the equipment or assigned to the platform. To marry the training required by the job to the ability of the service member, the Navy has established several coding systems.

Each enlisted billet in the Navy requiring focused training beyond what the incumbent's rate would provide is designated with one (or more) NEC (Navy Enlisted Classification) codes. Officer billets are coded in a roughly similar fashion using subspecialty codes and Additional Qualification Designators (AQDs). Officer subspecialties are analogous to developing a recognized skill through a journeyman program. Criteria for subspecialty designation include education, experience or a combination of the two. AQDs are like NECs in that they communicate abilities the incumbent should have to fill the billet, but differ in that they often emphasize expertise gained outside the classroom. Examples of AQDs include accreditation for division officer, department head and other leadership tours.

Once the Warfare Program Coordinators have determined that additional or revised training is needed, the requirements for additional quotas, revised curriculum and other facets are also addressed. This information is laid out in a standardized format and becomes the NTP for that particular platform. Normally, the contractor for the project initiates the development of the NTP under the guidance of the Warfare Program Coordinator and platform Program Manager. The Warfare Coordinator correlates the draft NTP with approved ship/squadron/shore manning documents which stipulate the type and number of personnel allowed for the platform. A "Hardman" analysis is also done which is a common sense approach whereby

the new requirements proposed in the NTP are verified by comparing them to an existing system. The NTPs are then passed to the Deputy, Chief of Naval Operations for Manpower, Personnel and Training (OP-01) for review and implementation. [Ref. 7]

In OP-01, an intensive review is conducted by the Officer (Pers-211) and Enlisted (Pers-221) Community Managers who examine the proposed NTPs for impact on their communities and associated career paths. Special attention is also given to the manpower changes (manning level in an enlisted rate, shifts in number of personnel at certain paygrades, etc.) which the NTP could affect. The TEMDUINS Program Manager (Pers-203) then reviews the NTPs to assess the impact on TEMDUINS' funding requirements.

The NTP is also analyzed by the Total Force Training and Education Division (OP-11). The focus here is to ensure that adequate training resources, such as facilities and instructors, will be available. The requirement for curriculum modifications is also addressed by this division.

2. Navy's Warfare Coordinators

a. The History of the Navy Warfare Coordinators

Until World War II, the shape of the Navy's hierarchy was relatively static. Surface Warfare (OP-03) was the Navy's cornerstone for its military operations. After the war, air power, and specifically the Army Air Corps, began to

receive significant attention. In a post-war reorganization under CNO Admiral Ernest King, Air Warfare (OP-05) emerged in an effort to foster and legitimize Navy's role in aviation. [Ref. 8:p. 17-19] Submarine Warfare (OP-02) was established in 1971 by CNO Admiral Zumwalt in 1971, thereby vesting each of the three major warfare programs with permanent representation in OPNAV [Ref. 8:p. 91].

This brief history of the Warfare Coordinators illustrates their segregation, by mission, function and organization. These differences also separate them from the more administrative OPNAV offices such as OP-01 (Deputy Chief of Naval Operations for Manpower, Personnel and Training). Next to be examined is how these parties impact the Navy's TEMDUINS program.

b. The Warfare Coordinators and their Relationship to TEMDUINS

A problem in Navy's TEMDUINS program occurs during the planning phase, a problem that carries forward into the programming phase. Changes to a warfare platform or system by the Warfare Program Coordinators (OP-02, 03, and 05) routinely generate a need for en route (TEMDUINS) training. Training requirements may actually double for a period of time as a new system is phased in, which naturally doubles the required funding. While the NTP process provides the Warfare Coordinators the means to forward revised training needs,

there is no way to ensure that all emerging training requirements they forecast are reflected in TEMDUINS POM submission.

This disconnect is partly due to the timing of OP-01's receipt of the NTPs in the POM cycle. Further, there is no Navy requirement for the Warfare Coordinators to provide support for the training costs they are indirectly incurring. These events contribute to the TEMDUINS program's repeated shortfall which the TEMDUINS Resource Sponsor and BUPERS (Bureau of Naval Personnel) must cover by internally realigning funds, decrementing other programs or soliciting additional funding from NAVCOMPT.

Because en route training is centrally funded for the entire Navy through the TEMDUINS program, the Warfare Program Coordinators are probably unaware of the impact additional training may impose. Applying economic theory, they may view TEMDUINS as a free good without understanding the opportunity costs to the Navy of increased TEMDUINS requirements. Such opportunity costs include training which must be foregone, related impacts on the associated training sites and the resulting loss of trained personnel in key mission areas. An additional opportunity cost to consider is the effect on the Navy's non-training programs if they must be reduced to cover TEMDUINS shortfalls.

It is understandable for the Warfare Program Coordinators to identify more closely with their program and

their related impact on the fleet than with TEMDUINS. The assumption seems to be that TEMDUINS funds will somehow be provided because they always have been. History has proved the Program Coordinators are correct in this assumption, but it may not be an option in the future. TEMDUINS has been subject to budget cuts each year as have most other programs within the Department of Defense since 1986. While the BUPERS claimancy, the TEMDUINS Program Manager and Resource sponsor have battled successfully for supplements, these additions have not offset increased training requirements and a diminishing budget base [Ref. 9].

NAVCOMPT has twice disapproved proposals for the TEMDUINS' Program to be supplemented by the Warfare Coordinators. NAVCOMPT's decision was that, as TEMDUINS was an OP-01 program, it was OP-01's responsibility, not the Warfare Coordinators to provide the supplement. The bottom line in NAVCOMPT's ruling was essentially that, if OP-01 wanted to fully fund TEMDUINS, it could be done by making TEMDUINS a higher priority program and decrementing other OP-01 programs to make up the shortfall. [Ref. 10]

While NAVCOMPT has a valid point, something is lost by not tying projected TEMDUINS requirements more closely to the Warfare Coordinators. If it were possible to include TEMDUINS training funds as part of the total procurement package, just as life cycle costs are, the visibility of the

total program would increase the likelihood that TEMDUINS funds would be available when the platform was fielded.

Just as each warfare community has a unique mission, they also have unique perspectives on their involvement with TEMDUINS and problems associated with the program. For the purpose of this thesis, attention will be focused on the offices which deal strictly with training for their respective community.

(1) Submarine Warfare Coordinator (OP-29)

On the subject of programming TEMDUINS funds, the Submarine Warfare Coordinator (OP-02) supports NAVCOMPT's view regarding TEMDUINS funding. The Warfare Coordinators do not put money into training but neither does OP-01 pay for warfare platforms. OP-02's perspective is that if TEMDUINS is severely underfunded, then OP-01 should work within the POM process, realign funds and fix the program permanently. [Ref. 10]

As the Submarine Warfare Coordinator sees it, part of the problem in planning for TEMDUINS requirements is that there is currently no way to break out "C" (NEC producing) schools [Ref. 10]. This is important because, for enlisted personnel, TEMDUINS funds are meant to be used only for NEC-producing courses. OP-01 is now doing an analysis to categorize Navy training. An offshoot of this effort will be to identify courses TEMDUINS should pay for with the criterion

of funding training that is NEC-related. Training is the Submarine community's number one priority. They simply do not accept anyone on a boat who does not have the requisite NECs or training. Training is provided in one of two ways. Either the sailor receives his NEC by attending a class at a remote site which requires TEMDUINS funding, or he arrives without training and attends school at a boat's homeport. Major training facilities are available at most of the boat homeports. This has the advantage that the sailor stays on base for the training and ensures the sailor will be trained before joining the boat. An added advantage is it saves TEMDUINS funds. The disadvantage is that the boat will be undermanned while the sailor is in school.

For the Submarine Warfare Coordinator, the fundamental problem is identifying the actual training requirements. When the TEMDUINS program was heavily funded, this was not a significant problem. Now that funding has gotten tight, however, the need to recognize Navy's training requirements is becoming more apparent. In OP-29's view, OP-01's reaction has been to seek additional funding as needed instead of finding a long term solution. Since the Warfare Coordinators' programs benefit from the training, the perception has been that OP-01 feels the benefactors should be the ones to supplement the shortfalls. [Ref. 11]

The Submarine Warfare Coordinator instead sees TEMDUINS as an OP-01 managed and funded program and, therfore,

OP-01's responsibility. The Warfare Coordinators have come to question how closely OP-01 has examined their "books" before asking for more money. There is also a concern that OP-01's funding priorities are different than the Warfare Coordinators. [Ref. 11] The inference is that TEMDUINS-related training may not be OP-01's leading concern.

The Warfare Coordinators are reluctant to transfer funds over to TEMDUINS for several reasons. The most significant of these is the potential financial risks to their own programs [Ref. 11]. This is understandable, considering the logic often employed by many NAVCOMPT analysts. From NAVCOMPT's perspective, the program providing compensation must have been overfunded; otherwise, the sponsor could not afford to cut his program to supplement TEMDUINS. Also, even if NAVCOMPT allowed a Warfare Coordinator to decrease a program to offset TEMDUINS, there is no guarantee NAVCOMPT would not divert the funds to a program they felt had a higher priority. Given such a scenario, the donors would face a "lose-lose" situation; they would have lost funds and not have achieved their objective.

One final difficulty that would occur if the Warfare Coordinators gave over funding for TEMDUINS to OP-01 is that they would have little say in expenditures under the current personnel order writing system. The detailers have ultimate control in how TEMDUINS funds are used as the TEMDUINS dollars are obligated when the detailer writes a

service member's PCS orders. To make the situation more equitable, something would have to be done to convey the Warfare Coordinator's priorities to the detailers and promote their compliance. [Ref. 11]

The Submarine Warfare Coordinator offered two broad suggestions to improve TEMDUINS planning, programming and budgeting. First, OP-01 should reset its priorities to give TEMDUINS more visibility and, second, it needs to supplement TEMDUINS to cover its long term program requirements vice continuing on a "hand to mouth" basis. The strategy offered to do this is to strengthen the system to predict and monitor requirements and develop a strong back-up database to track expenditures and validate the system. Currently, no comparisons are being made between NTP training cost projections and actual TEMDUINS requirements. Worse, as no single office is in charge of all aspects of Navy's TEMDUINS training requirement, there is no one to champion the program and defend the requirements. [Ref. 11]

A centralized system to improve TEMDUINS planning and programming might rely more heavily on NITRAS [Ref. 11]. NITRAS is the Navy Integrated Training Resources and Administration System, a database which includes information on most Navy-taught courses. The problem with NITRAS is that it is <u>not</u> all inclusive. Navy courses that do not produce NECs, commercial courses, simulators, federal

courses and courses offered by other services are not fully identified in NITRAS.

Interest had been raised in the recent past in improving NITRAS so it could be used more as a corporate training data base for the Navy. The benefit would have been the availability of a single data base covering all aspects of Navy training. As its use increased, the hope was that additional improvements could be made to the system. The initiative failed, however, due to lack of funds. [Ref. 11]

Some type of requirements predicting systems is still needed. Whatever system is chosen, it must be flexible so as to capture atypical training situations like "F" schools at the homeports and service member cross-training. The Submarine Warfare Coordinator has faith in NITRAS and is trying to make NITRAS work. One method involves advising their subordinate commanding officers that NITRAS will be used as a budget decision tool. Hence, if a submarine base commanding officer has an "F" school located on his site, it is in his best interest to ensure class load/graduate data and other pertinent information is correctly loaded into NITRAS. Failure to do so could result in budget and/or manpower cuts by the Warfare Coordinator. Understandably, OP-02 has found this to be a strong motivator in gaining support for NITRAS. [Ref. 11]

The Submarine Warfare Coordinator's specific suggestions to improve TEMDUINS are:

- Find a mechanism to force the identification of the Navy's true training requirements. One option, although difficult to implement, would be to examine the training requirements of each billet.
- Use the Navy's current training system, NITRAS, to justify TEMDUINS' funding requirements. If NITRAS will not meet TEMDUINS' needs, then another system should be identified.
- As unfunded requirements will likely remain a fact of life with the declining defense budget, a training priority system should be devised by the fleet and ship type commanders.
- OP-01 should "take charge" of the TEMDUINS program. Aggressive action to strengthen or promote the program is difficult, however, without solid background data to support the requested funds. Also, TEMDUINS' historical execution problem has damaged the program's credibility. [Ref. 11]

One last problem facing TEMDUINS now is the declining defense budget. While NAVCOMPT has been somewhat cooperative in sustaining TEMDUINS in the past, manpower and training related programs are likely to suffer as defense cuts are impacted. When the choice must be made between hardware and platforms or training, training is apt to lose. Even if NAVCOMPT endorsed large increases for TEMDUINS, it may be difficult to get the adjustments through OSD for the same reasons cited above. [Ref. 11]

(2) Surface Warfare Coordinator (OP-39)

The Surface Warfare Coordinator indicated their office programs all emerging training requirements for

TEMDUINS through the NTP process. The representative said she felt the NTP system was used and supported by the Warfare Sponsors as the mechanism to identify these training needs. In this way, the Warfare Coordinators respond to the planning and programming for TEMDUINS. While recognizing that training en route is OP-01's responsibility, they (OP-39) will fund related NEC-producing training if it cannot be funded under TEMDUINS. [Ref. 12]

The Surface Warfare Coordinator primarily sees the NTP process working through the Enlisted Community Managers [Ref. 12]. This is because the bulk of NTP courses affect enlisted NECs. While courses for officers are covered under NTPs, they represent a smaller section of Navy's training requirements.

