

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

**PERFORMANCE MEASUREMENT OF A
CARRIER BATTLE GROUP: A CASE STUDY
OF THE COMMANDER IN CHIEF, U.S.
ATLANTIC FLEET'S PARTICIPATION AS A
PERFORMANCE PLANNING AND REPORTING
PILOT PROJECT FOR FISCAL YEAR 1996**

by

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December 1996

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19970521 043

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 1996	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE PERFORMANCE MEASUREMENT OF A CARRIER BATTLE GROUP: A CASE STUDY OF THE COMMANDER IN CHIEF, U.S. ATLANTIC FLEET'S PARTICIPATION AS A PERFORMANCE PLANNING AND REPORTING PILOT PROJECT FOR FISCAL YEAR 1996			5. FUNDING NUMBERS
6. AUTHOR(S) Smith, Robert L.			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE
13. ABSTRACT (maximum 200 words) The Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) participated as a performance planning and reporting pilot project (PPRP) in support of the short-term requirements of the Government Performance and Results Act of 1993 (GPRA). Combatant military organizations have experienced, and will experience, some of the greatest challenges of changing from the management of inputs and outputs to defining, quantifying, measuring and managing for outcomes. The central core of this thesis is an exploration of how CINCLANTFLT and its action agent the George Washington Battle Group (GWBG) developed a performance plan, performance metrics for a carrier battle group (CVBG) and a performance measurement system that supported the process of performance management. To support the process of performance management the Battle Group Mission Capability Reporting System (BGMCRS) was created. The BGMCRS is an automated management information system that assists the Battle Group Commander in assessing the projected output capability of his command in seven critical mission areas. The system provided micro-level and macro-level performance information for use by the Battle Group Commander and his staff, and provided CINCLANTFLT with an archived data base that documented the performance of operationally deployed CVBG. Through its participation as a PPRP, CINCLANTFLT and the GWBG demonstrated that the performance of a CVBG is quantitatively measurable while demonstrating the process of performance management can assist in the effective and efficient management of a combatant force.			
14. SUBJECT TERMS Performance Measurement, Performance Management, Carrier Battle Group, Government Performance and Results Act, Commander In Chief, U.S. Atlantic Fleet, Readiness			15. NUMBER OF PAGES 107
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL

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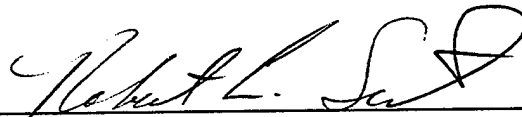
Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

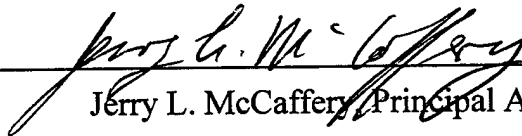
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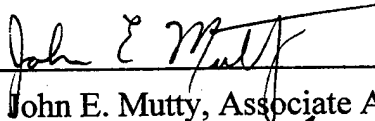


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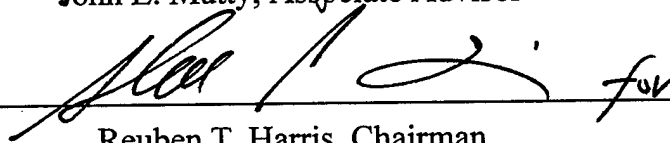
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ABSTRACT

The Commander In Chief, U.S. Atlantic Fleet (CINCLANTFLT) participated as a performance planning and reporting pilot project (PPRP) in support of the short-term requirements of the Government Performance and Results Act of 1993 (GPRA). Combatant military organizations have experienced, and will experience, some of the greatest challenges of changing from the management of inputs and outputs to defining, quantifying, measuring and managing for outcomes. The central core of this thesis is an exploration of how CINCLANTFLT and its action agent the George Washington Battle Group (GWBG) developed a performance plan, performance metrics for a carrier battle group (CVBG) and a performance measurement system that supported the process of performance management. To support the process of performance management the Battle Group Mission Capability Reporting System (BGMCRS) was created. The BGMCRS is an automated management information system that assists the Battle Group Commander in assessing the projected output capability of his command in seven critical mission areas. The system provided micro-level and macro-level performance information for use by the Battle Group Commander and his staff, and provided CINCLANTFLT with an archived data base that documented the performance of operationally deployed CVBG. Through its participation as a PPRP, CINCLANTFLT and the GWBG demonstrated that the performance of a CVBG is quantitatively measurable while demonstrating the process of performance management can assist in the effective and efficient management of a combatant force.

TABLE OF CONTENTS

I.	INTRODUCTION	1
	A. PURPOSE	1
	B. BACKGROUND	1
	C. METHODOLOGY	2
	D. SCOPE LIMITATIONS	3
	E. THESIS OUTLINE	3
II.	GPRA	5
	A. PERFORMANCE MEASUREMENT	6
	B. LEGISLATIVE INTENT OF GPRA	9
	C. LEGISLATIVE REQUIREMENTS OF GPRA	11
	1. Long-Term Requirements	11
	2. Short-Term Requirements	13
	3. Interrelationship Between Short-Term and Long-Term Requirements	14
	D. GPRA PILOT PROJECTS	15
	1. Performance Measurement Pilot Projects	15
	2. Managerial Accountability and Flexibility Pilot Projects .	16
	3. Performance Budgeting Pilot Projects	17
	E. PURPOSE OF PERFORMANCE MEASUREMENT PILOT PROJECTS	17

F.	DOD IMPLEMENTATION OF GPRA	19
G.	SUMMARY	22
III.	CINCLANTFLT	23
A.	CINCLANTFLT	24
1.	Organization and Mission	24
2.	The CVBG	25
B.	PURPOSE OF PARTICIPATING AS A PPRP	26
C.	SELECTION OF A CVBG AS PPRP ACTION AGENT	27
D.	PPRP IMPLEMENTATION CHALLENGES	28
1.	Selecting the Appropriate GPRA Coordinator	28
2.	Coping with Time Constraints	29
3.	Accepting PPRP Control Limitations	30
4.	Determining Performance Outcome	30
5.	Determining CVBG Indicators of Performance	31
6.	Securing Action Agent Support	33
E.	THE NEED FOR THE BGMCRS: AUTOMATING THE COMMANDER'S INFORMATION SYSTEM	34
F.	CINCLANTFLT PPRP METHODOLOGY	37

1.	Starting Position	38
2.	Determining Appropriate Performance Measures	41
3.	Creating a Data Collection and Array System	49
4.	Establishing Performance Goals	52
G.	SUMMARY	52
IV.	EVALUATION OF CINCLANTFLT'S PPRP	55
A.	INTRODUCTION	55
B.	PPRP STRENGTHS	56
1.	The Power of the BGMCRS	57
2.	Effectiveness of PPRP Methodology	60
C.	PPRP WEAKNESSES	63
1.	Metric Creep	63
2.	Data Reliability	65
3.	Organizational Culture	66
4.	Management/Leadership Culture	66
5.	BGMCRS Limitations	68
D.	FUTURE INITIATIVES AT CINCLANTFLT	70
E.	SUMMARY	72
V.	LESSONS LEARNED, RECOMMENDATIONS AND SUMMARY .	73
A.	OVERVIEW	73

B. CINCLANTFLT LESSONS LEARNED 75

1. Palatable Paradigm Shifts and User By-in Important 76

2. Applying the Process to Any Tasking 76

3. Dedicated Investment to Develop Metrics 77

4. Avoid over Complicating Process 77

C. RECOMMENDED FUTURE RESEARCH AREAS 78

D. SUMMARY 80

LIST OF REFERENCES 83

INITIAL DISTRIBUTION LIST 87

LIST OF FIGURES

Figure 1.	Performance Measurement Model	8
Figure 2.	Sample BGMCRS Daily Report	37
Figure 3.	CINCLANTFLT's Performance Assessment Process Model	38
Figure 4.	CINCLANTFLT Critical Task Data Hierarchy	41
Figure 5.	Basic Projected Output Capability Performance Algorithm	42
Figure 6.	Air Superiority Task Performance Algorithm	47
Figure 7.	B-Rating Matrix for Air Superiority Sub-Task 3a	48
Figure 8.	BGMCRS Sample Complete Critical Task Report/Display Screen	51
Figure 9.	BGMCRS Sample Critical Task Report/Display Screen	51
Figure 10.	BGMCRS Sample Subtask Report/Display Screen	52
Figure 11.	Resources Versus B-Rating Graph	69
Figure 12.	CINCLANTFLT Lessons Learned	75
Figure 13.	Possible Implementation Results Curves	80

LIST OF TABLES

Table 1. Tools for the Accomplishment of GPRA	6
Table 2. Long-Term GPRA Legislative Requirements	12
Table 3. Short-Term GPRA Legislative Requirements	14
Table 4. Performance Planning and Reporting Pilot (PPRP) Project Schedule	18

LIST OF ACRONYMS

ACC	Air Combat Command
ARG	Amphibious Ready Group
BGCDR	Battle Group Commander
BGMCRS	Battle Group Mission Capability Reporting System
CASREP	Casualty Report System
CDR	Commander
CINC	Commander in Chief
CINCLANTFLT	Commander in Chief, U.S. Atlantic Fleet
CNO	Chief of Naval Operations
COTS	Commercial Off-the-shelf
CVBG	Carrier Battle Group
C2F	Commander, Second Fleet
DoD	Department of Defense
DoN	Department of the Navy
GAO	General Accounting Office
GPRA	Government Performance and Results Act of 1993 (P.L. 103-62)
GWBG	George Washington Battle Group
FY	Fiscal Year
MEU(SOC)	Marine Expeditionary Unit, (Special Operations Capable)

N8	Warfare Programs and Readiness Directorate, CINCLANTFLT
OMB	Office of Management and Budget
OUSDC	Office of the Under Secretary of Defense, Comptroller
PPBS	Planning, Programming and Budgeting System
PPRP	Performance Planning and Reporting Pilot
SORTS	Status of Readiness and Training System
TRBG	Theodore Roosevelt Battle Group
TYCOMS	Type Commanders

ACKNOWLEDGMENTS

The author would like to thank the many personnel within the Warfare Programs and Readiness Directorate at the Commander in Chief, U.S. Atlantic Fleet whose assistance and support for this thesis was invaluable.

The author would like to especially recognize Mr. Richard Pearsall, CINCLANTFLT, N8AA without whose support and assistance this project could have never been completed.

Finally, the author would like to acknowledge his wife and children whose patience and support made this project possible.

I. INTRODUCTION

A. PURPOSE

The purpose of this thesis will be to explore the process the Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) used to accomplish a pilot project in performance planning and reporting. CINCLANTFLT volunteered to participate in the pilot project in performance planning and reporting as part of the requirements of the Government Performance and Results Act of 1993 (GPRA). CINCLANTFLT was selected for study because it is one of only two operational combatant commands within the Department of Defense (DoD) involved in the pilot project process and the only Department of the Navy (DoN) organization involved. CINCLANTFLT accomplished the pilot project utilizing the George Washington Battle Group (GWBG) as its test agent.

America is unquestionably the greatest military superpower in the world. Operational units have excelled in producing results. However, short of demonstrating military superiority in conflict, they have had limited success in measuring and quantifying their outputs in terms of efficient and effective outcomes. Military combatant organizations have experienced, and will experience, some of the greatest challenges of changing from the management of inputs and outputs to defining, measuring, quantifying and managing for outcomes.

It is hoped that this thesis will illuminate the challenges operational commands will face, how they may overcome these obstacles and provide them with an example of how to accomplish the process of performance measurement.

B. BACKGROUND

GPRA is one of several recent legislative initiatives aimed at improving the way the Federal government operates. Specifically, the Chief Financial Officers

(CFO) Act, the Government Management Reform Act (GMRA) and Vice-President Gore's National Performance Review are attempts to refocus federal government resource management toward adopting private industry's better business practices. Central to each of these initiatives is the intent of bringing accountability, efficiency and effectiveness into the management process Federal agencies utilize on a daily basis now as well as into their future operation. These initiatives are an attempt to cause a cultural paradigm shift in the Federal government from managing inputs and outputs to managing for results utilizing performance management practices.

GPRA is structured to enable a phased implementation process through conducting several short-term pilot projects. The intent behind conducting pilot projects is to allow for lessons learned from these pilot projects to be used at the agency level to enable effective development of strategic plans, performance planning and performance reporting.

C. METHODOLOGY

A limited review of the history and intent of governmental initiatives related to efficient management of federal resources will be conducted. An exploration of the how the Office of the Under Secretary of Defense, Comptroller (OUSDC) is implementing GPRA within the Department of Defense (DoD) will provide a transition between the overall requirements of GPRA and how OUSDC's approach to GPRA implementation relates to the performance measurement pilot project undertaken by CINCLANTFLT.

Exploration and documentation of the CINCLANTFLT pilot process will be conducted. A historical narrative will be developed for each major phase of their pilot project. Performance measurement challenges, solutions and lessons learned will be discussed. The future of CINCLANTFLT's performance measurement process will also be explored.

D. SCOPE LIMITATIONS

The core of this thesis will be an exploration of CINCLANTFLT's participation in the pilot project provision of GPRA for setting goals, measuring program performance against these goals, and reporting on their progress. CINCLANTFLT chose a carrier battle group (CVBG) which would be operationally deployed overseas while conducting the performance measurement pilot for CINCLANTFLT. The chosen CVBG was the GWBG, deployed primarily to the Mediterranean from January through July of 1996. This thesis will focus on the performance assessment system the GWBG utilized while deployed.

This thesis did not examine how OUSD(C) is managing implementation of GPRA within the DoD. Additionally, the processes utilized by other pilot projects in performance measurement are not presented.

E. THESIS OUTLINE

The objectives of this thesis are to:

- Examine how CINCLANTFLT developed its performance measurement process.
- Examine how performance measures were developed, captured and finalized.
- Explore the strengths and weakness of the CINCLANTFLT performance measurement process.
- Assess the potential for other combatant commands to utilize the CINCLANTFLT process for conducting performance measurement.

Chapter II provides of a discussion of GPRA. Included is a discussion on the short-term and long-term requirements of the Act and how these requirements are

interrelated. A discussion concerning the concept of performance measurement will be provided to establish the conceptual foundation supporting GPRA implementation.

Chapter III will be a detailed documentation of the pilot project process implemented at CINCLANTFLT. Challenges faced and solutions utilized will be provided. Documentation of performance metrics created and the prototype Battle Group Mission Capability Reporting System (BGMCRS) will also be discussed.

Chapter IV will be an analysis of the strengths and weaknesses of CINCLANTFLT's performance assessment process developed in order to execute its performance measurement pilot project.

Chapter V contains the conclusions reached in this thesis. CINCLANTFLT lessons learned from conducting the pilot project and recommendations for further study will also be provided.

II. GPRA

With GPRA, Congress and the President have demonstrated a desire for agencies of the Federal Government to focus on improving performance. This improved performance would in turn either directly, or indirectly, be related to an agency's budget. The Act's overriding purpose is first to effect management improvement within the Federal government and then to improve the budgeting process.

Predecessors of GPRA whose purposes were to effect bureaucratic change via the budgeting process include the Planning-Programming and Budgeting-System (PPBS) (although DoD still uses a modified, evolved PPBS); Management-By-Objectives (MBO); and Zero-Based-Budgeting (ZBB).

One key difference between GPRA and these former initiatives is their origin. Where the previous initiatives were the results of Presidential Directives, GPRA is law. Where the life spans of previous initiatives were dependent upon the tenure and inclination of a President, GPRA can only be changed through congressional action.

Where these previous systems were seen to be the road to governmental reform via the budgeting process, GPRA is attempting to alter the Federal budgeting process after reform of Federal management processes.

The conceptual framework of GPRA is premised upon an organization's ability to conduct its operations in a businesslike manner. The foundation of GPRA is rooted in directing agencies: to accomplish long-term strategic planning, which defines an organization's mission (s) and desired outcomes, to develop annual performance plans that will incrementally accomplish the desired goals and outcomes established in the strategic plan, to develop a process for measuring achievement of those goals or

outcomes, and report those results. Table 1 provides a synopsis of what the strategic plans, performance plans and performance reports are expected to accomplish.

Table 1. Tools for the Accomplishment of GPRA

Strategic Plans	Strategic plans are the starting point and basic underpinning for program goal-setting and performance measurement. The strategic plan articulates the fundamental mission (or missions) of an agency and lays out its long-term goals for implementing that mission.
Performance Plans	Performance plans are to be the basis on which to measure and compare actual performance during a fiscal year against the performance goals that were set.
Performance Reports	Program performance reports provide the results of what was actually accomplished for the resources that were expended. i.e., how well the original goals were met.

