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Expenditure tracking as a performance measurement system

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MBA PROFESSIONAL REPORT

Expenditure Tracking as a Performance Measurement System

By: Coleman Ruiz, and
          Jason Klingenberg
          December 2004

Advisors: Don Summers,
            Phil Candreva,
            Mary Malina

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   Operating as a reorganized command resulting from a large Naval Special Warfare (NSW) community-wide reorganization, called NSW-21, Naval Special Warfare Group One (NSWG-1) identified a significant budgeting challenge.   In late calendar year 2001, while NSWG-1 was working out the initial financial ramifications of its new organization, the Global War on Terror (GWOT) began.   With the GWOT came extraordinarily large supplemental appropriations. These appropriations helped subsidize some of NSWG-1's new funding needs.   Thus, NSWG-1 recognized it might face a future funding deficit if, and when, supplemental appropriations are discontinued.

   As a result, the NSWG-1 leadership formed a budget team determining how to more closely scrutinize the normal year budget to find discretionary funding for emergent needs. They executed improvements to NSWG-1's expenditure tracking system to capture more specific expenditure data upon which to base future spending decisions, and to establish a new baseline of normal, post transition needs. The purpose of this project is to document and analyze the improvements NSWG-1 made to its expenditure tracking system and how it serves as a performance measurement system.

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**EXPENDITURE TRACKING AS A
PERFORMANCE MEASUREMENT SYSTEM**

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Submitted in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

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EXPENDITURE TRACKING AS A
PERFORMANCE MEASUREMENT SYSTEM

ABSTRACT

In May 2003, after operating as a newly reorganized command for approximately two years, Naval Special Warfare Group One (NSWG-1) identified a significant budgeting challenge. Its new command structure resulted from a larger Naval Special Warfare (NSW) community-wide reorganization, called NSW-21. In late calendar year 2001, while NSWG-1 was working out the initial financial ramifications of its new organization, the Global War on Terror (GWOT) began. With the GWOT came extraordinarily large supplemental appropriations. These appropriations helped subsidize some of NSWG-1's new funding needs. Thus, NSWG-1 recognized it might face a future funding deficit if, and when, supplemental appropriations are discontinued.

As a result, the NSWG-1 leadership formed a budget team determining how to more closely scrutinize the normal year budget to find discretionary funding for emergent needs. They executed improvements to NSWG-1's expenditure tracking system to capture more specific expenditure data upon which to base future spending decisions, and to establish a new baseline of normal, post transition needs. The purpose of this project is to document and analyze the improvements NSWG-1 made to its expenditure tracking system and how it serves as a performance measurement system.

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I. INTRODUCTION

A. BACKGROUND

In May 2003, after a budget review, CDR Curtis, Chief Staff Officer (CSO) of NSWG-1 began analyzing the budget in order to find currently available discretionary funds to use for emergent needs. NSWG-1 leadership already knew they had increasing funding needs that accompanied their recent reorganization. However, it was not clear to department heads how much it cost to fund all their requirements. Thus, leadership did not know exactly how much it cost to operate the command. The GWOT and its subsequent supplemental funding also contributed to NSWG-1's challenge.

Following some initial assessment, NSWG-1 leaders discovered they were using overly broad categories for tracking expenditures. They only tracked spending by two broad categories: repairables and consumables. These categories did not provide enough information for leaders to make informed spending decisions. They needed more detailed data.

The CSO, comptroller, and the Logistic Support Unit (LOGSU) Commanding Officer met for an initial discussion following their budget review. They, with other financial personnel, comprised a budget team who identified how to address the current issue. They decided to implement changes in NSWG-1's expenditure tracking databases to capture more specific information. Their intent was to use the information to make more informed day-to-day spending decisions, and to paint a clear picture of their new, post NSW-21 needs. Budget execution continues as usual for department heads. Management simply accounts for transactions more precisely so the data they collect is more useful.

The purpose of our report is to document and analyze the improvements NSWG-1 made to its expenditure tracking system and how the new system serves as a performance measurement system. After first presenting NSWG-1's challenge, and the action they took, we describe the theory of performance measurement systems and how they assist managers. We then match NSWG-1's actions to the theory, explaining why their current

expenditure tracking systems provides them more useful, day-to-day decision making information. Finally, we present one recommendation for using current information as a leading indicator for future spending, and as justification for future budget requests.

B.   THE MODEL

The model we applied to NSWG-1's budget expenditure tracking system is Robert Simons' Cybernetic Feedback Model (Simons, 2000, p. 61) as a performance measurement system. The model describes how managers use performance information, compared against benchmarks, to develop feedback as a signal to either maintain an organization's strategy or alter its patterns of behavior. Their expenditure tracking system is a basic application of the model, and provides the NSWG-1 CSO with information useful for spending decisions.

NSWG-1 leaders decided they wanted more detailed information about where department heads were spending money. The feedback they acquire from their spending data becomes a tool to maintain or adjust resource allocation as necessary. NSWG-1's changes to the tracking system will provide more current, useful decision making information, and help establish a new, post NSW-21 budget baseline.

C.   ORGANIZATION

Following the introduction, our analysis proceeds with a brief history of the Naval Special Warfare community, a description of the changes NSWG-1 made to its expenditure tracking system, an explanation of what performance measurement systems do, an analysis of the expenditure tracking system as a performance measurement system, and a recommendation as to how NSWG-1 can plan for the future.

Chapter II is a brief history of Naval Special Warfare. We want to arm the reader with an understanding of the military background of the players involved, and the environment in which they operate. The history is also necessary to define the events that led to NSWG-1's budget challenges. Specifically, it is essential that we explain NSW-21, the community-wide reorganization that impacted NSWG-1 structure, and how it

contributed to the problem. A major piece of NSW-21 is the commissioning of a new command, the Logistics Support Unit (LOGSU). The new command took many administrative functions away from the operational Sea, Air, Land (SEAL) teams and centralized them under one roof. This changed the way NSWG-1 does business. The history provides the reader with background information about command relationships and the events that led to NSWG-1's current situation.

Chapter III explains NSWG-1's challenge and what the leadership did to address the issue. We focus on the changes they made to the expenditure tracking system; we will discuss supplemental appropriations and present NSWG-1's post NSW-21 baseline budget problem. This section also provides detail about NSWG-1's previous tracking system and how they track expenditures today. We discuss how funds flow down to department heads and are subsequently reported back up to management. We conclude with a step-by-step explanation of the changes NSWG-1 made and how they provide more detailed information.

Chapter IV introduces performance measurement system theory. We present a thorough description of the academic model, and how it helps managers. We also explain the Cybernetic Feedback Model and how it works as a performance measurement system. Operational military units are very focused on readiness and mission accomplishment. Performance measurement systems aid managers in balancing a few other challenges, however. There are long and short-term goals to balance, various stakeholders to consider, and not enough management time in a day to address every pressing issue. We discuss performance measurement's role in all three situations. The chapter also addresses choosing the proper information to control and how managers should use the information they gather.

Chapter V applies Chapter IV's theory to the data discussed in Chapter III. We discuss NSWG-1's expenditure tracking as a performance measurement system. NSWG-1's change to its expenditure tracking system was motivated to gather more clarity on current spending. Leadership wanted more detailed information for making current and future spending decisions. Additionally, they want to track current year spending to approximate more closely an accurate baseline in the post NSW-21 organization. Thus,

we detail the issue of supplemental appropriations subsidizing costs in the new organization. We then match the expenditure tracking system with performance measurement system theory and describe how it serves as a management tool for NSWG-1's staff.

Chapter VI concludes the analysis. We will provide a recommendation on how NSWG-1 might use their new, more detailed information to project future spending and justify future plus-ups to their annual budget. Permanent plus-ups will become essential to them when supplemental funding ends.

We intend for this analysis to be primarily documentary in nature describing what changes NSWG-1 made to its expenditure tracking system, how the changes help them now, and what they mean for the future. The NSWG-1 CSO asked us to look at their situation, define in academic terms what they did, and provide any recommendations for improvement. We realized, not immediately however, that NSWG-1 essentially made adjustments to an existing performance measurement system. We focus on this topic only. There are elements of activity based costing, communicating strategy, organizational theory, cost management, and budget formulation buried in the paper. However, we leave them as areas for further study since NSWG-1 was not specifically interested in those topics as they relate to the analysis.

II. A NAVAL SPECIAL WARFARE BACKGROUND: HISTORY AND ORGANIZATION

In early 2000, Naval Special Warfare (NSW) recognized that the world operational environment was changing. To continue supporting America's interests abroad, they needed to evolve with the changes. So NSW initiated a reorganization that fundamentally changed how the community operates. Their transformation is the most ambitious reorganization in the last 20 years.

Explaining how the community used to be organized and the changes they made is essential to our analysis. NSW's organizational changes are important to this project since we believe they contributed to NSWG-1's expenditure tracking problem. To fully understand NSWG-1's expenditure tracking problem, we must first provide a background of the NSW community, how they are organized, and how things changed.

A.   THE NAVAL SPECIAL WARFARE COMMUNITY:
1.   A Brief History

NSW traces its ancestry to World War II (WWII). The first "frogmen"-a term synonymous with today's SEAL commandos- were the Scouts and Raiders, Navy Combat Demolition Units, and Underwater Demolition Teams (UDTs). During WWII, Navy commandos conducted operations in the South Pacific, Europe, North Africa and China. Their primary mission was supporting US Marine Corps (USMC) and allied amphibious landing units. The Scouts and Raiders first saw combat in November 1942 during Operation Torch, the first allied landings in Europe on the North African coast. For the duration of WWII, Navy frogmen demolished shallow water obstacles, cleared beach lanes, and prepared beachheads days before USMC forces arrived for invasions. During the Korean War, UDTs primarily conducted demolition activities on railroad tunnels and bridges along the Korean coast.

In January 1962, at President Kennedy's request for an unconventional warfare capability, the US Navy established SEAL Teams ONE and TWO in Coronado, CA and

Little Creek, VA, respectively (Dockery, 2002, p. 33). The SEAL mission essentially merged with the original UDTs. Rather than focusing solely on underwater demolition, SEALs were commissioned to conduct clandestine operations in maritime and riverine environments. The early SEAL Teams were christened in Vietnam where they conducted hundreds of combat missions, mostly riverine in nature.

SEAL Teams ONE and TWO were the beginning of today's NSW forces. On May 1, 1983, all UDTs were redesignated as SEAL Teams or SEAL Delivery Vehicle Teams (SDVs), marking the first significant reorganization for modern day NSW. Since 1983, NSW units have operated in conflicts such as Grenada, Panama, DESERT SHIELD/DESERT STORM, and are currently operating in Operations ENDURING FREEDOM and IRAQI FREEDOM.