The Fleet CINCs (Commanders-in-Chief) under OP-03 are implementing a computer program which will delineate how TAD (Temporary Assigned Duty) per diem funds were used in a fiscal year. This system will capture how much "TEMDUINS-type" training the CINCs are doing using their own travel funds. In this situation, "TEMDUINS-type" training is NEC-producing training which should have been provided under TEMDUINS but which, for some reason, was not delivered. The CINCs are then using their own travel funds to ensure the individual gets the necessary NEC for his billet. The Surface Warfare Coordinator is interested in correlating the

information but has yet to determine how the data will be used.

One possibility is for the Surface Warfare Coordinator to seek reimbursement from OP-01. A more logical option may be to transfer the funds spent on "TEMDUINS-type" training over to OP-01 for TEMDUINS. The advantage would be that TEMDUINS would be able to identify more of the true Navy training requirement, and the CINCs would disassociate themselves from the training "business." [Ref. 13]

The driver behind the TEMDUINS problem from the Surface Warfare Coordinator's perspective is the current inability to identify all the courses which should be covered by TEMDUINS. An initiative currently being undertaken by the Total Force Training and Education Division (OP-11) of OP-01 was recognized as a step in the right direction. The benefit is that TEMDUINS courses (or NEC-producing courses) will be given more visibility, both programmatically and fiscally. Upper levels of Navy management then can better see what needs to be done to fix the TEMDUINS account. Solutions could possibly include the transfer of funds between OP codes to increase TEMDUINS' funding. [Ref. 13] This study will be covered in greater depth later in this chapter.

The Surface Warfare Coordinator finds their largest and most frequent TEMDUINS-associated problem is with engineering-related equipment training, especially in the area of miniature and micro equipment repair. The difficulty

encountered is that the new equipment often requires modification of the Navy's current courses to cover the unique requirements of the equipment, or the equipment design is so different that new courses must be developed. However, these systems are often fielded before any training can be provided, so the fleet must play "catch up." This is especially difficult when several such instances arise on one ship or if the total ship design falls into such a category [Ref. 13]. This situation could be a source of TEMDUINS' anomalies. Consider the example of a new-generation aircraft elevator on an aircraft carrier. The Navy has had elevators on ships for years, but this particular elevator is unique and operates differently from others. It is, however, a relatively small item on the building of an aircraft carrier and its uniqueness was somehow not realized. As a result, no NTP change to the Navy's elevator maintenance school was submitted. The course may have been modified to reflect the variation but without an NTP change driving the need for a course creation or modification, the need to adjust the NTP never came to the attention of the TEMDUINS Program Manager.

This scenario can seriously impact TEMDUINS in two ways if the resulting training change either lengthens or establishes a school: (1) it will generate an unforeseen need for additional TEMDUINS in the near term as orders are executed, and (2) it will be difficult for the TEMDUINS

Resource Sponsor to justify additional requirements in the POM for these invisible increases. [Ref. 13]

How does this disconnect occur? The problem lies between the procurement and NTP processes. When a contract allows for the vendor to use contractor vice government furnished equipment, deviations as described above can occur. The NTP is not modified because the magnitude of the differences between the equipment types is not always noticed or readily discernable. This has been most noticeable in the area of hull, mechanical and engineering equipment, as there are frequently last minute changes to these items as a ship is being built. [Ref. 13]

(3) Aviation Warfare Coordinator (OP-59)

The Aviation Warfare Coordinator's perspective towards the TEMDUINS program is that all enlisted personnel requiring an NEC should be receiving training en route. As TEMDUINS is under OP-01's cognizance, it is OP-01's requirement to fund this pre-fleet arrival training. In the Aviation Warfare Coordinator's (OP-59) view, OP-01 assumes that the training system is perfect which has left little slack in the training pipeline. [Ref. 14] Addressing the previous requests from OP-01 to prioritize training to stretch TEMDUINS' dollars farther, the response was:

> When the CNO prioritizes the Navy, we'll prioritize our training requirement. If TEMDUINS can't provide the needed training, its then the TYCOMs (Ship Type Commanders) problem. [Ref. 15]

The Aviation Warfare Coordinator sees problems arise when recruit (boot camp) or "A" (basic rate skills) school training completion dates slip. This has an immediate effect on "C" (NEC-producing) schools which are the TEMDUINS funded courses. Prospective "C" school students must wait until the next class convening date, earning TEMDUINS-funded per diem the entire time. [Ref. 14] From the student's perspective, this is only fair as they are not responsible for the delay.

The Aviation Warfare Coordinator has been working with OP-01 since 1974 to streamline the training pipeline and training requirements. Using the MMTR (Military Manpower Training Reports) process, they have identified redundancies and updated training needs to maximize cost-effectiveness. [Ref. 14]

Any emerging training requirements or changes to aviation programs are communicated to the TEMDUINS Program Manager (Pers-203) in the POM process. The Enlisted Community Managers (ECMs) for aviation ratings take the Aviation Warfare Coordinator's input and relate it to the revised number of enlisted end strength and rate changes. As the aviation community averages a three year sea/shore rotation, the ECMs then roughly estimate that one-third of the personnel they

manage will require "C" school training. [Ref. 14] While this seems to be an efficient way to estimate costs, it creates a possibility for over-estimating. The question that must be addressed is: must 30 percent of all the aviation enlisted personnel be retrained every three years for every possible tour of duty?

This method of estimating creates another problem in that the number of students exceeds the number of available "C" school seats. The result is that personnel are "stashed" as the fleet units want personnel only after they've been trained but the schools are overfilled.

Why is the fleet so reluctant to take untrained assets? Three reasons support this sentiment: (1) lack of time to train people, (2) lack of manpower to afford the loss of a sailor once he's reported aboard and (3) lack of unit travel funds to cover NEC training. The fleet's travel or TAD funds are small and are usually reserved for team training pre-deployment exercises. Even a centrally funded TDY-and-return program would not be much of a solution in the fleet's eyes due to the uncontrollable factor of the ships' operating tempo and operational commitments. These reasons make it difficult to meet convening dates. [Ref. 14]

The NTP disconnect related to platform upgrades and commissionings seen by the Surface Warfare Coordinator is not a problem for the aviation community. At Naval Air Systems Command Headquarters (NAVAIR), the Aviation Training

Systems Program Office's (PMA 205) purpose is to monitor training associated with aviation acquisitions. They work with the aviation system Program Managers (PM) plus other major Navy acquisition offices to ensure training requirements are identified. The PM should then ensure factory training is covered under the acquisition contract or that funds for the training are provided for in the POM. A suggestion being fielded currently in NAVAIR is that the acquisition funds for a platform be increased to include funds for basic training on the unit and continue until it is totally phased into fleet operation. At that time, the normal training funding process could resume. [Ref. 14] This recommendation would alleviate several current TEMDUINS' problems: sufficient funding and program visibility. Difficult questions would have to be answered relating to the execution of these unique funds, such as:

- How could this money be protected or ear-marked for the special uses it was acquired for?
- Who would manage the funds? Would they be transferred over to OP-01 for incorporation in TEMDUINS?

Another option would be to pass these training monies down to the fleet units as additional TAD funding. The drawbacks with this plan were stated earlier. The loss of onboard assets is a hardship for the fleet due to manpower shortages. Also, unpredictability of operating schedules makes scheduling schools for onboard personnel difficult.

The Aviation Warfare Coordinator also noted the extreme paradox between the Navy's Total Quality Leadership (TQL) program and cuts to our training dollars. TQL is receiving major emphasis from the CNO on down through the fleet [Ref. 16]. A major element of TQL is to ensure that personnel are adequately trained. Decrementing TEMDUINS or other training-related dollars is in direct conflict with Navy's TQL policy. [Ref. 14]

Current Navy actions are also exacerbating training fund deficiencies. Unless the savings accrued by decreasing the number of operating sites are offsetting, consolidation of training sites will likely increase training travel costs. No one site can be equidistant from all Navy activities, so the farther the distance, the higher the travel costs. [Ref. 14]

A problem whose magnitude has yet to be fully realized is the new GenDet (General Duty) policy. A few years ago, afloat units were having difficulty gaining enough General Duty enlisted personnel for the Deck division. Enlisted members reporting aboard ships designated with a rating went to work in that division. As more sailors were being "rated" before reaching the ship, this left a diminishing pool of people left to serve as Boatswains Mates in the Deck division. The problem began to take on racial overtones as, most frequently the non-rated sailors were minority members who could not pass the rate exams early in

their careers. Discontent arose as the dirty work on the ship began to fall most often on these minority sailors.

The fleet proposed and OPNAV (OP-01) approved the GenDet program in 1989. Under GenDet, prospective sailors agree to serve in general duty capacities aboard a ship for up to two years after which they are guaranteed rate-specific training. This training was to be centrally funded just as rate/NEC training is for other naval personnel. Funds were added to TEMDUINS in FY-90 to support this new program.

The actual execution of the GenDet program is not going as planned, however, according to the Aviation Warfare Coordinator. Some sailors are getting rated through on-the-job training. While this is a cost-savings to the Navy, there is no standardization or quality assurance of training received. Others are attending school while attached to the ship using a "fleet" seat as a few quotas are frequently reserved at the schools for the fleet's use. This is still a savings to the TEMDUINS program but represents both a dollar and manpower cost to the ship as the sailor is unavailable for shipboard work and command funds are used. To date, the Aviation Warfare Coordinator knows of no GenDets going back to school using TEMDUINS funds. Queries are being made as to whether this is a policy issue or a complication in the BUPERS order writing process. [Ref. 14]

3. TEMDUINS Program Manager (Pers-203)

The TEMDUINS Program Manager (Pers-203) is dual-hatted in that the incumbent is both responsible for TEMDUINS and functions as the Navy Policy Coordinator. As the TEMDUINS Program Manager, Pers-203 must first ensure that future requirements are accurately estimated and projected in the POM. Requirements that are not covered in the POM must be worked to gain funding. In years past, this was difficult due to the competing programs in OP-01, but not impossible. Decreasing Navy budgets will make the battle for funding items outside of the POM increasingly difficult.

The TEMDUINS Program Manager reviews all NTP change proposals provided to him. His analysis focuses on the financial impact of NTP changes on TEMDUINS. If increased costs are expected and have not been included in the POM, the TEMDUINS Program Manager notes this in his comments on the NTP. However, lack of TEMDUINS' funds has not been sufficient reason to prevent an NTP change from being implemented. This has been a source of frustration in that the TEMDUINS Program Manager can see a financial problem in the making but has no power to stop it or force compensation. The result is that the TEMDUINS program must absorb the growth or additional funds must be found. If the shortfall arises during the budget execution year, either the BUPERS claimancy or NAVCOMPT must supply the needed funding. Shortages before the

execution year normally must be covered either by BUPERS or OP-120, the TEMDUINS Resource Sponsor. [Ref. 17]

The TEMDUINS Program Manager gives execution guidance to the officer and enlisted detailers (Pers-4) through a Policy Decision Memorandum (PDM). The PDM describes in general terms what the focus should be for training in the current fiscal year. The emphasis is on the types of training for which TEMDUINS should be used (primarily NEC-producing training plus non-NEC training for overseas personnel only) and cost-savings measures the detailers should observe [Ref. 18]. Priority is normally given to training which can be done at sites co-located with the servicemember's current or prospective duty station or when the Manning Control Authority has certified the need [Ref. 17].

4. TEMDUINS Resource Sponsor (OP-120)

The TEMDUINS Resource Sponsor is responsible for acquiring, monitoring and protecting the funds for the program in the outyears. Through the POM process, Pers-463 and the cognizant budget analysts in the BUPERS Resources Department (Pers-02) work with Pers-203 to forecast outyear TEMDUINS requirements. Because of the involvement of the TEMDUINS Program Manager with the revisions to the Navy Training Plans, this should be an effective system. The resulting product is then consolidated by BUPERS into its final claimancy POM request and submitted to OP-120, the Resource Sponsor for both

TEMDUINS and the entire BUPERS organization. Preparation of TEMDUINS' annual NAVCOMPT, OSD and President's budget requests is done in a manner similar to the POM submission process with Pers-463, BUPERS and the TEMDUINS Program Manager working as a team.

As seen by the TEMDUINS Resource Sponsor, the program's biggest deficiency is the lack of historical data to support POM and budget requests. It has been found that TEMDUINS typically mirrors PCS requirements but on a proportionately lower funding level. This link is to be expected as PCS dollars provide the transportation to a school and TEMDUINS provides the student with per diem while there. But tying TEMDUINS to PCS is not especially valuable as the PCS account also lacks a strong, current historical data base. Without up-to-date information, there is no accurate way to analyze the needs of either program. OP-120 is presently doing some statistical regression internally in an effort to develop a prediction model for PCS. [Ref 19]

A second problem noted by the Resource Sponsor is the disconnect between the appropriations funding TEMDUINS and PCS. TEMDUINS draws its resources from the Operations and Maintenance, Navy appropriation while PCS is funded under the Military Personnel, Navy (MPN) appropriation. Since the two programs operate "hand in glove," why have they been broken apart in the appropriations?

