

**United States Military Academy
West Point, New York 10996**

A Systems View of the USMA Staff Redesign

**OPERATIONS RESEARCH CENTER OF EXCELLENCE
TECHNICAL REPORT DSE-TR-05-44
DTIC #: ADA433620**

Senior Investigator
Colonel Michael L. McGinnis, Ph.D.
Professor and Head, Department of Systems Engineering

Prepared For
Lieutenant General William J. Lennox, Jr.
Superintendent of United States Military Academy

December 2004

The Operations Research Center of Excellence is supported by the
Assistant Secretary of the Army (Financial Management & Comptroller)

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Abstract

For nearly two years, the United States Military Academy (USMA) and West Point have wrestled with how to restructure and realign West Point organizations due to the military-to-civilian conversion of duty positions and the separation of USMA mission and West Point garrison responsibilities mandated by the Installation Management Agency (IMA). In September 2004, the Superintendent of United States Military Academy, Lieutenant General William J. Lennox, directed a review of work done to date, and after studying the problems, recommendations for dealing with the impact of MIL-CIV and IMA on the Academy. Background research revealed that existing USMA staff elements essentially function as separate, activity-centric, stove-piped entities. Stakeholder feedback identified this as a major hindrance to the Academy's pursuit of excellence and higher performance. This report proposes a USMA staff that aligns Academy staffs with requirements to coordinate, control and execute West Point missions thereby enhancing the synergy between the USMA staff, lower level staffs and the Garrison Command.

About the Author

Colonel Mike McGinnis has served as Professor and Head of the Systems Engineering Department, United States Military Academy, from June 1999 to the present. Colonel McGinnis taught in the Department of Mathematical Sciences from 1986-1989. In 1990, he was selected as an Academy Professor in the Department of Systems Engineering. Colonel McGinnis can be contacted at mike.mcginis@us.army.mil.

Acknowledgements

Findings in this report were based on feedback from stakeholders who identified the issues and problems discussed below, and others who work at West Point. Key stakeholders consulted:

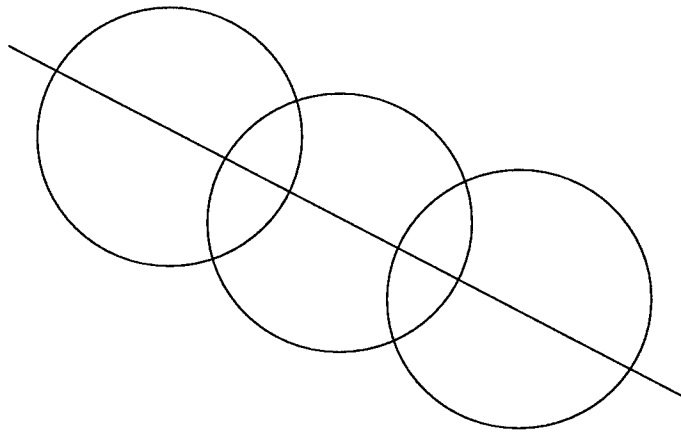
United States Military Academy: Superintendent **LTG William Lennox, Jr.**; Chief of Staff **COL Greg Dyson**; Public Affairs Office **Ms Margaret Trucksess**; Directorate of Housing and Public Works **Mr. Mike Anderson**; Dean of the Academic Board **BG Dan Kaufman**; Office of the Dean **COL Stas Preczewski**; United States Corps of Cadets S-3 **CPT Cushen** and S-1 **Ms Vonasek**.

West Point Garrison Command: Garrison Commander **COL Brian Crawford**; Deputy Garrison Commander **MS D. Zedalis**; 1-1 Infantry Battalion Commander **LTC Bruce Stanley**; Battalion Sergeant Major **MSG Craig Olszyk**; Battalion Operations Officer **MAJ Joe Peterson**; Battalion Adjutant General **MAJ Bill Willis**.

Other Garrison Commands: **MAJ Walt Kilmer**, Army War College, GC/IMA Executive Officer; **Mr. Jack Walker**, Fort Leavenworth, GC/IMA Deputy Commander.

Special thanks to **Ms Betty Melick** and **LTC Mike Kwinn** for research support and reviews.

A SYSTEMS VIEW OF THE USMA STAFF REDESIGN



COL MIKE MCGINNIS
Department of Systems Engineering
US Military Academy

For nearly two years, the United States Military Academy (USMA) and West Point have wrestled with how to internally restructure and realign business processes in response to changes forced upon the Academy by the military-to-civilian (MIL-CIV) conversion of duty positions, and the separation of USMA mission and West Point garrison responsibilities mandated by the Installation Management Agency (IMA).

On September 16, 2004, during a meeting the Superintendent of United States Military Academy, **Lieutenant General William J. Lennox**, directed the author to review work done to date, study the problems and make recommendations for dealing with the impact of MIL-CIV and IMA on the Academy.

LTG Lennox specifically directed that the study focus on two areas impacted by IMA:

- Reorganization of the Superintendent's USMA staff; and
- Management of West Point security and tracking progress to improve security analysis and assurance throughout the command.

Three other areas of interest surfaced during interviews with stakeholders that significantly broadened the scope of the study. The analysis and recommendations given below reflect a holistic view of *what is needed to set up the Academy, and future Superintendents, for success in the years ahead.*

Study Methodology

- Background
- Stakeholder Problem Statements
- Discussion, Analysis of Issues & Recommendations
 1. USMA Staff Design
 2. Staff Redundancy
 3. Strategic Planning
 4. Business Enterprise
 5. Security
- Future Work

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The presentation of results follows the study methodology outlined above. The background research phase encompassed the following activities:

- identification and analysis of stakeholders;
- identification of issues;
- definition of problems; and
- limit the scope of the study.

Three additional areas of concern were identified during stakeholder interviews. Together, the five areas significantly broadened the scope of the study. The areas are:

- need for an updated, redesigned USMA staff to meet future requirements;
- redundancy of staff elements throughout USMA, and between USMA and West Point;
- need to re-institute a formal strategic planning process linked to funding and budgeting;
- need to address data/information (mis)management and business process disconnects due to separation of mission and garrison responsibilities under IMA; and
- need to address security problems (gaps) due to the separation of security responsibilities under IMA.

The two purposes of this briefing are:

1. To overview work-to-date, findings and options for dealing with problems;
2. To present the Superintendent with decision recommendations.

Background: Previous Work & Stakeholders

Documentation of Previous Work

"USMA G-Staff Concept Initial Briefing to LTG Lennox, 23 July 2003." Office of Planning, Policy and Analysis (OPA). POC: COL Greg Dyson, USMA Chief of Staff.

"HHC Briefing to the Superintendent, USMA. 31 August 2004." POC: Maura DuMoulin. 845-938-3228.

"USMA Reorganization: Where We Have Been; Where We Are; Where We Want To Be." DRM presentation to the [USMA] Chief of Staff, 18 June 1999.