Source: OMB, 1993.

This chapter will focus on the legislative intent and requirements of GPRA and link what is to be accomplished by the short-term pilot projects to the long-term requirements imposed by GPRA. The concept of performance measurement will be discussed. Valid performance measurement is considered one of the necessary precursors for successful GPRA implementation. How the OUSD © has executed GPRA implementation will be explored as it relates to efforts of DoD performance measurement pilot organizations. The chapter will conclude with an exploration of what performance measurement pilots were required to accomplish.

A. PERFORMANCE MEASUREMENT

What is performance measurement? The Heritage dictionary defines performance as: "1. The act of performing, or the state of being performed. 2. The act or style of performing a work or role before an audience. 3. The way in which someone

or something functions." (Heritage Dictionary, 1979, p. 974). Although some would argue that the second definition best illustrates what elected officials do, the third definition will be the basis of deliberation in this thesis. In other words, performance measurement is the process of measuring how well a person or an organization accomplishes their job.

"Performance measurement is a process by which programs are objectively measured on how well they are accomplishing their goals through the effective and efficient delivery of products and/or services." (Social Security Administration, 1994, p. 1). "Strategic plans provide the foundation for carrying out all other GPRA requirements." (Groszyk, 1995, p. 8). If strategic plans are the foundation, then performance measurement must be considered the mortar that binds the process of strategic planning, performance planning, and performance reporting.

"GPRA's major elements can be found in most businesses, where these have been used for decades but for a different ultimate objective: profit or loss." (Groszyk, 1995, p. 5). However, where profit is typically the goal of private enterprise, public institutions usually do not have such clear objectives. As Figure 1 illustrates, it may seem intuitively obvious to most what should be measured. The reason that public entities have concentrated primarily on measuring inputs or outputs is because they are the easiest to accomplish. Since public sector goals and objectives are not always clearly defined it can be difficult to determine what to measure in terms of outcomes. In some cases, such as national defense, the overriding concern has been effectiveness. In war, there are no points for coming in second. The challenge facing federal agencies then is to determine what goals they should achieve. This forces questions to be asked of stakeholders and hopefully answers to be given. This may seem basic to an outside observer but is extremely difficult to accomplish in the public sector. If it were easy, the Federal government would already be doing it.

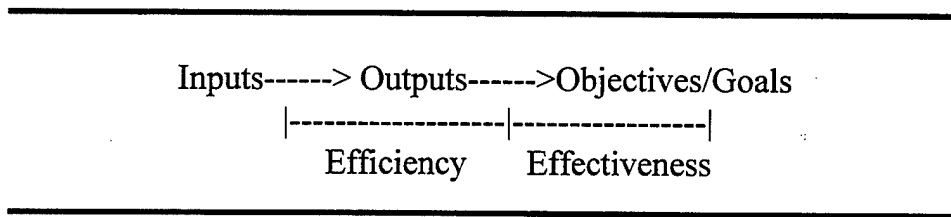


Figure 1. Performance Measurement Model

Source: After Lee, 1987, p. 64.

In GPRA there are no definitions for input or impact measures. "As GPRA is directed at establishing performance goals and targets, these definitions are prospective in nature." (OMB, 1995a, p. 1). In its "Primer on Performance Measurement," the Office of Management and Budget (OMB) provides definitions for use in executing GPRA. OMB produced its list of pertinent definitions to provide a common point of understanding initially for OMB training purposes and later made these definitions available to agencies beginning the GPRA process. Pertinent definitions include:

- Outcome measure:** An assessment of the results of a program compared to its intended purpose.
- Output measure:** A tabulation, calculation, or recording of activity or effort that can be expressed in a quantitative or qualitative manner.
- Input measure:** Measures of what an agency or manager has available to carry out the program or activity.
- Performance goal:** A target level of performance expressed as a tangible, measurable objective, against which actual performance can be compared, including a goal expressed as a quantitative standard, value or rate.

Performance indicator: A particular value or characteristic used to measure output or outcome.
(OMB, 1995a).

Why the emphasis on performance measurement? GPRA is striving to move the Federal management process which is preoccupied with control of resources - accounting for inputs and outputs and their relation to a line-item budget, to managing for results - managing for the effectiveness and efficiency of a program.

B. LEGISLATIVE INTENT OF GPRA

In his book "Reframing Organizations" Lee Bolman uses the label of "frames" to characterize the different vantage points from which individuals may view an issue and "lenses" to describe how individuals may bring such issues into focus. (Bolman, 1991). Interpretations of the intent of GPRA are as numerous as the prospective lenses worn by its legislative creators, ultimate implementors and outside observers. For example, Walter Groszyk of OMB states: "GPRA is intended to bring about a fundamental transformation in the way government programs and operations are managed and administered." (1995, p. 1). However, GPRA is seen by some observers within the Federal Government as just the latest "fad" attempt, like ZBB, by Congress to demonstrate to the American public that they are governing more efficiently and effectively (Leonard, 1995). A case of form over true substance.

Although GPRA may result in a change to how the Federal Government does accomplish the budgeting process, its main objective is to alter the way the Federal government accomplishes its job. The stated purposes of the Act are to:

- Improve the confidence of the American people in the capability of the Federal Government, by systematically holding Federal agencies accountable for achieving program results;

- Initiate program performance reform with a series of pilot projects in setting program goals, measuring program performance against those goals, and reporting publicly on their progress;
- Improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction;
- Help Federal managers improve service delivery, by requiring that they plan for meeting program objectives and by providing them with information about program results and service quality;
- Improve congressional decision making by providing more objective information on achieving statutory objectives, and on the relative effectiveness and efficiency of Federal programs and spending; and
- Improve internal management of the Federal Government.

(P.L. 103-62, 1993)

There is a "corporate" mind set that sees GPRA only as a new way to accomplish budgeting. For example, the Air Force's Air Combat Command (ACC) views GPRA's potential end result being the creation of a Federal performance budgeting system (ACC, 1996). This is the very organizational culture that GPRA is attempting to change. "The primary intent of GPRA is to improve the management of Federal programs through a results-oriented focus." (JFMIP News, 1995, p. 6). GPRA is structured with the understanding that time and experimentation will be necessary ingredients needed to evoke this change. The gradual process of moving from a system focused on expenditure control - of managing only inputs or outputs within the line-item budgeting process; to managing for results, of managing not only funds spent, but relating an expenditure to its outcome, is understood to be a daunting task.

C. LEGISLATIVE REQUIREMENTS OF GPRA

The legislative requirements of GPRA can be viewed as having short-term and long-term time horizons. The drafters of GPRA hope that accomplishment of the short-term requirements will develop the intellectual skills and "business culture" necessary for the success of the long-term purposes/requirements of GPRA.

1. Long-Term Requirements

Long-term requirements such as agency strategic plans, performance plans and performance reports have indefinite time horizons. These requirements begin in the later part of 1997 and continue indefinitely unless the Act is modified or canceled. These indefinite requirements direct Federal agencies to:

- Develop Strategic Plans prior to FY 1998 (these plans are to cover minimally six years, the first year of the plan and subsequent 5 'out' years);
- Prepare Annual Plans setting performance goals beginning with FY 1999;
- Report annually on actual performance compared to goals. (The first Performance Report is due in March 2000).

OMB is also required to prepare an annual government-wide performance plan, which is based on agency annual performance plans. Additionally, strategic plans must be updated every three years (P.L. 103-62, 1993).

Table 2 illustrates the long-term legislative requirements of GPRA. While GPRA does not dictate agency preparation of performance budgets, it does create a linkage between agency and government-wide performance and their budgets. Beginning with fiscal year (FY) 1999, OMB will produce a Federal Government performance plan which will be included as a part of the President's budget

submission to Congress. (P.L. 103-62, 1993) Every affected agency will also provide to OMB, Congress and the President their performance plan that corresponds to the fiscal year under budget consideration. Each March, beginning in the year 2000, just as Congress begins its budget deliberations, each affected agency will submit their performance report covering the previous fiscal year. One can quickly see that although there may be no specific dollar amount related to an agency's performance, at the macro-level, the President and Congressional decision makers will have greater qualitative and quantitative information available during budget deliberations.

Table 2. Long-Term GPRA Legislative Requirements

YEAR	REQUIREMENTS
1997 September	Agencies submit strategic plans. (Updated every three years thereafter).
September	**Agencies submit FY 99 annual performance plans to OMB.
December	**Agencies revise FY 99 annual performance plans to reflect Presidential budget decisions.
1998 February	**Agencies provide copies of complete final FY 99 annual performance plans to appropriate authorization and appropriation committees and make plans available to the public.
February	**OMB submits government-wide performance plan for FY 99 to Congress.
September	**At agencies' option, revise annual performance plans to reflect FY 99 budget decisions, and provide the revised plans to OMB, the appropriate Congressional authorization and appropriation committees, and make revised plans available to the public.
2000 March	**Agencies submit annual performance reports for FY 99.

** Requirement continues indefinitely thereafter for each subsequent FY.

Sources: P.L. 103-62, 1993 and OMB GPRA Implementation Plan, 1993.

2. Short-Term Requirements

Short-term requirements have a specified time period in which a specific action or actions will be accomplished. Examples of this are the pilot projects started in 1994 and ending in 1997. In the case of the pilot projects, legislative compliance is achieved simply through voluntary participation of agencies. There is no penalty for failure to participate nor is there penalty or reward for outcomes resulting from participation. Having over 70 Federal organizations or agencies volunteer to conduct performance measurement pilots may be an indication of a desire within the Federal bureaucracy to effect the management changes sought by GPRA.

Another possible explanation for the large number of volunteers is agencies have deemed it politically prudent to show support and enthusiasm for GPRA in the hopes of garnering future favor with Congress and the President. (Jones, 1996) This view discounts the emerging consensus within Congress to make government work better. Passage of the Chief Financial Officers Act of 1990, GPRA in 1993, and the Government Management Reform Act of 1994 demonstrate the congressional will that the Federal Government get more "bang for the buck." Regardless of the motivation to participate, for the three years since the passage of GPRA, organizations have invested vast amounts of energy, time and resources into participating in the pilot projects. Table 3 lists the short-term legislative requirements of GPRA.

Table 3. Short-Term GPRA Legislative Requirements

YEAR	REQUIREMENTS
1993	OMB selects at least 10 agencies as pilot projects in performance measurement.
1994	OMB selects at least 5 of the performance measurement pilots as pilot projects for managerial accountability and flexibility
1997	OMB selects at least 5 agencies (3 of which must have been performance measurement pilots) as pilot projects in performance budgeting for FY 1998 and 1999.
1997	By 1 May OMB reports to Congress on pilot results for performance measurement and also for managerial accountability and flexibility. An assessment on whether the pilot project phase succeeded in providing the basis for full-scale government-wide implementation will be included.
1997	By 1 June GAO reports to Congress on implementation of GPRA, including the prospects for compliance by Federal agencies beyond those participating as pilot projects.
2001	OMB reports to Congress on results of pilots for performance budgeting.

Sources: P.L. 103-62, 1993 and OMB GPRA Implementation Plan, 1993.

3. Interrelationship Between Short-Term and Long-Term Requirements

Each short-term pilot process commences four years prior to execution of its similar long-term initiative. The pilot process allows a participating agency to conduct the "GPRA process" either agency-wide or in a micro-level environment using subsets of its organization. The pilot process is the time that an organization can stumble, experiment and learn prior to actual GPRA implementation.

During the time period pilot projects are being conducted, the United States General Accounting Office (GAO) and OMB will be conducting assessments as to the

success of the pilot projects and the viability of the Federal government to execute the long-term requirements of GPRA. GPRA is written such that the only enduring requirements are the creation of strategic plans, performance plans and performance reports. Although there will be pilot projects in performance budgeting, there is no legislative requirement directing government-wide implementation.

The result is that execution of the pilot projects will result in a "report card" on the ability of the Federal government to accomplish either the requirements and/or intent of GPRA. OMB's and GAO's assessments occur just prior to execution of GPRA long-term requirements. As such, how well performance measurement pilots perform will be a key indicator as to whether or not the Federal government is ready to accomplish, or capable of accomplishing, the long-term strategic planning, performance planning and performance reporting requirements of GPRA.

D. GPRA PILOT PROJECTS

GPRA directed that three different types of pilot projects be conducted over varied time periods. Those pilot projects and their time periods are:

- Performance Measurement during FY 1994, 1995 and 1996.
- Managerial Accountability and Flexibility during FY 1995 and 1996.
- Performance Budgeting during FY 1998 and 1999.

1. Performance Measurement Pilot Projects

Because of the requirements levied by GPRA and OMB for performance measurement pilot projects, they have been synonymously referred to as performance measurement pilots, performance plan pilots, performance reporting pilots, or as performance report pilots. For simplicity and standardization, for the remainder of

this thesis they will be referred to as Performance Planning and Reporting Pilots (PPRPs).

Since participation as a PPRP required the creation of relevant portions of an agency's strategic plan (i.e., mission statement, agency goals and objectives) if they did not already exist and producing an annual performance plan and subsequent performance report, many agencies may have volunteered as a way to improve their ability to accomplish actual GPRA requirements commencing in 1997. Participation as a PPRP gave early participating organizations a three year "head start" in the development and execution of actual agency-wide GPRA requirements. A more extensive discussion on PPRPs will be conducted later.

2. Managerial Accountability and Flexibility Pilot Projects

Although Managerial, Accountability and Flexibility (MAF) pilot projects were to be conducted during FY 1995 and 1996, they never occurred. The requirements to conduct MAF pilot projects still exist, but OMB has been unable to manage their execution. Reasons given to PPRP pilot organizations for the failure to conduct MAF pilot projects include the energy and time committed by OMB to oversee the PPRPs, assisting agencies to prepare for actual implementation of GPRA and the need for such pilots being considered unnecessary by OMB. OMB supports their decision by pointing to legislative measures passed after GPRA and elimination of unnecessary and sometimes self-imposed agency restrictions negating the need for GPRA MAF pilot projects. It has also been observed that OMB made the requirements for waivers and restrictions so onerous that agencies used Vice-President Gore's National Performance Review (NPR) as the vehicle to accomplish the desired changes that could have been available through GPRA MAF pilot projects.

3. Performance Budgeting Pilot Projects

It is still too early to comment on the status of Performance Budgeting pilots. At this point in time, the process does not begin until late in calendar year (CY) 1997 although there have been discussions on delaying their execution until CY 1998. (Groszyk, 1996). Thus, PPRPs are the only pilot projects that have been accomplished.

E. PURPOSE OF PERFORMANCE MEASUREMENT PILOT PROJECTS

The pilot project plans and reports are intended to test the benefits, usefulness, and costs of the performance measurement and goal-setting concepts of this Act, and to identify any significant difficulties experienced by the agencies during the pilot phase (OMB, 1993, p. 32).

GPRA directed OMB to designate at least ten agencies as PPRPs. As stated earlier, over 70 Federal organizations were selected to participate. PPRP requirements entail having the selected agencies or organizations undertake the preparation of relevant portions of their strategic plans, develop performance plans, and produce subsequent performance reports. (P.L. 103-62, 1993) GPRA drafters and OMB saw the process of participating as a PPRP as an enabling process that would help assist in ensuring the overall long-term success of GPRA. While Agencies are preparing for eventual implementation of the long-term requirements of GPRA, they have had the opportunity to experiment and learn through the process of conducting their PPRPs. The experienced gained will assist agencies in accomplishing the long-term requirements of GPRA.

GPRA also requires the Director of OMB to submit, no later than 1 May 1997, a report to the President and to the Congress which:

- Assesses the benefits, costs, and usefulness of the plans and reports prepared by the pilot agencies in meeting the purposes of GPRA;
- Identifies any significant difficulties experienced by the pilot agencies in preparing plans and reports; and
- Sets forth any recommended changes in the requirements of the provisions of GPRA.

Table 4 shows the implementation and execution schedule for PPRPs. Depending on when an organization became a PPRP, it may have had the opportunity to produce up to three performance plans and reports. Due to the annual iterative nature of GPRA requirements, pilot participants will undoubtedly be further along their agency "learning curve" than those organizations that did not participate or did not utilize the opportunity to share pilot participant experiences within their whole organization.