Funds from both programs are tapped in the PCS order writing process if an individual merits TEMDUINS payment. The issue becomes more complex as it is possible for courses normally covered by TEMDUINS to be funded entirely by the PCS account. The division between the two funding sources is not the type of training provided, but the length of the training pipeline. If the service member attends training for less than twenty weeks in conjunction with a PCS transfer, the TEMDUINS account pays for per diem. For periods of training twenty weeks or longer, the sailor is no longer entitled to per diem and the PCS account pays all costs. [Ref. 19]

The arbitrary division based on the number of days has resulted in duplicate program monitoring systems, POM and budget submissions. Also, two separate BUPERS offices execute the two programs, each with a different perspective. If TEMDUINS could be shifted to the MPN appropriation with the PCS account, the Navy could have better coordination with a single office for program execution operating under one perspective. Another advantage to moving TEMDUINS from O&M,N to MPN would be flexibility. The MPN appropriation is far larger than BUPERS or the TEMDUINS O&M,N budgets which would make funding shortages much simpler and easier to rectify. [Ref. 19]

The TEMDUINS Resource Sponsor noted that with the funding decreases Navy is facing, prioritizing training is becoming necessary. Inquiries have found that detailers are

sending service members to schools not NEC-producing or specifically required by their next assignment because of questions in the rating advancement examinations. The Navy's policy for rate examinations is not currently matching the reality of the force downsizing.

There is no dispute that the information presented in the courses is not important but the related policies reflect the ideal situation where TEMDUINS is fully funded and money is no object. The conflict is that, while OP-120 would like the service members to have the benefit of these courses, the funding isn't available to cover them as well as the Navy's critical, job-related training. A scrubbing process is becoming increasingly important, but it will not likely happen until TEMDUINS funding shortfalls force the situation. At that time, the Navy Resource Sponsors and Warfare Program Coordinators will have to make the policies align with fiscal reality and honestly evaluate rating policy requirements. [Ref. 19]

5. Bureau of Naval Personnel (BUPERS)

The Bureau of Naval Personnel is the claimant for several field activities and major Navy programs including TEMDUINS. As mentioned previously, claimaints have been given the responsibility for budgeting for their subordinates during the execution years and providing administrative oversight. Because the subordinate programs still receive major mission

direction from their Program Manager, the claimants often function as administrative managers or "middlemen."

In the case of TEMDUINS, two BUPERS offices are involved in program execution and administration. The BUPERS Comptroller (Pers-02) holds fiscal responsibility for TEMDUINS and handles the current year budgeting. The BUPERS Distribution Department (Pers-4) coordinates the assignment of all active duty naval personnel. The Fiscal Management Branch (Pers-463) allocates TEMDUINS funds out to the detailers for use in writing PCS orders and monitors the fund status on a monthly basis. Towards the close of the fiscal year, or in situations of fiscal duress, both Pers-02 and 463 receive weekly reports on the balance of TEMDUINS funds.

a. Resources Management Office, Bureau of Naval Personnel (Pers-02)

During a recent meeting with the author, the BUPERS' Comptroller noted that NAVCOMPT analysts generally believe that TEMDUINS' requirements should be identified in the NTP. Further, these analysts tend to view the NTP as a concrete, cohesive, static entity that "should" be easy to price out and execute. The requirements are neither static nor all contained in the NTPs. However, since OP-01 is both responsible for the NTP and the TEMDUINS Resource Sponsor, NAVCOMPT personnel interpret that any TEMDUINS shortfalls as evidence of lack of support by the Resource Sponsor. [Ref. 1]

Actions internal to the OP-01 organization have also hindered the TEMDUINS program. OP-11 (Total Force Training and Education Policy Division), OP-12 (Total Force Programming and Manpower Division) and Pers-2 (Military Personnel Policy Division and Career Progression Department, previously OP-13) have not provided support in the form of a data base which would delineate what training requirements have been funded and approved for use by assignment personnel. Instead, during budget execution, TEMDUINS appears to be used to provide NEC-producing training or training requirements justified by the fleet, the Warfare Coordinators (OP-02, 03, and 05) or System Program Sponsors (NAVSEA, NAVAIR, etc). [Ref. 1] TEMDUINS requirements are thus satisfied on the basis of demand with no means of prioritizing training needs or providing approved, funded training before other emergent, unfunded training.

The BUPERS claimancy has found it difficult to keep TEMDUINS "fixed" in the budget because the program is too large to fence from fact-of-life changes and budget cuts directed at travel costs. As an example, the program was increased in the summer of 1990 for FY-91 which should have put TEMDUINS on solid ground. But in January 1991, a per diem rate increase issued by the Per Diem Travel and Transportation Allowances Committee to implement a change in law gave all enlisted personnel an additional $3.50 in per diem for meal reimbursement. The impact of this change on TEMDUINS, a

program totally based on per diem, was a $3.2 million shortfall for the rest of FY-91. [Ref. 1]

OP-11, OP-12 and Pers-2 have examined the problem of tracking and estimating TEMDUINS but they have been unable to reach any mutually agreeable solutions. A concern with any proposed system is the reaction of the detailers. One concern is that the detailers (Pers-4) might be reluctant to use or support such a system if it reduced their "flexibility" as schools are still used as incentives in selling a difficult set of orders. It appears that the historical solution for TEMDUINS has been to simply put more money into the program and not work on the process. [Ref. 1]

What does the future look like for TEMDUINS? The pressure to fund additional training is likely to remain, especially retraining of existing personnel as the size and structure of the Navy change. The idea here is to preserve the "investment" the Navy has in personnel even though the specific skills in which they have been trained are no longer required. An area of concern for NAVCOMPT may be that, even with a decreasing force structure since 1986, the Navy's TEMDUINS requirements have gone up. There are logical explanations for this, such as the need to cross-train personnel due to the decommissioning or modifications of warfare platforms. Also, some training pipelines have been cut in an effort to save MPN funds, which then increased the training to be done under O&M,N through TEMDUINS by reducing

the individual's training pipe from greater than 20 weeks to less than 20 weeks. Without a quantifiable system to document these and other phenomena, NAVCOMPT analysts may begin to think they are not being given an accurate portrayal of TEMDUINS program needs. [Ref. 1]

To better predict TEMDUINS' fiscal needs and expenditure patterns, the BUPERS' TEMDUINS budget analyst tracks the current year expenditures and does statistical analysis to correlate the present status with prior years. This has proven valuable as the peculiarities of the TEMDUINS program make it difficult to easily see how the program is executing. In routine TAD assignments, a service member will receive their orders, plus a travel advance for per diem and lodging, a few days before their departure. Upon returning from this short trip, a travel claim is to be submitted normally within five working days. The claim is adjudicated and any shortages or overages are reconciled with the service member. The entire process takes only a few weeks.

The process is much more complicated for TEMDUINS. PCS orders, citing TEMDUINS per diem authorization, are written as far in advance as a year before the service member's rotation date. The service member may then be in class up to twenty weeks and also may be allowed thirty days of leave plus travel time. Only on reporting to their new duty station does the service member file their PCS travel claim. Like a local travel TAD claim, the PCS claim is

adjudicated and the account settled. Therefore, for just one sailor, TEMDUINS funding could be obligated nearly a year and a half before the final expenditure is made before over (or under) obligation of funds may be realized.

Estimates used by the detailers are the basis for TEMDUINS over/under obligation but the detailers also face limitations. Situations may arise at the school site which increase the per diem requirement. An example would be a fire in the enlisted quarters rendering them inhabitable that necessitates students staying at motels. The TEMDUINS estimates themselves also create errors for the detailers. As per diem rates are scaled to cover the meal and lodging costs of a geographic area, generic estimates are not especially accurate. However, the large number of orders processed citing TEMDUINS makes using such estimates a necessity.

b. Fiscal Management Branch, Distribution Department, Bureau of Naval Personnel (Pers-463)

The Fiscal Management Branch serves as the link between the detailers, the BUPERS Comptroller and the TEMDUINS Program Manager. The branch estimates how much TEMDUINS funding each detailing section will require for the year, by quarter, and supplies it to the Comptroller for fund allocation. The branch also relays programmatic information and execution guidelines from the TEMDUINS Program Manager to the detailers.

The Fiscal Management Branch distributes the quarterly TEMDUINS allocations to the major detailing sections who pass the funding availability down to the individual detailers. Each detailer has a TEMDUINS "check book" with the opening balance being their initial allotment of funds. Each time a set of orders is written, the check balance is decremented. "Deposits" are made as the detailer receives additional increments of TEMDUINS funds.

The problem with this system is that TEMDUINS' long execution window prevents the detailer from "balancing" the check book. On the average, it will be six to nine months before a travel claim is filed on a set of TEMDUINS orders. Only at that time could it be said that a detailer's "check" has cleared the bank. Because the order-writing computer system is not linked to the computer system processing the PCS travel claims, a further complication arises. The detailer cannot match his TEMDUINS estimate to the actual amount spent on a member's orders to adjust his check book for any savings or underestimates. Historically, the estimates used by the detailers have exceeded what was actually spent, despite frequent revisions to the estimate tables. Therefore, due to the slow processing of orders and inability of the detailers to balance his checkbook, the detailers actually need to be given an amount larger than what they should be spending. The Fiscal Management Branch and the BUPERS TEMDUINS budget

analyst monitor this dichotomy closely during the year to prevent a statutory violation.

In allocating TEMDUINS assets to the detailers, the Fiscal Management Branch must also allow for the prior fiscal year's "bow wave." This bow wave is caused by TEMDUINS orders initiated in one fiscal year carrying over into the subsequent year. For example, if a sailor detaches from his last command in August and reports for a 15 week school beginning 1 September, he will have roughly five weeks of TEMDUINS per diem paid out of the current fiscal year O&M,N appropriation and the balance will be paid out of the next fiscal year's funds. The program can be quickly put into extremis if a large number of orders citing TEMDUINS are written late in the fiscal year. Fortunately, a limiting factor on the bow wave is that most of the schools resulting in large TEMDUINS payments convene either early in the summer or after the beginning of the fiscal year.

The Fiscal Management Branch has been somewhat frustrated in its role as it has the responsibility of executing TEMDUINS yet has no authority to prioritize training when funding becomes limited. The Policy Decision Memorandum (PDM) provided by the TEMDUINS Program Manager has not proved as helpful as hoped for. The guidance in the PDM has been broad and often echoed practical, cost-saving steps already put into effect by the branch. [Ref. 20]

B. Summary

Based upon the above information, there appears to be four significant problems associated with the planning, programming and budgeting of Navy's TEMDUINS program:

- Emerging training requirements are difficult to identify and incorporate into TEMDUINS' funding line.
- The actual expenditure of TEMDUINS funds cannot be correlated with personnel trained or initial fund obligations.
- The program is often driven by its funding level vice the Navy's true training requirements.
- There is no mechanism for setting priorities to maximize TEMDUINS' dollars when funding is limited.

This look at the TEMDUINS program illustrates the 'ripple effect' of fiscal and policy changes at other levels in the Navy which undermine the coherence of the TEMDUINS planning, programming and budgeting process. The following chapter will examine how the Navy's sister services deal with their TEMDUINS-like programs.

IV. VARIATIONS ON A THEME: HOW THE OTHER SERVICES MANAGE THEIR TDY EN ROUTE PROGRAM

All four services use appropriated Operations and Maintenance funds to centrally support training for military personnel conducted en route between permanent duty stations. The funding reaches the individual service member in the form of per diem in accordance with the Joint Services Travel Regulation [Ref. 21].

The focus of this chapter will be to examine how the Army, Air Force and Marines manage their temporary duty (TDY) en route programs which are equivalent to Navy's TEMDUINS program. A comparative analysis of the programs should provide an understanding of alternative ways for the Navy to manage TEMDUINS.

A. ARMY'S ATRRS PROGRAM

1. Army Training Doctrine

Under the Total Army concept, the Army's mission is to "deter any attack upon U.S. national interests and, if deterrence fails, to engage and defeat any enemy in any environment." [Ref. 22:p. 21-1] The decision in 1984 to designate "Training" as a new Total Army Goal emphasized the Army leadership's commitment to quality training and its contribution to accomplishing the Total Army mission. Their

training goal is "to produce a force trained to mobilized, deploy, fight and win anywhere in the world." [Ref. 22:p. 21-1] To reach this goal, the Army has identified six training objectives: Institutional, Active Component (AC), Reserve Component (RC), Civilian Componen., Support and Training Research and Development [Ref. 22:p. 21-1]. The emphasis on training is understandable, as "almost everything in the Army does impact, either directly or indirectly, on training." [Ref. 22:p. 21-3]

For many years, there was no single manager for training in the Army as responsibility was divided between the Deputy Chief of Staff for Operations and Plans (DCSOPS) and the Deputy Chief of Staff for Personnel (DCSPER). Analysis made it clear that the training function at Army Headquarters needed to be centralized to meet the challenges of the future. In October 1978, the Training Directorate (TRADOC) was formed as a part of DCSOPS, providing the Army with a single point of contact for all issues having an impact on training. [Ref. 22:p. 21-4]

Department of the Army training management guidance defines policy and emphasizes training-for-results with performance-oriented training deemed as the best approach. "The Army Plan," AR 350-37, provides overall direction for Army training while the "Management of Army Individual Training Requirements," AR 350-10, gives practical guidelines for developing the Army's training programs. [Ref. 22:p. 21-5]

2. The Army Training Requirements and Resourcing System (ATRRS)

ATRRS originated as a no-cost bulletin board computer system in 1977. A set of notebooks was the analyst's only tools to document and forecast Total Army training requirements. Of the numerous benefits automation could provide, the two most desired were visibility of requirements and query capability. [Ref. 23]

General Max Thurmon was serving in the Army Military Personnel Directorate in the late 1970's and saw the need for a personnel and training computer system. Upon his designation as Army Vice Chief of Staff, General Thurmon was able to promote this system [Ref. 24]. A "Steady State Study" conducted in 1983 revealed four major problems such a system should address:

- Inconsistent manpower/personnel needs and training base capacity.
- Total Army failure to fill resourced training seats.
- Lack of a consolidated database to track "spaces"/"faces" transactions in acquiring, training and distributing personnel.
- Lack of a single Army staff manager responsible for coordinating input to training. [Ref. 25]

Largely due to improvements generated by the Steady State Study, ATRRS has expanded to a comprehensive computer system residing on four mainframe computer systems driven by three IBM 39 computers. ATRRS still has its "bulletin board"

capability as most large Army activities have access to ATRRS as do all DoD schools. [Ref. 24]

ATRRS has the unique ability to tie "faces" (service personnel) with "spaces" (school class seats). Its other capabilities provide for: class scheduling, quota management, report generation, training seat reservations, input and graduation update, budgeting, program execution analysis, Total Army Individual Training Solicitation (TACITS) and Military Manpower Training Report (MMTR) data collection. [Ref. 26:p. 6] ATRRS is also used by Army Mobilization Managers as it allows the Army's peacetime requirements to mirror mobilization needs. The system proved its value in Desert Storm when reservists with appropriate training were easily identified for specific missions. There was no need to modify ATRRS because this capability is inherent in the system. [Ref. 23]

The Army ATRRS process consists of three major steps: (1) development of individual training requirements, (2) identification of resource courses and (3) execution of training programs [Ref. 22]. Each step will be closely examined.

a. Development of Individual Training Requirements

The first phase in developing individual training requirements starts with identifying force structure authorizations from the Personnel Structure and Compositions

System (PERSACS) and Active Army Military Manpower Program (AAMMP). PERSACS' reviews are done in April and November, while the AAMMP is produced as needed, but at least monthly. The PERSACS contains detailed information on the force structure of all Army components down to the MOS (Military Occupational Specialty, equivalent to a Navy enlisted NEC or officer subspecialty). The AAMMP has Army manning data including Active Army end strength, recruiting requirements and training throughput for seven years. [Ref. 22:p. 21-6]

The Total Army Personnel Command (PERSCOM), a component of DCSPERS, reviews the PERSACS and makes adjustments to reflect "all unit activations/inactivations, conversions, known modernization impacts, or other changes." The updated PERSACS is used to generate a comprehensive manning document, the Personnel Management Authorization Document (PMAD). This, in turn, is the basis for revising the MOS Level (MOSL) System. [Ref. 22:p. 21-6]

The MOSL compares authorizations defined in the PMAD against the Army's MOS and grade inventory which is aged to the fiscal year in question by adjusting for gains, losses and similar factors. The output is the number of soldiers, by skill, which must be trained to ensure that inventory matches authorizations. A similar process is used by the Army Reserve. [Ref. 22:pp. 21-6,7]

The results of these reviews establish the Total Army accession-driven training requirements which are given to

DCSPER for incorporation into ATRRS. Officer and non-commissioned officer training requirements are provided as well. Additionally, PERSCOM identifies and includes in ATRRS the requirements for in-service personnel needing training to "support professional development, reenlistment or reclassification programs, and mission requirements." [Ref 22:pp. 21-6,7]

PERSCOM also solicits information to update ATRRS from other Army Major Commands (MACOMS[1]), State Adjutants General and other agencies and services using the TACITS (Total Army Centralized Individual Training Solicitation) program, a subsystem of ATRRS. TACITS identifies and collects training needs for all courses taught for or by the Army including data such as length, capacity, frequency and location. [Ref. 27] To ensure support, TACITS has been designated as "the only official solicitation recognizing Army training requirements for military and civilian personnel." [Ref. 28]

A TACITS catalogue is sent to all Army commands each summer. From August to December, every Army organizational level evaluates its training requirements for the next five years and identifies corresponding courses

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[1] Army Major Commands (MACOMS) are similar to the Navy's Warfare Coordinators and major claimants. MACOMS include the U.S. Army, Europe; Eighth U.S. Army; U.S. Army Western Command; U.S. Army South; Forces Command; and the Special Operations Command.

available in TACITS. [Ref. 29] The activities are motivated to participate in the process as they understand that only requirements submitted through TACITS will ultimately result in school quotas [Ref. 27].

The training requirements are consolidated at each echelon as the submission works its way up through the MACOM structure with the MACOM making the final composite entry into the ATRRS database [Ref. 29]. In January, the ATRRS Program Managers review the Army's input plus requests from other agencies (i.e., Navy, Air Force, DoD). After analyzing the revised ATRRS data, the schools are asked to calculate their own resource requirements based on the new ATRRS information. The schools also function as a "sanity check," commenting on the impact of proposed changes to training throughput. The ATRRS Program Managers have until late March to complete their studies and identify any funding problems. [Ref. 24]

b. Resourcing Required Courses

After establishing the training requirements, the training program for each MOS must be developed. The key to this process is the Structure Manning Decision Review (SMDR):

> The SMDR is designed to validate Total Army training requirements and then reconcile those requirements to an affordable, acceptable, and executable training program...Training requirements will be initially established for the third POM year, validated for the second POM year (primary focus of the SMDR), and fine-tuned for the first POM year. [Ref. 26:p. 10]

The SMDR is a joint operation conducted by DCSPER and DCSOPS each August. Attendees include representatives from TRADOC, PERSCOM, the MACOMs and each individual proponent school. [Ref. 30] These SMDR participants provide vital information to the process, i.e., facility availability, training capability resources, training policy, training requirements and equipment availability priority [Ref. 25].

The SMDR is unique in that it covers, course by course, the building of the Army's training program [Ref. 24]. During the SMDR, fund realignment is the rule in an effort to hold training to a zero-budget growth. How is this done?

The SMDR breaks courses into three categories, where:

- Requirements equal available resources,
- Requirements exceed the resources, but funding can be provided or the requirements decreased without significantly impacting readiness, and
- Requirements exceed the resources, significant additional funds are needed, and the requirements cannot be lowered without severely affecting the manning program. Courses in this category are described as "constrained." [Ref. 22:p. 21-7]

Trade-offs between resources and requirements are the most frequent compromise made to rectify category two conflicts, especially when the proposed training is considered mandatory. Other concessions have included deleting older

courses and searching for a different type of training presentation. [Ref. 24]

Decisions too difficult for a group resolution are documented and presented to the "Council of Colonels", a board comprised of O-6 officers [Ref. 24]. The Council "attempts to confirm category two adjustments/resources and move as many courses as possible from category three to category two." [Ref. 22:p. 21-7]

The remaining unresolved courses are passed to a General Officer Manning/Training Review. The officers review and approve motions made by the "Council of Colonels." Courses still "constrained" are adjudicated by these flag level officers who recommend a course of action. If a "constrained" course is then funded, that funding level becomes the basis for the course's approved training program in that fiscal year. [Ref. 22:p. 21-7]

When the review process is completed, DCSPER publishes the Total Army training requirements and the approved training programs in the ARPRINT (Army Program for Individual Training) which becomes the training base line. ARPRINT provides, by fiscal year, projected individual training requirements for new and established courses. The ARPRINT is then used as justification to ensure resources (money, manpower, facilities, equipment and ammunition) are available to train the required number of soldiers. Based on the ARPRINT requirements, the schools and training centers

develop class schedules for each course. The course schedules are incorporated into ATRRS, reviewed by TRADOC for adequacy and policy compliance and then made available to the detailers or assignment officers. [Ref. 22:p. 21-7,8]

c. Training Program Execution

Army assignment officers or detailers have only one concern related to TDY en route training -- whether or not a quota is available in a course. If a quota has made it into ATRRS, funds are available to support the training. No funds, no quotas. Overbooking of classes is discouraged as it is costly; the student must be paid full per diem while waiting for the next class. [Ref. 27]

Training program changes during the execution year are managed by the TRAP (Training Requirements Arbitration Panel). TRAPs are convened monthly with the first TRAP for a new fiscal year meeting in the preceding February. The initial TRAP reviews transactions such as training increases, reductions, trades and execution problems. Requests for increases will be evaluated first for trade-offs among input agencies. If trades cannot be made, the schools and training centers are asked if they can absorb the increases without additional resources. Training decreases will also be examined as possible trade-off commodities to offset increases. [Ref. 26:pp. 9-10]

3. Army's Management of Training Fund Decreases

Because of the ATRRS system, the Army detailers do not deal with training dollars but training quotas. If training fund decreases occur, cuts are handled in a top-down method. TRADOC, the MACOMs and PERSCOM work with the schools and training centers to identify classes which are being underutilized. The needed cost savings are then realized by shortening the length of the class sessions or canceling class convenings. These savings are subsequently reflected in a decreased number of quotas available in ATRRS to the detailers. [Ref. 31]

4. Additional Benefits of ATRRS

The Army has realized several indirect benefits from the ATRRS system. Before the Army included all DoD courses and training provided to non-Army personnel, the other services were reluctant to reimburse the Army for training received. Now, ATRRS documents the number of seats DoD and other sources desire and associated reimbursements can be calculated. This capability may become critical under DBOF where the services will be working on a self-sufficient basis. [Ref. 23]

ATRRs also has features which can be readily appreciated by the soldier. It can translate the transcript of a soldier's service training into equivalent college

credits. Additionally, ATRRS notifies the GI Bill program of the service member's eligibility. [Ref. 23]

The final benefit of ATRRS is effective program management. The Army can now maximize its class seat utilization. It compresses a vast number of training requests into something more realistic and executable. ATRRS provides an accurate training program for both planning and budgeting and offers a means to compare projections against historical data. The Army has also realized increased efficiencies because of ATRRS world-wide computer bulletin board capability. The Army's training system truly runs on a real-time basis. [Ref. 23]

B. AIR FORCE'S TDY-TO-SCHOOL PROGRAM

The Air Force's "TDY to School" program is a centrally managed account monitored by the Air Training Command (ATC) Headquarters at Randolph AFB in San Antonio. AF Regulation 50-22, which provides the governing policy for the program, states that TDY to School will provide "formal training when other types of training (ancillary, on-the-job training programs, and so forth) will not satisfy the requirement." [Ref. 32:p. 1]

TDY-to-School differs from TEMDUINS in that it gives both travel and transportation funds in support of training where TEMDUINS only pays per diem. The guidance also notes that

because TDY-to-School funding is limited, training must be done at minimum TDY cost. [Ref. 32:p. 1]

1. The Scope of the TDY-to-School Program

Air Force's TDY-to-School Program promotes several different types of training:

- Air Force Directed Training
- Professional Development Education and Professional Military Education
- Contract Training
- Medical Training
- MAJCOM (Major Command[2]) Training

The Air Force has established that two training categories will take precedence over all other training requests. The first priority is Air Force directed training which is considered mission essential. This training retrains military personnel who are changing rates or being phased out of one aircraft and into another. The second priority is contractor-provided training such as on-site training in flight simulators or for systems maintenance. Pressure is on the Air Force to ensure all such contractor training is utilized in an effort to maximize the use of funds. [Ref. 33]

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[2] Major Commands are roughly equivalent to Navy's Warfare Program Managers and major claimants. MAJCOMs include: Strategic Air Command, Tactical Air Command, Military Airlift Command, Electronics Systems Command, Special Operations, and Air Training Command.

2. TDY-to-School Program Overview

Each year, MAJCOMs send personnel to courses for specialized skill training. The purpose is to provide "skills and knowledge needed to perform at an advanced skill level or in a supervisory position and usually related to an Air Force specialty." Instruction usually follows the member's initial pipeline training after the member has gained experience by working in their specialty. [Ref. 32:p. 2]

Funds for Air Force's TDY-to-School Program are "programmed for three years in advance of the current fiscal year to coincide with the Air Force's PPBS (Planning, Programming and Budgeting System)." For example, in FY-1991 operating year, the resources for FY-1992 (budget year) have already been identified by prior planning and programming actions, and FY-1993 requirements are being programmed. [Ref. 32:p. 2]

The TDY-to-School Program's success revolves around the interactions of four main participants:

- Accurate planning for their training requirements by the MAJCOMS.
- Effective administration of training resources by the Headquarters, Air Training Command.
- Programming and support of training requirements in the PPBS by the Headquarters, Air Force/MPPT (Military Personnel Program, Training). [Ref. 32:p. 2]
- Support of the program through the TMS by Headquarters, Air Force Military Personnel Command. [Ref. 34]

3. Identifying TDY-to-School Requirements and Building the Plan

Requirements for the TDY-to-School program are gathered from the MAJCOMs and their subordinates through the TDY-to-School Programming Plan (TSPP). Through the TSPP, the MAJCOM can communicate the quotas needed by weapon system, the training priority and total fiscal year requirements. The TSPP then establishes training needs and serves as a basis for programming and budgeting ATC-funded MAJCOM TDY-to-School instruction. [Ref. 26:p. 3]

TSPP requirements are forwarded up from the individual units to the air base Commanding Officer. They are then sent to the MAJCOMs for screening, prioritizing and further consolidation. The MAJCOMs also incorporate any additional individual training requirements of which they are aware [Ref. 35]. The data is ultimately submitted to the ATC by 1 November each year [Ref. 26:p. 3] through the TMS terminals at the MAJCOMs [Ref. 34].