"Memorandum for IMA, Northeast Region Director (Ms Diane Devens) Fort Monroe, VA 23651-1048." 8 October 2004. Subject: Loss of Garrison HHC Support. FROM: COL Brian Crawford, Garrison Commander, West Point, NY.

"USMA UIC W1FBAA, FY2006 Approved Organizational Force Structure." CCNUM 0106 TDA. E-Date: 1 October 2005.

Key Stakeholders

- USMA Superintendent (decision-maker)

- USMA Chief of Staff

- USMA Dean

- USCC Commandant

- West Point Garrison Commander & Deputy Garrison Commander

- 1-1 INF Battalion Commander

- 1-1 INF Battalion Command SGT Major

Face to face or telephonic interviews were conducted with stakeholders or representatives.

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Background information was obtained from the following stakeholders and sources:

- United States Military Academy: Superintendent (**Lennox, W. LTG**), Chief of Staff (**Dyson, G. COL**), Protocol Office, Public Affairs Office (**Trucksess, Margaret A**), Director of Housing and Public Works (**Anderson, M. Mr**), Dean of the Academic Board (**Kaufman, D. BG**); Office of the Dean (**Preczewski, S. COL**), United States Corps of Cadets (**Cushen, D. CPT**, **Vonasek, D. Ms**).
- West Point Garrison Command: Garrison Commander (**Crawford, B. COL**), Deputy Garrison Commander (**Zedalis, D. Ms**), 1-1 Infantry Battalion Commander (**Stanley, B. LTC**), Battalion Sergeant Major (**Olszyk, C. MSG**), Battalion Operations Officer (**Peterson, J. MAJ**), Adjutant General (**Willis, W. MAJ**).
- Other Garrison Commands: Army War College, GC/IMA Executive Officer (**Kilmer, W. MAJ**); Fort Leavenworth, GC/IMA Deputy Commander (**Walker, J. Mr**).

Background: West Point & USMA

West Point – Scope & Size

<u>Public Visitors/Year:</u>	<u>~1 Mil.</u>
<u>VIP Visitors/Year:</u>	<u>>1000</u>
<u>Public Events/Year:</u>	
> 20k	4 - 6
5-20k	6 - 8
2 - 5k	>30
<u>Cadet Events >2k:</u>	<u>>700</u>
<u>Acres:</u>	<u>16,080</u>
<u>Buildings (sq. ft):</u>	<u>938 (9.3M)</u>
<u>Quarters:</u>	<u>997</u>
<u>Roads:</u>	<u>~70 miles</u>

Human Resources – USMA TOTAL

• Military	720	
• Civilians	746	
• Cadets (US)	4163	
• Cadets (non-US):	43	<u>5672</u>

Human Resources – Garrison

• Military	121	
• Civilians (Perm. & Temp.)	1120	<u>1241</u>

21 July 2004 brief to VCSA: 121 military in the GC

- CDR & CSM (2)
- Chaplains & Assts (4/5, 9 total)
- DES Dir. & PM NCO (2)
- MPs (108)

•**AR 600-20:** Military personnel require military chain of command, military commanders and military organization implies HHC/HHD in either GC or USMA.

•**Proposed HHC:** 6 military

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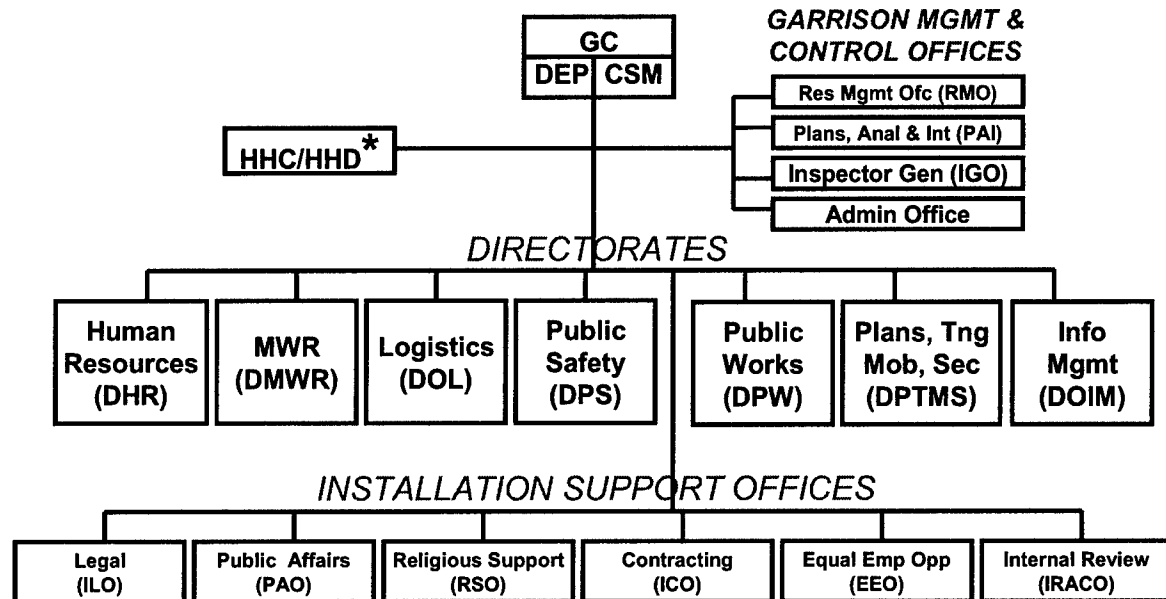
This slide illustrates key factors about West Point that set it apart as both an upper tier college with an international reputation and a fully functional, historical Army post. It also highlights the level of support activities attributed to USMA as a nationally prominent, undergraduate academic institution.

Each year, approximately one million visitors travel to West Point. This generates a steady churn of activities that severely stretches the Academy to its physical and human limits.

West Point routinely deals with 10 to 14 public events per year involving 5,000 to 20,000 people, or more, that would overwhelm other Army posts.

The large-scale events swell West Point to five or six times its normal size. The events challenge the Academy in ways no other military post experiences. This is especially demanding in the areas of security, force protection, crowd control, traffic management, and facilities management.

Background: Proposed IMA/GC Structure (7/23/2003)



USMA G-Staff Concept 7/23/2003

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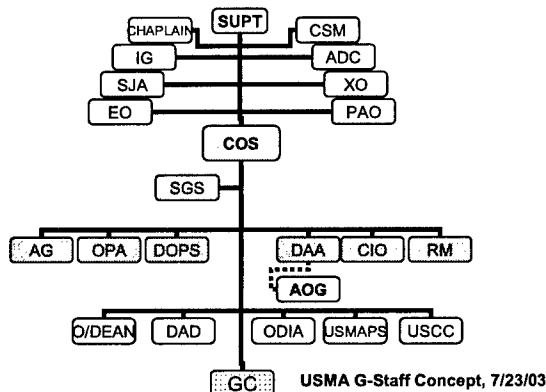
This figure depicts the West Point Garrison Command as organized under the Installation Management Agency (IMA). The slide was briefed by IMA on 10 July 2003 to USMA during a briefing entitled a "Common Garrison Structure."