Table 4. Performance Planning and Reporting Pilot (PPRP) Project Schedule

DUE	REQUIREMENT
August 1993	OMB defines list of government functions to be covered by pilots.
August 1993	OMB solicits agency self-nominations.
October 1993	OMB designates PPRPs.
March 1994	PPRP organizations submit FY 1994 performance plans to OMB.
March 1994	OMB selects additional PPRPs for FY 1995 and 1996.
September 1994	PPRP organizations submit FY 1995 performance plans to OMB.
March 1995	PPRP organizations submit FY 1994 performance reports to OMB.

Table 4 (Continued)

DUE	REQUIREMENT
April 1995	PPRP organizations submit FY 1996 performance plans to OMB.
March 1996	PPRP organizations submit FY 1995 performance reports to OMB.
March 1997	PPRP organizations submit FY 1996 performance reports to OMB.

Sources: P.L. 103-62, 1993 and OMB GPRA Implementation Plan, 1993.

Analysis of requirements listed in Tables 2, 3 and 4 illustrate the systematic implementation process established by GPRA. As can be seen from comparing requirements in Table 4 to requirements established in Table 2, there is a six month period from the completion of an organization's PPRP and issuance of their agency's strategic plan and annual performance plan. Also, after submission of the their FY 1996 performance report (Table 4) there is a period of two months in which OMB and GAO conclude preparation of their reports to Congress (Table 3). Congress will have five months from the issuance of GAO's and OMB's reports in which, if deemed necessary, to modify or rescind GPRA prior to the submission of agency strategic plans and annual performance plans.

F. DOD IMPLEMENTATION OF GPRA

DoD has been managing GPRA implementation at two levels simultaneously: the DoD-wide implementation and participation in the performance measurement pilot project process. While DoD has been refining PPBS to meet GPRA legal requirements, OUSD(C) has primarily acted in a liaison role between DoD performance measurement pilot organizations and OMB. (OUSD(C), 1995). OUSD(C)'s position is that "...critical elements of GPRA, such as Agency-wide strategic plans and increased program accountability, are already part of the DoD

PPBS." (OUSD(C), 1995, p. 1). OUSD(C) also states that DoD GPRA corporate level objectives are to:

- Integrate GPRA into the PPBS;
- Make GPRA a meaningful Secretary of Defense level report;
- Develop corporate level goals and corporate level performance measures.

OUSD(C) has determined that accomplishment of GPRA requirements can be accomplished at the corporate level with little input necessary from outside the Pentagon. OUSD(C) believes that all the information needed to accomplish GPRA is already available within the Pentagon through existing information systems and there is no need to burden commands with the administrative requirements of GPRA.

According to several sources, GAO and OMB both believe that OUSD(C)'s approach is not in keeping with the intent of GPRA and desire DoD to devolve the GPRA process throughout the DoD organization. OUSD(C) stresses, and both OMB and GAO agree, that DoD is already accomplishing most, if not all, GPRA requirements through PPBS. Several sources state they believe OUSD(C)'s position is "until other Federal agencies reach DoD's level of GPRA compliance further effort is neither required nor necessary unless Congress or the President dictate otherwise."

The impression of several DoD PPRP participants is that OUSD(C) has provided little implementation guidance. In fact, during initial coordination meetings, the predominate theme expressed by OUSD(C) was that they were there to lend assistance when requested and would not dictate the approach an organization could or should take in accomplishing their individual performance measurement pilots. One source vividly remembers a key OUSD(C) GPRA coordination meeting when

an OUSD(C) representative said: "We want a thousand flowers to bloom." Several sources point to individuals within OUSD(C) that have been extremely helpful but express the opinion that OUSD(C), as an organization, has not made the cultural changes necessary to fully integrate the tenants of GPRA. Because there has been little guidance from OUSD(C), the individual services have been unable to provide any definitive guidance to their PPRPs. The services have essentially acted as one more stop along the road of coordination between DoD PPRPs and OMB.

In a yet to be distributed GAO report discussing the progress and challenges in implementing GPRA at pilot agencies, GAO states:

Interestingly, we are finding that the pilot agencies making the most progress implementing GPRA recognize they still have many problems to solve, while those making the least progress tend to see little difference between the requirements of GPRA and the way they have normally done business. (GAO, 1996, p. 6)

The merits of OUSD(C)'s implementation process for GPRA is not the focus of this thesis, yet it illuminates a potential institutionally biased philosophical obstacle facing DoD pilot participants. DoD PPRP organizations have invested their time and energy irrespective of OUSD(C)'s position because they see GPRA helping them focus on "doing things right" and "doing the right things."

Whether OUSD(C)'s approach to GPRA will satisfy Congress or the President will be left for others to debate. The overall impression by OMB and GAO is that, on the whole, DoD PPRPs have been successful efforts. This should come as no surprise since DoD participants are knowledgeable and work within DoD's structured PPBS process. Long-term strategic plans, quantitative and/or qualitative assessments and evaluating "performance" during the budgeting process are elements of DoD's PPBS and bear striking resemblance to the requirements of GPRA. Discarding the lack of "corporate" support, DoD PPRPs may have been successful efforts because

the organizational culture necessary to support GPRA compliance already exists within DoD's combatant forces, whose focus has always been results oriented.

G. SUMMARY

It is too early to tell whether or not GPRA will succeed within the Federal government. It may be determined by Congress, after consultation with both OMB and GAO, that PPRPs have shown merit and the requirements and purpose of GPRA can be achieved. GAO and OMB assessments may very well point to the success of DoD's PPRPs as the basis to move forward with government-wide implementation of GPRA.

According to GAO, OMB and OUSD(C) sources, the processes utilized by several of DoD's PPRP organizations have shown that organizations can go beyond simple compliance of the Act while embracing the intent of GPRA - managing for results. These organizations have been mentioned as models for other Federal agencies to emulate as ways to accomplish the intent and requirements of GPRA. One of the organizations that has been mentioned with regular frequency is CINCLANTFLT.

What will be discussed in the next chapter is how CINCLANTFLT, a military combatant force which cannot directly measure outcomes in a normal peacetime presence operations, accomplished their PPRP and created a performance measurement process and system that have received favorable attention both inside and outside DoD.

III. CINCLANTFLT

In business terms, CINCLANTFLT could be characterized as a \$10 billion dollar international conglomerate that employs over 140,000 people. CINCLANTFLT's operations include airports, harbor facilities, shipping and transportation networks, and training facilities. These and other "business areas" exist as an extensive industrial complex that supports its major "product lines." The common denominator in CINCLANTFLT's "product lines" is providing combat ready forces for rotational deployment throughout the world.

One of these major "product lines" is the CVBG. A CVBG is made up of surface combatants, submarines, aircraft, and support ships (McGrady, 1995).

The most visible and potent force package CINCLANTFLT provides to a theater commander is the CVBG. "It is a massive, self sustaining force - over 7,000 people operating 10 surface and subsurface units and over 70 tactical aircraft - that can reposition itself on the high seas at 30 knots, without need for diplomatic clearance from other nations, to within striking distance of any adversary." (CINCLANTFLT, 1995, p. 5).

The bottom line for a CVBG can not be measured in terms of monetary profit or loss. A CVBG's bottom line is determined by how well a CVBG accomplishes such tasks as forward presence, security and crisis response and when necessary, fighting and winning in battle.

There is simply nothing comparable to the flexibility of carriers, with their long reach and ability to remain on station for long periods of time, which has led to that now-familiar question asked by all national command authorities during any crisis: Where are the carriers? (George, 1992, p. 103)

The focus of this chapter will be a discussion on the evolution and execution of CINCLANTFLT's PPRP. The chapter begins with a review of the organization of CINCLANTFLT and a typical carrier battle group. Following this is a review of CINCLANTFLT's reason for participating as a PPRP and why CINCLANTFLT selected a CVBG as its action agent for execution of its PPRP. Next, the challenges CINCLANTFLT faced in executing its PPRP will be explored, including the development of its performance plan, determining what specific performance to measure, and how it developed a system for collecting and presenting the performance data.

Specifically, this chapter will answer the following questions:

- How did CINCLANTFLT create a performance measurement process which was useful to its Commander, the CVBG Commander, organizational members and other stakeholders?
- What was the implementation process used to develop and execute CINCLANTFLT's PPRP?
- How were performance measures developed, captured and finalized?

A. CINCLANTFLT

1. Organization and Mission

"The Atlantic Fleet is comprised of all units of the Navy's Atlantic Surface, Air, and Submarine Forces, along with various maintenance and support bases, stations, and facilities." (CINCLANTFLT, 1995, p. 3). CINCLANTFLT reports administratively to the Chief of Naval Operations (CNO). CINCLANTFLT's subordinate commands maintain their administrative link to CINCLANTFLT regardless of their geographic location or operational relationship.

CINCLANTFLT subordinate commands may report operationally to CINCLANTFLT while stateside, but when forward deployed these units report operationally to a Unified Commander in Chief (CINC), commonly referred to as a "Warfighting CINC."

CINCLANTFLT's immediate subordinate commands are referred to as Type Commanders (TYCOMS). TYCOMS provide the operational forces that CINCLANTFLT organizes for employment, usually as a CVBG or as an Amphibious Ready Group (ARG). CINCLANTFLT's TYCOMS are Naval Air Forces, Atlantic, Naval Submarine Forces, Atlantic and Naval Surface Forces, Atlantic. If CINCLANTFLT deploys an ARG, Marine Forces, Atlantic also provides Marine personnel and equipment. Due to research constraints, the issue of ARGs was not explored and will not be discussed in this thesis.

CINCLANTFLT's mission is to: "Support Unified and NATO Commanders with fully trained and combat ready forces -- executing all tasks -- timely, correctly, safely and decisively." (CINCLANTFLT, 1993, p. 3). In other words, CINCLANTFLT provides forces ready to fight and win.

2. The CVBG

A CVBG takes on the name of the aircraft carrier which serves as the flagship for the Battle Group Commander (BGCDR). Due to deployment timing considerations, the GWBG was chosen to act as CINCLANTFLT's PPRP action agent.

The 'life' of a CVBG is normally two years, covering eighteen months in the United States and 6 months operationally deployed overseas. The notional life cycle of a CVBG begins after return from a forward operational deployment. This is normally 18 months prior to a CVBG's next deployment. During the first 12 months after return from deployment units undergo equipment repair or replacement, personnel changes and basic unit training.

Six months prior to deployment, designated units from CINCLANTFLT TYCOMs come under the operational control of the CVBG Commander. The CVBG Commander then reports operationally to the Commander, Second Fleet (C2F) for advanced training and evaluation prior to ultimately deploying overseas. C2F is CINCLANTFLT's Battle Group trainer, responsible for welding designated individual units into a cohesive, combat ready force (CINCLANTFLT, 1995, pp. 3-4).

A CVBG operational deployment is usually 6 months in duration. During this time, the CVBG is regarded as a national military asset, one of the key tools for employment by a Warfighting CINC, providing an initial crisis response capability anywhere in the world. Upon completion of the forward deployment, the CVBG returns to the United States where it begins its next 'life' cycle.

The operational cost of a CVBG from training work-ups (\$141M) to return from deployment (\$133M) is approximately \$274 million (CINCLANTFLT, 1994). With the military hearing the legislative charge to do more with less, CINCLANTFLT finds itself developing the tools necessary to ensure it is effectively and efficiently utilizing its resources in accomplishing its mission.

B. PURPOSE OF PARTICIPATING AS A PPRP

CINCLANTFLT felt that there were three predominant advantages from participating as a GPRA PPRP.

First, it provides the opportunity to assess and improve the current linkages between our headquarters level strategic plan, Battle Group execution of the Navy Department's CVBG mission critical tasks, and the warfare requirements decision process. Second, as 'Stewards of the Public Trust' we need to continually focus on improving the Navy's collective effort to better husband its resources - people, equipment and funds. Lastly, participation offers a front-end lessons learned opportunity on how to adapt our corporate processes to best fit the

performance funding objectives of GPRA. (CINCLANTFLT, 1995, pp. 1-2).

The above statement provides some insight into CINCLANTFLT. First, CINCLANTFLT was improving its process for communicating corporate goals to every level of the organization and encouraging leadership/management efforts throughout the command to accomplish these goals. Second, CINCLANTFLT saw the need, and was taking action, to provide greater linkage between day-to-day operations and efforts to accomplish its goals and mission. Third, CINCLANTFLT anticipated that GPRA would eventually influence the way it would manage its day-to-day operations.

CINCLANTFLT had an existing strategic plan, it had specified goals and objectives, and was developing benchmarks in order to assess its organizational success. What it didn't have was a viable measurement process that assisted its subordinate commands in assessing how they were doing in accomplishing their jobs. Hence, CINCLANTFLT was unable to adequately measure how well it was accomplishing its corporate goals or mission. CINCLANTFLT saw GPRA as a way to help focus its efforts in effectively managing its operations. CINCLANTFLT saw participation as a PPRP as a way of accomplishing one of its established goals, to "develop accurate and timely measurement to better assess readiness of forces." (CINCLANTFLT, 1995, p. 17).

C. SELECTION OF A CVBG AS PPRP ACTION AGENT

Why select a CVBG, an entity with so many variables affecting its ability to accomplish its mission, many of which are outside the control of either the CVBG Commander or CINCLANTFLT? The question DoD and OUSD(C) wanted

CINCLANTFLT to answer was whether or not it is possible to measure the performance of one of its combatant units.

If CINCLANTFLT could not adequately measure the performance outcome of one of its major "product lines," then its ability to manage its resources effectively and efficiently could be categorized as questionable. CINCLANTFLT saw the need for a CVBG performance measurement process as more than just producing a credible PPRP; the need for improved performance measurement and management for a CVBG was seen as a precursor to developing a CINCLANTFLT-wide performance management process.

D. PPRP IMPLEMENTATION CHALLENGES

Six major challenges faced CINCLANTFLT at the onset of its PPRP: (1) Selecting the appropriate GPRA coordinator; (2) Coping with time constraints; (3) Accepting PPRP control limitations; (4) Determining performance outcomes; (5) Determining CVBG performance indicators; and (6) Securing action agent support. Each of these will be discussed below.

1. Selecting the Appropriate GPRA Coordinator

The original directorates that coordinated the submission of CINCLANTFLT's nomination package were the CINCLANTFLT Inspector General's and Comptroller's offices. Upon CINCLANTFLT's selection as a PPRP they felt that, because of their lack of CVBG operational experience, they would be the wrong selection as CINCLANTFLT's PPRP coordinator. One of the key individuals that helped initiate CINCLANTFLT's participation as a PPRP was the Deputy Comptroller, CINCLANTFLT, Mr. Greg Franceski. Although Mr. Franceski is a strong supporter of the concepts of GPRA, he also realized that he lacked the operational knowledge and the necessary credibility with operational forces to accomplish a credible PPRP involving a CVBG because he was "just an accountant." He understood that a

successful PPRP would need to be accomplished by personnel knowledgeable in the actual operation of a CVBG - process owners that understood how a CVBG operates. Mr. Franceski believes that GPRA was a management initiative that could be subsequently supported by an accounting system (Personal interview, 1996).

What the PPRP needed was a group of talented experts, personnel knowledgeable in the operation of a combatant force to drive CINCLANTFLT's PPRP. This led to CINCLANTFLT's Warfare Programs and Readiness Directorate (N8) assuming the lead for executing the PPRP.

N8 is headed by Dr. Roger Whiteway, a Naval Reserve Captain and Naval Aviator who is an expert not only on naval operations but a driving force in the way CINCLANTFLT conducts its core operations. N8's primary PPRP action officer is Mr. Dick Pearsall, a retired Navy Captain, who has extensive experience with the operation of naval forces. Mr. Pearsall has been a Destroyer Commanding Officer and twice the Commander of a Destroyer Squadron. Another expert who worked on the PPRP is Mr. Ted Hill. Mr. Hill was assigned the primary responsibility for development of the software to support the CINCLANTFLT PPRP. Mr. Hill is a retired Navy Captain with extensive experience in Naval Aviation, a former Aircraft Squadron Commander, Ship Commanding Officer and a CVBG Chief of Staff. This group of experts in the operation of a CVBG, developed CINCLANTFLT's PPRP implementation process and performance measurement conceptual framework.

2. Coping with Time Constraints

N8 took charge of the PPRP in late February of 1995, leaving them little more than one month to develop CINCLANTFLT's performance plan. This resulted in an obvious "time crunch" for N8 and focused efforts to accomplish the basic requirements of a GPRA PPRP.

Some PPRP organizations used the PPRP process to begin early implementation of GPRA, a much more ambitious undertaking than that assumed by N8. N8 accepted the challenge of running the CINCLANTFLT PPRP with one primary goal: "Answer the GPRA mail." (Pearsall, 1996) N8 saw their task as a PPRP consisting of one primary objective, answering the question: Can performance of a military combatant force, specifically a CVBG, be measured?

