This report provides a synopsis of the work surrounding the Army Medical Department (AMEDD) reorganization during the period January 1993 to June 1995. Volume I of the report documents the formation of Task Force Aesculapius; the role of Organizational Design, Incorporated; and the impact of the reorganization on other AMEDD activities. Other topics covered include background reasons for the reorganization, the analytical process, concept plan development, implementation of the concept plan, major subordinate command analyses, marketing the reorganization, and related issues. Volumes II, III, IV, and V contain enclosures which include the MEDCOM Concept Plan, Task Force charters, selected reorganization briefings, and major subordinate command reviews.
PROPOSED MISSION
MEDICAL RESEARCH, DEVELOPMENT AND ACQUISITION COMMAND

1. Discover, develop and field cost effective medical information and material and prevent technological surprise in order to optimize Armed Forces effectiveness by:

   - Prevention of battle and non-battle disease and injury
   - Sustainment and amplification of individual operational capabilities despite disease or injury
   - Provision of state-of-the-art medical management of casualties so as to prevent death and disability and to minimize lost duty days

2. Sustain a technologically superior, affordable medical research development and acquisition capability and capacity which is responsive to Armed Forces needs for medical support and services during military operations and which enables future military operational capabilities.

3. Preserve Army medical research, development and acquisition effectiveness while accommodating national and international determinants transcending defense considerations.

4. Perform wholesale level functions associated with management of Class VIII medical material. Execute medical material programs in support of Army-wide health services including:

   - Depot level maintenance
   - Management of sets, kits and outfits
   - Contingency planning and support for Reserve material management
   - Operation of a Service Item Control Center (EICC)
SUMMARY OF RECOMMENDATIONS
MEDICAL RESEARCH AND DEVELOPMENT COMMAND

I. COMMAND GROUP:

1. The Deputy Commander position should be a Brigadier General position.

2. The Executive Assistant role operates as an independent contributor position and needs to be more clearly defined.

II. COORDINATING STAFF:

1. The Chief of Staff role operates at the Brigadier General level.

2. Align Administrative Support functions under a newly created Administrative Support Directorate.

3. The Research Area Directors and Research Plans, Programs and Budget element should be placed under the Director, RDA Operations.

4. The residual functions of the Current Operations Office should be transferred to a Directorate of Support.

5. Transfer the Manpower function from the DCSPER to the Comptroller.

6. Consider aligning the Civilian Personnel Management function with the Medcom CPD with duty station with DCSPER, MRDC.

III. SPECIAL STAFF: Establish a Human Use and Regulatory Affairs Office.

IV. EXTERNAL RELATIONSHIPS (SARDA):

1. Dual-hat the MRDC Commander as the Deputy Assistant Secretary Army (ASA), RDA for Medical Systems.

2. Continue to receive P6 resources from SARDA and P8 dollars from the MEDCOM.

V. ACQUISITION:

1. Establish MRDC as an Acquisition Command similar to the AMC model.
2. Consolidate USAMMA with MRDC to perform the Medical Materiel Management function.

3. Integrate the USAMMDA organization into the Acquisition function.

VI. MISSION: Expand the USAMRDC mission to include Acquisition related Logistical and Procurement functions (e.g., USAMMA).
BACKGROUND:

The U.S. Army Medical Materiel Development Activity (USAMMDA) manages execution of the development component of the Army Medical Department's Research, Development, Test, and Evaluation (RDTE) materiel developer responsibilities in order to achieve Department of the Army (DA) and joint service materiel system objectives (e.g., cost, performance, and schedule targets). The USAMMDA was created in 1984. Over the last nine years, this activity has evolved to the point where it is currently the only Department of Defense (DoD) activity which solely functions in the medical materiel development arena. This evolution of roles and mission, however, has strained the current working relationship between USAMMDA, some U.S. Army Medical Research and Development Command (USAMRDC) headquarters (HQ) staff, and the command's subordinate laboratories. Today, that working relationship has reached a critical point where issues of control of resources and planning of product transition are contentious and in need of immediate resolution.

I. THEME: The USAMMDA development effort must be more fully understood and functionally integrated into the full spectrum of the medical research and development mission and execution.
II. FINDINGS:

A. The USAMMDA perceives that they should have control of 6.3A (non-system Advanced Development monies). This resource category is primarily directed at demonstrating the feasibility of materiel solutions and the validity of nonmateriel solutions. Pre-product candidates are reviewed and considered as an element of the Medical Mission Area Materiel Plan (MedMAMP). Category 6.3A provides information that reduces uncertainties and technical risk, avoids costly false starts in formal development programs, and ensures timely insertion of the most responsive technology into developmental systems.

B. USAMMDA currently picks up responsibility at the 6.3B (Systems Advanced Development) point. The 6.3B point has been identified as a choke point by laboratory scientists who feel that potential products have often not been in the technology base (<6.3B) long enough.