The briefing also overviewed the major roles, responsibilities and activities of each IMA/Garrison Command staff element.

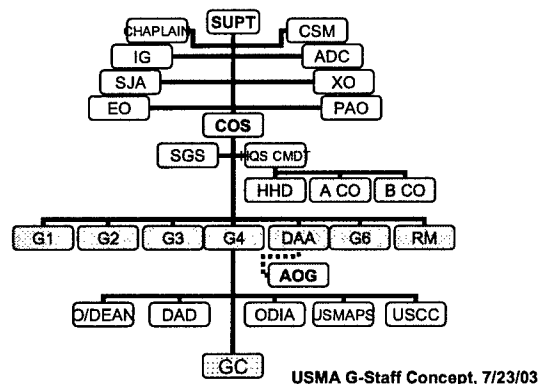
*The Headquarters and Headquarters Company / Detachment (HHC/HHD), shown above, has been proposed by the West Point Garrison Command but has not (yet) been approved by the IMA Regional Director at Fort Monroe, VA (see Appendix A).

Background: Proposed SUPT Staff (7/23/2003)

Current USMA Staff Structure



Recommended USMA G-Staff



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Information on this slide was prepared by the Office of Policy, Planning and Analysis, LTC Rodney Lusher. It shows two representations of the USMA staff presented to the Superintendent on July 23, 2003 by the USMA Chief of Staff during a presentation entitled "The USMA G-Staff."

The diagram on the left is the current USMA staff structure which has been in place for over a decade. The staff organization on the right illustrates a traditional G-staff alternative that was recommended for implementation at USMA by the Chief of Staff Study.

The presentation also identified processes, tasks and activities to be accomplished by each staff element to include internal and external liaison with government and non-government organizations.

The G-staff study did not analyze USMA staff workload; nor did it provide estimates of human resource requirements for either the current USMA staff or a USMA G-staff. Efforts to determine the size of current staffs (i.e., SUPT's personal and USMA staffs) and an estimate of the G-staff have thus far been unsuccessful.

Stakeholder Interviews: Categorization of Problem Statements

USMA Staff: "We [USMA] did not anticipate or understand how MIL-CIV and IMA would impact the USMA staff, mission or how West Point functions."

USMA Staff: "Under IMA, the SUPT's staff is not properly sized to do the work necessary to oversee and execute the mission. The SUPT's staff needs to be about what it is now [today] not what IMA says it should be."

Business Processes: "One impact of IMA on West Point will be to disrupt old work processes which, in turn, will disrupt information flow."

Staff Redundancy: "Implementation of the proposed G-staff will result in redundancy and fail to add much value to mission execution."

Staff Redundancy: "The proposed IMA headquarters is designed much like other Army headquarters. However, this headquarters is redundant with higher echelons resulting in major functions to be performed by two or more staff elements."

Command & Control: "Under IMA and MIL-CIV the loss of a USMA C2 element will disrupt the military chain of command."

Command & Control / Security: "The two most important impacts of IMA [on USMA] will be the loss of a C2 element for soldiers and the gaps it will create in force protection."

Command & Control / Security: "The biggest concern under IMA is force protection and security. We need 1-1 INF for C2 of security forces."

Security: "The biggest concern with IMA is the security issue. IMA and MIL-CIV civilianized the security forces and moved control of security from the mission side to the garrison side."

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The nine problem statements given above were obtained from interviews with the USMA Superintendent, Chief of Staff, West Point Garrison Commander, and others listed at Slide 3. The statements reflect concerns in the following areas: USMA staff, business processes and practices, staff redundancy, command and control, and force security.

The remainder of the report discusses and analyzes the five issue / problem areas identified at Slide 2:

- Staff Design;
- Staff Redundancy;
- Strategic Planning;
- Business Enterprise;
- Security.

Decision recommendations are made when applicable and where appropriate. When no decision recommendations are possible, the study recommends the next steps to continue working issues / problems. We conclude with suggestions for future work.

Issue 1: USMA Staff Design.

Design Statement

To design an (interim) Superintendent's USMA staff that is organized around high-level staff functions of **collecting** (information), **assessing**, **planning**, **deciding** and **informing** (communicating) in order to:

- (1) Effectively **coordinate** activities across USMA subordinate organizations and functional area activities and processes; and
- (2) Facilitate the **flow of information** to the commander, between higher, lower, adjacent echelons, and external government and non-government organizations in coordinating, controlling and executing the USMA mission.

that can be implemented by December 2006.

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Formulation of the USMA staff design statement took into account considerations and assumptions conveyed by stakeholders, as well as, lessons learned from previous work related to designing military headquarters and command posts.

Major assumptions used in formulating the USMA staff design statement:

- Designing a USMA staff requires a holistic ***system of systems*** perspective of USMA and West Point;
- A USMA staff designed to support the Superintendent requires that it retain both a focus and processes that are ***commander-centric***;
- A commander-centric USMA-level staff requires that the staff, and staff processes, be ***organized around the flow of information, staff products, and decisions***;
- Three important design objectives of a USMA staff are to: (1) improve ***organizational effectiveness*** in support of mission accomplishment, strategic planning and decision making; (2) improve ***organizational efficiency*** in the areas of information management and business processes, and (3) ***reduce redundancy*** where and when it is appropriate to do so.

Issue 1: USMA Staff Functional Decomposition

HIGH-LEVEL DESIGN STATEMENT: Design an (interim) coordinating USMA Staff organized around the flow of information to improve the coordination, control and execution of DoD, Army and USMA policies, processes and procedures in support of the USMA mission, and that can be implemented by December 2006.

COLLECTING: To efficiently and quickly collect data and information to be used for assessing institutional, and sub-element, performance across all areas of interest; development of strategic long-term and mid-term operational plans; making informed decisions by the leader team in support of the USMA mission; and communicating decisions, commander's intent and critical information in a timely manner to internal and external, governmental and non-governmental organizations.

ASSESSING: To efficiently and routinely assess and benchmark USMA activities using observable measures of policy effectiveness, mission effectiveness and organizational performance and to anticipate future states through the use of leading indicators of future performance.

PLANNING: To develop and coordinate strategic-level policies and plans, over the long term, including funding, resourcing, and budgeting to meet USMA's strategic long range plans and mid-range operational plans.

DECIDING: To make timely, informed mission-focused decisions, issue orders and formulate commander's intent needed for USMA to coordinate, control and execute DoD, Army and USMA policies, processes and procedures.