2.   The NSW Mission

NSW's mission is to provide the Combatant Commanders (CoComs) of the United States' four regional areas of interest with highly trained and equipped SEAL and SDV forces, and Special Boat Unit (SBU) detachments. NSW units train to successfully conduct maritime special operations in all wartime and contingency operations. NSW, and all Special Operations Forces (SOF), focus on eight broad missions: direct action, special reconnaissance, unconventional warfare, counter-terrorism, counter-drug, counter-proliferation, foreign internal defense, and peacekeeping. Performing these eight missions requires certain skill sets, qualifications, and training that every NSW unit must complete to deploy.

The U.S. Navy, including NSW, uses a formal training requirements list designed to ensure individual units acquire the proper skills to undertake the missions with which they are charged. A sample of requirements for a typical SEAL platoon are: Satellite communications (SATCOM)/Very High Frequency (VHF) communications, digital imagery transfer, small boat navigation, combat swimmer (diving), large and small arms weapons training, visit-board-search and seizure (VBSS), individual marksmanship, land navigation, basic combat medical training, ambushes, and helicopter assault. Some skill sets, such as marksmanship, are individual. However, many training events require

various skill sets and a combination of different NSW units. NSW personnel work in this dynamic and challenging environment everyday.

B.   THE NSW ORGANIZATION:

1.   NSW Prior to the NSW-21 Transformation

We define the old NSW organization as that which existed from May 1, 1983 to February 2002. In May 1983, the last UDTs were decommissioned and reorganized as SEAL Teams. In February 2002, the proverbial curtain fell on the old structure when NSW began operating as a reorganized force following the NSW-21 initiative (McCray, 2001, p.49).

Within the NSW hierarchy, Naval Special Warfare Command (NAVSPECWARCOM), or "WARCOM," is the apex of the community. Prior to NSW-21, there were six major commands subordinate to WARCOM, all commanded by Navy Captains (O-6): Naval Special Warfare Group ONE (NSWG-1), commonly known as "Group," Naval Special Warfare Group TWO (NSWG-2), Special Boat Squadron ONE (CSBR-1), Special Boat Squadron TWO (CSBR-2), the Naval Special Warfare Development Group (DEVGRU), and the Naval Special Warfare Center (NSWC). Subordinate to each Captain are his operational and support units. Figure 1 shows an organizational chart of NSW's command structure prior to NSW-21.

```
                        NAVSPECWARCOM
                        Coronado, CA

NSWG ONE      NSWG TWO    SPECIAL BOAT     SPECIAL BOAT      NSW           NSW CENTER
(NSWG-1)    Little Creek, VA.  SQUADRON ONE   SQUADRON TWO   DEVELOPMENT    Coronado, CA
Coronado, CA              Coronado, CA     Little Creek, VA   GROUP
                                                            Dam Neck, VA

SEAL Team ONE    SEAL Team TWO                                             Basic Underwater
                                                                          Demolition/SEAL
SEAL Team        SEAL Team FOUR                                             Training
THREE                                                                       (BUD/S)

                 SEAL Team EIGHT    Special Boat      Special Boat
SEAL Team                            Unit 12          Unit 20            SEAL Tactical
FIVE             SDV TWO             Coronado, CA     Little Creek, VA    Training

SDV Team ONE                         Patrol Crafts                        Advanced
Pearl Harbor, HI  NSW Unit TWO       3,4,7,8          Special Boat        Training
                  Germany                             Unit 22
NSW Unit ONE                                          Stennis, MS         SDV Operator
(NSWU-1)          NSW Unit FOUR                                           Training
Guam              Puerto Rico                         Patrol Crafts       Panama City, FL
                                                      1,2,5,6,
NSW Unit THREE                                        and 9-13
(NSWU-3)          NSW Unit TEN                                            NSW Center Det
Bahrain           Spain                                                   Little Creek, VA

NSW Det Kodiak                                                            NSW Parachute
Kodiak, AK                                                                Team
                                                                         "Leap Frogs"
```