3. Accepting PPRP Control Limitations

One challenge that can not be understated was the fact that whatever process CINCLANTFLT developed would be executed by the deployed CVBG Staff. "Once the CVBG Commander 'chops' to the operational control of the Theater CINC, CINCLANTFLT will effectively have no control over any of the variables that may impact on the execution of this pilot plan nor little leverage to assist the CVBG Commander." (CINCLANTFLT, 1995, p. 16) This constraint manifested itself in the planning process as a performance plan manageable enough not to impact the GWBG's day-to-day ability to support the Warfighting CINC's while conducting the PPRP. One of CINCLANTFLT's PPRP development guidelines was to keep the PPRP simple and manageable. The time constraint also resulted in the assessment process remaining flexible by supporting the needs of the GWBG Commander first, while providing aggregate performance information to CINCLANTFLT.

4. Determining Performance Outcome

Unlike other Federal agencies, a combatant force cannot be operated nor its performance measured solely by the application of proven business practices. GPRA calls for 'outcome measures' to be developed and incorporated into the performance plan. For a DoD combatant force, outcome measures are best calculated during armed conflict - a situation counter to our peacetime deterrence mission. (CINCLANTFLT, 1995, p. 15)

Simply stated, a combatant organization such as a CVBG does not have the ability to measure its primary outcome, success in battle, unless it executes a military operation. The compromise that CINCLANTFLT N8 proposed, which was accepted by OMB, was to use the concept of "projected output capability" instead of an absolute outcome measure. Projected output capability is similar to the military concept of readiness - the ability of a military unit to accomplish an assigned operational task. The outcome that CINCLANTFLT would attempt to measure then was the ability of the GWBG to be ready to accomplish any task assigned by a Warfighting CINC.

5. Determining CVBG Indicators of Performance

What is the projected output capability of a CVBG? Initially determining what to measure was a sticking point as CINCLANTFLT began to develop its performance plan. Members of the CINCLANTFLT staff had their own intuitive beliefs about what it took for a CVBG to be "successful" but none of these metrics or measures were codified in one, all encompassing, structure. Fortunately, the problem of determining what to measure was solved by the issuance of OPNAV Instruction 3501.316 in February of 1995. (OPNAV Instruction 3501) OPNAV Instruction 3501 defined the critical tasks that a CVBG should be minimally capable of accomplishing as a principle element of the national power projection capability. The thirteen critical tasks a CVBG should be able to accomplish are:

1. Surveillance and Intelligence
2. Command and Control
3. Air Superiority
4. Maritime Superiority

5. Power Projection
6. Theater Ballistic Missile Defense
7. Operations in Support of the Peacetime Presence Mission
8. Amphibious Force Operations
9. Insertion and Withdrawal of Land-Based Forces into Uncertain or Hostile Environments
10. Special Operations
11. Combat Search and Rescue
12. Mine Warfare
13. Sustainment

(CINCLANTFLT, 1995, p. A-1)

The requirements for each task establish what a CVBG should be able to accomplish. What the instruction does not provide is a list of the variables that should be accounted for in accomplishing a given task. OPNAV Instruction 3501 lists what must be accomplished but not how the task is to be accomplished. The "how" is left to the discretion, skill and ability of the combatant commander(s) to determine.

Ability to accomplish the listed critical tasks in essence becomes the mission of a CVBG. CINCLANTFLT needed to determine the specific measures and performance indicators, that provided an assessment of a CVBG's ability to accomplish each task. How CINCLANTFLT and the GWBG determined specific performance indicators for each critical task will be discussed later.

6. Securing Action Agent Support

CINCLANTFLT could have just ordered the Commander, GWBG, Rear Admiral Giffin, to conduct the PPRP. As a military professional, he would have saluted smartly and executed the order. This would have ensured compliance but not necessarily cooperation or support for the PPRP.

N8 approached Rear Admiral Giffin explaining the legislative requirements of GPRA, stressing that CINCLANTFLT was accomplishing an OMB/DoD tasking and their desire to create a CVBG performance assessment system. He was supportive of the concept of producing a performance measurement process for a CVBG, yet was concerned about the PPRP being a potential impediment to his primary day-to-day mission of tactical support to the GWBG's Warfighting CINC(s).

In response to his concerns, N8 worked with him to determine, create, and establish the framework for the performance plan, determination of the methodology for performance indicator development and creation of a Battle Group Mission Capability Reporting System (BGMCRS).

N8 also established certain precedents to garner support from both the Battle Group Commander and his organizational members. First, there were to be no new measures created. This was done to ensure that the Battle Group Staff and supporting units would not become overburdened by the data collection effort. The BGMCRS would rely on using existing measures to support the BGMCRS performance indicators. Second, the performance measurement process would be primarily focused on supporting the information needs of the CVBG commander and not CINCLANTFLT. Finally, the Commander, GWBG would have ultimate authority to modify any elements of the BGMCRS in order to better reflect his needs.

Another way N8 garnered support among members of the GWBG was to involve them in developing the critical task/sub-task performance indicator matrices

which became the foundation of the computer software system, the BGMCRS. The BGMCRS would provide the BGCDR and his staff with micro-level or macro-level performance information while providing macro-level performance information and the complete archived data set from the GWBG to CINCLANTFLT. Thus, the goal for the GWBG evolved from accomplishing the GPRA PPRP to development, trial and validation of the prototype BGMCRS. The BGMCRS was to become 'their' system. "Giving people a role in shaping decisions secures their commitment." (Kaufman, 1981, p. 82; cited in Behn, 1995, p. 660).

E. THE NEED FOR THE BGMCRS: AUTOMATING THE COMMANDER'S INFORMATION SYSTEM

Before discussing CINCLANTFLT's PPRP methodology a detour to discuss what the prototype BGMCRS provided the BGCDR is necessary. As will be shown later, there is no shortage of data being collected within a CVBG. Often this data is used for management purposes at lower levels within the CVBG and not aggregated into an information set that provides a holistic indication of a CVBG's ability to accomplish a given critical task. Also, not all of this data or information is presented to the BGCDR. It is not a factor of the BGCDR not wanting the information. The limitation of what information is provided to the BGCDR is more a function of time, technology, the visibility of the staff officer (i.e., how high or low within the organizational hierarchy an officer was located) and the lack of an better management information system.

To understand what the BGMCRS would provide the BGCDR, an appreciation of how he presently receives and correlates the available information he uses to assess the capabilities of his command will be provided. Most of the BGCDR's performance information is provided in twice daily staff meetings, typically 9:00 am and 7:00 pm.

The 9:00 forum is called the "Morning Meeting" and is typically the main meeting of the day and is attended by the majority of the staff.

Prior to the Morning Meeting though the BGCDR spends his morning going over various reports detailing the status of his forces. This will usually take one to two hours each morning. The Morning Meeting is where the BGCDR is briefed on the status of the Battle Group by his principle staff officers and organizational commanders also embarked aboard the carrier (i.e., Airwing Commander or Carrier Commanding Officer). They have distilled many of the same reports that the BGCDR has already read, adding any additional information that may reflect differently than that reported to either him or outside interested parties (i.e., unit TYCOMS, the Warfighting CINC(s) and the National Command Authority). Most of these reports are related to individual commands or departments. This is the beginning of the "stove-pipes" of data the BGCDR will analyze on a daily basis.

Each staff officer will usually brief what happened over the last 24 hours, the day's planned schedule of events, near term major events, things that are going well, areas that are having problems with recommendations for correcting problems, areas they feel require his personal attention or problems requiring his direction for resolution. At times the briefing can seem endless and the volumes of information approaching infinity. The subjects covered are usually complex and dynamic. Because each staff officer tries to resolve all possible issues at his level some issues can sometimes be slow to surface for the attention of the BGCDR.

This parade of officers (12 or more), with their supporting data or distilled information, presents a portion of the CVBG "picture." The Intelligence Officer will discuss intelligence matters, the Operations Officer will discuss operational matters, the Logistics Officer will discuss logistics matters, and so forth. Rarely is there an overlap or integrated functional assessment of the CVBG's overall capability. This

is accomplished by the BGCDR after he has heard and read all the provided information.

All of this information will be presented orally, graphically with overhead slides or in written summaries. These Morning Meetings last an average of one to one and one-half hours, or longer depending on the complexity of the environment within which the Battle Group is operating.

The Morning Meeting is the BGCDR's primary management information system. The BGCDR takes these stove pipes of data, uses his knowledge of CVBG operations, at-sea experience, command experience, analytical abilities and intuitive skills to make a personal assessment of how his command performed in the past while making a subjective assessment of the abilities of his command to operate today and in the future. He is a human computer that takes these hundreds, perhaps thousands of pieces of data and mentally aggregates it into a functional assessment of his command.

The BGMCRS was an attempt to automate the BGCDR's management information system by aggregating, correlating and reporting the status of the CVBG by functional mission areas (critical tasks). The BGMCRS would also provide his principle staff officers and unit commanders a new management tool which assisted them in being able to quantitatively assess their individual areas of responsibility. Figure 2 provides an example of the aggregate performance report the BGMCRS provided the Commander. What will follow is a discussion of the methodology CINCLANTFLT utilized to accomplish its PPRP and how the BGMCRS was developed to support CINCLANTFLT's goal of measuring the outcome value(s) of a CVBG. A demonstration of the different levels of mission critical task information the BGMCRS can provide will also be shown.

Battle Group Reporting System

Readiness Status as of 08 Jul 96

Today Average

G	G	Air Superiority	B1 (0.93)	(1.27)
G	Y	Maritime Superiority	B2 (1.38)	(1.37)
G	Y	Power Projection	B1 (0.88)	(1.11)
G	Y	Peacetime Presence	B2 (1.01)	(1.28)
G	G	Sustainment	*B1 (0.89)	(1.24)
G	Y	Command & Control	B2 (1.16)	(1.14)
G	G	Surveillance & Intel	B1 (0.17)	(1.09)

NOTES

COLOR CODE
G = Green, Y = Yellow, R = Red

* = Indicates buried degrader (subtask below B2)

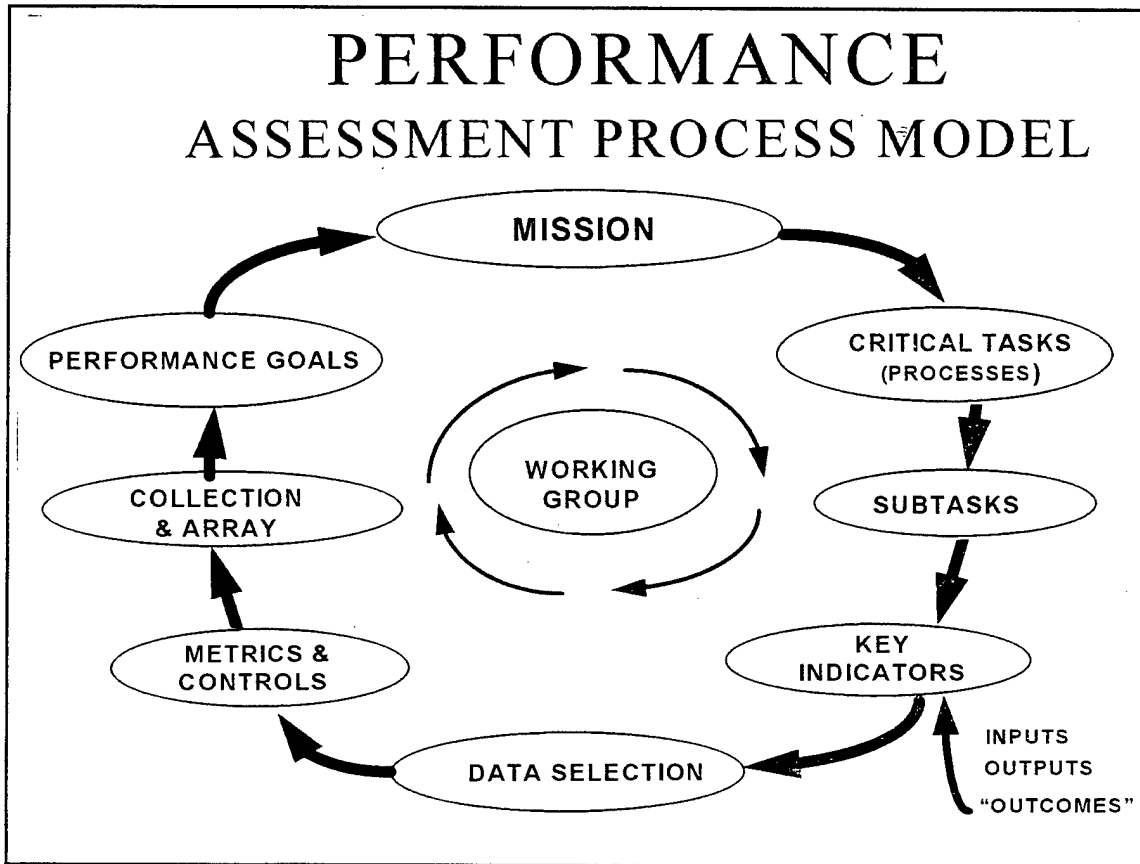
G/G = B1, G/Y = B2, Y/Y = B3, Y/R = B4, R/R = B5

Source: After CDR, GWBG, 1996.

Figure 2. Sample BGMCRS Daily Report

F. CINCLANTFLT PPRP METHODOLOGY

Upon initiation of the PPRP process, CINCLANTFLT began a concurrent, iterative process of developing its performance plan, creating a performance assessment system, and determination of performance goals and eventual performance report. The plan to execute their PPRP resulted in CINCLANTFLT developing a performance assessment process that fit within their organizational culture, existing processes and allowed for paradigm shifts to occur as the PPRP and assessment process evolved. Figure 3 provides a visual representation of CINCLANTFLT's



Source: After CINCLANTFLT briefing to GAO representatives 26 August, 1996.

Figure 3. CINCLANTFLT's Performance Assessment Process Model

performance assessment model. For analysis purposes CINCLANTFLT's performance assessment model will be broken into four phases: (1) Starting position; (2) Determining appropriate performance measures; (3) Creating a data collection and array system; and (4) Establishing performance goals.

1. Starting Position

a. Determining Mission and Critical Tasks

As stated previously, CINCLANTFLT's organizational mission is to provide combat ready forces to the Warfighting CINCS. The mission of a CVBG is

to be ready and able to execute any of the CNO established CVBG critical tasks. Given the time constraints and the pilot nature of the tasking, the initial PPRP plan called for only five critical tasks to be measured. Because of the efforts of the working group in developing appropriate measures and the effectiveness of the BGMCRS during initial testing, Rear Admiral Giffin decided that he wanted to add two additional critical tasks for measurement as a part of the PPRP. The seven critical tasks selected for measurement during the GWBG's deployment (with their corresponding CNO critical task number) were:

- Surveillance and Intelligence (Task 1)
- Command and Control (Task 2)
- Air Superiority (Task 3)
- Maritime Superiority (Task 4)
- Power Projection (Task 5)
- Peacetime Presence Operations (Task 7)
- Sustainment (Task 13)

b. Assessing Current Readiness Measurement Systems

Two primary readiness assessment and reporting systems were in existence at the onset of CINCLANTFLT's PPRP. They were the Status of Resources and Training System (SORTS) and the Casualty Report (CASREP) system.