INFORMING: To clearly and effectively communicate decisions, intent and information internally throughout the command and externally to key governmental and non-governmental organizations

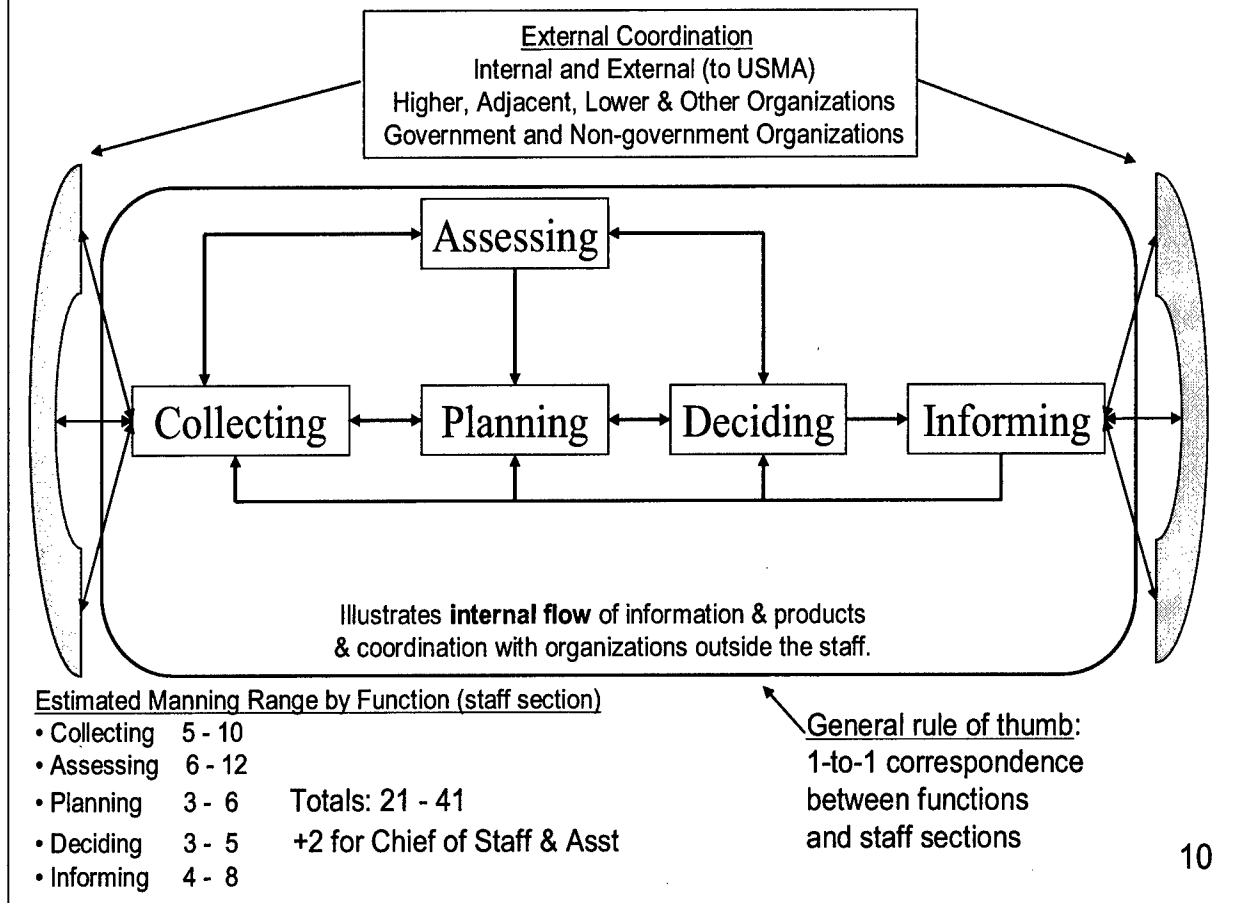
9

Given the USMA staff design statement and major assumptions (see Slide 8), we undertook a functional decomposition of the USMA staff that identified five major functions. The functions listed above are fundamental to a USMA staff accomplishing the Academy's mission, and to fulfilling the Superintendent's intent.

Figure 10, on page 13, portrays inputs and outputs of each function in the form of an input-output model. By linking the separate functions together, we form a functional flow diagram that shows how products and processes flow through the coordinating staff.

Manning estimates, based on professional judgment and past headquarters design experience, are provided for each section of the coordinating staff.

Issue 1: Coordinating Staff Functional Flow Diagram



This diagram depicts the general flow of information, decisions, and staff products within a coordinating-type staff. Staff elements will need to be stood up to accomplish each function:

- **Collecting:** Collects and manages data and information from all sources, internal and external to USMA, higher-lower-adjacent-other military organizations, and all other government and non-government organizations;
- **Assessing:** Develops metrics for all areas of interest including policy, institutional and organizational effectiveness, efficiency and performance. Analyzes and interprets information to assess progress and success of current operations/activities, and develops leading/predictive indicators for anticipating future problems and decisions.
- **Planning:** Develops strategic, crisis, and routine plans linked to prioritized requirements and projects, and oversees the funding, resourcing, budgeting and execution of strategic, long-term plans;
- **Deciding:** Supports the Superintendent and the institution by developing, coordinating and executing formal and informal decision tailored to the decision making needs of the Superintendent and the institution.
- **Communicating:** Accomplishes timely strategic and routine communications, internally and externally, in a clear, consistent manner with all USMA stakeholders and partners. Communicates the Superintendent's intent, decisions and orders throughout the Academy.

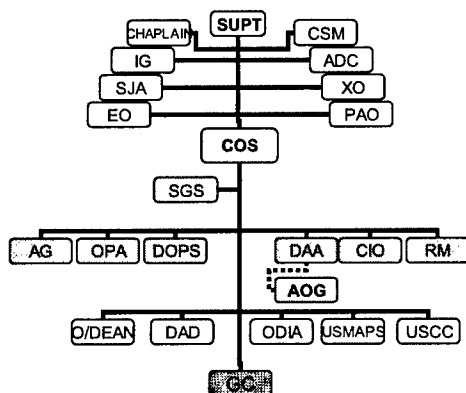
Next, we present three alternatives for organizing the USMA staff:

- (1) *current staff* (no change to today);
- (2) *traditional G-staff*; and
- (3) *coordinating staff*.

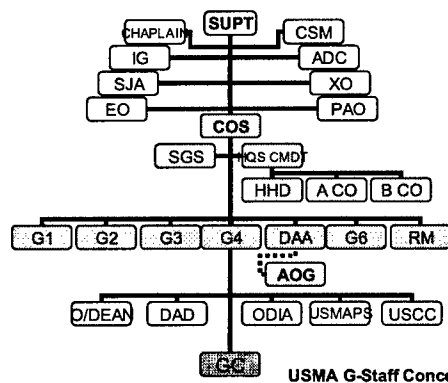
None of the alternatives recommends changes to the Superintendent's personal staff.