Headquarters, United States Air Force (HQ, USAF) adds Air Force directed training to the TSPP compilation [Ref. 35]. The TSPP is forwarded to ATC for validation and approval in accordance with Headquarters, Air Force/MPPT training policy. ATC provides HQ, USAF/MPPT a summary of TDY-to-School requirements and utilization data from the TSPP who uses the information to program and budget TDY-to-School funds. [Ref. 26:p. 2]

4. Integrating Budgeting with the TDY-to-School Requirements

a. Establishing the Budget

The ATC at Randolph Air Force Base coordinates the annual requirements screening process (TSPP) via the Training Management System (TMS). Each year, Air Force holds a training requirements meetings where functional managers (similar to Navy's Program Managers) each project their training needs, by month and quarter. At the same time, they assign training priorities within each functional area. [Ref. 33] The MAJCOM representatives enter the resulting data directly into TMS which is then retrieved and analyzed by the ATC and passed to HQ, USAF/MPPT [Ref. 35].

While the ATC is coordinating and developing the TDY-to School Plan, program budget requirements are also being estimated by the Training Programs Division at HQ, USAF/MPPT. The TDY-to-School funds are then passed to ATC for execution in their annual Financial Plan (FINPLAN). [Ref. 36] The FINPLAN is analogous to the Operating Budget Authorization provided to a Navy claimant by NAVCOMPT.

When changes are made to an Air Force platform, the acquisition process helps identify the related training needs. The System Program Office (SPO) creates a System Training Plan (STP) for the acquisition project. The STP is sent to ATC who disseminates it to the Training Service Officer (TSO) for

review and chop. Based on the TSO's feedback, the ATC then incorporates the requirement into the FINPLAN. [Ref. 35]

Although the FINPLAN lays out a spending profile in standard budget categories, the funds are actually passed in a lump sum. ATC has ultimate execution authority over that funding and how it will be used, irrespective of the FINPLAN.

The impact of this system is that changes to ATC's priorities and circumstances may result in the diversion of funds away from TDY-to-School. Also, although a total of $32 million was available at ATC in FY-1990, it had to be used for both TDY-to-School costs plus ATC's own administrative travel and Mobile Team Trainer expenses. [Ref. 35]

b. Requirements vs. Resources

Like TEMDUINS, TDY-to-School's major problem is one of funding, where the training requested by the field units exceeds the funds available to support it. The Air Force assumes it will train about 5.5% of its military end strength when estimating the amount of TDY-to-School funds needed, allowing roughly $1200.00 per training quota per year. [Ref. 33]

While approximating is an efficient budgeting tool, the resulting prediction is less than what the field units say they need [Ref. 33]. Last year, Air Force field activities proposed training requirements of over 50,000 quotas valued at $64 million, but in actuality about 25,000 personnel were

trained. In years past, MAJCOM requirements have been projected as high as 84,000 quotas. [Ref. 35] This underscores the difficulty the Air Force is experiencing in validating the submitted training requirements, which has led to a credibility gap between the field activities and the Headquarters. The feeling at Headquarters is that often field units submit a training 'wishlist' vice their bare bones requirements. As a result, the field's assessment of training requirements mushrooms. [Ref. 33]

To cover the deficiency between requirements and funding, ATC sets priorities for "funded" or must-pay training. As mentioned previously, the two highest categories are Air Force directed and contractor-provided training. [Ref. 32:p. 1] The Air Force assignment personnel (detailers) notify ATC how many quotas they will need in these two categories for the upcoming year. The remaining quotas are available for distribution throughout the Air Force. ATC retains control of the funds but earmarks the quotas for the designated users. [Ref. 36]

Remaining funds (or quotas) are allocated back out to the MAJCOMs on a pro-rated basis. Roughly 75 percent of the TDY-to-School quotas (and funds) are shared among the MAJCOMs. The last 25 percent goes to any remaining commands with training requirements. If the Air Force lacks TDY-to-School resources, the must-pay quotas are protected and shortages are taken from the funds reserved for the MAJCOMS.

Commands are also queried quarterly to see how their requirements compare to resources available in an effort to realign and maximize funds. [Ref. 35]

MAJCOMS also may fund TDY-to-School training ATC cannot afford. If seating capacity allows, the MAJCOM can provide ATC accounting data to cite on the member's PCS (Permanent Change of Station) orders to cover the travel and per diem costs. The caveat is that the MAJCOM must provide the appropriate "color" of money, i.e., Operations and Maintenance, Budget Activity 8 funds. While this option is available, the MAJCOM more frequently funds training for the member on a TDY-and-return basis after they report to their unit. [Ref. 36]

5. Problems with TDY-to-School

The Air Force has encountered some problems relating to the TDY-to-School program. Cuts in training funds have emphasized the need for changes in the program as documented by letters sent up by the MAJCOMS to the Headquarters, saying that decreased TDY-to-School training is now affecting combat readiness. [Ref. 35]

What factors have contributed to the program's funding shortfall? First, TDY-to-School funds are not fenced for that program's exclusive use. For example, the FY-1991 $32 million TDY-to-School budget covers several categories of travel, not just TDY-to-School. If more pressing dollar

requirements emerge, ATC can (and has) pulled money from the program. The resulting loss to TDY-to-School has been significant at times, representing up to a 25 percent program reduction. [Ref. 35]

It is important to note that ATC is not insensitive to the impact its actions have on TDY-to-School; the program is simply overcome by events. As a result, the TDY-to-School program has come to bank on fiscal year end "fall out" resources to get through the execution year. There is concern, however, that such windfalls may be "history" in light of DoD's current lean funding levels. [Ref. 35]

Another problem the Air Force has found is that the TDY-to-School training requirements submitted to the ATC are not scrubbed as closely as possible. It appears that "gold plating" or nice-to-have requests are being proposed with essential training requirements. Also, as training in the Air Force isn't centralized, costly duplications and overlaps have occurred in the past. [Ref. 35]

6. TDY-to-School's Future

Changes are coming into play for the Air Force's TDY-to-School program. As mentioned above, the provision was made in fiscal year 1990 for the MAJCOMs (with ATC approval) to use their own unit's Budget Activity 8 O&M funds to support their training needs. This is similar to the Navy's TDY-and-return concept, whereby the member goes from his duty station to

class and back using the duty station's travel funds. [Ref. 35]

There is also an initiative being promoted to totally decentralize the TDY-to-School program, passing all training funds and responsibilities down to the MAJCOMs. The feeling is that if the MAJCOMS controlled the funds, visibility for basic, "non-sexy" training would be increased. An office would be established at Headquarters or ATC to serve as the facilitator between the MAJCOMs, who would be supplying training funds, and the detailers, who would be citing those funds on PCS orders. This concept is still just a proposal, as the Vice Chief of the Air Force has yet to support it. [Ref. 35]

ATC is also searching for a way to validate training requirements and find a more effective use of quotas. Historically, about 4-5 percent of the MAJCOMs manpower has been trained each year. This figure has been used for planning purposes but has no basis other than historical data. The Air Force Comptroller is supporting the validation effort based on his own requirement to establish unit costs. The Comptroller's hope is to develop a generic cost per graduate output rate with the costs being summarized by base and by course. [Ref. 35]

Some of the motivation behind developing the TDY-to-School cost rate is from DBOF where the training commands will be vying with outside competitors for local command training

dollars. In many cases, the local commands will now be free to go to the best training source be it Air Force, DoD or a commercial vendor. As a matter of survival, the Air Force must then fully establish its TDY-to-School unit costs. [Ref. 35]

C. The Marine Corps' Training En Route Program

1. Training Input Plan

The Training Input Plan is the backbone of the Marine Corps' en route training program as it represents the compilation of all Corps training requirements. The Commanding General of the Marine Corps Combat Development Command (CGMCCDC) requests data for the Input Plan from Headquarters, Marine Corps (HQMC) by letter. [Ref. 37]

HQMC promulgates the data call down the chain of command and consolidates the responses. HQMC also correlates the submitted training requests against the projected Corps' force structure, which changes frequently. [Ref. 38] The information is sent back to CGMCCDC then passed to the Director of the Marine Corps Air Ground Training and Education Center (MAGTAC), one of its subordinate offices. The staff at MAGTAC uses the Corps' feedback to develop outyear POM training requirements and also refines the Input Plan to align it with funds available for the execution year. The final current year Input Plan represents the Corps' funded training

quotas and contains specific course data such as course title and seat information. [Ref. 37]

The Input Plan is returned to HQMC, via CGMCCDC, for implementation. HQMC gives it to the Corps' monitors (detailers) to use in planning upcoming PCS orders. The Input Plan only delineates courses and quotas available to the monitors, however. Funding authority for training is provided separately through the Training Quota Memorandum (TQM). [Ref. 38]

2. Training Quota Memorandum (TQM)

The Training Quota Memorandum (TQM) furnishes the monitors with accounting codes to be cited on member's PCS orders to support their en route training. The Job Order Numbers in the accounting codes are course-specific with the differences noted in the last three digits of the code. The advantage of this system is that it possesses an inherent "free" management tool. Based on the unique Job Order Numbers, the MAGTAC can monitor TQM obligations and expenditures using routinely generated reports from DoD's central accounting centers. This has eliminated the immediate need for a specialized data base system to monitor the Corps' training en route program. [Ref. 38]

3. Integrating the TQM and Input Plan

How are the Input Plan and the TQM related? The Corps' training requirements are initially identified through

the Input Plan. The Input Plan helps increase the visibility of training-associated factors such as school house capacity, the projected training requirements themselves, history of seats funded, historical quota use and program shortfalls, which may impact quota estimates. Previous quota cost estimates are adjusted for student "no-shows" and attrites. The Input Plan is costed out using the updated estimates and becomes the foundation for the TQM. [Ref. 38]

Based on the refined cost per quota, the MAGTAC compares the Input Plan requests and funds available for the fiscal year. If the quotas requested exceed the resources, the number of seats bought is reduced. Deletion decisions are based on course priorities reflecting the Corps' mission requirements. The resulting funded quotas are reflected in the final Input Plan MAGTAC sends back to HQMC. [Ref. 38]

4. Outyear Planning

As noted previously, the Input Plan provides the Corps' training requirements reflected in both their execution year and outyear POM budgets. The Marines are similar to the other services in that they do not always succeed in gaining POM for unfunded training requirements. However, the funding problems have frequently healed themselves during the execution year as the monitors usually do not execute what was requested in the Input Plan. [Ref 39]

Like the Navy, the Marines try to manage within the dollars they have been provided in the POM. Prior to FY-90, there were sufficient funds to cover the entire Training Plan. The POM was written using both the Input Plan and the monitor's feedback on training needs. The monitors would help in the process by prioritizing the requirements into training segments such as MOS specialty training as the first priority, recruiter training as second, and security/professional development last. [Ref. 38]

Since FY-90, however, the Marines' program has begun to resemble the Navy's TEMDUINS with its decreased level of funding. Prioritizing training has become a much more serious endeavor with MAGTAC recently initiating the decisions. [Ref. 38]

While emerging requirements are usually dealt with through prioritization or seeking additional resources, new training initiatives tied to acquisition have other support. When a new weapon system is fielded, some training is normally provided with the acquisition itself. In the Marine Corps, the proponent for a new initiative, such as a weapons system or platform, pays for any associated training until the effort is incorporated in the training POM. During POM, the emerging requirement will be submitted as an unfunded item unless the proponent antes up for it. If it is not bought in the POM, reductions must then be made to either accommodate the new training or delete it. [Ref. 38] The Marines also usually

experience funding shortages when phasing between old and new systems due to the overlap in training [Ref. 39]. The Navy has experienced similar problems which are often exacerbated if there is any delay in the transition process.

5. Executing the Marine's En Route Training Program

The Corps' monitors rely on the Input Plan for information and the TQM for funding when writing member's orders. As the Marines' program is currently operating, the monitors manage their training dollars by managing the number of quotas they are assigned in the Input Plan. Like the Army, the monitors can make assignments to the schools by name. Actually, the monitor's reservation must have a name associated with it by a specific cut-off date or the reservation will fall through and the quota is available for use by other monitors. [Ref. 38]

6. Problems associated with the Marines' Program

Unlike the Navy and other services, the Marines conduct a minimal amount of training internally and rely heavily upon training provided by the other services to meet their needs. While the Corps' does cut costs by operating fewer training sites, they must offset it with training en route to various non-Marine activities. This puts increased emphasis on adequately funding their training program from the beginning through the POM. [Ref. 38]

Like their sister service, the Navy, the Marines have come to rely upon offsetting funds becoming available in the execution year to cover any shortages. With diminishing defense dollars, such reliance could soon become risky. [Ref. 38]

D. Summary

In examining the Navy's sister services' management of their TDY en route training programs, some similarities can be seen. Common to all the military services is an increased sensitivity to DoD's declining budget and the impact on service programs. The two larger services, the Army and the Air Force, have come to rely on automated systems to define and manage training requirements. The resulting data is subsequently used in the budget process. Due to its small size, the Marine Corps has not developed a computer system to track its training program. Instead, the Marines have modified their accounting data to take advantage of existing DoD systems.

Decreases in DoD's budget base occurring as a result of the Budget Enforcement Act of 1990 will have an equally harsh impact on all the services, making it important to consider every avenue available to maximize the use of funds. Training, unfortunately, is often one of the first victims when funds are limited. To justify funding for TEMDUINS, the Navy would be well advised to follow the other services' lead

and establish an automated system to support TEMDUINS. The next chapter will examine the TEMDUINS program from a management control system approach.

V. MANAGEMENT CONTROL THEORY AND THE CURRENT TEMDUINS PROGRAM

"In all organizations, even the tiniest, there is an activity called management control." [Ref. 40:p. 3] The purpose of this chapter is to describe management controls used in operating budgets. A comparison will be made between one control theory and the management of Navy's TEMDUINS program.