Figure 1. NSW Organizational Chart Prior to NSW 21

The scope of this analysis resides only within NSWG-1's command boundaries so we will concentrate primarily on their organization. Additionally, we exclude NSWU-1 (Guam), NSWU-3 (Bahrain), Det Kodiak, and SDV-1 from the analysis since they are not pertinent to the problem. From this point forward, readers should think in terms of NSWG-1 (Group) and the three SEAL Teams subordinate to its command. Figure 2 shows the NSWG-1 command structure prior to NSW-21 which we discuss in the following section.

```
┌─────────────────────┐      ┌──────────────┐      ┌──────────────────┐
│ COMMAND MASTER CHIEF│──────│   NSWG-1     │──────│   COMPTROLLER    │
└─────────────────────┘      │  COMMODORE   │      │  MS.GAIL WELCH   │
                             └──────────────┘      └──────────────────┘
                                    │
                             ┌──────────────────┐
                             │ CHIEF STAFF      │
                             │ OFFICER (CSO)    │
                             └──────────────────┘
                                    │
┌──────────────┐             ┌──────────────┐
│ SEAL TEAM    │             │     N1       │
│ ONE          │─────────────│    ADMIN     │
└──────────────┘             └──────────────┘
                             ┌──────────────┐      ┌──────────────┐
┌──────────────┐             │     N2       │──────│     N8       │
│ SEAL TEAM    │─────────────│    INTEL     │      │    RDT&E     │
│ THREE        │             └──────────────┘      └──────────────┘
└──────────────┘             ┌──────────────┐      ┌──────────────────────┐
                             │     N3       │      │ SPECIAL ASSISTANTS:  │
┌──────────────┐             │    OPS       │      │                      │
│ SEAL TEAM    │─────────────└──────────────┘      │ JAG                  │
│ FIVE         │             ┌──────────────┐      │ CMAA                 │
└──────────────┘             │     N4       │      │ CHAPLAIN             │
                             │   SUPPLY     │      │ RESERVE LIASION      │
                             └──────────────┘      │ CAREER COUNSELOR     │
                             ┌──────────────┐      └──────────────────────┘
                             │     N6       │
                             │   COMMS      │
                             │   IT         │
                             └──────────────┘
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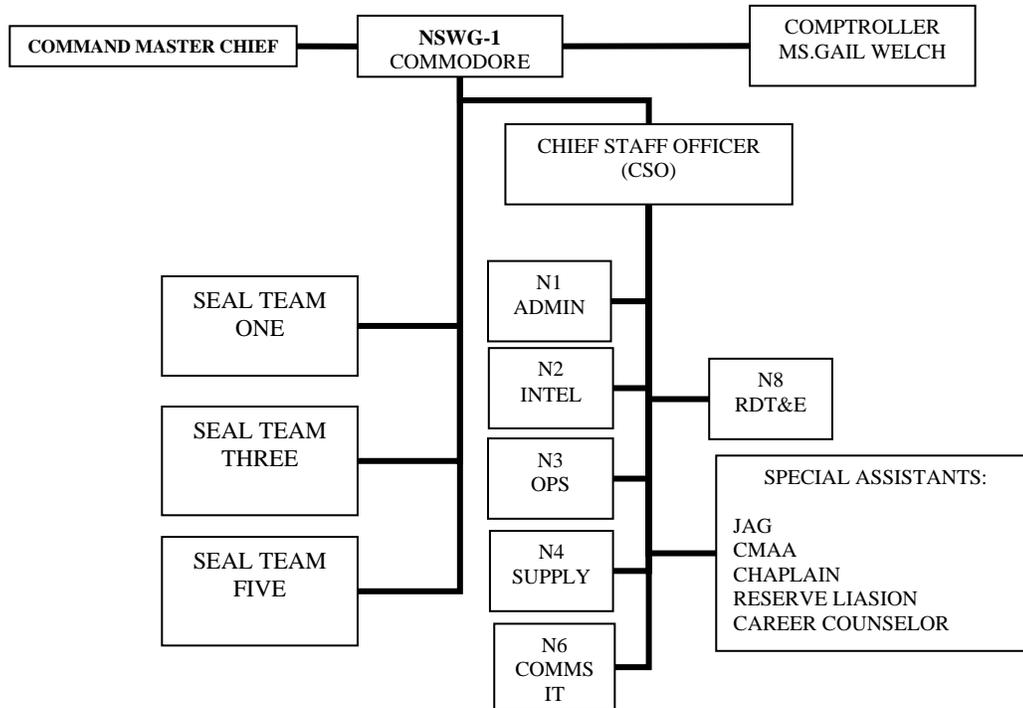
Figure 2. NSWG-1 Prior to NSW 21

2. NSWG-1 (Group) and the SEAL Teams

NSWG-1's mission is to ensure SEAL Teams are properly manned, trained, equipped and ready to conduct special operations in the Pacific Command (PACOM) and Central Command (CENTCOM) theaters. Additionally, NSWG-1 can deploy as a NSW Task Group during wartime. As a practical matter, Group's primary responsibility was providing funding, limited training and logistical support to the Teams. The Teams executed the majority of their own training, equipping, maintenance, and logistics.

The Teams receive nearly all their financial resources from NSWG-1, so when the Teams needed money they received it from the Group Comptroller. The limited training that Group provided was in certifying all deploying platoons. Platoons earned deployment certification through successfully completing an Operational Readiness Exercise (ORE). Senior enlisted SEALs permanently stationed at Group served as independent evaluators for these pass/fail exercises. In terms of logistical support, Group focused mainly on ensuring that deployed platoons had aircraft to ferry them and their

equipment to and from theater. Most other activities were the Teams' responsibility. Commanding Officers (COs) had considerable latitude in how they trained and equipped their platoons. The fact that each Team received its funding from Group and independently equipped its own platoons is important in this analysis.

As expected, the Team COs had the final say on what equipment their platoons used. However, they had limited discretion on purchasing high value items. Weapons, dive rigs, and communications gear is standardized and expensive so it normally requires approval from either the Navy or the Special Operations Command (USSOCOM) before being issued to the Teams. Nevertheless, most personal gear (backpacks, load bearing equipment, holsters, thermal protection, dive masks, knives, escape and recovery kits, maintenance equipment, etc.) was selected, purchased, and issued independently by each Team. Additionally, each Team was responsible for replacing ruined and old operational gear.

The Team's autonomy prior to NSW-21 came with an administrative cost. In addition to equipping the platoons, the Team was also responsible for maintaining the command's gear: parachutes, boats and motors, weapons systems, and vehicles. All of this required a rather robust support staff. In addition to operational platoons, the Team consisted of nine major support departments: diving, supply, ordnance, first lieutenant (boat/motor maintenance), air operations, communications/IT, medical, intelligence, and administration.

Support personnel responsible for maintaining, inventorying, and issuing equipment constituted at least one-third of a Team's personnel. Thus, headquarters personnel (CO, XO, and Ops department) spent much of their time coordinating, planning, and enforcing administrative policies. This non-operational focus began to burden NSW war fighting units and pose serious challenges to the community. For example, the CO of the command did not deploy since the majority of his platoons were all in the U.S. at any given time. This relegated CO's to essentially commanding training units instead of deploying units.

Did operational units need to be doing so much support work? How much capability was sacrificed because Teams had to dedicate so much of their attention to administrative duties? These are the types of questions NSW asked themselves when they initiated the NSW-21 transformational review.

3. NSW-21

The NSW-21 transformation is the most significant reorganization to date for NSW. Rear Admiral Eric T. Olson, WARCOM commander during the transition, said "NSW-21 is not a plan for reorganization, [as much as] it is a collection of five associated initiatives that, collectively, constitute a transformation that transcends reorganization" (McCray, 2001, p. 50). These five initiatives are: 1) the development of the NSW squadron, 2) the reorganization of the community's architecture, 3) the realignment of training programs, 4) the optimization of command and control relationships for deployed forces, and 5) the development of a NSW C4ISR (Command, Control, Communication, Computers, Intelligence, Surveillance, and Reconnaissance) infrastructure. NSW-21 provides warfighting units the freedom to focus on operational requirements instead of administration, standardizes training, places senior leadership in theater, and centralizes logistics and support. Our focus is on what NSW did to relieve warfighting units of some administrative burden and centralize logistics and support.

Prior to NSW-21, the Teams were responsible for their own training. Although training is obviously important, it required a significant amount of non-deployable personnel working in the training department at a Team. With only two platoons deployed at one time, most of the Team's focus was on training the six platoons that were in CONUS. Consequently, the SEAL Team, NSW's primary warfighting unit, focused more on training than on theater operations.

To remove this administrative burden from the Team, the responsibility for training SEAL platoons was sent to NSWG-1 in the form of a new department: Training Detachment (TraDet). TraDet represents the first major structural difference created by NSW-21. The Teams are no longer responsible for platoon-level training. Group, through TraDet, ensures that every platoon on the West Coast is fulfilling their training requirements.

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NSW-21 also centralized logistics and support for the SEAL Teams. As we mentioned above, prior to NSW-21 each Team was largely responsible for equipping its own platoons. The Teams also fielded major maintenance departments and pools of vehicles. Finally, each Team booked and monitored its own CONUS flights for training and deployment. The Teams were performing a significant amount of logistical activities. Thus, NSW created a new command under NSWG-1: the Logistics and Support Unit (LOGSU). Figure 3 shows NSWG-1's organizational structure after the NSW-21 reorganization.
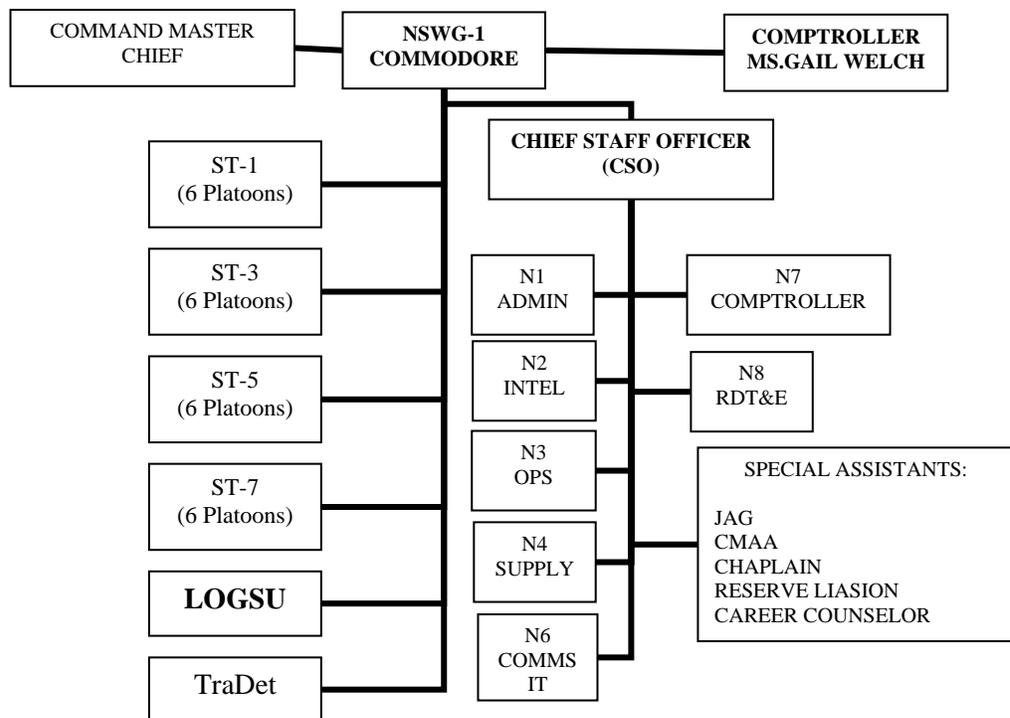
Figure 3. NSWG-1's post NSW-21 structure

LOGSU's mission is to provide logistical support to NSWG-1 and components in direct support of NSW operations under the command of a Navy Supply Corps O-6/O-5. The LOGSU consists of 14 departments that execute the support functions once located at the Teams. Therefore, all of the Teams' departments, except "administration," now

reside at LOGSU. Besides a few liaison personnel, the Teams only retained an administration department. In addition to equipping the Teams, maintaining operational gear, and providing medical support LOGSU is also responsible for NSW's firing ranges and training facilities. Range responsibilities formerly fell directly under a NSWG-1 staff office. Figure 4 shows the structure of the Teams before and after NSW-21.
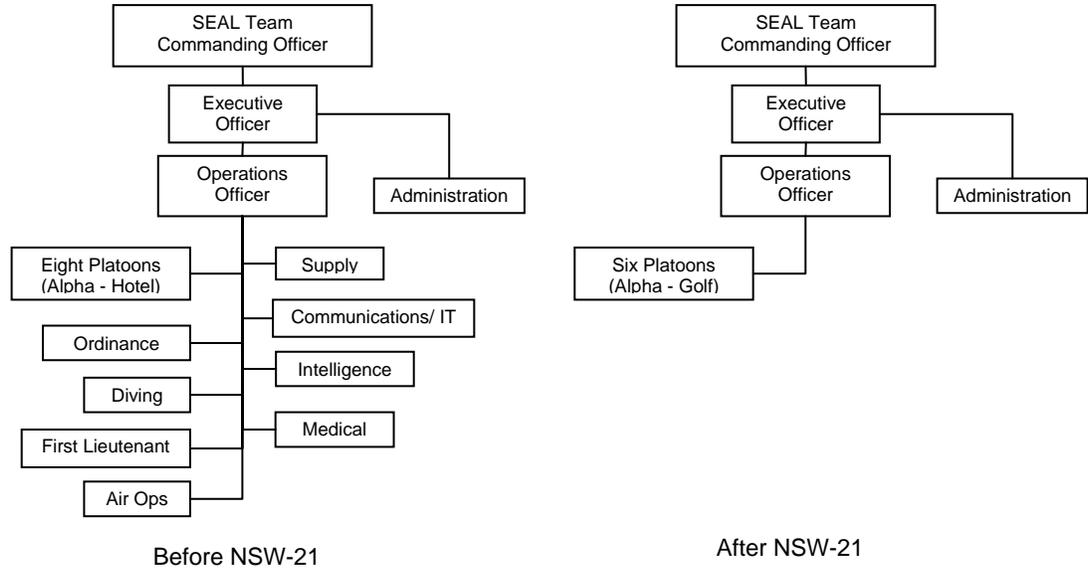

Figure 4. SEAL Team Structure Before and After NSW-21

Nearly all mobility, logistic, and supply duties reside at LOGSU instead of at the Teams. For example, if a Team needs vehicles they requisition them through the LOGSU First Lieutenant department. If platoons need operational supplies they requisition them through LOGSU's supply department. If a Zodiac inflatable boat is worn and needs to be replaced, the Team requests a new one from LOGSU and returns the old one. LOGSU then deals with the ensuing "supply" issues: fix the old one or buy a new one. The idea is LOGSU focuses on the administrative issues so the platoons can take the new boat and focus on training.

Prior to NSW-21, the Teams had Supply Officers qualified to handle large sums of money. Thus, they tracked their own Operations and Maintenance (O&M) spending.

Under NSW-21, Team supply departments are manned by one enlisted first class Storekeeper (SK1) who serves as a liaison to the LOGSU supply department. The LOGSU supply department is just one of 14 departments that now service all four SEAL Teams on the West Coast. LOGSU's creation essentially consolidated the work of 18 total departments that were previously spread across three SEAL Teams. The new departments at LOGSU execute the same functions as the Teams' departments but they work for someone else.

NSW-21 changed the way Group, LOGSU, and the Teams do business. Many jobs within the NSWG-1 structure either transferred commands or were completely eliminated. The reorganization was a zero-sum transition with respect to manpower but as one might guess, NSWG-1 probably incurred some new costs due to its increasing size.

III. THE CHALLENGE FOR NSWG-1

In May 2003, the NSWG-1 leadership recognized they had increasing funding needs that accompanied the post NSW-21 organization. Not expecting an increase to their annual baseline, NSWG-1 began scrutinizing the budget to find discretionary funds for possible emergent needs they knew might come with GWOT, and remain thereafter. Leadership knew NSWG-1 was subsidizing some normal-year spending with GWOT supplemental appropriations. They had to find a way to fund all their needs, even those "normal" costs paid for by "supplemental" money. Otherwise, when the supplemental appropriations stop, Group will be left with unfunded requirements that are essential for operations. Thus, leadership needed to trim any possible excess spending to divert it to more pressing requirements. After initial inquiries, they were not satisfied with the level of detail to support financial decisions.