Issue 1: USMA Staff Alternatives 1 & 2

ALT 1 - Current USMA Staff



ALT 2 - Traditional G-Staff



USMA G-Staff Concept, 7/23/03

Observations:

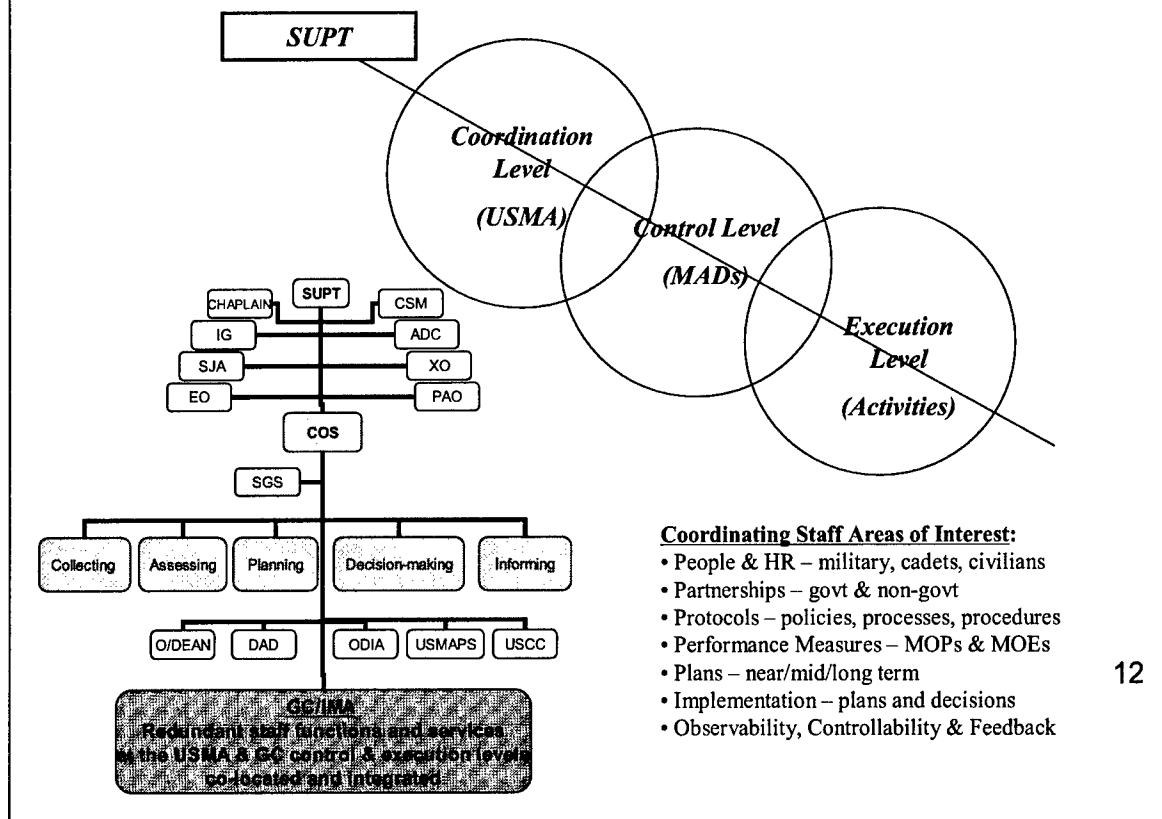
- Both typically look and work up and down not across activities, programs, MADS, functions.
- Neither organized as a coordinating staff; rather organized along traditional, stove-piped LOCs & C2.
- High degree of redundancy in the functional areas of G1 (HR), G2 (Security), G3 (Plans), G4 (LOG), G6 (IM & Tech Support), and G8 (RM). Redundancy exists between the SUPT personal staff and USMA G-Staff, between USMA and subordinate staffs (O/Dean, USCC, etc), and between USMA and GC/IMA staffs.
- Advantages and disadvantages of each alternative are given in the Chief of Staff Briefing dated 7/23/2003. 11

Alternatives 1 and 2 (shown above) were presented previously to the Superintendent by the USMA Chief of Staff during a USMA staff briefing on July 23, 2003.

Alternative 1 depicts the current USMA staff that has been in place for over a decade.

Alternative 2 is a traditional, stove-piped Army G-staff that is well understood and commonly used throughout the Army.

Issue 1: ALT 3 - USMA-level Coordinating Staff



ALT 3 Advantages:

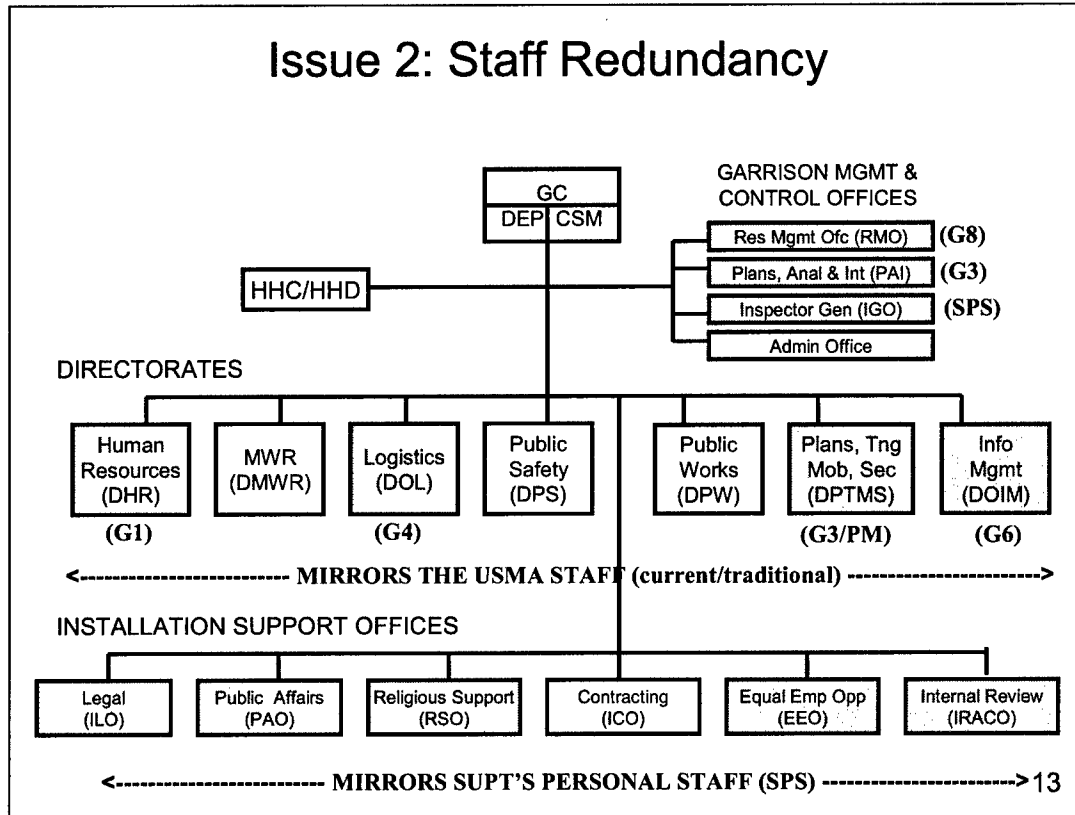
- Holistic view of staff echelonment at USMA;
- Tailors the USMA staff to meet the needs of the Superintendent;
- Focusing the USMA staff on coordination and clarifying the missions of lower level staffs will help reduce redundancy, and will set conditions for staffs to work as an integrated team;
- Dedicated long range strategic planning staff element will lead to more effective identification and prioritization of USMA requirements across all domains;
- Dedicated staff element for assessing and tracking performance and progress, over time, across USMA activities and functional areas will ensure funding, resourcing, budgeting, and execution proceed logically from vision to concept to realization of vision.