SORTS provides a snapshot of the capability of individual ships, submarines or air squadrons to execute their wartime missions. This assessment is based on the unit's material condition, personnel

manning, supply status, ordnance inventory and training. SORTS provides a broad overview of unit status, based on these specific indicators. The CASREP system supports the CNO and CINCS in the material management of assigned forces by advising operational and support personnel of any degrades in equipment status that might affect a unit's ability to perform its missions. (GWBG, 1996, Enclosure 1, p. 2)

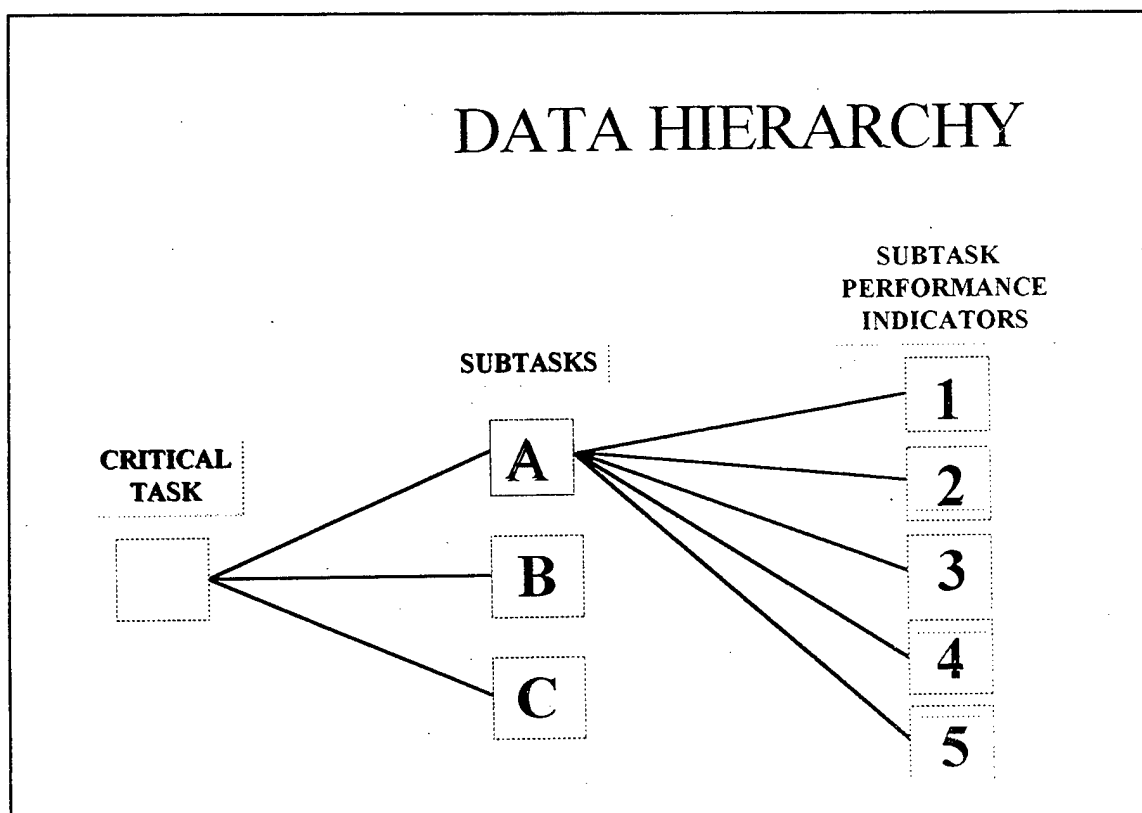
"SORTS has five grades which result in a unit being rated from C-1, most ready; to C-5, least ready." (Junor, 1996, p. 3). The CASREP system also includes a corollary C-1 to C-5 rating of the levels of equipment degradation from minor to critically important to the unit's ability to operate. "SORTS is subjective and often includes the commander's interpretation of the readiness of his unit." (Junor, 1996, p. 5) The same limitation has often been expressed of the CASREP system. In the development of the BGMCRS, the potential for personal interpretation of data was eliminated by requiring affected units to report only raw data. The BGMCRS would contain the metrics and controls for determining ultimate performance indicator values.

CINCLANTFLT utilized the corporate knowledge of SORTS and CASREP as the philosophical framework for developing their BGMCRS. The CINCLANTFLT assessment process enabled them to modify selected elements of both SORTS and CASREP for use in the BGMCRS while expanding the scope of total indicators and include those capability elements of typical interest to the BGCDR. As CINCLANTFLT put it: "We selected the path of least institutional resistance." (CINCLANTFLT, 1995, p. 19) The prototype BGMCRS reflected aggregate CVBG capability while eliminating some of the limitations of the unit level SORTS and CASREP systems. The result of adapting the conceptual framework of SORTS and CASREP, which are primarily reporting systems to higher headquarters,

was the BGMCRS, a management tool for the GWBG Commander and his staff. Thus, CINCLANTFLT created a realistic and responsive performance reporting system that provided macro-level and micro-level information to the GWBG Commander and his staff while also providing macro-level information and the GWBG's archived data set to CINCLANTFLT.

2. Determining Appropriate Performance Measures

The challenge at this point of the performance assessment process was determining the sub-tasks and key performance indicators that would provide an assessment of the GWBG to accomplish a given critical task. Figure 4 shows how CINCLANTFLT organized its data hierarchy to measure the projected outcome capability for each critical task.



Source: From CINCLANTFLT briefing to GAO representatives 26 August, 1996.

Figure 4. CINCLANTFLT Critical Task Data Hierarchy

In business terms, these sub-tasks and performance indicators could be characterized as "factors of production." The question N8 wanted the GPRA working group to answer was: What are the "factors of production" that result in a CVBG's output capability for each critical task? As Figure 5 illustrates, N8's challenge was to determine the elements that go into determining projected output capability and creating the performance algorithms that would provide them with a value for each selected critical task's aggregate projected output capability.

$$\begin{array}{l} \text{Projected} \\ \text{Output} \\ \text{Capability} = \text{function("factors of production")} \\ \text{Value} \end{array}$$

Figure 5. Basic Projected Output Capability Performance Algorithm

a. *Determining Subtasks and Performance Indicators*

CINCLANTFLT took the CVBG critical tasks developed in CNO Instruction 3501 and had task-specific working groups develop the subtasks and initial performance indicators. These experts were drawn from staffs of the GWBG, CINCLANTFLT, C2F, the TYCOMS, Tactical Training Group Atlantic, Commander Carrier Group Four and the Atlantic Fleet Senior Officer Observer Team (SOOT). What is important to understand is not from where these working group members came, but to appreciate that they were former or current unit commanders, line managers and process owners who had extensive subject-matter expertise relating to at-sea battle group operations. These subject-matter experts possessed the "corporate

knowledge" that would be critical to determining the "whats" that comprise the projected output capability for each critical task.

GPRA provides specific definitions for output and outcome measures and stresses the need to measure outcomes instead of inputs or outputs. As stated earlier, CINCLANTFLT had been granted approval of its "projected output capability" concept in lieu of the use of wartime contingent outcome measures. N8 felt that although they may be using "simple" input and output measures, the resulting projected output capability values from a critical task performance algorithm produced the "outcome" value that complied with the intent of GPRA.

b. Determining Data Selection

As each task was analyzed for selection of sub-tasks and performance indicators, guidelines were established for determining data selection. This guidance included:

- Limiting the number of performance indicators.
- Ensuring data was available to Battle Group Staff.
- Linking performance indicator metrics to existing standards or policies.
- Not weighting performance indicators.

(1) **Limiting the Number of Performance Indicators.** Just as CINCLANTFLT limited the number of critical tasks to measure during the pilot, they did not want the GWBG to become overwhelmed in an effort to capture all possible variables. As one other DoD PPRP participant stated: "Measure everything and you measure nothing." (Trump, 1996) This had to be balanced against the philosophy of "You can't manage what you don't measure." (Flanagan, 1996) N8's

intent was to have the working group members work smartly at capturing only the "vital few" data elements that would result in "intelligent aggregation of data for the decision maker." (Pearsall, 1996) This resulted in each sub-task, on average, having no more than six to eight performance indicators.

(2) Ensuring Data Was Available to the Battle Group Staff.

Participants in the PPRP working groups recognized that there was no shortage of data being collected within a CVBG, yet little of it was being collated or integrated at the Battle Group level or being reported in a Battle Group holistic perspective. Just as each manager conducts some basic measurement of his department, N8 wanted to ensure that the data collected was something that was already being reported to members of the Battle Group Staff, or that a reporting process could be easily created to report the data without undue effort by lower elements of the organization. In some cases this meant nothing more than adding the GWBG as an information addressee on message traffic going to other commands.

(3) Linking Performance Indicator Metrics to Existing Standards or Policies. The third guideline helped the working group ensure that they were establishing metric values in line with existing standards or policies whenever possible. For instance, the CNO has established goals for tactical aircraft in terms of minimum mission capable rates at a given point in the normal operating cycle. The working group ensured their metrics aligned with such policies and standards.

(4) Not Weighting Performance Indicators. The fourth guideline was met with some trepidation by members of the working groups. It took some effort on the part of N8 to convince working group members that developing a priority ranking or weighting of performance indicators was beyond the time, technology and resources available particularly given the prototype nature of the PPRP tasking. One can quickly get into a "Which came first, the chicken or the egg?"

philosophical discussion. What is more important, the fighter pilot, the aircraft, or the command and control structure that supports him or her in accomplishing a given tactical mission? The answer is all of the above. Elements such as these are commonly referred to as "show stoppers." "Many of the indicators represent a set of minimum conditions required to do a task." (CINCLANTFLT, 1996, p. A-2)

This issue was resolved by the BGMCRS annotating if a critical task had a buried degrader (value below B-2) in the critical task performance report display. This resulted in the Battle Group Staff of BGCDR having an automatic indication of a buried degrader while not getting bogged down in a time consuming exercise of determining relative weights among aggregated "show stoppers."

c. Establishing Performance Metrics and Controls

BGMCRS-ratings (B-ratings) for each task and sub-task were initially established and refined by the GPRA working groups before final approval by the GWBG Commander and Director of N8. The B-rating scale intentionally follows the concept of SORTS/CASREP ratings. The rating scale followed the following framework:

- B-1 Fully Capable of doing entire task or subtask.
- B-2 Minor degradation to overall capability.
- B-3 Major degradation to part of capability or multiple minor degradations.
- B-4 Marginal ability to do full task.
- B-5 Unable to do task.

CINCLANTFLT provided the following caveat to the B-rating system: "The capability to carry out a task or mission, however, also depends on additional factors which are difficult to quantify. The factors may include specific characteristics of the threat and/or threat location, battle group force structure and capabilities, environmental factors, Rules of Engagement in effect, other tasking(s) assigned to battle group assets, and reliance on specific supporting assets from national or theater sources. In other words, performance indicators are just that - "indicators." (CINCLANTFLT, 1995, p. A-2)

The ultimate B-rating would thus be determined by the GWBG Commander. "Our BGMCRS will mirror SORTS and allow the CVBG Commander to apply his subjective judgment in deciding to what degree the quantitative metric degradation impacts a mission area." (CINCLANTFLT, 1995, p. 20). For instance, if the carrier were short on a given type of ordnance then that sub-task B-rating would reflect as a low metric value (i.e., below B-1 or B-2). However, this may not reflect a variable such as the assigned resupply ship being on-station and waiting for the opportunity to conduct the resupply. In such a case, the Commander could subjectively override the BGMCRS to reflect his personal assessment of the actual situation (reflect a higher B-rating than the performance algorithm would calculate at a given moment in time). However, the BGMCRS performance display software architecture was developed to annotate this subjective override with the accompanying CVBG Commander's reason for override filed in the reason code section of the BGMCRS daily report. The archived data file would still maintain the raw data input along with the Commander's override and his comments.

Figure 6 illustrates how a working group developed one such performance algorithm, in this case for CVBG critical task number three, Air Superiority.

<u>Task 3</u>	<u>Sub-tasks</u>
Ability to maintain control of designated airspace =	3a. Capability to detect, monitor, and maintain readiness to intercept aerial contacts
	+
	3b. Capability to establish and enforce No-fly Zones or conduct defensive counter-air operations in a littoral environment supported by organic tanking as necessary.
	+
	3c. Capability to detect and defeat a coordinated, multi-axis attack by advanced cruise missiles.

Source: From CINCLANTFLT, 1996, p. B-1.

Figure 6. Air Superiority Task Performance Algorithm

Each performance algorithm was further refined in a multi-phase review process with CINCLANTFLT and the GWBG Commander providing final approval.

Sub-task B-rating values were determined through the development of a matrix table for each sub-task performance indicator. For example, critical performance indicators selected for Sub-task 3a were:

- Percentage of 3-D Air Search Radars inoperative.
- Percentage of Ship Electronic Intercept Receivers inoperative.
- CVW Fixed Wing Aircraft Mission Capable (MC) Rates.
- CVW Fixed Wing Aircraft Mission Completion Rates.
- Tactical Receive Application (TRAP) Operational Availability.

- Data Link 11 Effectiveness.
- Percent of Air Unknown Contacts Within the Inner Defense Zone (IDZ).

Figure 7 displays the B-rating matrix for sub-task 3a indicators. Each sub-task had a matrix table developed which when numerically aggregated would result in a B-rating for that given sub-task. Each resulting sub-task B-rating would

AIR SUPERIORITY Sub-task '3a' Matrix											
B-Rating	SHIP ES 3D RADAR SYSTEM		AIRCRAFT MC RATES			MISSION COMPLETION RATES			LINK	%	
	CASREPs	CASREPs	VAW	VF/VFA	VAQ/VQ	VAW	VF/VFA	VAQ/VQ	TRAP A ₀	EFFEC- TIVENESS	AIR UNK
	1	0%	0%	90%	90%	90%	96%	96%	96%	95%	95%
2	10%	10%	83%	83%	84%	92%	92%	92%	90%	90%	10%
3	20%	20%	75%	75%	77%	88%	88%	88%	85%	85%	20%
4	30%	30%	70%	70%	72%	84%	84%	84%	80%	80%	30%
5	>30%	>30%	<70%	<70%	<72%	<84%	<84%	<84%	<80%	<80%	>30%

Source: From CINCLANTFLT briefing to GAO representatives 26 August, 1996.

Figure 7. B-Rating Matrix for Air Superiority Sub-Task 3a

then be averaged to derive the final B-rating for a given critical task. The final performance algorithm for critical task number 3 is then:

$$\begin{array}{lcl} \text{Output Capability} & = & \text{Average of sub-tasks} \\ \text{Critical Task \# 3} & & 3a + 3b + 3c \text{ B-ratings} \end{array}$$

3. Creating a Data Collection and Array System

The initial version of the BGMCRS included 120 performance indicators and 750 discrete data elements. The version that the GWBG deployed with included 280 performance indicators (some appear more than once in different aggregations) and 1050 discrete data elements. "The pilot plan development involved creating a process to collect, correlate and analyze desired data. The need for a CVBG level readiness reporting system became obvious." (CINCLANTFLT, 1995, p. 19) This was accomplished using a commercial off-the-shelf (COTS) computer spreadsheet program. The specific brand is of no consequence, the major ones such as Lotus or Excel all possess the same relative capabilities. What is important to realize is how *the common desktop computer provided CINCLANTFLT with the ability to create and manipulate the complex data base that supported the BGMCRS.*

The COTS spreadsheet system would become the heart of a concurrent initiative during the PPRP, the creation and testing of the prototype BGMCRS which supported CINCLANTFLT's performance plan and assessing the ability to measure the performance of a CVBG. The BGMCRS allowed for the collection and array of data, inclusion of metrics and controls in the aggregation of data and the subsequent display of the resulting output capability for each measured critical task. The COTS spreadsheet also allowed the flexibility to adapt and adjust to the needs of the GWBG Commander as the GWBG's experience level increased as it conducted the trials of

the performance assessment process and developed the performance reports generated by the BGMCRS.

Figures 8, 9 and 10 provide examples of how a BGMCRS daily report may be presented. The BGMCRS was normally presented as a visual report but could be provided in printed form. Starting with Figure 8, the BGMCRS would provide the Battle Group Commander a one slide or one page visual snap-shot of the CVBG's daily performance for each of the measured critical tasks. In a later version, as was shown in Figure 2, the historical average is also displayed. In the case of Air Superiority, Figure 8, there is a dot next to the generated B-rating (B-2) that indicates a buried degrader. The Battle Group Commander could ask to see the Air Superiority Display screen/report to discern which of the Air Superiority sub-tasks was below B-2. Figure 9 provides an example of this information. In this example, Sub-task A also reflects a buried degrader and the Commander may wish to view the sub-task display screen to discern what was causing the degradation of the sub-task value. In viewing the Sub-task A display screen/report, Figure 10, the Commander could quickly see that the Link Effectiveness rating is a B-5. By proceeding through three layers of the BGMCRS display/report, the Commander now knows which buried degrader was impacting on the overall B-rating for Air Superiority. At this point the Commander can make a management decision as to what action may or may not need to be taken. Where the BGCDR would previously have to mentally "compute" the performance assessment for Air Superiority, the BGMCRS now automatically accomplishes this for him and at a greater level of aggregation than previously possible.

Battle Group Reporting System		
Readiness Status as of		15 Dec 95
<input type="checkbox"/>	<input type="checkbox"/>	Air Superiority •B2 (1.59)
<input type="checkbox"/>	<input type="checkbox"/>	Maritime Superiority •B2 (1.85)
<input type="checkbox"/>	<input type="checkbox"/>	Power Projection B1 (0.81)
<input type="checkbox"/>	<input type="checkbox"/>	Peacetime Presence B2 (1.25)
<input type="checkbox"/>	<input type="checkbox"/>	Sustainment •B2 (1.75)
<input type="checkbox"/>	<input type="checkbox"/>	Command & Control B1 (0.47)
<input type="checkbox"/>	<input type="checkbox"/>	Surveillance & Intel •B2 (1.64)

Source: From CINCLANTFLT N8 Briefing on the BGMCRS, 1995.