The NSWG-1 leadership did not know, by specific category, where or how much of the NSWG-1 budget each department spent. They could only look at absolute numbers to see how much each department spent in aggregate. Additionally, "Consumables" and "Repairables" were the only two categories into which the departments classified expenditures. These two broad expenditure categories did not provide enough information to plan and manage the budget effectively. They could not analyze trends of over- or under-funding. How and where NSWG-1 spent their Repairable and Consumable budget was the leadership's major concern.

A. WHAT ARE "REPAIRABLES AND CONSUMABLES"?

Repairables and Consumables are two broad categories of spending that fall under Group's O&M money. Figure 5 illustrates the NSW distribution of O&M funding.
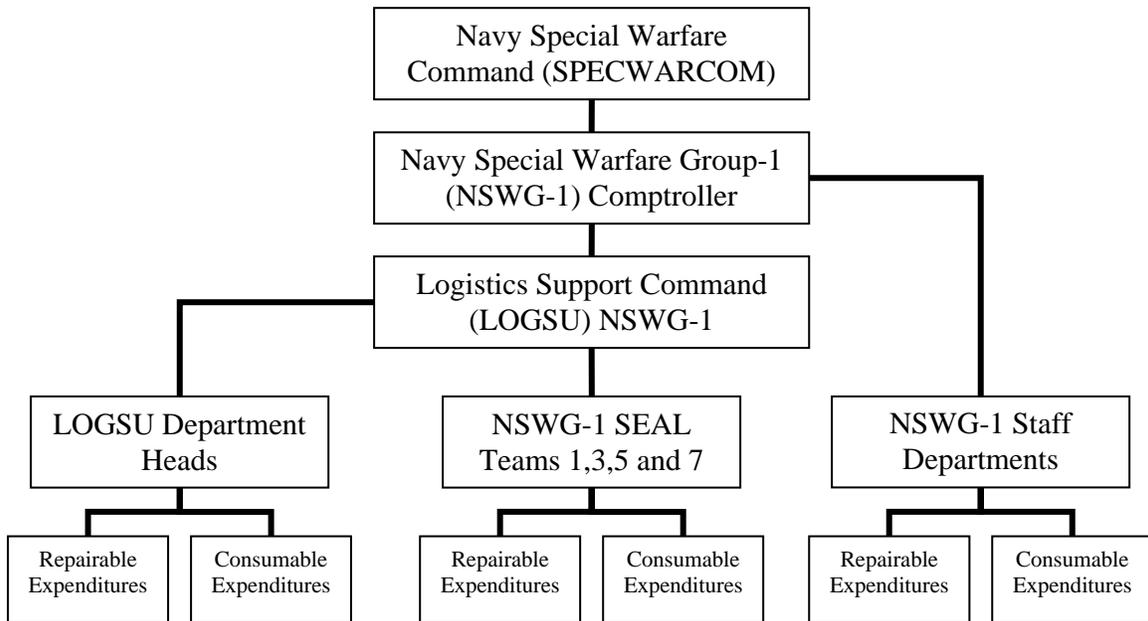
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                    ┌──────────────────────────┐
                    │   Navy Special Warfare    │
                    │  Command (SPECWARCOM)     │
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                    ┌──────────────────────────┐
                    │ Navy Special Warfare Group-1 │
                    │   (NSWG-1) Comptroller    │
                    └──────────────────────────┘
                                │
                    ┌──────────────────────────┐
                    │ Logistics Support Command │
                    │    (LOGSU) NSWG-1         │
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Figure 5. NSWG-1 Operations & Maintenance (O&M) Money Flow

LOGSU Department Heads	NSWG-1 SEAL Teams 1,3,5 and 7	NSWG-1 Staff Departments
Repairable Expenditures / Consumable Expenditures	Repairable Expenditures / Consumable Expenditures	Repairable Expenditures / Consumable Expenditures

Repairables are funds spent for spare parts and maintenance. Consumables fund a wide-range of requirements for day-to-day operations from service contracts to replacing worn operational gear. Maintenance is heavily managed and scrutinized so Group leadership was comfortable with how the repairable money was being tracked. Repairables are also a much smaller piece of the budget, so there was more concern for consumable expenditures.

Due to NSWG-1's operational dependence on consumable money, leadership wanted a clearer understanding of where money was spent. They did not know exactly how much money each NSWG-1 department needed to operate. Specific consumable spending information is essential for making decisions on where to fulfill unfunded requirements, who gets more money when new operational requirements arise, and where NSWG-1 can accept risk with respect to decreasing funding.

B. NSWG-1'S NEW POST NSW-21 FUNDING NEEDS.

NSWG-1's baseline annual budget with respect to the old organizational structure was described in Chapter II (Figure 2). Despite a known increase in costs that came with the reorganization and the newly commissioned LOGSU, NSWG-1 was able to operate without a major increase in funding thanks to significant supplemental funding that accompanied the GWOT. In each year since 2001, NSWG-1 received annual supplemental funding as large as their normal year budget. This created enough money to satisfy all their needs, with few operational shortfalls.

Group's discomfort with the tracking of consumable dollars in May 2003 was a direct result of the complexity of the NSW-21 reorganization occurring simultaneously with the GWOT, and the supplemental funding that accompanied it. The terrorist attack of September 11, 2001 immeasurably impacted NSWG-1's day-to-day operations.

The World Trade Center (WTC) terrorist attacks occurred nearly simultaneously with NSW's community-wide restructuring. The NSW community felt the budgetary effects of new operational commitments almost immediately. There were more deployments, new training to conduct, and additional procurement and maintenance of equipment. Luckily, large supplemental appropriations accompanied the new demands. Figure 6 details the significant events from 2000-present which contributed to NSWG-1's budget tracking problem, and lack of baseline.
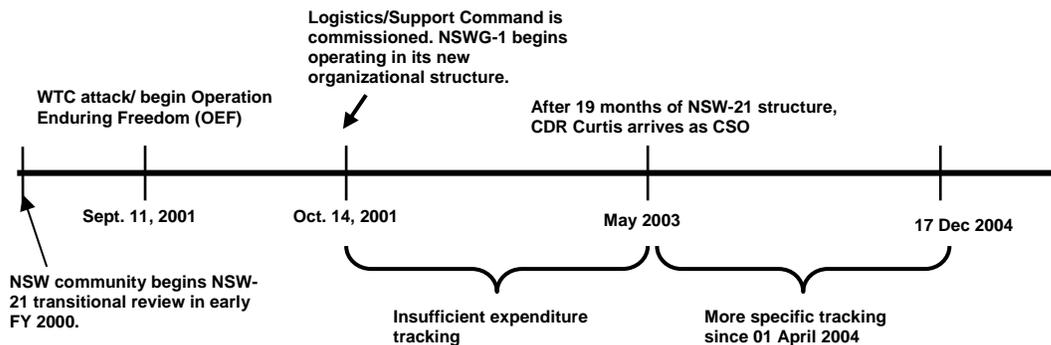

Figure 6. Significant Events Affecting Expenditure Tracking Problem

However, the GWOT and large supplemental appropriations are not normal occurrences. Therefore, while the supplemental appropriations obviously helped NSWG-1 both operationally and in transition, they also presented some managerial challenges. The supplemental funding essentially masked NSWG-1's new baseline budget needs.

Due to the extremely dynamic operational environment, abundant supplemental funding, and the new organizational structure, NSWG-1 and LOGSU were not able to capture even an approximation of their baseline budget. Following the WTC attacks, NSW's operational commitments soared. Expectedly, the leadership of the community and its personnel were focused more on real world operations than on gathering old budget data. Therefore, NSWG-1 began working in its new organizational structure with no new approximate baseline budget. They did not know how much it would cost to run LOGSU and all its departments. Instead, the Group Comptroller was using pre NSW-21 budget estimates to fund all requirements.

During the beginning of Operation Enduring Freedom (OEF), LOGSU received and fulfilled operational requests so quickly they simply "spent money and asked for more when (they) ran out" (Gail Welch, NSWG-1 Comptroller). There was essentially no "bottom of the barrel" due to the GWOT supplementals. The extra funding essentially removed the need to have a new baseline. Unfortunately, NSW-21 and LOGSU began operating in this abnormal, "non-baseline" environment, and they are just now establishing what they believe normal year spending will look like.

C. WHY AND HOW DID NSWG-1 IDENTIFY THE PROBLEM?

NSWG-1 and LOGSU discovered they needed more detailed spending information after asking some questions. What happens when the supplemental appropriations stop flowing? What are NSWG-1's baseline budget requirements during a normal year? Have we incurred new cost in the post NSW-21 organization, and what are they?

Group knows their baseline for the years prior to NSW-21. Over the last 10 years, they have received annual increases in their budget only to account for inflation.

This essentially indicates that Group has incurred no significant additional programmatic costs with respect to O&M consumables. This might be true for the Group staff departments that did not change but what about all the new departments at LOGSU? Was the NSW-21 restructuring a zero sum budgeting transition? Could the budget from the seven departments at each of the three SEAL Teams effectively transfer to fund the 14 departments at LOGSU? Theoretically, this might be possible. The issue we are documenting and analyzing is that Group knows they using GWOT supplemental money to pay for non-GWOT needs so they needed more specific data to tell them where.

The NSWG-1 CSO held a budget review when he arrived in the summer of 2003. None of the department heads could tell him EXACTLY where they spent their money. They knew only, in aggregate dollars, how much they spent. The department heads are not necessarily poor financial managers; they simply did not have the tools able to gather specific data. Consequently, the budget call was useless. Without specific information, the best a department head could do was ask for the same funding as last year. Clearly, this is an insufficient justification of needs.

Shortly after the budget review, the Group leadership, and key financial personnel established a budget team. They identified changes necessary to gather more specific expenditure information. They decided that department heads should continue to execute spending normally. Department heads match incoming requisitions to their designated quarterly spending limits, and fill requests in a priority order. For example, the First Lieutenant department might use funds to replace spare parts it used for a boat repair. As long as there is money in a department's account, managers use it to fill legitimate needs.

The budget team realized that no change was necessary at the department head level. Acquiring more useable managerial information required a more specific data tracking system at the LOGSU level. They decided to start from scratch with a zero-based budget.

D.   THE CHANGE – TRACKING AND CAPTURING EXPENDITURE DATA

The flow of funds down to department heads and how spending is reported back up the chain of command is essential to understanding NSWG-1's expenditure tracking change. Figure 5 shows how funds flow down the chain. However, it does not show how expenditures are tracked once the respective departments and Teams receive their quarterly Operating Target (OPTAR).   The change we describe below defines how NSWG-1 tracks and captures expenditure data, not how the comptroller issues money. Thus, a more in depth explanation of this process in both the old and new system is required. Figure 7 shows the circular nature of funds flow, accounting, and reporting at NSWG-1. The order in which funds flow has not changed, only how spending is tracked.
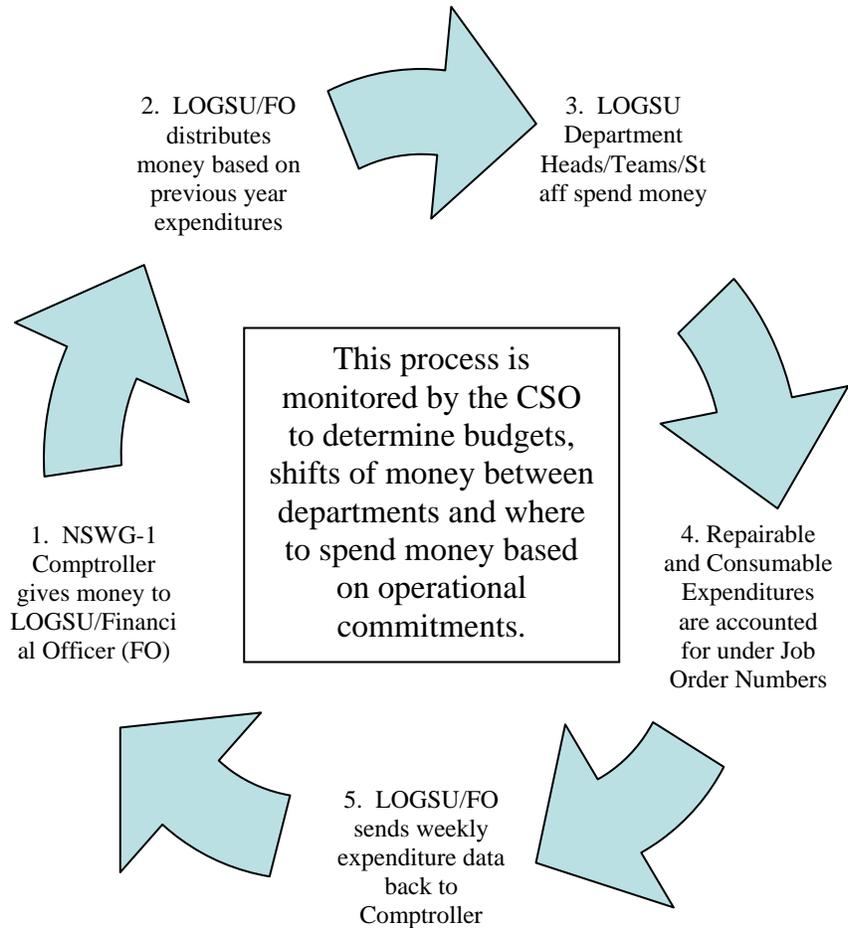

2. LOGSU/FO distributes money based on previous year expenditures

3. LOGSU Department Heads/Teams/Staff spend money

This process is monitored by the CSO to determine budgets, shifts of money between departments and where to spend money based on operational commitments.

1. NSWG-1 Comptroller gives money to LOGSU/Financial Officer (FO)

4. Repairable and Consumable Expenditures are accounted for under Job Order Numbers

5. LOGSU/FO sends weekly expenditure data back to Comptroller

Figure 7. NSWG-1's Circular Flow of Money

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There are two key steps in the budget flow at Group. First, and most importantly, consumable and repairable spending is tracked (step 4) in LOGSU's Financial Office by Job Order Number (JON). All expenditures are tied to JONs. Group uses two databases to capture financial information: MicroSNAP at LOGSU and STARS at the comptroller level. STARS is the parent reporting system that the NSWG-1 comptroller uses to report above her level. These two software packages pass one specific bit of information: dollars spent by JON. Every week MicroSNAP downloads spending information into STARS (step 5). The other key to Group's budget process is that the CSO oversees the entire funds flow process.

Prior to the budget team meeting, MicroSNAP only tracked spending in two JON's: repairables and consumables. Thus, all of Group's spending was captured under these two broad categories. Group leadership recognized that this level of information was insufficient for making any budgeting, spending, or redistribution decisions. He had no way of knowing how a reprogramming of money might hurt one department if he moved funds to fill a more important requirement somewhere else. In fact, he could not tell which requirements were more important. Without specifics on spending, there was no way to determine if one department was underfunded or if they simply exhausted their OPTAR.

The budget team decided that over the next several months they would improve the JON reporting system in both MicroSNAP and STARS (steps 4 & 5). They involved many people at both Group and LOGSU: the LOGSU Financial Officer, the Deputy Comptroller, etc. They met every three weeks for approximately five months creating new, more specific JONs by which MicroSNAP and STARS could track and report. They chose the new JONs by identifying likely categories under which departments were already spending, but not tracking. For example, they knew the SEAL Team platoons spent most of their money on worn personnel equipment and clothing, both Navy Stock Number (NSN and commercial open purchase (OP)). Thus, they created four different JONs to track those purchases. The databases were then updated with the new JONs.

Now, when a requisition is entered into MicroSNAP, it is filed under a very specific JON.
A sample of the new JONs is shown in Table 1.

	TEAM 1	TEAM 3	TEAM 5	TEAM 7
JON CATEGORIES				
ADMIN CONSUM NSN	X	X	X	X
ADMIN CONSUM OP	X	X	X	X
REPAIR NSN	X	X	X	X
REPAIR OP	X	X	X	X
PRINT DOD	X	X	X	X