ALT 3 Disadvantages:

- Requires significant reorganization of the USMA staff and commitment of resources, effort and time to reshape the organization and the workforce;
- Requires a business enterprise approach to data and information management (see Issue 4 below), and reengineering of some USMA and West Point business practices.

Recommendation: Alternative 3. All three alternatives will work if top-level functions are accomplished. Despite the familiarity of a traditional G-staff, it may not be well suited to USMA where lower level echelons are not typical of military organizations at most posts. A traditional USMA G-staff may result in organizational misalignment and unanticipated managerial problems.

Issue 2: Staff Redundancy



The shaded areas depict redundancies in human resources, information and computer resources, office space, and organizational functionality between West Point staffs: Garrison/IMA, USMA, Superintendent's personal staff, and lower echelons such as USCC, O/Dean and MWR.

Across the organizational domains listed above, staff redundancy exists in the following areas:

- human resources (G1/HR);
- operations (G3/OPNS);
- strategic and contingency planning (G3/Plans);
- logistics and facilities (G4/LOGS);
- information management, information systems, systems management and technical support (G6/IO/IM/Tech/Computer Support);
- resource management (G8/RM).

Recommendations:

- Study and assess the extent and implications of redundancy issues.
- Formulate, analyze and recommend options for where West Point needs redundancy and areas where redundancy either can be reduced or eliminated.

Issue 3: Strategic Planning

Problem: Based on stakeholder feedback, the USMA long-range strategic planning process fails to:

- Effectively identify and prioritize USMA requirements;
- Sustain long term funding of prioritized projects;
- Track budget execution of projects;
- Ensure that the application of resources proceeds logically from vision to realization.

Recommendations:

1. Establish a strategic planning committee of permanent members (by duty position) and ad hoc members appointed by the SUPT.
2. Establish a predictable planning schedule on a semi, annual or bi-annual cycle with timelines, deadlines, agendas, and processes for identifying strategic level requirements;
3. Role of a USMA Staff in coordinating strategic planning:
 - Oversee development of a USMA strategic plan;
 - Conduct trade analysis;
 - Coordinate lower level staff activities such as portfolio and project management, activity-based funding and budgeting;
 - Assess progress of lower-level staffs in completing projects and activities;
 - Prepare decision recommendations for the Superintendent, facilitate decision briefings and strategic planning committee meeting.

A long range strategic planning process is critical to sustaining West Point's competitiveness as an upper tier academic institution.

The USMA staff must assume a prominent roll in the following areas critical to strategic planning:

- Formulate a USMA strategic planning process;
- Implement and track the effectiveness of the strategic planning process;
- Apply the process to formulate a long-range strategic plan linked to resource allocation;
- Clearly articulate, interpret and represent decisions by both the Superintendent and institutional governing committees in areas dealing with the USMA strategic plan;
- Clearly and effectively communicate strategic planning decisions and intent, internally and externally, to government and non-government partners and organizations.

Issue 4: Business Enterprise

Problem: Lack of standards and protocols for managing data and information management cripples West Point's ability to effectively and effectively benchmark and track institutional progress.

Specific issues:

- No Academy-wide meta-data standards or protocols for data and information management (storing, archiving, parsing, sharing, etc).
- No standard architecture or software for data management;
- Legacy systems abound at West Point & USMA creating the following problems:
 - Across the Academy, software and formats for data not compatible;
 - Different versions of the same software used to store and manage data;
 - Same (or similar) data stored in different formats using different software systems.

Problem: Information is cubby-holed throughout West Point and USMA.

Specific issues:

- Data and information resides throughout the command with no or very limited visibility of what is available or whether or not the information is up to date.
- Difficult to access data.
- Data formats vary from organization to organization. Data formats are not always compatible.

Problem: Data incompatibility, accessibility problems and different software systems drive up costs.

Problem: Lack of visibility of data limits the institution's ability to access data to evaluate organizational performance of processes and activities in a timely and efficient manner.

Problem: As the Academy transitions to IMA, the separation of institutional responsibilities between USMA and West Point will disrupt legacy business and work processes splitting them across mission and installation lines of control and authority.

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This slide presents problems and issues related data management and business processes at West Point.

Issue 4: Business Enterprise

General Recommendations:

1. Design a common data management protocol, data architecture and data structures for managing Academy data and information;
2. Undertake business process reengineering and enterprise initiative in response to disruptions imposed on the Academy by IMA which will break apart legacy Academy business practices into separate practices for USMA and West Point.

Specific Recommendations:

1. Replace (20 year old or more) legacy data management software systems with modern commercial off the shelf (COTS) tools;
2. Reengineer USMA business processes embedded in old, legacy data management systems;
3. Progress from concept demonstration, to limited user test (LUT), to full system roll out. Several examples of enterprise initiatives, currently underway at USMA, that can serve as test beds for best practices include: (a) O/Dean Registrar online AMS system; (b) the O/Dean online faculty application process initiated by D/Social Sciences; (c) D/Systems Engineering data management and enterprise initiative;¹ and (d) the Automated Reporting Management Information System (ARIMIS)².

Benefits of Transforming Business Processes (if done properly):

- Improved timeliness and accuracy of activity-based reporting and forecasting;
- Increased efficiency of workforce resulting from standardizing software and streamlining data management procedures;
- Improved financial accountability and auditing of business activities;
- Cost savings from retiring legacy systems;
- Reduced risks of non-compliance with DOD policy;
- Improved data management and data collection on USMA organizational performance and installation activities provides SUPT with better feedback.

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Note 1. The Department of Systems Engineering Enterprise Database Management System (POC: LTC Willie McFadden). The Department has undertaken the development of an integrated Enterprise Budget, Research, and Personnel Management System tailored to the organization's specific requirements. The object-oriented code and the relational links of the underlying database structure will provide the Department with a scalable information and data management solution that integrates budget, personnel, research, and cadet information systems into a comprehensive holistic management system.

Note 2. The Automated Reporting Management Information System (ARMIS) was initiated in 1987 for collecting financial and operational data from the largest carriers. Additional ARMIS reports were added in 1991 to collect service quality and network infrastructure information from local exchange carriers subject to price cap regulations, in 1992 for the collection of statistical data formerly included in Form M, and in 1995 for monitoring video dial tone investment, expense and revenue data. Today, ARMIS consists of ten public reports.

Issue 5: Security

Security Issues & Problems -- Stakeholder Interviews

"Under IMA and MIL-CIV, the loss of a USMA C2 element will disrupt the military chain of command."