Figure 8. BGMCRS Sample Complete Critical Task Report/Display Screen

Air Superiority		15 Dec 95
Seize and Maintain Control of Designated Airspace		
<input type="checkbox"/>	<input type="checkbox"/>	A Detect, Monitor & Intercept Air •B2 (1.90)
Contacts		
<input type="checkbox"/>	<input type="checkbox"/>	B Establish & Enforce No-Fly Zones •B2 (1.63)
<input type="checkbox"/>	<input type="checkbox"/>	C Detect/Defeat Coord Multit-Axis ASM B2 (1.24)
Attack		

Source: From CINCLANTFLT N8 Briefing on the BGMCRS, 1995.

Figure 9. BGMCRS Sample Critical Task Report/Display Screen

Air Superiority - Subtask A		15 Dec 95			
Detect, Monitor and Intercept Aerial Contacts					
<input type="checkbox"/>	<input type="checkbox"/>	% 3D Radar CASREPS	B1	(1.00)	0.00%
<input type="checkbox"/>	<input type="checkbox"/>	% Ship ES Sys C3/C4	B1	(1.00)	0.00%
<input type="checkbox"/>	<input type="checkbox"/>	Acft Msn Capable Rates	B2	(1.71)	85.05%
<input type="checkbox"/>	<input type="checkbox"/>	Air Msn Completion Rates	B2	(1.52)	93.90%
<input type="checkbox"/>	<input type="checkbox"/>	TRAP Op Avail (Ao)	B2	(1.67)	91.67%
<input type="checkbox"/>	<input type="checkbox"/>	LINK Effectiveness	B5	(4.51)	38.90%
<input type="checkbox"/>	<input type="checkbox"/>	% Air Unknowns in IDZ			

Source: From CINCLANTFLT N8 Briefing on the BGMCRS, 1995.

Figure 10. BGMCRS Sample Subtask Report/Display Screen

4. Establishing Performance Goals

Because of the prototype nature of the BGMCRS and this being CINCLANTFLT's first attempt as a PPRP, the determination of an overall performance goal for the GWBG was a concern for all involved. "Recognizing the limitations of normal peacetime operations and the resource constraints that Commander, George Washington Battle Group can expect to face on deployment, CINCLANTFLT has set the performance goal of B-2 overall and B-2 for each of the critical tasks selected for this pilot project." (CINCLANTFLT, 1995, p. A-2)

G. SUMMARY

The primary purpose of CINCLANTFLT's implementation plan was to support the day-to-day tactical information needs of the GWBG Commander and his staff

while providing aggregate performance information to higher headquarters. CINCLANTFLT created a performance measurement process by leveraging existing readiness assessment systems and keeping the process simple and bounded. The process of executing the PPRP and developing the BGMCRS cost CINCLANTFLT approximately \$131,000 (Pearsall, 1996). The approximate cost of a deployed CVBG being \$133 million (CINCLANTFLT, 1994). This means for less than one tenth of one percent, CINCLANTFLT created a system for measuring the performance of a CVBG. By any measure, this must be considered an exceptional return on their investment. Use of an COTS software spreadsheet system allowed them to collect, correlate and manipulate collected data into a useful information report for the GWBG Commander.

The evolution of the PPRP changed from the GWBG conducting a non-routine, added tasking of potentially limited near term utility to validating a prototype Battle Group readiness system (BGMCRS) of potentially unlimited utility. In doing so, CINCLANTFLT was able to develop, capture, and finalize performance measures that reflected the micro-level performance information for use by the BGCDR and his staff while providing macro-level performance information for use by CINCLANTFLT.

Using COTS software CINCLANTFLT developed a cost effective way to collect data and integrate that data to produce performance indicators that reflected corporate knowledge of how a CVBG accomplishes its many varied tasks. "If nothing else, it confirms that a little bit of waterfront sailor common sense goes a long way." (Pearsall, 1996)

In Chapter IV an exploration of the strengths and weaknesses of CINCLANTFLT's performance measurement process will be conducted. Current or future performance management initiatives at CINCLANTFLT will also be discussed.

IV. EVALUATION OF CINCLANTFLT'S PPRP

A. INTRODUCTION

"OMB's GPRA analyst has characterized the CINCLANTFLT performance measurement model as one of the best of the 71 GPRA pilots" (CINCLANTFLT, 1996, p. 1) and also characterized CINCLANTFLT's performance plan as being of exemplar quality (OMB, 1995b). The George Washington Battle Group Commander, Rear Admiral Giffin, states that CINCLANTFLT's performance measurement pilot project has demonstrated the capability exists to measure the readiness of a carrier battle group (CDR, GWBG, 1996) and has recommended that the Battle Group Mission Capability Reporting System (BGMCRS) be placed onboard each of CINCLANTFLT's carrier battle groups (Pearsall, 1996).

The ability to conduct performance management is hinged on management's ability to measure performance. CINCLANTFLT's pilot created the BGMCRS to measure the performance of a carrier battle group. CINCLANTFLT's execution of the pilot and the creation of the BGMCRS were done in order to support CINCLANTFLT's strategic management goal of developing a process of accurate and timely measures of performance.

Some observers see CINCLANTFLT's performance assessment process as a model for performance management and possibly for strategic planning. Some observers point to the development of CINCLANTFLT's performance assessment model as the result of CINCLANTFLT's "plan to plan" (Bryson, 1995) which set the stage for CINCLANTFLT accomplishing an effective performance assessment process and implementing performance management principles within the management/leadership culture of a carrier battle group.

Why CINCLANTFLT's pilot has received such praise and approval will be illustrated through a discussion of the strengths of its performance management process. The weaknesses of CINCLANTFLT's performance management process will also be addressed to demonstrate what efforts remain to be accomplished in order to continue the process of implementing performance management within CINCLANTFLT.

As is the case in many new initiatives, those involved in the execution of the PPRP will be able to identify many of the strengths and weakness of that system (Wolfgang, 1995). Evaluation of CINCLANTFLT's PPRP will be accomplished primarily through a exploration of the CDR, GWBG's executive summary and program recommendations made concerning the GWBG's execution of the pilot project. Information received through interviews with members of the GWBG staff will also provide additional perspective of the strengths and weaknesses of the process.

The final section of this chapter will be a discussion of current or future initiatives at CINCLANTFLT as a result of participating as a PPRP. If the primary indication of an effective pilot project is what an organization plans to do at the conclusion of its GPRA PPRP, then these future initiatives should provide some indication of how successful CINCLANTFLT has been in instituting performance management principles within its organization.

B. PPRP STRENGTHS

"The PPRP has demonstrated the capability exists to measure the readiness of a CVBG. This pilot program has established a methodology for measuring a CVBG's combat readiness." (CDR, GWBG, 1996, Enclosure 1, p. 1). The GWBG Commander's statement demonstrates a credible level of "customer" satisfaction and illustrates that measurement of a combatant force's outcome(s) is possible. The

Commander of the GWBG made several key points in his Executive Summary concerning the PPRP and his attendant validation of the BGMCRS (contained in his final report to CINCLANTFLT). These key points will be broken into two general areas:

- The power of the BGMCRS.
- Effectiveness of PPRP methodology.

1. The Power of the BGMCRS

The power of the BGMCRS results in a vast improvement in the management information previously available to the BGCDR. It allows "middle managers" to review performance at the micro-level, "corporate and executive managers" (i.e., BGCDR and senior staff officers) to review performance at either the micro-level or macro-level for the entire carrier battle group. It also provides CINCLANTFLT with an in-depth archived data set (the first time this has been possible) that documents the day-to-day and macro-level performance that covers the entire period an operationally CVBG was deployed. Several of the key attributes of the BGMCRS include:

- Multi-level data relationship displays
- Raw, computed, modified data separately archived
- Trend analysis, over selectable time frame
- Command Override notation provided
- Buried degradation visual cue
- Performance degradation linked to reason code

- Data cells annotated as to degradation cause
- Engine 'tuneable' to any set of performance measures

Source: CINCLANTFLT briefing to GAO representatives, 26 August, 1996.

The attributes, capabilities and products available from the BGMCRS were discussed in Chapter III. The system allowed the CDR, GWBG and his principle staff to focus on managing for results through quantifying performance output capability for key performance indicators that reflected a carrier battle group's ability to accomplish its critical tasks. The key points of what the BGMCRS provided the CDR, GWBG and his principle staff were the abilities to:

- Assess readiness [projected output capability] in both warfighting and support areas.
- Review the trend in any task, sub-task, or specific metric to the average values over any given time period.
- Use the BGMCRS information in a tactical application.
- Provide the Fleet Commanders an assessment of the readiness of the CVBG to execute all of its missions.

(CDR, GWBG, 1996)

a. Assess Readiness

"During the pilot program, the BGCDR and his principle staff assistants were able to assess the Battle Group's warfighting capabilities in defined mission areas by monitoring the data which documents the most current capabilities of the various ships, aircraft, submarines and support vessels assigned to the BG." (CDR, GWBG, 1996, Enclosure 1, p. 1) Simply stated, the members of the GWBG had the

ability, due to the existence of the BGMCRS, to achieve a holistic appraisal of the capabilities of the CVBG.

"The benefits to the BGCDR and his principle assistants can be significant." (CDR, GWBG, 1996, Enclosure 1, p. 3) The BGMCRS allowed for the streamlining of data (CDR, GWBG, 1996), manipulation, correlation and display of information either daily, weekly, or monthly. The archive capability of the system allowed for storage of data and information that was not possible prior to the development of the BGMCRS. In short, the BGMCRS was a management tool the CVBG staff did not previously have which now allowed for improved, efficient and effective, management of the CVBG.

b. Review Trends

The BGMCRS allowed the GWBG to utilize the power of the computer spreadsheet to chart individual performance indicators. Prior to a performance indicator degrading, the GWBG staff was able to anticipate potential performance indicator values. The BGMCRS spreadsheet software structure eliminated the need for human labor to accomplish the laborious task of aggregating large amounts of data. What was not previously possible, now was due to the common desktop computer. This enabled the BGCDR and his staff to focus on those "critical few" elements that could adversely impact on the GWBG's ability to perform a given critical task. Instead of having a reactive management approach they were now able to become proactive in their management of the GWBG's performance capability (GWBG staff, 1996).

c. Tactical Application

"The summary of data can provide insight into the allocation of scarce assets to competing mission areas, thus maximizing warfighting capabilities across all disciplines." (CDR, GWBG, Enclosure 1, p. 3) By quantifying and measuring

critical task/sub-task performance indicators the CDR, GWBG now had the ability to effect reallocation of resources through quantitative analysis rather than qualitative "guesses."

d. Overall Assessment of CVBG's Ability

The GWBG was able to use the aggregate of the seven critical tasks as a surrogate indicator of the overall capability of the GWBG for all thirteen critical tasks (CDR, GWBG, 1996). Many of the performance indicators presently being measured for the pilot would have also been incorporated in the remaining six critical tasks which did not have performance algorithms developed (Pearsall, 1996). "The metrics developed maintain a top level picture of the [CVBG] capability while still retaining necessary sensitivity to particular operations." (CDR, GWBG, 1996, Enclosure 1, p. 2).

2. Effectiveness of PPRP Methodology

"The basic principles used in the CVBG GPRA pilot program can be used to assess the readiness [outcome] of any unit, group of units, or facility desired. (CDR, GWBG, 1996, Enclosure 1, p. 1) Organizations that are considered "leaders" in accomplishing management reform have consistently utilized three critical steps in the development of their performance management process: (1) Define organizational mission and goals [outcomes], (2) Measure performance, and (3) Use the performance information (GAO, 1996). Chapter III illustrated how CINCLANTFLT and its action agent, the GWBG accomplished each of these three steps. What is important to appreciate is the management style that CINCLANTFLT and the GWBG utilized to accomplish these three steps.

a. Existing Leadership/Management Culture

CINCLANTFLT N8's coordination process and Rear Admiral Giffin's management style of the PPRP are founded in the concepts, tenants and practices

found in the Navy's Total Quality Leadership (TQL) program. TQL as a discipline in the Navy began in 1983 (DoN, TQLO, 1992). A manifestation of the level in which TQL is affecting Navy leadership can be seen by the management style utilized by CINCLANTFLT to execute its PPRP. TQL's emphasis is on process improvement through employee empowerment (CINCLANTFLT, 1993) and use of quantitative measurement systems and practices (DoN, TQLO, 1992).

One of the manifestations of TQL in CINCLANTFLT's pilot was the use of the deliberative management approach in the conduct of the pilot project. The phrase deliberative management may seem foreign to a military officer. After all, most combatant officers do not characterize themselves as managers - they consider themselves leaders and warfighters. It is the rare combatant officer who would characterize himself solely as a manager. Proponents of TQL would describe deliberative management as another way of characterizing effective leadership. The deliberative approach lists four design elements that are important parts to effective deliberation: (1) Determination of a strategic question; (2) Encouraging stakeholder collaboration; (3) Generative learning - moving participants beyond their old "givens" and assumptions to find new solutions and opportunities for action; and (4) Executive action (Roberts, 1996).

"Can we measure performance of a combatant unit and, if so, how?" was how CINCLANTFLT framed their strategic question.

Next external stakeholder collaboration was demonstrated by the issuance of OPNAV Instruction 3501.316 that established CVBG critical tasks. Although not explicitly demonstrated, issuance of this instruction involved internal Navy stakeholders such as the Atlantic and Pacific Fleet Commands, TYCOMS and external stakeholders such as the Warfighting CINCS and DoD. Communication among these stakeholders resulted in the consensus of what is expected of a CVBG.

CINCLANTFLT's internal stakeholders were then given the task of determining the appropriate performance metrics that demonstrated accomplishment of the critical CVBG tasks. N8 garnered internal stakeholder collaboration by challenging the GWBG and working groups to develop a management information system that supported the BGCDR as its primary purpose, while providing specific performance information for staff officer use and aggregate performance information to CINCLANTFLT.

Generative learning occurred through the development of the BGMCRS and performance algorithms as individuals began to see how creating a function based measurement system crossed and interrelated their respective areas of responsibility. The working groups were able to go beyond common expectations of what is important to them, to thinking in terms of the information needs of the BGCDR and CINCLANTFLT.

Executive action relates to the fact that the CINCLANTFLT N8 and the GWBG Commander made the ultimate decision on the content of the performance plan, performance metrics and performance goals. TQL and deliberative management do not mean relinquishing control or responsibility for an organization. They simply allow for greater employee involvement in solving organization challenges.

CINCLANTFLT or the CDR, GWBG may characterize the execution of the pilot project as the result of good leadership. In business terms their actions would be characterized as effective management.

We have a powerful tool in TQL. We have a theory with which to access our process and our systems; we have the tools by which to measure our progress; and we have a mechanism by which to involve all of our people in the Navy to make things better. Let's put it to use in our day-to-day operations to ensure that we fight, we win. (Kelso, CNO, cited in DoN, TQLO, 1993)

N8's coordination and the CDR, GWBG management of the pilot project demonstrates that TQL is making inroads as a management process within CINCLANTFLT. Just as the principles of TQL have taken time, energy and leadership support to bear fruit for the Navy, use of performance management principles will not occur overnight. "I doubt we could have accomplished the pilot ten years ago." (Pearsall, 1996)

C. PPRP WEAKNESSES

Interviews with several GWBG staff officers and recommendations made by the CDR, GWBG illuminate some of the weaknesses of CINCLANTFLT's PPRP and provide some indication of future leadership efforts required within CINCLANTFLT if the performance management process is to continue. The principle weaknesses of CINCLANTFLT's PPRP process are:

- Metric Creep
- Data Reliability
- Organizational Culture
- Management/Leadership Culture
- BGMCRS Limitations

1. Metric Creep

Because the BGMCRS possesses such power and flexibility the potential for "metric creep" - adding more and more "vital few" metrics for measurement exists (Hill, 1996). As was previously discussed in Chapter III, the initial version of the BGMCRS accommodated 750 data elements and 120 performance indicators. The GWBG deployed with a system that collected 1050 data elements to derive 280

performance indicators for seven of the thirteen critical CVBG tasks. This final metrics package was the result of detailed analysis that *reduced the original metrics set that was two to three times larger than the one ultimately finalized* (GWBG, 1996).