PRINT OP	X	X	X	X
SERVICES DOD (Non-recurring)	X	X	X	X
SERVICES OP (Non-recurring)	X	X	X	X
EQUIP NSN (Teams Equipage)	X	X	X	X
EQUIP OP (Teams Equipage)	X	X	X	X
UNIFORMS NSN (Operator)	X	X	X	X
UNIFORMS OP (Operator)	X	X	X	X
GEAR NSN (Operator)	X	X	X	X
GEAR OP (Operator)	X	X	X	X
DEPOT LEVEL REPAIRABLE				
OPERAT CONSUM NSN	X	X	X	X
OPERAT CONSUM OP	X	X	X	X
TOOLS NSN	X	X	X	X
TOOLS OP	X	X	X	X

Table 1.   Sample of New JONs

The new JONs give very specific information about how and where money is spent. Thus, the CSO, the LOGSU CO, and the comptroller have managerially useful data with which to make spending decisions. The new JONs added a small change to the execution system and immense clarity about where NSWG-1's money is going. The changes did not disrupt the current execution structure. It simply made information more useful so department heads could make smarter purchasing decisions. This, in turn, provided more valid execution data.

The new tracking system serves two purposes. It tracks current year spending and provides more detailed data for decision making. NSWG-1 intends to use one year's worth of data as a basis for its normal baseline budget. Since they track "normal-year" spending separately from "GWOT-justified" spending they can acquire a close

approximation of future needs. There are not separate JONs for GWOT or normal spending, just a delineation of which type of money is being used: "normal" or "supplemental." The new expenditure tracking system also serves as a control for monitoring specific spending trends. The new JON categories provide more detail as to where and how much department heads are spending. The improved detail helps leadership more closely monitor spending activity and make more informed decisions about how NSWG-1 should allocate resources. The changes Group made were essentially an improvement to a budget execution and measurement system.

We focus on this exact topic in the next two chapters of the analysis. The next chapter defines the performance measurement systems concept and how they help managers. Chapter V then applies the theory to the problem. We discuss how NSWG-1's expenditure tracking system serves as a tool helping managers to make more informed decisions.

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IV. PERFORMANCE MEASUREMENT SYSTEMS

A. WHAT ARE PERFORMANCE MEASUREMENT SYSTEMS?

Performance measurement systems are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities (Simons, 2000, p. 4). They are information systems upon which managers base their decisions. Managers of small DoD units often use informal discussions and direct supervision to ensure they effectively manage the command. Large commands are much too complex to manage informally. Regardless of the size however, managers are rarely involved in every function for which they are responsible. Thus, managers rely on formal systems to provide them useful data in understanding how their organization is progressing.

The definition of performance measurement implies four main purposes: conveying information, using routines and procedures to gather data, assisting managers, and maintaining or altering patterns in organizational activities. Whenever possible, these systems rely on specific data rather than subjective assessments to provide information. However, not all measurements in DoD are quantitative. "Readiness," for example, is very difficult to quantify. Thus, many leadership decisions will remain subjective regardless of the information collected. Whenever possible though, performance measurement systems provide fact based information.

Organizations use formal routines and procedures to capture information. Workers either write information on paper or record it in computer databases. How workers record information is generally embedded in the rhythm of the command and occurs on a predetermined cycle. Some commands report information weekly, some monthly, while others might report quarterly. However, nearly every DoD organization captures data on a daily basis. Management must decide which data is important to them, and how often they want to review it.

Performance measurement systems are specifically tailored to provide decision making information to managers. Organizations generate heaps of information, not all of

which is useful to every manager at every level. Therefore, control systems are designed to sift through data to provide managers with only the information they need. Once managers have useable information, they can make decisions based on what they know. For example, DoD commands use expenditure data as a means to help determine if departments are using resources efficiently, and if funding is being applied in the proper areas.

Finally, managers use measurement systems to either maintain the command's current status or make adjustments to their strategy. Managers implement strategy by setting both short and long-term goals. Performance measurement systems assist managers in tracking their decisions by combining goals with expectations, and using feedback to monitor the unit's progress.

Performance measurement systems are both monitoring devices and decision supporting tools. They provide managers with routinely gathered information. They aid in achieving short-term goals while also monitoring long-term concerns. And they help managers balance the interests of various stakeholders, and use time efficiently. Performance measurement systems provide managers with only the information they need to maintain the pulse of the command, and therefore make more informed decisions.

1.   **What Performance Measures do: Balancing Tensions**

In DoD, performance measurement systems help managers achieve "readiness" while balancing three primary tensions: short and long-term goals, satisfying various stakeholder interests, and leveraging scarce management time. Achieving "readiness" is the primary goal for any operational command. Operational leaders are charged with achieving the highest degree of readiness given the resources at their disposal.

Most lower-level, DoD operational commands plan for the short-term. They often have long-term visions, but only a general plan on how to achieve it. Performance measurement systems help managers achieve short-term goals while keeping an eye on future requirements. Performance measurement systems also help DoD managers balance many stakeholder interests. Although most commanders make the final decisions on operational issues, there are many stakeholders with an interest in a unit's strategy.

Finally, performance measurement systems help managers create the greatest operational effectiveness with a scarce amount of time available. Managers only have a limited amount of time in each day. Performance measurement systems save time, providing managers the freedom to explore operational opportunities, and manage day-to-day activities.

DoD managers apply funding, equipment, and manpower in amounts proportional to the support required by their departments or divisions. Then they measure the departments' results against short-term mission goals to see how the command is progressing. But commanders also look to the future since DoD units have long-term commitments as well. Balancing short and long-term goals is one of three tensions that performance measurement systems help managers negotiate. Commanders also have to balance various stakeholder interests, and address demands with a scarce amount of time available. Performance measurement systems help managers balance all three challenges.

Military commands generally focus day-to-day on short-term goals; those achievable in a single year or less. For example, many operational commands manage their budgets quarterly. The primary reason for short-term planning is the nature of DoD funding. Despite two-year DoD budget plans, Congress only appropriates funding one year at a time. The uncertainty that accompanies single year funding is not conducive to long-term planning. However, effective commanders make judgments about the future based on current information. Managers should try to project long-term mission needs for future operations. Commanders might consider the long-term O&M costs associated with buying long-, or short-term assets. Long-term support funding is almost always required for procurement purchases. Performance measurement systems aid managers in balancing short and long-term goals by differentiating between current and future needs. They establish and monitor short-term goals, and provide frameworks for ensuring adequate resources are available for long-term goals.

Managers also must balance the expectations of different stakeholders in the chain of command. Both large and small DoD units have many different constituents with varying goals and views on command strategy. Some constituents might agree on

strategy but expect different outcomes. Military leaders must consider every constituent affected by their strategy since people have different views on what goals are most important. In budget execution, commanders might be focused on how much "readiness" the command purchased, while the comptroller is only focused on execution variances. Performance measurement systems help managers monitor their strategy while also balancing other interests.

Finally, with a limited amount of time available, managers must prioritize tasks. Commanders use performance measurement system to ignore things working well, only addressing issues of concern. This is the "management by exception" concept. DoD senior level managers do not have enough time in each day to address all financial, technological, personnel, training, and operational issues. Allocating time effectively and appropriately is critical to a DoD manger's success. Performance measurement systems help managers leverage their time and attention. If designed correctly, the system enhances a manager's productivity while minimizing the time invested.

Performance measures are tools used by all effective managers to achieve their desired goals and strategies. The systems help managers balance organizational tensions that impede communication and decision making. They aid managers in balancing short and long-term goals and constituent interests, and they leverage precious management time. The information that measurement systems provide is formal, critical feedback about the command that managers might not have gathered informally. Answering what information to gather and how they intend to use the information are the final two steps managers take before actually implementing the system.

2. Designing Performance Measurement Systems

DoD organizations are almost exclusively centralized organizations. A small group of people at the top of the organizational hierarchy hold the formal decision making authority. Senior managers possess nearly all critical information and are accountable for all budget and operational decisions. Low level, unit managers are given very narrow spans of control to avoid distraction from their specific areas of responsibility. Thus, bridging the gap between unit and senior managers requires a performance measurement system that provides quality, unit level information.

Otherwise senior managers become disconnected with the command and only have subjective intuition upon which to base decisions. The first step in creating an effective performance measurement system is choosing what information should be gathered.

Managers must determine what type of information they want to gather, and with what frequency of feedback. For example, when tracking budget execution, managers might want to know either how much money a department spends, or specifically where they are spending, or both. There is no specific rule designating what amount of data manager's should gather. They decide for themselves how much information they require to make decisions. Regardless of what information or how much is collected, gathering fact-based information transfers managers from intuition to objective analysis. Communicating information is of little use by itself though. Useful communication requires some method of feedback.