A. DEFINING MANAGEMENT CONTROL SYSTEMS

"Management control is the process by which managers influence other members of the organization to implement the organization's strategies." [Ref. 40:p. 10] As seen by this definition, all organizations perform management control functions even if they are not formally recognized. Controls serve as the means by which we head towards an objective. "They keep us from veering off in undesirable directions and prevent unwanted things (from) happening." [Ref. 41:p. 2]

Schick describes management control as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objective." [Ref. 42:p. 17] Effectiveness is situation-specific and means "doing the job you want or promised to do." Efficient performance reflects "doing your

job with a minimum use of resources" or generating the maximum possible output using a given amount of resources [Ref. 43:pp. 5-6].

1. Basic Divisions in Management Control Systems

Management control systems contain both a structure and a process: structure is what the system **is**, and process is what it **does** [Ref. 44:p. 231]. The control structure primarily consists of specifying which managers are responsible for which resources in the organization [Ref. 44:p. 233]. The closer the match of the responsible parties to the control structure, the easier it will be to implement a good management control system [Ref. 44:p. 235]. The focus of this chapter, however, will be on the management control process vice the structure as it more closely relates to the subject of this thesis.

2. Management Control System Characteristics

Anthony and Young have identified five general characteristics common to all management control systems:

- A Total System - It embraces all aspects of the organization's operation.
- Goal Congruence - The system leads individuals to take actions that are in the best interest of the organization and its goals.
- Financial Framework - This is the core of the management control system where amounts are stated in monetary terms.
- Rhythm - The control process follows a definite pattern and timetable, month after month and year after year.

- Integration - The system is coordinated and integrated so data collected for any purpose can be reconciled with other system data. [Ref. 44:pp. 13-14]

B. MANAGEMENT CONTROL SYSTEMS PROCESS FOR OPERATING ACTIVITIES

Management control activities fall into two general categories - those for unique special projects and those for the control of ongoing operations such as TEMDUINS. Due to its applicability to TEMDUINS, attention will be centered on operating activity controls.

The management control system process for operating activities consists of four subprocesses which follow one another in a prescribed sequence. These subprocesses are: programming, budget preparation, execution and evaluation. [Ref. 40:p. 15]

1. Programming

Ramanathan has described programming as the "process of subcontracting between top and middle management for the purpose of specific accomplishment within each program." [Ref. 43:p. 409] In a definition that is closer to the Navy's operations, Anthony explains programming as "the process of deciding on the programs that the organization will undertake and the approximate amount of resources that will be allocated to each programming." [Ref. 40:p. 15]

Programming usually is done annually for a span of five years, as beyond that time, the future is "so murky that attempts to make a long-range plan for a longer period are not worthwhile." Because of the relatively long time horizon, only rough estimates are feasible. [Ref. 44:p. 83]

"Programs should be developed to meet a particular goal or objective." [Ref. 45:p. 153] A goal is a broad statement of the organization's intent, the main purpose of which is to communicate the organization's aims and priorities. An objective is one of a set of steps leading to the achievement of an organization's goals, indicating a specific result to be achieved within a certain time frame. [Ref. 45:p. 112] "A realistic and comprehensive appraisal of the past performance and continuing potential of each existing program is an essential element in the programming cycle ." [Ref. 43:p. 410] Lacking a concrete performance measure such as profit, program decisions in nonprofit organizations are often "based on judgment and are influenced by the persuasive abilities of program advocates and by political and other considerations." [Ref. 44:p. 11]

Preparing the program's long-range plan normally involves two cycles. Rough guidelines and general assumptions about the future are agreed to in the first cycle. In the second cycle, these are used to prepare the long-range plan. [Ref. 44:p. 15] While final decisions are made by senior personnel, the major responsibility for programming is

assigned to program-level and other middle managers. Their knowledge and personal experience are crucial for analyzing the potentials and problems in current programs and in proposing innovations. [Ref. 43:p. 424]

The first cut at the program's plan usually reveals a "planning gap." In a nonprofit entity, the gap indicates that estimated expenses exceed estimated revenues and other sources of funds. [Ref. 40:p. 84] Making choices among alternative courses of actions can be difficult because the relationship between costs and benefits and even the amount of benefits are hard to measure in nonprofit organizations [Ref. 40:p. 85].

Programming is challenging for two reasons. First, differing expectations in the organization produce an inhibiting effect (organizational friction) which can impede results and increase costs. With the natural tendency of large bureaucracies to operate rather slowly, internal friction created by differing individual objectives can slow their progress almost to a standstill. [Ref. 46:pp. 30-31]

Second, participants may employ the tactic of globality to avoid confrontation during programming. Details of disagreements are ignored and objectives are discussed instead in broad global terms. Agreements are easily achieved, but, when the "agreed" objectives must be implemented, "the specifics again become important, and organizational friction reappears." [Ref. 46:p. 32]

2. Budgeting

Gambino describes a budget as "the detailed, quantified, objective plan for attaining an organization's goals," stated in fiscal language for a fixed period of time [Ref. 45:p. 21]. Some analysts see budgeting as the

> "fine tuning" of the program for a given year, incorporating the final decisions on the amounts to be spent for each program, and making clear who is responsible for carrying out each part of the program. [Ref. 44:p. 358]

In reality, however, no such clean separation between programming and budgeting exists, nor can it exist since additional program decisions often surface as part of budgeting. The two processes are distinct, however. The purpose of the programming process is to make decisions about programs, while the purpose of budgeting is to decide on the actual operations plan for a year. [Ref. 44:p. 358]

The budget serves as an important control device in a nonprofit organization. It is a useful tool for developing and communicating some of the principal measures by which performance will be evaluated. Later, the same budgetary tool is the basis for measuring the degree to which the organization's goals have been attained. Thus, the budget "lends an aura of responsibility both for one's development of the plan and adherence to that plan." [Ref. 47:p. 3] Budgets have an additional control function in government organizations as the "amounts appropriated in accordance with

the budget cannot be legally exceeded and violators are subject to criminal penalties." [Ref. 44:p. 427]

While upper management is the strongest force in programming, lower levels of management are the key players in the budget preparation process. As Anthony and Young have noted:

> If budgets are imposed without such participation, managers feel no commitment to attain the objectives. Participation starts at the lowest level in the organization. [Ref. 44:p. 90]

The budget then represents a bilateral commitment between a manager and their superior on expected performance, subject to the implied qualification "unless actual conditions are different from those assumed in the budget." In other words, the approved budget gives managers the authority to carry out the program, but also makes them responsible for doing so within the stated amounts. [Ref. 44:p. 90]

Research has shown that budget formats are important. Procedures are not neutral as "the *means* of budgeting *somehow* affects the *ends* of budgeting." [Ref. 46:p. 12] However, no perfect budget structure has been found that will meet the needs of every organization at every period in its existence. Certain elements have been found to be helpful to any budget structure:

- It must have a program structure to relate results to resources.
- It must link not only resources to results but also personnel to results.

- It must articulate the results to be achieved and the way in which those results will be measured.
- It should involve officials and employees in the decision process at appropriate levels.
- It must have line item control features and should link to the accounting system.
- It must be practical to implement. [Ref. 46:p. 26]

Three major problems have been noted in budgeting. First, upper management's primary concern is usually financial solvency so increased emphasis is placed on financial rather than performance budgeting. The effect is that those executing the budget may not appreciate how their respective roles integrate into the goals and objectives of the organization, which decreases their motivation to perform effectively. [Ref. 43:p. 491]

Second, actual performance will often deviate from the plan due to basic uncertainties in the budget process. "Unless corrective actions are taken in time, such deviations tend to persist, and their cumulative effects frustrate the goals and objectives of the organization." [Ref. 43:p. 493] Three elements are needed to take effective corrective action: (1) timely information on actual performance, (2) correlating actual performance with budgets and plans and (3) analysis of the deviations between actual and planned performance. [Ref. 43:p. 546]

The third problem is one inherent to appropriated funds. As appropriations for operating purposes usually lapse

at the end of a fiscal year, there is a natural tendency not to permit appropriated funds to go unused. [Ref. 44:p. 427] "While the encumbrance accounting system is designed to avoid spending more than the amount appropriated; in practice, it also discourages spending less than the among appropriated." [Ref. 44:p. 428]

3. Execution

"The budget preparation process lays the groundwork for the control of operations, often referred to as 'program execution'." [Ref. 40:p. 91] The budget is a device for coordinating the activity's actions, but it is only a guide for the manager:

> If a better way of achieving objectives is discovered, or if conditions change from those observed in the budget, the manager should depart from the budget...Adherence to the budget is not necessarily good, and departure from it is not necessarily bad. [Ref. 40:p. 92]

The budget may or may not be revised if circumstances change during execution. Differing views have emerged concerning budget revisions. Some analysts feel that the budget no longer reflects planned performance unless it is revised. Others argue that revisions destroy the basis for analyzing difference between actual and budgeted performance. A compromise is to maintain the original budget but "periodically to prepare a 'current estimate' to show the revised estimate of performance." [Ref. 40:p. 93]

The main control activity during budget execution is task control, where managers ensure specific tasks are carried out effectively and efficiently [Ref. 40:p. 12]. But, managers cannot literally "control costs." Instead, they attempt to influence the actions of the people responsible for incurring costs [Ref. 40:p. 92].

"Task control is transaction-oriented; that is, it involves the control of individual tasks." Task control consists of seeing to it that the rules prescribed as part of the management control process are being followed. Tasks performed by professionals do not fit the standard rules provided by management as much of their work is not routine. Nevertheless, it does tend to be repetitive and general guidelines for even those tasks can usually be developed. [Ref. 40:p. 37]

During execution, information is critically needed by management for task control. Operating performance data will alert management about the potential need for corrective action. This information should reach the manager quickly enough to enable him to act, and it should be structured so problem areas are highlighted [Ref. 40:p. 93]. Managers act based on both informal (e.g., observation, conversation) and formal (reports, documents) information, the purpose of which is to alert them to the possible need for corrective action [Ref. 40:p. 93]. "The frequency with which reports of actual

performance are prepared depends on the manager's ability to take corrective action if it is needed." [Ref. 40:p. 94]

There should be a means of quickly notifying the manager of events related to the activity's critical success factors. The structure of these ad hoc reports should emphasize these factors and provide information about them as quickly as possible. [Ref. 40:p. 93] Summary information should be backed up by detailed information to facilitate the search for causes of variances in important items on the regular reports [Ref. 40:p. 94].

Many nonprofit organizations are extremely concerned about budget execution, in that if actual expenditures fall under budget, it may be a signal to the funding sources and others that the budget for next year could be cut safely. "Because efficient performance that results in expenses being less than budget is, in effect, penalized, the tendency exists at many nonprofit organizations to ensure that the entire budget is expended." [Ref. 45:p. 152]

4. Reporting and Evaluation

Regular budget reports serve a variety of purposes, such as: (1) a basis for action (if warranted), (2) a way to coordinate and control the organization's current activities, (3) a tool for evaluating operating performance and (4) the means for program evaluation [Ref. 40:p. 97].

Budget evaluation closes the loop in the management control system. Evaluating actual budget performance can lead back to program revision, budget revision or a change in operations. Evaluation may also make management reconsider the organization's strategies for achieving its goals. [Ref. 44:p. 12]

Evaluation has been called an "attempt to determine whether programs are achieving the results for which they were authorized and for which funds were made available." It is difficult to determine how well a nonprofit organization is meeting its goals because their outputs are often intangible. Yet, finding an appropriate evaluation system is becoming increasingly important to meet the public's demand for improved nonprofit organization accountability. [Ref. 45:pp. 111-2]

Anthony and Young recommend classifying output for evaluation according to what it is supposed to measure. Three categories have emerged: results measures, process measures and social indicators. [Ref. 44:p. 468]

Results measures express output in terms related in some way to the organization's objectives, either directly or through a surrogate measure, to indicate operational effectiveness. [Ref. 45:p. 117] Using TEMDUINS as an example, a primary objective of the program is to provide per diem for en route NEC-producing training between permanent duty stations. A surrogate results measure of this objective would

be the total number TEMDUINS' recipients who earned an NEC in a year.

Process measures reflect the "activity conducted by the organization." [Ref. 45:p. 117] The focus is upon measuring efficiency, but not effectiveness [Ref. 44:p. 469]. Results and process measures differ in that results measures are "ends oriented" while process measures are "means oriented." Anthony and Young explain:

> An ends-oriented indicator is a direct measure of success in achieving an objective. A means-oriented indicator is a measure of what a responsibility center or individual does. [Ref. 44:p. 468]

Process and results measures must be related to ensure effective performance [Ref. 44:p. 469]. For example, TEMDUINS could use the number of enlisted personnel receiving per diem under the program in a year as a process measure. Yet a result measure is needed to validate that essential or NEC-producing training was provided.

Social indicators "usually relate to overall objectives rather than specific activities of an organization. Since the cause-effect relationship is not clear, these indicators are difficult to use properly ." [Ref. 45:p. 117] These indicators have been found to been so heavily influenced by external factors that they are of little use in day-to-day management [Ref. 44:p. 471]. For example, Pers-463 uses an average daily per diem rate when estimating the amount of TEMDUINS funds required for a fiscal year based on a given

training requirement. But the average per diem rate is affected during the execution year by several unpredictable, external factors, such as government quarters availability, changes in room rate charges and changes in the length of a course due to weather conditions.