Simple extrapolation of the present BGMCRS metrics set might result in a BGMCRS that includes as many as 520 performance indicators and 1950 data elements to support measurement of all thirteen critical tasks. Add to this the recommendation of the GWBG Commander to create the ability for the Battle Group Commander to add tailored metrics to each task or sub-task for monitoring (GWBG, 1996) and the flexible BGMCRS may soon become too large and cumbersome to be effective.

One of the first considerations an organization must decide upon when commencing development of its measurement system is what will constitute enough data. Each organization must determine its own point along the data collection continuum - between measuring everything (Trump, 1996) and measuring the vital few (Pearsall, 1996) - where enough information exists to satisfy management's needs.

The initial BGMCRS data set was bounded by the constraints of time available and a focus on collecting information that primarily supported the BGCDR's tactical information needs. The challenge for CINCLANTFLT in the future will be to develop a management policy that, when implemented, keeps the data selection process responsive to the Commander's needs while inhibiting metric creep. "Configuration control of the BGMCRS will need to be forcefully managed." (Pearsall, 1996). The question of "value added" metrics must be addressed when any organization creates a performance measurement system (Hill and Pearsall, 1996).

2. Data Reliability

With all computer applications, the adage "garbage in - garbage out" still remains relevant. This is more than a discussion of how to limit data input errors. A performance measurement system will only be as good as the people that provide the data. "Battle Group Commanders must instill in their personnel the absolute necessity for accuracy in data reporting. The observed variance in report discipline between ships, ship types, submarines and aircraft carriers, and fleets reduces the effectiveness of consistent data." (GWBG, 1996, Enclosure 2, p. 2).

Several of the GWBG staff interviewed commented on the fact that Rear Admiral Giffin absolutely insisted on truthfulness of data reporting. Although they did not provide any specific instances, they suspected some units commanders of utilizing disparate values for BGMCRS purposes and other unit status reports (i.e., SORTS or CASREP) that required the same data.

The CDR, GWBG was able to effect a paradigm shift for the purposes of the pilot project but it illustrates that there still exists a cultural paradigm that will require corporate leadership attention as the process of performance measurement matures and grows.

Part of this tendency to report disparate data values can be overcome through the structure of the performance reporting system. The BGMCRS interrelated information into holistic, mission related performance indicators. This limited participant ability and tendency to "play the numbers." (Hill, 1996) However, modifying the system provides an answer, but not the solution, to the greater problem of failing to modify an organization's reward system to support the performance management process.

3. Organizational Culture

Several GWBG Staff interviewees expressed concern about the perception of the potential use of the BGMCRS as an assessment system of a commander's leadership skills. Each stressed that if the BGMCRS follows the same direction as SORTS and CASREP, which are seen as "report cards" by their TYCOMS, then the performance management process will fail.

One of the reasons this is problematic for a combatant force is the fact that the military's reward system is fixed. The only way a manager (either officer or enlisted) is rewarded is by being promoted. With the reward system in the military fixed, there will always be potential inducement to report "what the commander wants to hear" (only positive performance indicators) especially if it ultimately relates to the future promotion of, or decision to retain in the case of enlisted personnel, a military member.

Strong leadership from top managers/leaders that emphasizes and values accurate reporting for management purposes is essential. A balance between the paradox of needing performance information to effect management decisions and limiting (or excluding) the use of that performance information as a determinant of a manager's/leader's value is required if the performance management process is to remain viable.

4. Management/Leadership Culture

Just as the BGMCRS provided greater quantitative data for the BGCDR's use, it also created greater complexity for his principle staff. Senior staff officers (Navy Captains and Commanders) reveled in the impact the BGMCRS had in increasing their ability to effectively and efficiently manage their respective areas. Several junior officers (Lieutenant Commanders and Lieutenants) were initially awestruck as their "universes" expanded. Several of these junior staff members interviewed related

how they watched as an occasional principle staff officer, several junior staff officer, or they themselves, initially had trouble effecting the change in their management style.

Switching from a management style that focused only on task specific areas, to one that required incorporating a greater cross-functional management style did not occur overnight. This strain manifested itself in the moderate support several of the junior GWBG staff gave the BGMCRS during their interviews (One officer simply characterized the BGMCRS as "O.K."). More information does not always equate to decreased work load or in assisting a manager to effectively accomplishing his job.

Not only will CINCLANTFLT need to standardize training in the use of the BGMCRS, they will also need to incorporate principle staff training to facilitate effective use of the BGMCRS (CDR, GWBG, 1996). These "middle managers" will need to be educated on how to prevent the performance assessment process from taking over the direction of their day-to-day efforts (e.g., thinking that data collection and analysis is their primary role) while learning how to make the performance assessment system assist them in the better management of their responsible areas.

Another effect resulting from the GWBG's validation of the BGMCRS was the realization of the effort required by affected parties to integrate their respective responsibilities. This is the essence of effective staff work, which can sometimes get "lost" in the day-to-day execution of one's job. Through the iterative process of determining performance algorithms and validating the BGMCRS, unit commanders and staff officers soon found that attempting to sub-optimize in one area could adversely impact on an aggregate task output capability value. Instead of being able to focus on simply managing their "distinct activities," managers found their jobs taking on greater complexity as a result of the BGMCRS. A frustration expressed by

several junior staff officers was the desire to know "Who is responsible for something that affects more than one mission area?" Another comment was: "I can only juggle so many balls at one time."

This complexity was a by-product of the requirement to now know and anticipate how their actions would reflect on the aggregate performance of the whole Battle Group. They found themselves operating as integrated functional managers which requires more energy, effort, training and education.

This should not be considered a "bad" result of the performance management system, it just illustrates one of its by-products. The benefits the BGMCRS provides to the BGCDR and his staff come at a cost of greater management complexity for all involved, especially in the lower levels of the managerial hierarchy. "An effective management information system is usually expensive and time consuming to develop, but without it, an organization is unable to assess - relatively objectively and unambiguously - its strengths weaknesses, efficiency and effectiveness." (Bryson, 1995, p. 85)

Assuming that there will be no additional resources given in terms of increased staff sizes, management/leadership education in the proper execution of the performance management process and the performance measurement system for combatant commanders and their staffs will be critical. Clarification of job descriptions, responsibilities and authority also need to be assessed as an organization embraces performance measurement and performance management principles.

5. BGMCRS Limitations

Several GWBG Staff Officers interviewed expressed the concern that "outside" personnel or organizations will see the BGMCRS as a way to justify modification of unit resources (budget). They also fear a "bean counter" suggesting modifying B-rating goals to effect monetary savings.

Several interviewees commented on the need to educate "outsiders" of the fact that the BGMCRS is not refined enough to effect resource decisions. One interviewee stated it so: "The BGMCRS only reports performance. It was not designed to model performance or derive the costs of that measured performance." Due partially to the prototype nature and purpose of the BGMCRS, at this stage, it should not be considered a tool by which to model CVBG readiness or effect resource allocation decisions. The BGMCRS is not, and was not, designed to capture all variables that effect the potential output capability of a CVBG.

Until further validation of the BGMCRS is accomplished and the system is refined it would be inappropriate to consider it a resource allocation tool for either micro-level or macro-level adjustments of resources.

Figure 11 illustrates this concept. On the horizontal axis is the cost of a six month deployed CVBG. The average CVBG cost while deployed is approximately \$133 million. Along the vertical axis is the B-rating scale. The resulting B-rating of B-2 achieved by the GWBG and the approximate cost of the GWBG's deployment result in only one data point on the graph.

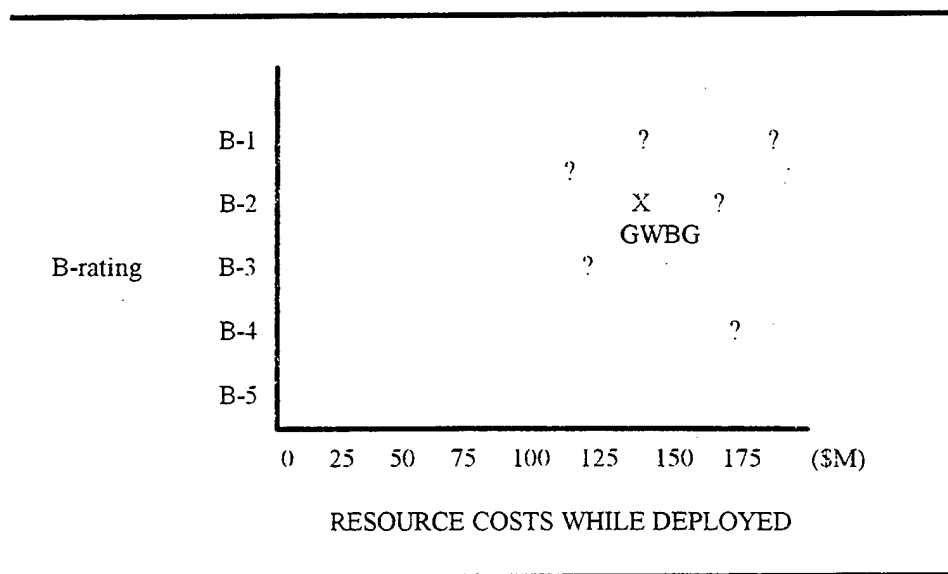


Figure 11. Resources Versus B-Rating Graph

Even with the data collected by the GWBG, an adjustment of either resources or established B-rating level goal may not reflect in a different data point. How much would it take to move the needle? Could a one percent change in resources (\$1.3 million) result in a change in overall B-rating? Would a few thousand dollars used to adjust a performance indicator reflect in a differing sub-task value that would change the overall critical task B-rating? (Franceski, 1996)

After another CVBG's deployment performance data is collected CINCLANTFLT will be able to connect these aggregate data points. At that point in time CINCLANTFLT will have a rudimentary relationship between resources expended and B-ratings. At this point it may be possible to effect macro-level adjustments.

When it comes to the ability of a CVBG to support a Warfighting CINC, should a BGCDR err towards costs savings at the expense of a potentially degraded critical task output capability? This question and those mentioned previously are not trivial when it pertains to matters of national security. Answers to these questions should take time, serious study and careful determination of who should have the ability and responsibility to make these decisions prior to any quick action.

D. FUTURE INITIATIVES AT CINCLANTFLT

If the PPRP was a success at CINCLANTFLT, then the performance management process should have a continuing life. At CINCLANTFLT and other DoD pilot organizations I talked to while conducting research for this thesis, two recurring trends continually came to the forefront. First, the performance management processes desired by GPRA were already underway prior to executing their PPRPs. Second, the management processes utilized, refined and developed during their PPRPs are not ending with the conclusion of their FY 1996 PPRPs (with the issuance

of their 1996 performance reports in March, 1997). The same can be said for CINCLANTFLT.

Several initiatives are underway as CINCLANTFLT's FY 1996 pilot comes to its formal conclusion with the delivery of its performance report in March, 1997. A refined BGMCRS (incorporating recommended changes derived from the GWBG's initial validation) will be utilized by the Theodore Roosevelt Battle Group (TRBG) when it deploys in November, 1996. The TRBG will measure the same seven critical CVBG tasks that were measured by the GWBG.

Upon the TRBG's return from deployment, CINCLANTFLT will begin the data analysis afforded by having two aggregate sets of CVBG performance. If the CDR, TRBG favorably endorses the BGMCRS, CINCLANTFLT plans to finalize the system and place it onboard every CINCLANTFLT carrier battle group.

Another initiative underway at N8 is the development of an Amphibious Ready Group/Marine Expeditionary Unit (Special Operations Capable) (ARG/MEU (SOC)) mission capability reporting system. The Chief of Naval Operations has just recently approved the ARG/MEU(SOC) critical tasks list and the ARG/MEU(SOC) policy instruction is pending. N8 intends to begin the task of developing ARG/MEU(SOC) performance algorithms. At some point the major organizational units of the ARG/MEU(SOC) will become involved in the collaborative effort of developing the initial ARG/MEU(SOC) performance algorithms and a prototype ARG/MEU (SOC) Mission Capability Reporting System.

When the GWBG makes its next operational deployment overseas it will take with it not only a standardized BGMCRS, but it will also test and validate an integrated Battle Group Cost/Performance data base. This data base will integrate BGMCRS performance data with related Operations and Maintenance, Navy (OM&N) resource expenditures from the CINCLANTFLT Comptroller's "CVBG

product line." This effort will be a joint CINCLANTFLT, CNO, and Comptroller of the Navy initiative to operate the CVBG as a Performance Based Organization (PBO) with selective resource control allocated to the Battle Group Commander for the conduct of the operation. An end goal of this initiative is to develop a performance based managerial accounting system (Pearsall, 1996).

E. SUMMARY

The strengths of CINCLANTFLT's PPRP lie in the management process utilized in the execution of the pilot which allowed for involvement of all concerned participants in the development of the CVBG critical task and sub-task performance indicators and B-rating matrices that became the structure within the BGMCRS. The performance plan remained manageable and the leadership/management style of the GWBG's Commander, Rear Admiral Giffin ensured that command attention and support for the pilot program ensured it remained more than just a additional tasking to accomplish.

The weaknesses of CINCLANTFLT's PPRP are grounded in the need to continue changing organizational cultures and the need for management/leadership education to effectively transition to a performance management/leadership style.

What started as a process to answer the "GPRA mail" has resulted in a new and evolving management process in CINCLANTFLT. "I think we [CINCLANTFLT] will drive to linking the budget to performance. Whether or not GPRA results in any impact at our level doesn't matter because we will continue the process because it makes sense." (Whiteway, 1996)

What will be discussed in the next and last chapter will be CINCLANTFLT's lessons learned from coordinating and executing its pilot project, recommended areas for further study and thesis conclusions.

V. LESSONS LEARNED, RECOMMENDATIONS AND SUMMARY

A. OVERVIEW

The primary purpose of this thesis was to explore the process the Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) used to accomplish its pilot project in performance measurement. The structure of GPRA pilot project requirements also resulted in CINCLANTFLT accomplishing performance planning and will result in a performance report by March, 1997.

CINCLANTFLT's, action agent the George Washington Battle Group was able to validate that the performance of a carrier battle group could be quantitatively measured. Through the execution of the pilot project a Battle Group Mission Capability Reporting System was created. This system was able to automate the Battle Group Commander's management information system and provide him and his staff with both micro-level and micro-level performance information. The system also provided CINCLANTFLT with the aggregate macro-level performance measurement of a carrier battle group and a first time ever archived data set that documents the day-to-day performance of a carrier battle group deployed for six months.

Chapter II discussed the requirements and intent of GPRA. The concept of performance measurement was also discussed. GPRA pilot projects requirements and specific documentation on the requirements for performance measurement pilots was provided. This established the requirements for, and expected results from, performance measurement pilots.

Chapter III documented how CINCLANTFLT accomplished its performance measurement pilot. CINCLANTFLT accomplished its pilot by assigning the project to the right people, utilized the tenants of Total Quality Leadership and deliberative

management, leveraged existing performance measurement systems to create a better way to quantitatively measure a carrier battle group's performance.

By focusing on the performance information needs of the Battle Group Commander, having the process bounded by time and available resources and utilizing a commercial off-the-shelf computer spreadsheet CINCLANTFLT was able to efficiently and effectively develop a system that measured the performance of a carrier battle group. The resulting system enabled the Battle Group Commander to automate his primary management information.

Many combatant organizations will find that they are already conducting some sort of performance measurement, but probably not at an aggregated organizational level. Utilizing the process created by CINCLANTFLT, combatant organizations have a framework for improving their own leadership/management processes and systems.

Chapter IV evaluated the strengths and weaknesses of the CINCLANTFLT performance assessment process. The key strength in CINCLANTFLT's performance assessment process was the George Washington Battle Group Commander's favorable endorsement for the Mission Capability Reporting System and the performance management process. The deliberative management process allowed "middle management" to produce a bottom-up solution to CINCLANTFLT's top-down challenge of determining whether or not performance of a CVBG could be measured, and if so how.

Weaknesses of the pilot project process point to the continued need for top leadership/management support to continue the cultural paradigm shifts required to effect performance management within a combatant organization.

B. CINCLANTFLT LESSONS LEARNED

An element of the Navy's TQL program is the process called the "Plan-Do-Check-Act" (PDCA) cycle. CINCLANTFLT Warfare Requirements and Programs Directorate (N8) developed the initial pilot project plan. The pilot project was executed (do) by the GWBG and supported by N8. CINCLANTFLT has already conducted an initial evaluation of their performance assessment process and the BGMCRS (check). CINCLANTFLT has made modifications to the BGMCRS and will have the TRBG test the refined system. Having the TRBG test the refined BGMCRS and other initiatives mentioned in Chapter IV are part of CINCLANTFLT's continued implementation of performance management within CINCLANTFLT (act).