Cybernetics is the study of information and its use in feedback systems. The field's primary focus is automatic control systems such as the human nervous system or mechanical-oriented systems. However, cybernetics can be applied to DoD organizations as well. Operational military commanders use effectiveness, or readiness, as a feedback measure to determine if they applied sufficient resources in the correct proportion across departments. Managers use information and feedback to both measure progress in achieving goals, and to assess emerging threats and opportunities. Both types of information provide feedback about actual events compared against goals and standards. Figure 8 shows the Cybernetic Feedback Model (Simons, 2000, p. 61).
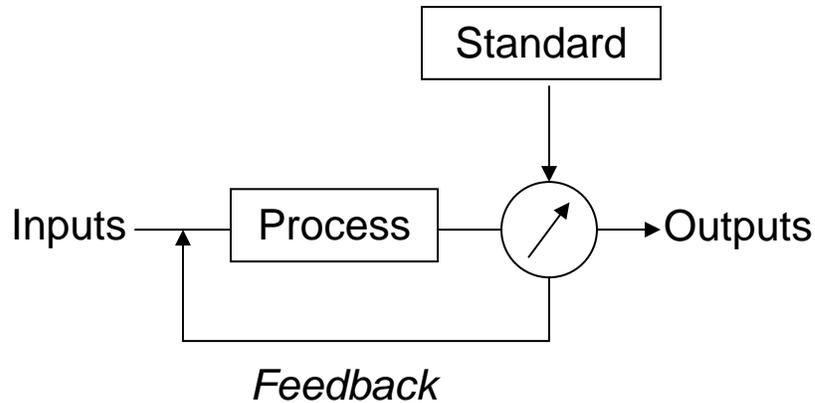
Figure 8. The Cybernetic Feedback Model

Feedback sent solely to managers is not enough, however. Information also must flow from managers down to subordinates and up to executives. Managers need to communicate goals and milestones, and inform employees as to which activities they are committing resources. In DoD commands, managers assign budget execution operating targets (OPTARs). An OPTAR is a prescribed spending level that unit managers must meet per a specified time frame. Managers also need to communicate strategies and performance goals up the chain to executives. Superiors provide the support managers need to operate their organizations. If higher levels are not adequately informed, they cannot provide the much needed support.

a. Deciding What To Control

Managers choose among inputs, processes, and outputs when deciding what information to control (Simons, 2000, p.62). Inputs (money, people, raw materials, etc.) enter an organization, are transformed by some process to create something of value, and some output is subsequently produced. Managers are free to measure any and all stages. However, with limited resources they generally choose one stage to which they will dedicate their time and energy. This choice is fundamental to the performance measurement system.

Information about inputs is necessary, but rarely sufficient for control. For instance, budget dollar amounts are necessary data but they provide no decision

making information. Budget dollars, as inputs, certainly do not guarantee that money is spent on the right things, or if the outcome of spending is beneficial. Therefore, while managing budgets, it is not practical to control inputs. It is more beneficial for managers to focus their performance measurement on processes or outputs.

In making the choice between processes or outputs, DoD managers must consider three criteria: (1) technical feasibility of monitoring and measurement, (2) cost, and (3) desired level of innovation. In some instances, it is technically feasible to monitor both processes and outputs. For example, it is easy for quality control inspectors to observe assembly line workers in an auto manufacturing plant. Assembly line activities are step-by-step processes that are performed one way each time. The assembly plant can also measure the output by checking the car for defects. However, measuring a DoD organization's effectiveness (output) relative to its budget consumption is not as clear. The output might be "percent return on taxpayer dollars" based on unit effectiveness. Unfortunately, there are few quantitative measures for "effectiveness" in training. Success is combat is more clear but still not purely quantitative. DoD managers can only monitor outcomes if the output can be measured accurately. Thus, DoD managers may not have the choice to measure outputs. They may be forced to monitor processes if data on outputs is unavailable.

The second criteria for selecting what to control is cost. When it is technically feasible to control both processes and outputs, analyzing the relative cost of both actions is necessary. Cost has two components: (1) the costs of generating and processing information and (2) the lost opportunity or damages resulting from not monitoring the proper information. Toyota's famous *kaizen* principle requires workers to stop the production line immediately if they discover a problem. Toyota does not believe in waiting to monitor outputs. They feel the damages resulting from not monitoring the production process are too high relative to the benefits of allowing the line to run constantly. If the relative importance of achieving outcomes is high, then monitoring processes is necessary. This raises the chances of catching mistakes early. The organization is monitoring processes because they cannot afford the negative effects of

defective outputs. If adjusting outcomes is relatively simple however, managers have more confidence in waiting to measure outputs.

The final criteria in choosing what to control is level of innovation. If managers desire a high level of innovation from employees, they monitor outputs. Measuring outputs gives workers the freedom to experiment with inputs and processes as long as they meet output goals. Conversely, if managers desire to limit innovation, they choose to control processes by standardizing work procedures. In DoD budget execution, managers are subject to extensive spending regulations. Therefore, DoD managers generally focus on controlling the spending process because innovation is not encouraged.

DoD managers in any command rarely wait to measure final outputs. The costs of a mistake are simply too high. For example, large material acquisitions are monitored in stages. If outputs were the only measure, and there were errors in the process such as insufficiently developed technology, final outputs might be useless. This would waste millions of dollars. In cases like this, DoD managers often measure subsets of processes. If measuring a process is necessary but time consuming and impractical, managers might choose instead to evaluate outputs from each process of an activity. Again, DoD acquisitions proceed by measured phases. Programs cannot proceed from one phase to the next without completing certain requirements. Measuring the entire process in each phase could be prohibitively time consuming. Thus, managers simply measure the outputs of each phase at specified milestones. By measuring the outputs of processes, managers mitigate the costs of waiting to measure the final product while saving valuable management time.

An effective performance measurement system reflects a manager's level of focus and the type of decision making information they require. Managers choose systems to bridge the gap between senior and unit level managers to acquire information they would not otherwise easily obtain. Thus, deciding what to measure is a critical choice in designing performance measures. Managers must consider technical feasibility, cost, and innovation level when choosing between inputs, processes and outputs. They use the information they gather, and subsequent feedback, to leverage their time and

make decisions. Regardless of what managers monitor though, using the information effectively is most critical.

3.   Using Information

Once managers design the performance measurement system, and they have the information they want, they must use it effectively. As the Cybernetic Feedback Model shows, information from measures is most useful when coupled with feedback based on standards, or benchmarks. For instance, an aviation squadron quarterly maintenance report stating personnel spent $200,000 on repairs is not useful. The information only becomes useful when you have a benchmark against which to compare it. If squadron aircraft normally require $400,000 for maintenance, then repair personnel achieved a 50% cost cut. However, if costs are historically held at $50,000 per quarter, managers might have a problem.

Gaining control through the cybernetic process requires a benchmark against which managers compare actual performance, and a feedback channel to communicate information on variances (Simons, 20000, p. 61). A benchmark is a formal representation of performance expectations. It provides managers a means to measure how well the organization transformed inputs to outputs. Although the benchmark provides a measuring stick for information, feedback is necessary to use the data. Feedback returns variance information from whichever stage managers chose for measurement. Managers use these variances to make adjustments to desired levels of performance. Feedback is the backbone of performance measurement systems.

Cybernetic feedback measurement allows managers to use information for decision making while conserving scarce management time. Senior level managers have tremendous demands on their time. Thus, managers use these systems to put their organizations on auto-pilot. They allow *management by exception* (Simons, 2000, p. 210). Rather than continually monitoring processes, feedback systems provide periodic feedback via exception reports. Feedback and variance information help managers

identify items of significant concern. Therefore, management only has to direct its attention to things of significant importance, not topics that are consistently in-line with standards.

Since managers use feedback systems to conserve management attention, they should be prepared to review reports, and promptly address problems when they arise. Employees often take corrective action before managers ever see reports. However, managers should always follow up on a situation exposed by the performance measures in place. Quickly focusing management attention in the right places keeps the organization on track.

The cybernetic feedback model as a performance measurement system is a manager's tool for measuring, monitoring, and correcting deviations in performance. DoD organizations use feedback systems to provide managers with timely and accurate information. They aid in implementing strategy while balancing short and long-term goals, managing many stakeholders, and conserving management time. Performance measurement is critical for DoD managers who make decisions on short notice and have fiduciary responsibility of taxpayer money. Clear, detailed information helps managers make fact-based rather than intuitive decisions.

NSWG-1 made changes to their expenditure tracking system to gather more detailed information. They now have the means to establish a closer approximation of normal year needs, and more useful, day-to-day decision making information. The old, broad tracking categories did not help the CSO in making purely fact-based decisions. Although leaders never have perfect information, NSWG-1's new expenditure tracking method provides much more useful information.

V.   NSWG-1'S PERFORMANCE MEASUREMENT SYSTEM

NSWG-1 leadership desires more accurate information upon which to make present and future spending decisions. The detailed data they gather also provides an approximation of their post NSW-21, normal year budget needs. The baseline budget states what Group's funding requirements are for a normal year. However, it is not a benchmark against which to compare performance.

Benchmarks are formal representations of performance expectations. If the baseline budget was a performance benchmark, NSWG-1's only goal would be to spend to zero. Group's command strategy would be simply to spend the budget. This is clearly not their mission. It would not say anything about how efficiently personnel use resources, or how the command is progressing. The baseline is important information but not useful as a performance benchmark.

Rather, Group's benchmark, or performance standard, is leadership's subjective assessment of Team "readiness" and effectiveness. NSWG-1 applies funding to the Teams based on their needs. Deploying commands and LOGSU departments then work to prepare "ready" Teams. From performance variances determined by the Team's effectiveness, leadership either maintains NSWG-1's current strategy, or revises resource allocations to improve readiness. NSWG-1 leadership made expenditure tracking changes to more accurately control spending in order to meet their performance standards. There performance measurement system was inefficient because it did not produce the proper data.