C. Transition of products from the technology base (<6.3B) is identified as a "pull" by Research Area Directors (RADs) who generally feel that such pull places too much authority at USAMMDA.

D. The Medical Systems Review Committee (MSRC) process is reported by many respondents to be broken.

E. The Task or Technical Area Manager (TAM) process is also reportedly broken.

F. The management of the "Milestone O" decision point (marks the formal transition into the concept exploration and definition phase of the acquisition program) is felt to be a USAMMDA lead.
G. Transition of current operations into compliance with the new DoD Directive 5000 series is perceived to be a problem between the USAMMMDA and the respective RAD.

H. The role of USAMMMDA as the only DoD Materiel Developer is not fully defined nor acknowledged by the DoD community.

I. There is no method for a product improvement program to be implemented given the current disparate roles of USAMMMDA and U.S. Army Medical Materiel Acquisition Agency (USAMMA).

III. Issues:

A. Is the Medical Systems Review Committee the proper vehicle for determining the transition point for a "product"?

B. Does the current draft USAMRDC Regulation 70-xx, "Medical Materiel System Development Program," appropriately address findings?

C. Should USAMMMDA manage 6.3A dollars?

D. Are the laboratories poor performers in relation to cost schedules?

E. What should be changed (if anything) to formalize USAMMMDA's role as the DoD's Medical Materiel Developer?

IV. Discussion.

The medical research and development process yields both information and materiel products. Information products generally transition directly from the science and technology base (6.1, 6.2, 6.3A) to the user community. Materiel products, on the other hand,
require extensive investment in development prior to fielding. Because of this added investment for development, an intense management process is required. Candidate products flow from the laboratories, through a decision point (Milestone 0), to the program manager.

The measure of success for any Research and Development (R&D) management system is in the transition of useful, affordable products into the acquisition system and subsequently to the end user. The system should promote identification of those candidates with the lowest possible technical risk, and lowest possible development and production cost/time; it should promote the balance of these factors against operational requirements identified by the user. Every aspect of the R&D management process should be tempered by the obligation to apply government resources in the manner which promises to yield the maximum benefit in terms of mission capability for the minimum investment of resources.

The Task Technical Area Manager (TAM) system was created to primarily oversee extramural technology base efforts. Extramural program and research efforts are carried out by agencies (e.g., universities or private contractors). Alternatively, intramural programs represent in-house laboratory efforts.

TAMs may be appointed by either laboratory commanders or RADs to assist in managing subareas of a particular research program. TAMs are delegated authority to plan and manage the execution of their area's extramural (and sometimes intramural) programs, tasks in which they work closely with the Acquisition Management Liaison
Officers (AMLOs) and RAD staffs. TAMs responsibilities include: monitoring all research relevant to a given mission subarea in order to preclude duplication of efforts; identifying information gaps; developing research strategies and Requests for Proposals; recommending priorities for funding of approved contract proposals; and assuring timely transitions to the development process of mature technologies.

Scientific Steering Committees were created to ensure a balance is maintained between a "mature" and "over mature" or "under mature" product. The tendency of scientists to want to improve upon their scientific and intellectual products should be balanced against the need to develop products according to constrained cost, schedule, and performance guidelines, and other regulatory requirements. Although it is essential that Program/Product Managers (PMS) maintain control over the development process, it would be counterproductive to isolate the PM from the very expertise which made the product being managed a reality. For this reason, scientific steering committees are used to provide the continuing dialogue between PMs and scientists so essential to successful development and fielding. These committees also ensure that the DoD and Army objective of inserting the latest advances in technology into developing systems is considered at each stage of the development process.

The goals of 6.3A and 6.3B are similar: selection of technically feasible and cost-effective solutions ("proof of principle") through demonstration and validation. The difference
is that 6.3B projects must pass a Milestone 0 review by the Medical Systems Review Committee (MSRC) and are formally entered into the initial phase of the Life Cycle System Management Model (LCSMM).

In contrast to the typical practice of competing several candidates in 6.3B, the normal practice of medical R&D is to require proof-of-principle in science and technology base laboratory models and subsequent selection of a single candidate for transition to development and human testing.

The MSRC has been the traditional method for addressing the product transition phasing between 6.3A and 6.3B programs of resource management. Although the MedMAMP feeds this process, there currently exists an overlapping of responsibility and influence which contributes to an unstructured and sometimes exploited no-mans land of research and development resource expenditure.

In order to maintain the U.S. technological advantage through rapid transition of new scientific knowledge and technology into militarily useful products, the final transition decisions should not be left solely in the hands of either program managers or scientists. The MSRC provides the formal forum for the necessary coordination, information sharing and decision making.