Figure 12 lists CINCLANTFLT's primary lessons learned from conducting its pilot project in performance measurement. Discussion of these lessons learned will follow.

-
- Paradigm shifts can be palatable
 - User buy-in important
 - Process can be applied to any tasking
 - Dedicated investment to develop metrics
 - Avoid over complicating process - KISS
-

Source: After CINCLANTFLT briefing to GAO representatives 26 August, 1996.

Figure 12. CINCLANTFLT Lessons Learned

1. Palatable Paradigm Shifts and User Buy-in Important

"A lot of what was accomplished is due to how the project was packaged." (Pearsall, 1996). The creation of the BGMCRS changed the focus of the PPRP from fulfilling the pilot project requirements of GPRA into creating a management information system that provided the BGCDR with the ability to assess his command's projected output capability.

For combatant forces, the need to assess mission capability is an overriding concern. Development of the BGMCRS provided the psychological hook that ensured "middle management" support for the PPRP project. "Accounting systems aren't as sexy as a weapon system." (Franceski, 1996). Through the development of the BGMCRS a group of warfighters, who would characterize themselves as leaders first and managers second, developed a MIS system that supported their Commander, provided them with the ability to manage their respective responsible areas in a cross-functional, collaborative management style, while providing CINCLANTFLT with performance information of the CVBG at a macro-level.

One of CINCLANTFLT's primary outcomes from the pilot project was the development of the BGMCRS. The BGMCRS is a performance measurement system that serves a dual role as a readiness assessment system. The results from the system are the same, the latter characterization is just more palatable to a warfighter.

2. Applying the Process to Any Tasking

CINCLANTFLT's performance assessment process model provides a road map to accomplishing results-oriented management. At its heart, just as in the key steps of GAO's GPRA implementation model, is the need to empower employees to determine the best way(s) to achieve clearly defined goals and objectives (GAO, 1996). The creation of a responsive and effective performance measurement system is the key foundation that enables an organization to effect performance management

principles. CINCLANTFLT's pilot project demonstrates that any combatant organization can accomplish performance measurement and management, if they have the desire.

3. Dedicated Investment to Develop Metrics

Having the right people is the linchpin to the process. "Performance is the responsibility of functional managers, not comptrollers." (Hamre, 1994) CINCLANTFLT had their "managers" determine the performance indicators and structure of the BGMCRS. Specific support staff departments, such as accounting should be used to assist in the process, not drive or coordinate it.

The cost in resources and time to develop appropriate metrics is not cheap. The benefits derived are worth the effort. Establishing limits of time available and purpose eliminate the potential for the metrics package from growing to large. CINCLANTFLT's approach was to create the "90%" solution (Pearsall, 1996).

Realizing that not all variables could or should be captured in the performance assessment system CINCLANTFLT utilized process experts and key "managers" to determine the vital few variables necessary to determine performance outputs. CINCLANTFLT's performance measurement system allowed the BGCDR to interject common sense and his warfighting experience into the equation which prevented the performance measurement system from being unwieldy and unresponsive to the BGCDR's information needs.

4. Avoid Over Complicating Process

The question any organization desiring to accomplish performance management must be ask is: When does the process provide enough information to satisfy the Commander's information needs?

CINCLANTFLT made the decision to incrementally implement the performance management process within its organization. Taking "small steps" has enabled

CINCLANTFLT to enjoy "small successes" while it determines the most effective way to implement performance management principles throughout its organization.

C. RECOMMENDED FUTURE RESEARCH AREAS

CINCLANTFLT has begun an iterative and incremental process of instituting performance management principles throughout its organization. Since the process is relatively new, and GPRA's final impact on how Federal agencies will manage their operations is yet to be determined, they each offer several areas for future study. Some of these areas include:

- Comparison of the results of the TRBG's performance measurement process and that of the GWBG's.
- Exploration of the implementation and execution process for the prototype ARG Mission Capable Reporting System.
- Exploration of the process by which CINCLANTFLT integrates the prototype CVBG cost accounting system and the finalized BGMCRS and the resulting impact on the organizational performance management process.
- Exploration of how DoD has implemented GPRA and the effect it has had on the current PPBS, individual services and major commands.
- A comparison between CINCLANTFLT's incremental implementation of performance management principles and a DoD PPRP which instituted an agency-wide implementation of performance management would demonstrate the cost/benefits between the two varied approaches to implementing performance management principles.

The first area of recommended research would provide additional lessons learned from a second testing and utilization of the BGMCRS. What would be interesting to note is whether or not there are standardized performance results

between the different carrier battle groups. Areas that could be researched could be what real-world variables impacted the TRBG's B-rating results as compared to those of the GWBG. A comparison of top leadership/management styles might illuminate how to effectively influence the performance measurement/management process.

The second area of recommended research would document the challenges of integrating the performance measurement/management process of two different organizational cultures. Lessons learned would be of value to follow-on ARG/MEU(SOC) organizations implementing the process.

The third area of recommended research would illustrate the impact on, and challenges of, implementation on the organizational and managerial culture of a combatant force. A key question could be whether the performance assessment process would still be as viable after the integration of a cost accounting system.

The fourth area for recommended research would document the impact GPRA and OUSD(C)'s implementation plan for GPRA compliance do or do not have on the day-to-day management of operations within the individual services and major commands.

The last item for future research could help organizations just implementing performance management within their organization to determine the cost/benefits of either having an incremental implementation plan or organization-wide implementation plan. Figure 13 illustrates a potential finding of this research. The question is: Does either approach provide a more effective road map to successful implementation of performance management principles? This is not to say the represented "results curves" are accurate. It would be of value to know which approach avails an organization the best results and chance for long-term success.

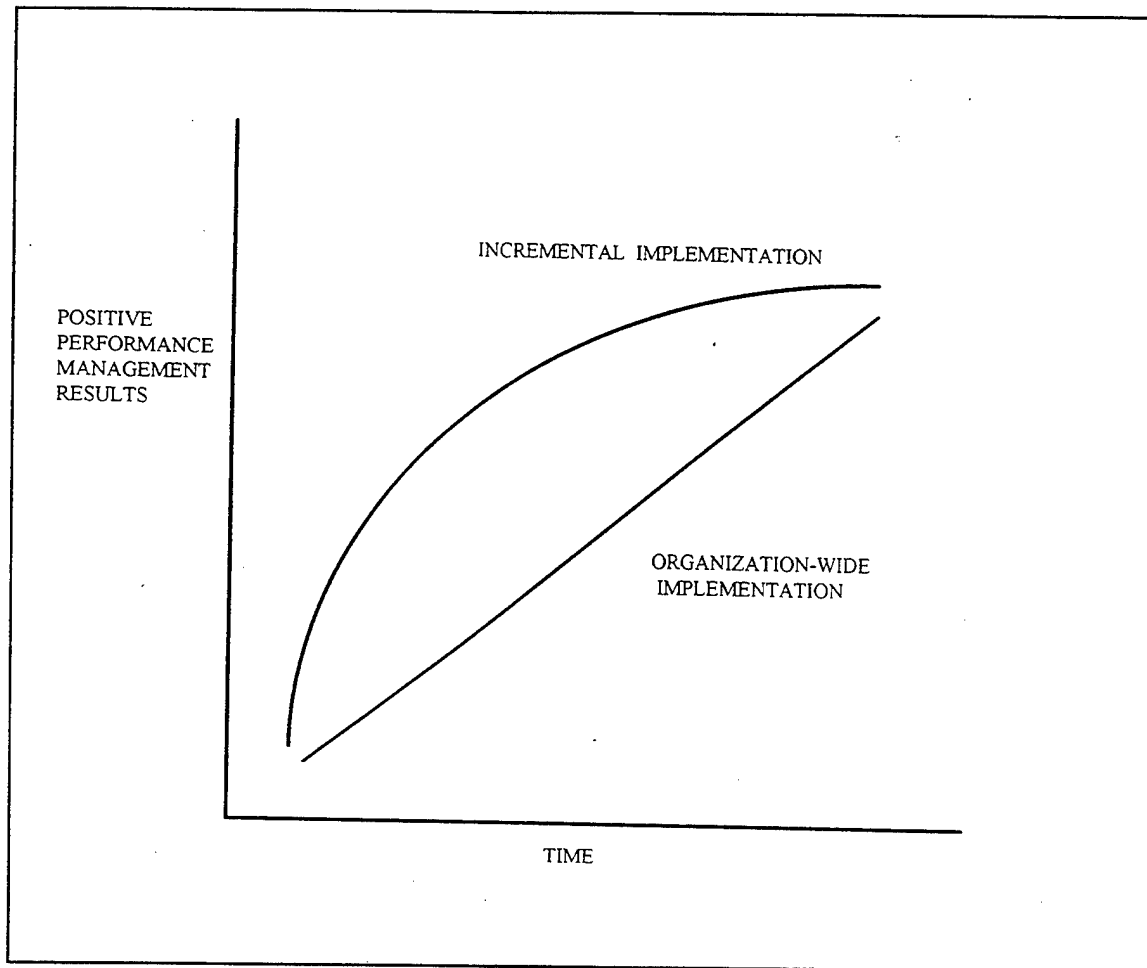


Figure 13. Possible Implementation Results Curves

D. SUMMARY

CINCLANTFLT demonstrated the capability exists to measure the performance of a combatant force, specifically a carrier battle group. CINCLANTFLT's performance assessment process entailed a deliberative management process born from the Navy's TQL program. "Middle managers" were given the challenge of determining the appropriate performance indicators and how those indicators were to be aggregated in the Battle Group Mission Capability Reporting System.

Through CINCLANTFLT's performance assessment process a better way of measuring the performance capability of a CVBG was created. The new process

resulted in the collection of the "vital few" indicators that have the greatest impact on a CVBG's ability to accomplish a given critical task.

GPRA's requirement for performance planning and reporting pilot projects served as the impetus for CINCLANTFLT to pursue one of the goals it had established in its 1994-1996 Strategic Plan, creating better metrics by which to measure and manage its core operations.

The BGMCRS and CINCLANTFLT's performance management process will continue to undergo refinement and improvement. The challenge in the future will be taking the performance measurement/management process developed during the pilot project and turning it into an organization-wide process. In its GPRA implementation plan, GAO makes the following statement concerning the challenge of implementing the performance management ideals found within GPRA:

A change of this magnitude will take time -- years rather than months -- and will occur only through the concerted efforts and commitment of Federal managers, agency officials, and other interested parties, including Congress. GAO, 1993, p. 5)

The same common sense, patience and commitment that made CINCLANTFLT's performance measurement pilot project a success will be required if CINCLANTFLT wishes the performance management process to succeed over the long-term. The approach CINCLANTFLT took in order to accomplish its pilot project in performance measurement and the resulting performance management process can be used as the basis for modification by any combatant force that wishes to begin the process of performance management.

LIST OF REFERENCES

Air Combat Command (ACC), "Government Performance and Results Act (GPRA) of 1993- Fiscal Year (FY) 1996 Performance Plan," HQ, ACC, 1995.

Behn, R., *Management by Groping Along*, Journal of Policy Analysis and Management, Vol. 7, No. 4, John Wiley & Sons, Inc., Fall 1988.

Bolman, L. and Deal, T., "Reframing Organizations," Jossey-Bass: San Francisco, CA, 1991.

Bryson, J., "Strategic Planning for Public and Nonprofit Organizations," Jossey-Bass: San Francisco, CA, 1995.

CINCLANTFLT, *Fact Sheet: CINCLANTFLT's GPRA Performance Measurement Pilot, George Washington Battle Group*, U.S. Atlantic Fleet, N8, 19 June 1996.

CINCLANTFLT N8, Briefing to GAO Representatives on CINCLANTFLT PPRP, 26 August 1996.

CINCLANTFLT N8, Briefing on the BGMCRS, December 1995.

Commander, George Washington Battle Group, "Final Report on Government Performance and Results Act (GPRA) Pilot Project," 22 July 1996.

CNO Instruction 3501.316, "Policy For Carrier Battle Groups," Office of the CNO, 17 February 1995.

Commander, George Washington Battle Group, "Final Report on Government Performance and Results Act (GPRA) Pilot Program," 22 July 1996.

Commander in Chief, U.S. Atlantic Fleet, *1994-1996 Strategic Plan*, HQ, CINCLANTFLT, 1993.

Commander in Chief, U.S. Atlantic Fleet, *Performance Measurement Pilot Memorandum*, U.S. Atlantic Fleet Comptroller, 1994.

Commander in Chief, U.S. Atlantic Fleet, *GPR*A FY 96 Performance Plan, HQ, CINCLANTFLT, 1995.

Comptroller General of the United States, GAO, "Executive Guide: Effectively Implementing the Government and Performance and Results Act," GAO/GGB-96-1, 18 June 1996.

Department of the Navy, Total Quality Leadership Office, "TQL in the Fleet: From Theory to Practice," TQLO Publication, No. 93-05, Arlington, VA, October 1993.

Flanagan, W., Jr., Commander in Chief, U.S. Atlantic Fleet, Lecture given at the Naval Postgraduate School, 1 October 1996.

General Accounting Office, "Managing for Results: Progress and Challenges in Implementing GPRA at Pilot Agencies," (draft), Testimony prepared for delivery before the Committee on Governmental Affairs, U.S. Senate and the Committee on Governmental Reform and Oversight, House of Representatives, 1996.

George, J., "The U.S. Navy In The 1990s: Alternative for Action," Naval Institute Press, Annapolis, MD, 1992.

Groszyk, W., Implementation of the Government Performance and Results Act of 1993, paper presented to the Organization of Economic Cooperation and Development, November 1995.

Groszyk, W., "Status of GPRA," Personal e-mail, 2 October 1996.

Hamre, J., 1994, "The Future of Financial Management: Focus on Performance," <ftp://ftp.fedworld.gov/pub/results/dodart01.txt>

Interview with Mr. Greg Franceski, CINCLANTFLT, Deputy Comptroller, 23 August 1996.

Interview(s) with Mr. Dick Pearsall, CINCLANTFLT, N8AA, 22 -27 August 1996.

Interview with Ms. Pamela Trump, HQ, ACC, 17 July 1996.

Interviews with various George Washington Battle Group Staff Officers, 27 August 1996.

Interview with Mr. Ted Hill, CINCLANTFLT, N8AB, U. S. Atlantic Fleet, 26 August 1996.

JFMIP News, "A Newsletter for Government Financial Managers," Summer 1995, Vol. 7, No. 2, gopher://pula.fincenet.gov:70/0waisdoci...appen/news/jfmip/summer.95

Jones, L., and McCaffery, J., *Implementation of the Chief Financial Officers Act and other Initiatives to Improve Federal Financial Management*, 1996.

Junor, L., and Oi, J., *A New Approach to Modeling Ship Readiness*, Center for Naval Analyses, Alexandria, VA, April 1996.

Lee, J., "Management Accounting Changes for the 1990s," McKay Business Systems, Artesia, CA, 1987.

Leonard, B., *Note on GRPA Implementation*, 17 September 1995, gopher://pula.fincenet.gov:70/0waisdoci...ol/fnet/budget-net/

McGrady, E., and Brophy, K., "What Does a U.S. Navy Carrier Battle Group Do?" (Draft), Center for Naval Analyses, Alexandria, VA, 24 February 1995.

Office of the Under Secretary of Defense, Office of the Comptroller, "Government Performance and Results Act (GPRA) Implementation," Executive Summary provided to OMB, 25 April 1995.

OMB, "Government Performance and Results Act of 1993, P.L. 103-62, Implementation Plan," (Preliminary Draft), 4 August 1993.

OMB, "Primer on Performance Measurement," 28 February 1995a, gopher://pula.fincenet.gov:70/0waisdoc.../post/perform/primer01.txt.

OMB, "CINCLANTFLT Pilot Plan Review Comments," 1995b.

P.L. 103-62, Government Performance and Results Act of 1993, 103d Congress, 1993.

Social Security Administration, "Presenting Performance Measurement in Financial Statements," Practices presentation at Professional Development Conference, 1994, <gopher://pula.financenet.gov:70/0waisdoci...eb/depts/ssa/pm.ssa>

Wolfgang, D., "Implementation of the Government Performance and Results Act at DLA: A Case Study Analysis," Naval Postgraduate School, Monterey, CA, 1995.

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