Even though Group's budget baseline is not useful as a benchmark, it is an essential first step in defining their needs. NSWG-1's baseline lacks clarity because new, post NSW-21 spending has been subsidized by GWOT supplemental money. By subsidizing normal year spending, the GWOT supplemental appropriations masked the baseline needs of NSWG-1's new organizational structure. Thus, when the GWOT supplemental appropriations stop, NSWG-1 will be left with a large amount of unfunded requirements necessary to operations.

Since the NSW-21 reorganization, there was a significant amount of spending justified by GWOT. If GWOT-justified costs disappear when NSWG-1 returns to a normal year operational tempo, the absence of supplemental money will not matter. Group will not have to fund any new costs. However, any new, post NSW-21 costs Group incurred, and paid with GWOT money will essentially become unfunded. The new costs will continue into the future as normal year needs with no supplemental money to pay for them. Thus, Group probably needs a larger funding base for future years. This is the baseline the new expenditure tracking system will help find.

After the summer 2003 budget call, the NSWG-1 budget team decided to use current year spending as a basis for their needs. The new JON tracking system went into effect on 01 April 2004, so NSWG-1 has gathered just over six months of specific, line-item spending data. They will not have a full year until 31 March 2005. Therefore, in summer 2005, when Group is preparing to execute FY 2006, they will have their first full year of information available from the new tracking system. The resulting data will provide them an estimate of how much it costs to operate the command, and fund its subordinate units. Although past spending does not provide future information, it does provide a rough baseline.

Establishing a baseline by using current year spending provides lagging information. Unfortunately, last year's information is history and does not provide completely accurate information for future years. In DoD, past spending trends are used far too often to predict future needs. However, NSWG-1 had to start somewhere. Since the NSW-21 transformation, the most accurate budget estimation they could make was to ask for the amount they spent in previous years. There was no basis for any increase. In fact, despite commissioning a brand new command (LOGSU), when you subtract supplemental appropriations, the funding NSWG-1 received over the last two years is the same funding they received in prior years. In the long-term, NSWG-1 will not be able to meet all its requirements without a increase to the normal year baseline.

Group leadership realized the first step to addressing their funding issue was more specific expenditure tracking. The budget call exposed their accounting system as overly broad. The tracking categories were insufficient in providing the detail necessary to

make informed decisions. In theory, Group could have proceeded by tracking all spending under the existing repairable and consumable categories. However, this would provide only an aggregate dollar amount of how much they spent over the year. It would give no insight into how the newly commissioned LOGSU, and other changes, affected their costs. They made changes because they needed a more informative performance measurement system to aid them in dealing with funding issues.

A.   NSWG-1'S PERFORMANCE MEASUREMENT SYSTEM

Changing Group's expenditure tracking system was an improvement to a performance measurement system. NSWG-1 had information-based routines in place but they were insufficient for effectively altering patterns in organizational activities. Group leadership could not identify spending trends to make changes to their resource allocation strategy. They needed better information for decision making information.

NSWG-1's mission is to ensure SEAL Teams are properly manned, trained, equipped, and ready to conduct special operations in the PACOM and CENTCOM theatres. Group's job is providing ready SEAL Teams. Thus, NSWG-1's output, in the context of a Cybernetic Feedback model, is "ready Teams." Figure 9 shows NSWG-1's Cybernetic Feedback model.
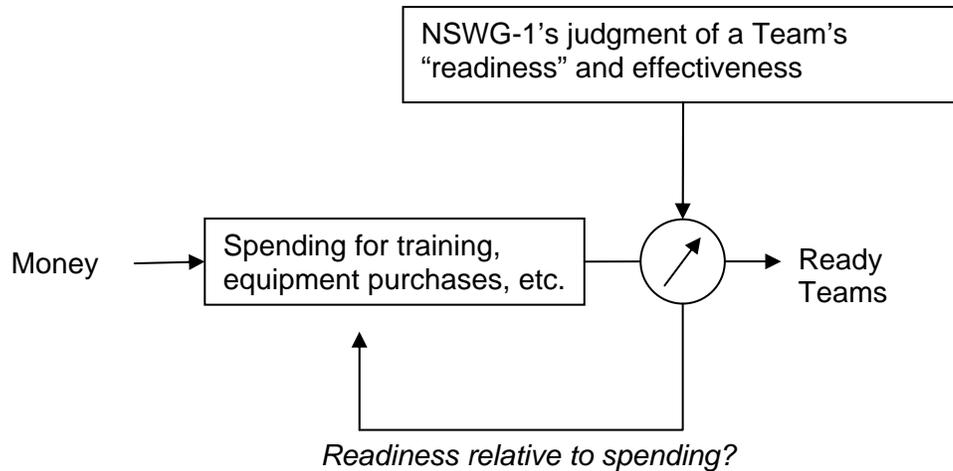
Figure 9. NSWG-1 Cybernetic Feedback Model

Since this analysis focuses on NSWG-1's spending, the "process" within the model is resource allocation. Group leadership distributes funding in amounts they feel are sufficient to achieve NSWG-1's strategy. Due to the qualitative nature of readiness, NSWG-1's benchmark, or performance standard, is left to the commanding officer's judgment, a subjective assessment. Every military command would like to have a purely quantitative measure for readiness. Unfortunately, this is not practical, or possible. Thus, Group derives variances, and feedback, by comparing how ready the Teams actually are against how ready the CO intended them to be, or how ready NSW standards say they should be. After assessing readiness variances, the CO either maintains the status quo, or makes changes to the spending execution process. In this case, changing the process means altering resource allocations to correct deficiencies in identified areas.

The budget team's first step in improving the system was determining what information would be most useful to the people responsible for spending: the CSO, LOGSU CO, and comptroller. They also had to determine what level of detail they wanted. There are mounds of information flowing through NSWG-1 during the spending process. They needed to capture the correct data at the correct location. They could then use the information to make new, better informed spending decisions.

1.   How Group Decided What to Control

Managers exhibit what is most important to them by deciding what to control. Their choice reflects level of focus and the type of information they require to make decisions. Group leadership decided to measure processes rather than inputs or outputs. In fact, the new JON tracking system is actually a subsystem, and NSWG-1 measures the outputs of the process.

It is not feasible for Group to measure inputs. Although Group leaders are upper level managers within NSWG-1, they are not upper level with respect to the DoD, SOCOM, or WARCOM apportionment chain. NSWG-1 is on the receiving end of the WARCOM process. Thus, they have very little control of inputs. They do not decide how much money they get each year. Even if Group could completely control inputs, aggregate dollar amounts apportioned to NSWG-1 at the beginning of a fiscal year do not provide information about progress or efficiency. Thus, it is not practical for them to measure their inputs. Similarly, it is of no use to measure their outputs either.

Within their performance measurement system, NSWG-1 cannot measure outputs because readiness cannot be measured accurately, the costs of NOT measuring the process are far too high, and Group does not desire innovation in spending. As we mentioned, readiness is a somewhat qualitative concept. Qualitative measures provide little incentive for managers to measure outputs since they are not easily defined. Additionally, the cost involved with deficient outputs is also a factor in what to measure. Like every military command, it is extremely important that Group provides operationally prepared Teams. Sending under-trained Teams overseas is completely unacceptable. The cost of sending Teams overseas who are not ready would be catastrophic to both life and mission accomplishment. NSWG-1 must correct deficiencies early, before platoons deploy overseas. Since the importance of achieving outcomes is so high, monitoring processes, instead of outputs, is necessary. The last factor in deciding what to measure is level of innovation. Due to the fiduciary responsibility of spending taxpayer money, spending innovation is not encouraged in

DoD. Group does not desire high levels of innovation in budget execution. Thus, Group's performance measurement system measures processes instead of inputs or outputs.

Although Group is measuring processes, physically monitoring every department head as they spend money is obviously not possible or desirable. Instead, the expenditure tracking system is subsystem where the CSO measures the outputs of the spending process. The Teams and departments are essentially free to spend their OPTAR. After issuing quarterly spending limits, the command leadership only receives reports stating how much and where the money was spent. Then they evaluate the outputs of the process (expenditures) with respect to readiness variances. Are they achieving readiness relative to their resource allocation plan? If the Teams are sufficiently prepared, Group will probably maintain its current spending habits. If there are readiness deficiencies, Group will alter funding allocations to induce improvements.

Group leadership realized that applying their efforts to controlling inputs was a little marginal benefit. Nearly every DoD manager is at the mercy of some other funding authority. Additionally, controlling outputs is potentially too costly, and not quantitatively feasible. Therefore, they decided to control processes. The information gathered during the spending process yields more useful information upon which to make future decisions, and is helping Group define its normal year baseline needs. It helps Group monitor and adjust their command strategy, and balance three important issues.

3. Using the New Expenditure Tracking System

NSWG-1's goal in using this performance measurement system is to achieve operational effectiveness. However, they initially made changes to the system to meet emergent funding needs. This goal is likely the only one Group explicitly recognized. Implementing performance measurement systems is not part of traditional military leadership training. Therefore, managers have little inclination, except for an intuitive sense of management, to implement them. NSWG-1 knew the better data would help them meet emerging needs first, and ultimately, operational effectiveness. The new expenditure tracking system will help managers address short and long-term goals

simultaneously, balance various stakeholder interests, leverage scarce management time, inject greater accountability, make more informed decisions, and align goals with subordinate personnel.

a. Short- and Long-Term Goals

The long-term effect of discontinuous supplemental appropriations is a reality. NSWG-1 operations are more expensive now than they were prior to the NSW-21 transition, and are partially subsidized by GWOT funding. The baseline information NSWG-1 is gathering provides a rough, long-term view of future needs. Non-GWOT, normal year spending today represents an approximation of recurring costs for a similar operational tempo in the future. NSWG-1 is defining how much money they need to maintain the same training and deployment schedule for future years, without GWOT supplemental funding. Despite its lagging nature, they are using short-term, past spending as a foundation from which to base long-term needs. Unfortunately, the dynamic, unpredictable operational environment does not afford them any other option. The new JON tracking system provides a basis from which to extrapolate long term needs, but also provides essential information for short-term decision making.

Group's initial motivation in making changes was to closely scrutinize the budget to find discretionary funds already in the system for future emergent needs. Group leadership wants to trim the fat in places over funded and plus-up those departments with new needs. The current tracking system provides clear information about where departments are spending. The line-item detail provides data leaders can use to more accurately assess unfunded requirements (UFRs), and reprogram money to departments with emerging needs. In the old system, it was prohibitively difficult to monitor exactly how departments were spending. The information that Group gathered was not useful to managers.

The aforementioned MicroSNAP system did record every requisition, but it filed them only under repairables and consumables. To obtain any detailed information, the LOGSU Financial Officer had to physically sift through every single requisition to gather information for which leaders asked. Additionally, command leadership could not tell how much money departments committed to certain spending