When selecting which output measures to use, some important considerations include:

- Some measure of output is usually better than none.
- If feasible, relate output measures to measures available from outside sources.
- Use measures that can be reported in a timely manner.
- Develop different measures for different purposes.
- Focus on important measures.
- Don't report more information than is likely to be used.
- If feasible, tie output measures to expense measures.
- Don't give more credence to surrogates than is warranted. [Ref. 44:pp. 478-9]

Reports and evaluation serve two key purposes; feedback and feedforward. As noted by Ramanathan:

> Feedback (reporting the effectiveness of current performance) and feedforward (reporting the potential impacts of current deviations of future plans and performance) are the twin aims of monitoring performance. [Ref. 43:p. 564]

But reports alone do not guarantee that feedback and feedforward will occur. The reports must be discussed at the correct levels, explanation and analysis must be provided by

responsible individuals and corrective action identified and implemented. [Ref. 43:p. 564]

Certain difficulties have been associated with reports and evaluations. By their nature, reports focus on the current period but the current period results are influenced by decisions made in earlier periods [Ref. 40:p. 16]. Since evaluation occurs after the event, it literally cannot affect what has happened [Ref. 40:p. 95].

However, formal reports alone do not meet all the needs of management control. Informal information gained through conversations, memos or meetings is also critical. When important news is conveyed as soon as possible informally, formal reports will hold no surprises. [Ref. 40:p. 95] However, too much information can also be counterproductive. Excess data is either ignored or under-utilized. This obstacle can be overcome by involving the managers in designing the reports, to customize them for their interests. [Ref. 43:p. 566]

The original budget was based on certain assumptions about conditions that would exist during execution. Logically, allowances for changed circumstances should be made but many evaluators tend to hold subordinates accountable for uncontrollable changes. [Ref. 40:p. 96]

C. EXAMINING TEMDUINS' MANAGEMENT CONTROL SYSTEM

If everyone always did what was best for their organization, management controls would never be needed. Merchant has found that management controls provide the means to ensure that plans made by the organization are carried out or modified if necessary [Ref. 41:p. 43]. Characteristics of "good" management control systems include:

- Orientation towards the future,
- Consideration of dimensions and facets of the system,
- Recognizing that assessment of success is hard and subjective, and
- Realizing that 'good' control is not always economically feasible. [Ref. 41:p. 44]

In the section above, the management control system for operating activities was described as having four phases: programming, budgeting, execution, reports and evaluation. Following is a comparison of Navy's TEMDUINS program to this management control concept.

1. Programming

The appropriations budget is the one most commonly used by government agencies whereby a fund sets an upper limit to financial expenditures allowed a specific activity during the fiscal year [Ref. 48:p. 125]. Our history of Continuing Resolutions is evidence of the time required to pass an appropriation. But, the appropriation is just a step in an even longer process -- the budget cycle for a Navy program.

The Operations and Maintenance, Navy (O&M,N) budget for a naval program or activity has a life span of ten years. Initial action commences five years before the execution fiscal year through the Planning, Programming and Budgeting System (PPBS) POM (Program Objective Memorandum) process. The transition from programming to budgeting occurs during the President's Biennial Budget submissions. Then, before the appropriation lapses, the funds are available for another three years to cover any legal expenditures remaining.

Programming goals or objectives for Navy programs, such as TEMDUINS, can be viewed from several perspectives: that of the major claimant, the Resource Sponsor, the major claimant and those tasked with budget execution.

a. Bureau of Naval Personnel (Pers-02), TEMDUINS' Major Claimant

The financial management objectives of the major claimant, BUPERS (Pers-02), include:

- Obtain for and administer material assets to the TEMDUINS budget execution office, BUPERS (Pers-463). In the case of TEMDUINS, the assets are O&M,N funds. For other Navy programs, the assets may be funds, manpower, capital equipment, property and consumables.
- Coordinate, evaluate and submit short and long term TEMDUINS budget requests to NAVCOMPT and/or the Resource Sponsors.
- Oversee Pers-463's compliance with administrative and legal constraints. The most critical concern is conformance with 10 U.S.C. Titles 1301 (misuse of appropriated funds) and 1517 (over-obligation of appropriated funds).

- Maintain the "big picture" perspective of their own and TEMDUINS' roles in the Navy's overall mission of national defense.

b. Chief of Naval Operations (OP-120C), TEMDUINS' Resource Sponsor

The Resource Sponsor's objectives are similar to the claimant's in that they are concerned with:

- Analyzing the claimant's input for the TEMDUINS program's long term budget and forwarding to the next level for approval.
- Protecting TEMDUINS' financial interests to the maximum extent possible in the face of major reductions.
- Maintaining an even "bigger picture" view of their claimants, their programs and the Navy's total needs.

c. Bureau of Naval Personnel (Pers-203), TEMDUINS' Program Manager

The TEMDUINS Program Manager's viewpoint differs from the claimant and Resource Sponsor, in that his interest in finance is tempered by his programmatic concerns. The Program Manager must:

- Monitor the fiscal activity of TEMDUINS to defend budgeted funds against reduction and ensure that current year funds are used legally and wisely.
- Provide those responsible for executing the program, Pers-463, with sufficient guidance and support to meet mission objectives.
- Be sensitive to future changes in the Navy and DoD which may impact his program.

d. BUPERS (Pers-463), TEMDUINS' Program Execution Office

Program execution offices naturally have a different perspective of Navy financial management which is reflected in their objectives:

- Maintain records and prepare reports as required by the major claimant, Program Manager and other senior commands.
- Submit accurate and timely budget requests to the major claimant.
- Scrutinize all obligations and expenditures.
- Comply with applicable Program Manager, Resource Sponsors and claimant policies and guidelines, plus any applicable laws.
- Establish credibility with all interacting parties. Most important is to have a strong, honest relationship with the claimant as they are the primary fiscal contact and the source of funds in the budget years.
- Be thoroughly familiar with the current internal and external political environment, to better manage expenditures and build viable budgets.
- Educate personnel in the basics of Navy finance and budgeting to ensure compliance with laws and maximize use of resources.

2. Budgeting

A program's O&M,N budget can be used for control purposes. The budget functions as a control when the commitment is made to work within the planned forecast to achieve an agreed-on outcome. [Ref. 49:p. 150] TEMDUINS is at a disadvantage as the program lacks a detailed historical data base, such as those maintained by the Army and Air Force.

TEMDUINS budget estimates have relied on general execution historical data and proposed future requirements

provided by the Program Manager based on information provided by the Surface Warfare Sponsors in the NTPs. However, because the Navy does not fund specific courses or quotas as some of the other services do, neither the TEMDUINS budget analyst or Pers-463 can develop refined budget estimates or detail the impact of funding shortfalls.

Control is achieved in the budget process by using TEMDUINS past budgets and execution profiles to identify in part their future funding levels. Any increases or decreases to the program are compared to the yardstick of past performance. Care is taken not to exceed the funding amount allowed by NAVCOMPT without offsets being provided.

While the claimant POM budget analyst, the Program Manager and the Resource Sponsor are the key players during TEMDUINS' programming phase, the Pers-02 TEMDUINS budget analyst and Pers-463 budget officer are the main ones involved in drafting TEMDUINS' current year budgets. The TEMDUINS budget is then examined by the Program Manager to check for programmatic consistency before being included in the claimant's submission to NAVCOMPT.

3. Execution

The most difficult objective for the TEMDUINS budget execution office, Pers-463, and the claimant, Pers-02, is ensuring that adequate funds are available for the program, and successfully gaining more for unforeseen requirements.

The execution office has little real control over the amount of money TEMDUINS will finally receive, and they cannot generate any revenue to make-up for shortfalls. Pers-02 is in a similar situation as the funds available to TEMDUINS are contingent on what is provided to the claimancy by NAVCOMPT. The best defense both Pers-02 and 463 have is to have developed accurate budget requests based on realistic projections of future requirements supported by back-up data. Also important are records and reports documenting the timely obligation and expenditure of funds to prove responsible fiscal management. These two actions will help provide a basis to support TEMDUINS unfunded requirements in the execution and future years of the program.

The TEMDUINS Program Manager is only slightly involved in the program's execution. The guidelines provided each year are meant to give Pers-463 direction for the detailers when obligating TEMDUINS funds. The guidelines have been kept broad so as not to be restrictive. While this approach has provided the detailers with flexibility in order-writing, there is concern that such broadness also allows for loopholes.

4. Reports and Evaluation

Both Pers-02 and Pers-463 track TEMDUINS execution through a number of reports. Data is received from Navy Finance and Accounting Activity (NFAA), Cleveland, reflecting month end information. Near the end of the year, or when funds seems perilously low, the reports are provided weekly. The number of counts (orders) written and associated dollars are provided with the information broken out by officers and enlisted personnel, obligations and expenditures.

Pers-463 also receives additional detailed reports from NFAA weekly which identifies TEMDUINS obligations in yet greater detail. The report shows counts and fund obligations by quarter for officers and enlisted personnel. But, due to the differing dates of computer runs to generate the reports, the two NFAA reports cannot be correlated.

Pers-02 is required by NAVCOMPT to report monthly on the financial status of its subordinate activities and programs. NAVCOMPT's interest is chiefly in the amount of funds currently obligated and expended. This information is compared to estimated obligation rates provided by the claimant in the annual budget submission.

BUPERS and NAVCOMPT evaluate the execution of its subordinate activities and programs for two purposes: to ensure that use of available funds is maximized and to watch

for potential legal violations. The TEMDUINS program is often at a disadvantage in this type of evaluation. As discussed previously, it may take several months before a service member's PCS orders citing a TEMDUINS fund obligation are liquidated. This gives the program a poor expenditure rate, making it appear that funds are possibly being used ineffectively. Also, because of the delay in expenditures and the difficulty in accurately estimating the final per diem expense, it is hard to monitor TEMDUINS legal viability.

The primary means of monitoring TEMDUINS is through the number of personnel trained, a process measure. Even this is an unreliable measure, however, as the number can be affected if TEMDUINS-supported PCS orders are slowed or stopped. This situation has occurred in the past when Military Pay, Navy (MPN) funds have been insufficient for the planned number of PCS moves. As PCS orders provide the transportation for TEMDUINS, any change to PCS orders directly impacts TEMDUINS execution.

D. SUMMARY

TEMDUINS program management currently embraces a portion of each aspect of the management control theory defined above. Programming is done through the POM process but Anthony and Young's second cycle, long range planning, is not evident [Ref. 44:p. 15]. Also, the Navy's mid-level management is not

especially involved with TEMDUINS programming as the theory would expect [Ref. 43:p. 424]. This is in direct contrast to the TDY en route programming done by the other services where field personnel input is solicited to take advantage of their operational knowledge and personal experience in establishing the program's long range needs.

Not all facets of the budgeting management control theory are applicable to TEMDUINS. While it is crucial to involve lower managers in building most budgets to gain their commitment to attain the defined objectives, commitment from the TEMDUINS "lower managers" (i.e., Pers-02's TEMDUINS Budget Analyst, Per-463 and the Pers-4 assignment personnel) will not ensure budget success. This is because training requirements are driven by upper management in the form of the Navy Warfare Coordinators (OP-02, OP-03 and OP-05). Such a situation makes it difficult to use the budget as a bilateral commitment between the TEMDUINS Program Manager (Pers-203) and their fiscal superior, the TEMDUINS Resource Sponsor (OP-120), as Anthony and Young suggest [Ref. 44:p. 90].

Anthony has suggested that during execution, the budget is only a guide for the manager and deviations should be made as conditions warrant [Ref. 40:p. 93]. Regrettably, Pers-02 and Pers-463 haven't much flexibility in making deviations for TEMDUINS' execution as they have little control over which courses are funded by the detailers for which personnel assignments. Without an explicit plan for total Navy TEMDUINS

training requirements, they cannot effect quick adjustments to expenditures based on changes in the Navy's operational commitments. While the TEMDUINS Program Manager does provide execution guidance to assist Pers-02 and Pers-463, the direction is rather broad in scope. This again is due to the lack of a precise program plan, delineating what training will be needed on a priority basis.

Reports are used by Pers-02 and Pers-463 to track obligations and expenditures to prevent fiscal overruns and assure that available funding will carry the TEMDUINS program through the fiscal year. While it is possible then to monitor efficient use of funds, the Navy cannot be certain that TEMDUINS funds have been used effectively. This is due to the intangibility of the program's outputs, a problem common to most nonprofit organizations [Ref. 45: 111-112]. The main measure used now in evaluating TEMDUINS' success for any given year is a performance measure: the number of personnel who received per diem under the program in a fiscal year. To better monitor the program's effectiveness, it might be helpful to adopt a surrogate results measure such as the number of personnel who earned an NEC or similar accreditation in a fiscal year.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The purpose of this thesis was to examine how the Navy plans, programs and budgets for its training conducted en route between permanent duty stations through its TEMDUINS program. The DoD's current fiscal environment was discussed with emphasis placed on the Military Personnel and Operations and Maintenance appropriations. This data underscored the need to attain the maximum economy during an era of diminishing defense budgets. The roles and responsibilities of the Navy offices impacting the TEMDUINS program were identified and discussed. For comparative purposes, similar Army, Air Force and Marine Corps training-en-route programs were researched. Finally, TEMDUINS programming, budgeting, execution and evaluation techniques were contrasted with operating budget activity management control systems as an objective means of performance measurement. This chapter will correlate the above information in a final assessment of the TEMDUINS program fiscal management.