"The two most important impacts of IMA [on USMA] will be the loss of a C2 element for soldiers and the gaps it will create in force protection."

"The biggest concern under IMA is force protection and security. We need 1-1 INF for C2 of security forces."

"The biggest concern with IMA is the security issue. IMA and MIL-CIV civilianized the security forces and moved control of security from the mission side to the garrison side."

Three Recommendations for Addressing Security Issues & Problems

- I. **Security Analysis**: Address current and near-to-mid term security issues at the control (operational) and execution (tactical) levels.
- II. **Security Assurance**: Address long-term, strategic security issues at the coordinating (strategic) level.
- III. **Security Command & Control**: Address security force issues relating to command, control, communications, plans, lines of responsibility and authority and C2 of military assigned to USMA and West Point.

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Security issues and recommendations are categorized into three areas: (1) security analysis; (2) security assurance; and (3) security command & control. Each category is briefly explained below.

Security analysis covers all aspects of security planning for both routine and special, large-scale events. Security analysis starts with an assessment of potential local and near-term threats, intent and capabilities, and USMA vulnerabilities. Based on threat analysis and West Point vulnerabilities, plans are developed and refined for responding to threat capabilities and intentions. Plans include standing, mission-type plans and orders, contingency plans, and event synchronization matrices that layout the implementation of both time-driven and event-driven security plans. Areas of analysis include, but are not limited to, physical security, patrols, guard forces, force protection, crowd control, traffic management, crisis actions, and facilities management.

Security assurance is the formulation of a holistic, strategic West Point / USMA security plan, development and implementation of a strategic-level, long term process for defining and identifying security risks, likelihoods of risks, preventative measures, security threat responses, and consequence assessments.

Command and control specifies individual (by duty position) and organizational authority and responsibilities for coordinating, controlling and executing all aspects of security analysis and security assurance recommendations. USMA and West Point also require a command and control element for administering to more than 5,800 military personnel and cadets assigned to West Point.

Issue 5: Security

Recommendation I: Security Analysis

1. Analyze USMA and West Point current and near-term force protection requirements and current capabilities;
2. Recommend security force and technological alternatives for covering current physical security gaps;
3. Plan for security force improvements and technology insertions over time.
4. Update and revise security force protection plans over time.

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Notes:

1. Conduct a comprehensive analysis of USMA and West Point force protection requirements, capabilities, technologies, and processes to prevent and respond to security threats.
2. Recommend physical security and technological alternatives to cover physical security gaps using preventative and force protection security measures such as:
 - X-RAY and detection sensors at entry points to West Point and key facilities;
 - Bomb detection dog teams;
 - Surveillance and monitoring systems, sensors, unmanned ground vehicles, etc.
3. Plan technology insertions over time to improve physical security and threat reduction capabilities. Incorporate technologies into the force protection plans over time.

Issue 5: Security

Part II. Security Assurance Recommendations

- 1. Specify West Point Security System Requirements**
- 2. Develop a USMA Security Assurance Strategy**
- 3. Implement a Security Force Quality Assurance Program.**

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Specify West Point Security System Requirements

- Specify security assurance services, including force and installation protection, that meet or exceed expectations of the public, the Army/DoD and USMA/West Point;
- Conduct threat analysis on local and regional levels; develop predictive (leading) metrics for preventative measures;
- Coordinate security analysis and assurance measures with local government and non-government organizations;
- Improve skill levels of contracted security work force;
- Formulate and implement a security risk and resource management plan.

Develop a USMA Security Assurance Strategy

- Formulate a USMA Strategic Security Plan for USMA / West Point security force management;
- Form a Red (threat) Team to periodically conduct predictive security analysis in order to identify and implement preventative security measures;
- Develop and implement a process for defining and identifying security risks, likelihood of risks, preventative measures, security threat responses and consequence measures.

Implement a Security Force Quality Assurance Program.

- Initiate and promote professional certification of contract security forces;
- Implement security assurance as a West Point-wide program;
- Benchmark USMA security assurance with other organizations (military and non-military);
- Develop a test and evaluation plan for security forces (chain of command, MPs, contract guard force, Provost Marshal, Fire Department, etc.);
- Develop a security force risk assessment and management plan;
- Refine and test critical activities, scheduling, reporting and response procedures.

Issue 5: Security

Part III. Command & Control Issue - Background

- **Issue:** Command and control of security forces, oversight of the force protection mission and headquarters element for administrative support of military members assigned to USMA and West Point.
- Under IMA, USMA may lose its command and control element for overseeing security operations (1-1 INF) in support of routine daily activities and when conducting surge operations for large scale activities (>5,000).
- AR 600-20 requires USMA to have a military chain of command, military commanders and a military organization for its assigned military personnel. Authorizations will be required for a HHC/HHD in either GC or USMA.

USMA Military: 5671

Garrison Command Military: 121

- At this time, no decision has been made as to whether or not USMA, or the Garrison Command/IMA, will retain 1-1 INF BN or some other C2 element in the form of an HHC/HHD for C2 of military service members assigned to USMA.
- Proposed HHC (C2) element (see notes below): +6 military

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Note. Proposed positions for a West Point Command & Control Element:

<u>POSITION</u>	<u>GRADE</u>	<u>REQ</u>
BATTALION COMMANDER	O5	1
EXECUTIVE OFFICER	O4	1
COMPANY COMMANDER	O3	1
BATTALION CSM	E9	1
1ST SGT	E8	1
SIGNAL SPT SYS NCO	E6	1
<i>(Becomes Training and Ops NCO)</i>	Total	6

Issue 5: Security

Part III. Command & Control Issue - Recommendations

Issue: C2 of security operations and guard forces.

ALT 1: Place the security force under the Provost Marshall. This is the Army-wide solution to IMA and is also the approach followed throughout O-CONUS;

ALT 2: Retain 1-1 INF BN at West Point to provide C2 of security forces and the security mission. This alternatives separates the gives the Superintendent and USMA the flexibility it needs in dealing with security issues for routine and surge events.

Recommendation: Pursue ALT 2 to retain 1-1 INF as the USMA Security Force C2 element. Failing that, implement ALT 1.

Issue: C2 of military personnel assigned to West Point.

ALT 1: Retain 1-1 INF BN with a HHC/HHD that provides administrative C2 for military personnel assigned to West Point;

ALT 2: Stand-up a HHC/HHD under either the Garrison Command or USMA to provide administrative C2 of military personnel assigned to West Point.

Recommendation: Pursue ALT 1 to retain 1-1 INF including a HHC for C2 of military personnel. Failing that, implement ALT 2.

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Work-in-Progress & Future Work

- Continue to refine and mature alternatives;
- Brief key stakeholders on issues, work to date, and recommendations;
- Brief the Superintendent on findings and work to date;
- Present Superintendent with decision recommendations;
- For each decision by the Superintendent:
 - Assign staff responsibility for implementing the Superintendent's decisions;
 - Develop an implementation plan (metrics, timelines & milestones);
 - Develop a strategic communication plan to inform the workforce and motivate the case for change for each decision.