categories, or if they were spending efficiently. Under the new JON tracking system, Group leadership can more accurately monitor short term performance, and adjust goals. They can review specific information concerning budget execution and make adjustments to spending as needs emerge. By augmenting the performance measurement system, Group leadership has useable information at their fingertips.

b. *Stakeholder Interests*

Group is focused on short term decisions. In today's operational environment, missions change very quickly and commitments emerge every day that managers must address. However, there are other stakeholders interested in NSWG-1's decisions. The comptroller certainly has a stake in Group's financial situation, as does NAVSPECWARCOM, NSWG-1's parent command. Subordinate departments also have an interest in Groups' spending decisions. With a more efficient performance measurement system, NSWG-1 leadership can more effectively manage these other stakeholders' interests.

Due to the nature of civilian positions in DoD, the comptroller deals with both current issues and the long term effects of short term decisions. Military leaders hardly ever deal with issues for more than two years. The expenditure tracking changes help military leaders balance issues important to the comptroller. The comptroller has a stake in current decisions, their long term effects, and reporting requirements. First, while the military leadership decides where to apply Group's resources, the comptroller is constantly addressing "color of money" and anti-deficiency issues. She ensures funding is both available and obligated in its proper category. More specifically tracked information provides a clearer picture of expenditures for the comptroller. She can see where money is being spent and more detail on execution variances. The new information provides a more detailed framework from which to work.

The new JON tracking also provides more detail for reporting. The comptroller reports execution variances to WARCOM every month. Prior to the tracking change, it was difficult for the comptroller to answer specific questions about where variances occurred. The new information provides the detail to identify spending variances early, develop justifications, and make necessary adjustments. The changes

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also provide information to help the comptroller address long term problems. The current year spending information and its trends helps the comptroller develop a strategy for addressing future funding challenges.

c.   Scarce Management Time

The final issue the performance measurement system is helping balance is management time and commitments. There is never enough time in a day to get everything done. Senior level DoD managers have immense demands on their time and must find ways to maximize efficiency with a small amount of time invested. As we mentioned above, prior to the tracking changes, if leaders required any level of detail on spending the LOGSU Financial Officer had to sift through requisitions buried in the MicroSNAP program. This is clearly a waste of everyone's time. Under the new system, MicroSNAP uploads specific spending data straight to the STARS system. Both the CSO and the comptroller's office can review detailed spending data on demand by pulling it from STARS. Group leadership now has information they can quickly review in order to make changes or maintain their current spending. The data helps them address problems with much less time committed to the process.

d.   Accountability, Making Decisions, and Aligning Goals

The new tracking system provides for more accountability and facilitates greater support for subordinate departments. Departments have an interest in spending decisions because leadership decides how much money they receive. The more specific information available to leadership should inflict a greater sense of accountability on department heads to spend more efficiently. After all, Group leaders can now see exactly how department heads are spending their money. If departments are efficient, and have good justification for unfunded requirements, they will get more money. However, if the contrary is true, they might get less.

The system is not designed to be a watch dog, though. Group simply wants a better decision making tool. Due to the centralized nature of the command, leaders hold most of the critical decision making information at the top of the organization. Therefore, based on emerging needs, the CSO can apply more money to an operational shortfall long before department heads would be able to react. For example,

if deployed Teams recently received new vehicles in theatre, Group could develop and fund a support unit to help maintain the vehicles. The Team, busy with operational missions, might not have the time or information necessary to recognize that a maintenance shortfall is on the horizon. Group, using past spending information and resident mobility expertise could gather the proper personnel and funding to support the deployed Team. Without detailed information they would be guessing as to how much the support costs are.

The detailed JON tracking system also bridges the gap between unit level and senior managers. The performance measurement system's more specific information helps leaders more effectively align Group's goals with those of department heads. Group transfers its spending strategy to departments via OPTARs. Leadership knows each department's function, and how they apply funding. Therefore, Group apportions money in amounts relevant for departments to achieve a particular level of effectiveness. For example, if part of NSWG-1's strategy is to increase mobility operations and decrease diving, it will apply more funding to the first lieutenant department and less to diving.

Prior to the JON tracking changes, the CSO had to base resource allocation decisions primarily on intuition. Repairables and consumables did not provide sufficient information to objectively assess whether Group's spending strategy was achieving the results they required. Therefore, the CSO could not make fact-based adjustments to spending. The information now available serves as a dashboard to gauge how spending is helping Group achieve its goals.

NSWG-1 improved their performance measurement system to better balance short- and long-term needs, stakeholder interests, and to leverage management time. Although, having more specific current information was the goal, the improvements also help address long term needs. With detailed data, Group can make smarter day-to-day decisions as well as predict future challenges. The changes also balance the interests of other stakeholders. The comptroller, WARCOM and subordinate departments are all well served by more accurate, clear spending information. Finally, leaders positively leveraged their management time. For example, the Financial Officer

no longer has to sift through data to extract detailed information. Through STARS, the CSO and comptroller's office can essentially manage by exception. They can review reports and adjust spending as they see fit. The expenditure tracking changes improved a performance measurement system. NSWG-1's information-based routines now gather more detailed data. They provide more useful, fact-based information upon which Group can make more informed decisions.

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VI.   RECOMMENDATION

One of the primary focuses of NSWG-1's performance measurement system is balancing short- and long-term funding issues. NSWG-1 leaders changed the way they track expenditures because they want to find discretionary funds already available in their budget to fund both current and future shortfalls. They made changes under the assumption that after supplemental appropriations stop there are new recurring costs they cannot cover with their pre NSW-21 budget. They believe more detailed information is necessary to "trim the fat" from over-funded departments. Any funding they find is applied to emerging needs. The information they are currently gathering is useful in guiding current spending, but we recommend they also use the data to predict future costs. Future costs, and therefore long-term needs, will help NSWG-1 justify permanent plus-ups to their annual baseline. In fact, permanent plus-ups are likely essential for NSWG-1 to maintain future readiness.

The current expenditure tracking system helps NSWG-1 monitor day-to-day spending habits more closely, make more accurate short range decisions, and justify temporary plus-ups based on emerging requirements. However, NSWG-1's detailed information can also predict future needs. With the information they now have, NSWG-1 leaders can match current year spending to current activity levels. NSWG-1 can then use predictions about future activity levels to determine long-term funding requirements.

Many NSWG-1 departments have costs that are directly related to the activity levels of operational units. These departments have variable costs bases. When activity levels rise, costs increase; when activity levels drop, costs decrease. We assume operational units' (SEAL Teams, Special Boat Units, and SDV) activity levels drive the costs incurred by these NSWG-1 departments. Conversely, departments that have stable needs exhibit fixed costs characteristics. No matter the activity level of operational units, these departments require a constant funding base.

For spending that varies directly with activity levels, future increases in activity require more funding. If NSWG-1 can prove they have permanent increases in certain activities since the NSW-21 transition, they can use this information to justify permanent

plus-ups to their annual budget. To predict future funding needs though, NSWG-1 must first determine each departments' cost structure: the relative portion of variable and fixed costs of their total costs.

If Teams cycle more platoons through training, some NSWG-1 departments must provide a greater level of support activity, and therefore incur higher costs. However, since not all departmental spending is sensitive to activity levels, some departments are not subject to our recommendation. Despite increases in platoon training and deployment, the NSWG-1 staff administrative department probably does not require a funding increase. The administrative department has relatively fixed costs. Rather, NSWG-1 must focus on those departments with variable costs.

For example, assume that NSWG-1's Niland training facility exhibits variable cost characteristics. If 12 platoons visit Niland during a year, and fuel costs are $120,000, then it costs approximately $10,000 per platoon, per year in fuel to conduct training. Thus, if NSWG-1 predicts that four additional platoons will visit Niland next year then Niland requires a $40,000 plus-up in their budget to sustain training readiness. Based on a selection from NSWG-1 new JONs for the Niland range, managers also have to pay for equipment, batteries, and operational consumables to support training activities. Increased activity levels mean higher costs in those areas. Thus, if NSWG-1 can prove it has incurred permanent increases in activity levels, they have strong justification to ask for permanent plus-ups in their annual budget. There might also be other areas within NSWG-1 where justification can be found.

NSWG-1 can use information from its performance measurement system to predict long-term costs and develop budget justification. They have short-term cost information useful for predicting future needs based on activity levels. It is clearly more difficult to get funding without valid justification. NSWG-1's old tracking categories did not provide a sufficient tool for managing spending trends or justifying new money. There was only lagging information from which to make future guesses about spending. The new information is useful in making short-term decisions, long-term predictions, and obtaining funding necessary for future readiness.

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