Before addressing the conclusions reached, it would be useful to review the research questions for this thesis. The primary focus of this thesis was to examine how the Navy and its sister services plan, program, budget and execute funding

to support en route TDY training. Additional questions to be addressed were:

- What factors relating to en route TDY training are common to all four services and which are unique?
- How do the respective services program for this type of training in the POM process?
- How are new en route TDY training requirements (i.e., those related to an equipment modification or acquisition) programmed and funded by the services?
- To what level does each service delegate budgeting for this category of training?
- Are specialized computer or management control systems used by the services in planning for en route TDY training?
- What controls are exercised by the services to maximize the use of funds during the execution year?
- What are the services' respective management policies towards this type of training?

The following sections consolidate the answers found to these questions.

1. Lessons the Navy Can Learn From the Other Services

There are four major lessons the Navy can learn from how the other services manage their TDY-en-route training. The first lesson is that a macro-level data base appears to be the most effective way to predict training needs and manage the program. Specific examples for the Navy to consider are the Army's ATRRS and Air Force's TMS systems. Discussions with Army staff members indicates there is a possibility for

other DoD components to "buy into" the ATRRS system [Ref. 23]. This presents a distinct advantage to the Navy as it would have the opportunity to use a proven, functioning system without paying for development or start-up costs.

Second, only the Navy has its assignment personnel manage training allotment based on available training (TEMDUINS) dollars. The other three services "buy" training quotas with the TDY-en-route resources, and these quotas are passed to the assignment personnel for use in writing PCS orders. Execution year dollar changes are then made by adjusting the number of quotas a detailer has access to. This technique seems to be a more effective budgeting tool as the TDY-en-route budgeting office retains stronger control of the dollars and can impact funding increases or decreases quickly. Another advantage to this approach is that it frees the detailers from the administrative burden of managing a "checkbook" for training dollars.

Third, the other three services have some type of training prioritization in place to maximize the use of training funds and ensure that training deemed most critical takes precedence. The Army and Marine Corps training priorities are largely driven by mission needs, and the Air Force gives first priority to Air Force-directed and contractor-provided training. The Navy, however, has yet to have an agreement reached between the Program Warfare Coordinators and OP-01 for any type training prioritization.

Considering the Navy's decreasing budget profile, it will become increasingly important for the Navy to identify a ranking process for training requirements to ensure the most critical needs are met first.

Fourth, the other services involve their field activities in identifying current and upcoming training requirements. This feedback, after headquarters review and consolidation, becomes the basis for programming and budgeting their respective training en route programs. There is one disadvantage is this process in that some "gold-plating" (requesting non-essential training) has occurred which falsely inflates the projected requirements. But, the other services seem to find that this disadvantage is more than offset by the field-level input of what training is actually best for the mission vice what a higher-level command might perceive is required. Additional savings have been found where subordinate activities have suggested the reduction or deletion of courses. The Navy has yet to adopt this approach as training requirements are still developed at OPNAV in Washington.

2. Similarities and Differences Between the Services' Programs

a. Common Factors

The comparison between the services' training en route programs has revealed several similarities. Common to

all of them is that training requirements typically exceed the resources available. This situation was noted irrespective of how the training requirements were identified, either by the headquarters or field activities. Even with exacting review processes, such as those used by the Army and Air Force, training needs still were greater that the designated funding. This phenomenon emphasizes the need for quota prioritization to guarantee that the most critical needs are met.

The four services all appear to experience some difficulty in overestimating training requirements. While the Navy's estimates are based on available historical data and information identified in the NTPs, the lack of a training data base precludes verification of the estimates. The Navy's sister services have recognized this problem and have their respective training requirements development systems (Army's Structure Manning Decision Review (SMDR), the Air Force's Training Management System (TMS) and the Marine Corps Headquarter's Training Input Plan (TIP)) serve in part as a screening process to filter out extraneous training requests.

The military services also must modify their training en route programs to reflect budget reductions. The Army, Air Force and Marine Corps translate the dollar loss into quotas lost and adjust the number of quotas available to the assignment personnel. The Navy implements TEMDUINS cuts by directly reducing the dollars available to the detailers.

b. Differences

The Army's ATRRS system is unique compared to those used by the other services. An extremely powerful and interactive data base, it encompasses several management functions in one system: programming, planning, execution and individual training records for Army personnel. ATRRS and Army training also have a high level of visibility relative to other Army programs, a visibility that seems even higher compared to the other service's TDY en route programs. The Army's perceived importance of TDY en route training is evidenced by conflict resolution taken to the "Council of Colonels," with subsequent evaluation by the General Officer Review.

The Air Force has explicitly defined its training priorities and made them policy through Air Force Regulation 50-22 [Ref. 26] which lends stability to their program, budget and execution plans for TDY-to-School. The Marines and Air Force go through an iterative process to determine the training priority for a given year. Again, the Navy assigns no priorities to its training program.

The Air Force has undertaken an initiative not yet attempted by the other services in that training quotas and dollars available after prioritized needs are met are apportioned out to the MAJCOMS. Further, the MAJCOMS are allowed to directly fund desired TDY-en-route training requirements in excess of their allotted quotas. This is an

interesting endeavor as it both maximizes the use of available training assets but also removes TDY en route funds from the economic public good category as the MAJCOM's must now pay for any additional training they desire.

The Marines have found a way to employ existing government accounting systems as a control mechanism for their TDY en route program. Course-unique accounting data identified in the TQM (Training Quota Memorandum) allows the Corps to use standard accounting reports to monitor the obligation and expenditure of their training dollars.

3. TDY-en-Route and the POM Process

The Army takes the data collected through its SMDR as the basis for the POM submission. The Marine Corps operates in a similar manner where the TIP is also their training program's POM foundation. The Air Force employs its TDY-to-School Programming Plan (TSPP) as both the core of its training requirements definition process and its program's POM. The Navy, on the other hand, incorporates training-related information gleaned from the NTPs into its TEMDUINS' POM submission. Compared to the other services, this is a far less accurate method. Only those NTPs seen by the TEMDUINS Program Manager can be reflected in the POM and even this is contingent upon when the NTPs are received in the POM process.

4. Delegation of Budget Authority

All four services currently hold budget authority for their TDY en route programs at the headquarters level. The common reason for this decision appears to be increased management control to prevent any legal violation relating to overobligation or misuse of appropriated funds. The Air Force, however, is considering decentralizing their TDY-to-School program, passing all training funds and responsibilities down to the MAJCOMs [Ref. 35].

5. Computer and Management Control Systems

The Army and Air Force employ extremely large and complex computer database systems (ATRRS and TMS, respectively) to manage their TDY en route programs. The Marine Corps TIP, although not automated, serves a similar purpose in defining Marine Corps training needs. The Navy presently has no formal management control or computer support system for TEMDUINS, relying instead on close interaction between the program's Resource Sponsor, Program Manager, Claimant and Execution Office.

6. Execution Year Controls

During the budget execution year, TEMDUINS obligations and expenditures are monitored by the program's Financial Execution Branch (Pers-463) and the BUPERS Comptroller (Pers-02) on a monthly basis early in the fiscal year and weekly as the year draws to a close or funding is limited. The actual

execution data is compared to monthly estimates developed during the budget process. Deviations are managed on an exception basis.

The Marine Corps manages the execution year of their respective program in a similar manner. Government accounting reports vice internal reports are used to analyze actual obligations and expenditures. This capability is due to the Corps adaption of course-unique accounting data.

The Army also monitors execution year actions, making most of its adjustments through the TRAP (Training Requirements Arbitration Panel). The TRAP reviews transactions such as training increases, reductions, trades and execution problems. The goal is to reconcile differences by making trade offs or absorbing shortages.

During the execution year, the Air Force first ensures its top two training priorities, Air Force-directed and contractor-provided training, are met. The remaining training requirements are decremented to offset any shortages that exist in satisfying these priorities. Should the Air Force MAJCOMs have unfunded training requirements, they are permitted to provide funding specific for that training.

7. Management Policies

As mentioned previously, all four services presently have adopted a centralized management style for their

respective TDY en route programs. Yet beyond that, some services have defined additional training management policies.

The Army has established that training is the number one priority for their service. The Air Force's stated policy is that Air Force-directed and contractor-provided instruction will take precedence over all other requirements. The Marine Corps and Navy both strongly support training but have not promulgated any additional management objectives.

B. RECOMMENDATIONS

Based upon the above conclusions, the following are both immediate and long-term recommendations for the Navy to consider for the TEMDUINS program.

1. Short-Term Recommendations

The first recommendation the Navy could quickly adopt is prioritizing its training requirements as the other services do. Prioritization should first be done for the budget execution year and then, as a long-term goal, extended through all POM years. Without the ability to rank requirements, it will be difficult for the Navy to ensure that the most essential training is provided before other requirements in a fiscal year. This will become an increasingly critical factor as the current defense budget shows the Navy's funding continuing to decrease.

Second, the Navy should examine the adoption of a system similar to that used by the Marine Corps where the

accounting data is unique for each course funded. Due to the large number and variety of courses attended by naval personnel, this concept would have to be slightly adjusted. For example, the accounting data for enlisted personnel could be adjusted by one or two characters to differentiate between aviation, surface warfare, submarine or general shore duty training. Similar changes could be made for officer accounting data. This would allow the Navy to quickly monitor TEMDUINS obligations and expenditures without the need for the development of additional reports by using standard government accounting reports.

2. Long-Term Recommendations

The Navy's first long term goal for TEMDUINS should be to establish a computerized database system to aid in the management, programming, budgeting and execution of the program. While Pers-02 and Pers-463 do monitor TEMDUINS closely and track the available historical data, these efforts simply do not compare with the extensive computerized systems used by the Army and Air Force. The automated systems the other services employ have several distinct advantages; not only is background data readily available for analysis, but the process used to automate the information serves as a control measure for training requests submitted. Whatever system the Navy adopts, it must be flexible so as to capture

standard training plus atypical situations such as homeport training and service member cross-training.

Research has found that some equipment and hardware modifications, especially those giving the contractor flexibility in acquisition or design, are not fully reflected in the respective NTP. While the Navy's training facilities may recognize the anomalies and lengthen or establish a new school, these adjustments directly affect TEMDUINS' per diem requirements. If the information is not in the NTP, the TEMDUINS Program Manager has no knowledge that additional funding requirements exist.

It is recommended that the Navy Warfare Coordinators and/or the cognizant Acquisition Offices periodically correlate the current or proposed NTP with the respective contract to identify areas which could result in additional training requirements already recognized in the NTP. Specific attention should be given to allowances for Government Furnished Equipment or Form-Fit-Function contracts.

Next, consideration should be given to the impact NTP training requirements have on the TEMDUINS program. Several Navy offices directly affect TEMDUINS' funding through the NTP process. Yet, there is no motivation for these parties to ensure that their requirements are identified in the TEMDUINS POM submission and are funded. The non-availability of funds has yet to be a deterrent to the approval of an NTP, with the implication being that somehow the budget process "will

provide." Instead, NTP requirements which have not been funded through the budget or POM process should be returned to the originator, either for funding support or reconsideration. Funding support could be direct, in the form of transferring dollars into the TEMDUINS account to fund the requirement, or indirect, by aiding the TEMDUINS Resource Sponsor and Program Manager in a funding campaign to NAVCOMPT.

As a continuation of the above recommendation, it is also suggested that NAVCOMPT reconsider its refusal to allow the Warfare Sponsors to contribute to the TEMDUINS program to support training requirements which exceed the program's available resources. While OP-01 is responsible for the TEMDUINS program, the current system is not economically sound as the Warfare Coordinators may identify requirements which are unrealistic given the Navy's current fiscal environment. One possibility is to do major funding transfers during the POM, while another is to deal with the additional training requirements on a case-by-case basis. Following the Air Force's example, the Navy could allow the Navy Warfare Coordinators to individually fund excess training requirements. Research noted that the Warfare Coordinators already do this unofficially. Formalizing the process as the Air Force does would still allow the training requirements to be monitored to build the TEMDUINS data base and support future year projections.

Unlike the Army and Air Force, the Navy does not have an interactive process to identify training requirements perceived at all levels of the Navy. Presently, the Navy's primary means of isolating requirements is through the NTP process. Even this communication is only "one way" as the Warfare Coordinators provide input to OP-01 but receive no feedback.

Consideration should be given to implementing an interactive training forum in the Navy as the means to building TEMDUINS requirements. Such a program would have several benefits. It would reduce infighting between OPNAV offices and refocus efforts on a common goal of service to the fleet. Also, actual "hands on" users' contributions to the process could result in more relevant training being provided and reveal courses for deletion, streamlining or modification. While this is ambitious, a beginning could be made on a smaller scale with quarterly meetings between the Warfare Coordinators and the TEMDUINS team. The next evolutionary step could be to include the 26 Navy claimants.

There is now no way to program TEMDUINS training costs as a portion of a major acquisition program, due to the difference in appropriations. Even now when the NTP for a major project is submitted to Pers-203 and subsequently incorporated and funded in the POM, the separation between the acquisition and the TEMDUINS funding weakens the link. The resulting lack of viability makes it difficult to show the

impact TEMDUINS budget cuts may have on significant future requirements.

Unfortunately, there is no easy solution to this problem. Current laws prohibit supporting routine training with other than O&M funds. If provisions were made for this type of training under acquisition or other appropriations, administration of the TEMDUINS program would become a nightmare. If the funds were originally plugged into the acquisition funds and then reprogrammed into TEMDUINS as O&M, things would work fine until the acquisition project slipped fiscal years. The result would be that the associated O&M funds would expire for obligation before training could be provided. The best option is to develop a system like the Army or Air Force where quotas are individually "bought" and requirements can be closely tracked.

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