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Specifics.

- **Staff Function Decomposition.** Decompose each function needs into lower level objectives (i.e., mission-type statements) that specify how each function is to be accomplished. Formulate metrics for assessing progress, performance and effectiveness in pursuit of each objective. Write formal specifications for how each USMA staff element is to be organized, manned and equipped to accomplished the functional requirements and objectives.
- **Coordinating Staff Specifications.** Develop requirements and specifications for a coordinating staff, including an organizational structure of subsystems, people and equipment, to accomplish the functions and objectives in support of the parent organization's (USMA) mission and the intent of the Superintendent.
- **Staff Redundancy.** Conduct a more detailed staff study at all levels of USMA and West Point to identify areas where staff redundancy is required and where staff redundancy can be reduced thereby improving the inefficiency and effectiveness of staff processes, and to improve the utilization and stewardship of government resources.
- **Staff Workload Analysis.** Conduct workload analysis of staff activities to estimate size of workforce and the knowledge, skills and attributes.

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Appendix A. IMA LETTER TO FORT MONROE DATED 8 OCTOBER 2004

MAGC-RM

8 October 2004

MEMORANDUM FOR INSTALLATION MANAGEMENT AGENCY, NORTHEAST REGION DIRECTOR
(MS. DIANE DEVENS), 5A NORTH GATE ROAD, FORT MONROE, VA 23651-1048

SUBJECT: Loss of Garrison HHC Support

1. Reference Installation Management Agency (IMA) Northeast Region (NERO) message, 21 Sep 04, SAB (S: 8 Oct 04).

2. This memorandum responds to your request to assess the impact of losing the installation HHC. If the West Point Garrison loses the 1st Battalion 1st Infantry (1-1 IN BN), there will be no command and control element for either the Garrison or mission military. The Battalion's military are a critical component of the force structure that provides command and control, security and force protection at West Point. As such, West Point requires the restoration of 6 military positions to re-establish a Battalion (BN) headquarters and Headquarters and Headquarters Company (HHC) to perform these functions.

3. The Superintendent, USMA, has expressed appreciation that IMA recognizes the requirement to re-establish an HHC that supports USMA Soldiers as well as Garrison Soldiers. The 1-1 IN BN includes the HHC, the (already approved) MP Company (108 Soldiers) and provides C2 for security and force protection at the Academy. Additionally, the 1-1 IN BN Commander is "dual-hatted" as the DPTMS under the Standard Garrison Organization (SGO) template. Retaining 1-1 IN BN/HHC is key in managing the frequency and magnitude of security issues, exacerbated by the volume and status of Academy visitors.

4. The potential problems and magnitude of concern is directly linked to the loss of the 1-1 IN BN/HHC that supports a military force of 121 Garrison (post PBD 712 implementation) and 713 mission USMA Soldiers. A force structure summary for the West Point Garrison and the USMA are provided at enclosures 1 and 2 respectively.

a. There is no USMA mission HHC. The USMA is not like a typical Army post (Forts Hood, Stewart, etc.) where the mission elements are "self contained and self sustaining" from a Soldier administration support capability. The evolution of this support at West Point is Soldier administration and company grade "supervision" for all Soldiers (staff and faculty), except for the MEDDAC, currently resides in the Garrison's 1-1 IN BN/HHC.

b. If the 1-1 IN BN/HHC is removed, USMA will be unable to provide C2 for Soldiers. Without an IMA created 1-1 IN BN/HHC, USMA will be required to divert personnel from the primary mission of developing leaders of character or request DA approval of a new C2 element on the mission side to fulfill this requirement.

5. The minimum structure required is as follows: Battalion Commander (LTC/O5), Battalion XO (MAJ/O4), Company Commander (CPT/O3), Command Sergeant Major (CSM/E9), First Sergeant (1SG/E8), Training NCO (SSG/E6), Office Automation Clerk, GS-0326-05. The civilian clerk position will provide legal and administrative support. The specific requirements are found in AR 600-8 and AR 27-10.

6. POC for this action is Patricia Gilardo, RMO, Manpower, 845-938-6956/DSN 688-6956.

//s//

BRIAN A. CRAWFORD
COL, FA
Garrison Commander

OTHER

These are collecting (data and information), accessing (organizational effectiveness, efficiency and progress), planning (near, mid and long range), deciding (decision-making and supporting the decision making processes), and informing (communicating information, decisions, plans, and commander's intent to higher and lower echelons as well as internally and externally).

To design a USMA-level Staff capable of coordinating activities throughout the command, collecting information in any area of interest, assessing (and benchmarking) organizational performance and progress, conducting long-range strategic planning and coordinating mid-range operational level planning, informing and enabling the decision making processes of the organization, and communicating internally across all domains and functional areas and externally with key governmental and non-governmental agencies.

- Staff Design Statement
- Functional Decomposition
- Functional Flow Diagram
- Staff Design Alternatives & Recommendation

Feasible USMA staff alternatives under consideration will be evaluated against the following USMA staff design goal:

Issue 4: Business Enterprise

Problem: Lack of standards and protocols for managing data and information management cripples West Point's ability to effectively and effectively benchmark and track institutional progress. Specific issues:

- No Academy-wide meta-data standards or protocols for data and information management in terms of storing, archiving and parsing.
- No standardized software or protocols used for data management;
- Legacy systems abound at West Point & USMA. Creates the following problems:
 - Software and data formats across the Academy not compatible. Different versions of the same software being used;
 - Same or similar data and information being stored in different formats and using different software systems.

Problem: Information is cubby-holed throughout West Point and USMA. In many instances, staffs are unaware that data exists and if its presumed to exist, staffs are not sure where making it inaccessible. Specific issues:

- Data and information resides throughout the command with no or very limited visibility of what is available and whether or not the information is up to date.
- Difficult to access data.
- Formats of data vary from organization to organization. Date formats are not always compatible.

Problem: Data incompatibility and different systems drive up costs to maintain data.

Problem: Non-visibility of data limits the institution's ability to access data to evaluate organizational performance and its processes and activities in a timely and efficient manner.

Problem: As IMA becomes fully implemented, responsibilities will be separated between USMA and West Point causing legacy business and work processes to be split across mission and installation lines of authority.

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14. ABSTRACT For nearly two years, the US Military Academy (USMA) and West Point have wrestled with how to internally restructure in response to the military-to-civilian conversion of duty positions and the separation of USMA mission and West Point garrison responsibilities mandated by the Installation Management Agency (IMA). In September 2004, the Superintendent of USMA directed a review of previous work on the problem, and recommendations for dealing with the impact of MIL-CIV and IMA on the Academy. Research for this report reveals that the current USMA staff elements essentially function as separate, activity-centric, stove-piped entities; a major hindrance to the Academy's pursuit of excellence and higher performance. This report presents a USMA staff design that will align and enhance the synergy between USMA staff elements, lower level staffs, and the West Point Garrison Command.					
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