Membership of the MSRC is drawn from USAMMDA PMs, RADs, and laboratory commanders. (Specific attendance at meetings varies according to the product(s) being considered.) Meetings are scheduled, coordinated, and chaired by the Commander, USAMMDA. The approval authority for any MSRC action is the Commander, USAMRDC.
The MSRC is the formal mechanism to assure technology maturity for Milestone 0 transition decisions. The committee convenes as needed or at least once a year to review and recommend technology base items or projects for transition to development (6.3B). The MSRC provides the basis for integrating, structuring, and defining workloads and actions required to support timely Program Initiation (Milestone 0). The committee's primary goal is to optimize transition points in a project while reducing development risk. When sufficient data addressing critical issues has been obtained, and important technology base questions have been answered, a transition point is determined.

The committee also considers and recommends the return of products to the science and technology base due to issues that cannot be resolved in the development phase, and takes action on MAMP-joint conference recommendations to modify or abort a product development program. Candidates for return to the science and technology base are identified by the appropriate Project Manager with rationale for its return and the issues which must be satisfactorily resolved prior to renomination for transition. Among reasons for deletion of a product, presented by the Commander, USAMMDA, are: change in threat, catastrophic test failure, lack of progress toward meeting performance requirements, excessive cost of meeting performance requirements, and failure to meet regulatory requirements.

Candidate products for transition from the science and technology base to development are usually nominated by the
appropriate laboratory commander. However, any MSRC member prepared to justify his/her nomination can nominate products for MSRC consideration. Criteria for nominating products for MSRC review varies by category (e.g., pharmaceuticals, biologicals, and applied medical systems). Nominations are made for transition to the USAMMDA only after appropriate selection criteria have been satisfied.

Usually, products recommended for transition to development are briefed to the MSRC by the laboratory commander responsible for that product in the science and technology base or by the commander's technical expert. Presentations must follow a required format.

V. RECOMMENDATIONS:

A. Resolve staffing nonconcurrences with draft USAMRDC Regulation 70-xx, "Medical Materiel System Development Program," to support DoD 5000 series.

B. Realign the USAMMDA organization to an "at par" position with RAD and laboratory(s) organization.

C. Resolve the assignment of the Milestone O decision authority at the Deputy (Brigadier General) Commander (RAD/OPS) USAMRDC-level through use of a MSRC-like committee. Deputy Commander (RAD/OPS) chairs this meeting, not USAMMDA.

D. Use TAM and Scientific Steering Committee as originally designed and implemented.
E. Formalize a system for programming or managing unplanned returns of products to the technology base.

F. Formalize the "70%" solution goal of medical materiel development.
MEDICAL RESEARCH AND DEVELOPMENT COMMAND
RESEARCH AREA DIRECTORS

BACKGROUND:

The Medical Research and Development Command (MRDC) consists of a headquarters element, science and technology laboratories, a development activity, and a procurement activity. The chain of command for the commanders of the laboratories and activities is direct to the Commander, MRDC.

Within the support staff of the Commander, MRDC are the five Research Area Directors (RADs), formerly known as Research Area Managers (RAMs). The RADs are supervised by the Deputy Commander and senior rated by the Commander, MRDC. Each RAD has a separate support staff that ranges from one to three staff officers, a civilian program analyst, and a secretary.

In an attempt to clarify the function of the RADs and their staffs, Headquarters (HQ), MRDC published a memorandum 8 July 1992, Subject: HQ R&A Tasking to Review the Relationship of RADs, Laboratory Commanders and USAMMDA. The memorandum was signed by the Deputy Commander and reads in part:

"2. The primary roles and responsibilities of these positions are as follows:

c. Research Area Directors. Research Area Directors (RADs), under the direction of the Deputy Commander, have HQ coordinating staff responsibility for assigned Research, Development, Test, and Evaluation (RDTE) functional areas. In this
role, RADs provide management, development, and oversight of the planning, programming, budgeting, and execution activities required for their assigned RDTE programs. In this capacity, they provide guidance and assistance to HQ staff and Command elements in discharging the latter's responsibilities as they relate to each RAD's assigned areas of responsibility. The major functions of the RADs are:

(1) Develop and recommend to the Deputy Commander their respective planning, programming, and budgeting resource (6.1-6.4) requirements and priorities for integration by the Director, Planning, Programming, and Budgeting Directorate (D,PPBD) into the Command's overall RDTE investment strategy.

(2) Develop detailed functional investment strategies and priorities and supporting narratives of Command RDTE planning, programming, and budgeting activities in coordination with PPBD.

(a) Translate mid-range through long-range Command goals into Scientific and Technical Objectives (STOs) (6.1-6.3a) and provide input as tasked by PPBD.

(b) Translate near-term through long-term war fighting capability issues into materiel development and acquisition objectives.

(c) Develop narrative program descriptions integrating science and technology base objectives and development programs in support of functional plans, program, and budget submissions.
(d) Develop narratives of functional area investment strategies and programs for inclusion and integration into the Medical Technology Base Master Plan, Medical Materiel Development and Acquisition Plan and related documents.

(e) Develop, in coordination with D,PPBD, detailed planning, programming, budgeting, and execution information in support of the annual Commander's Review and Analysis of RDTE programs.

(3) Define integrated goals and priorities for assigned programs; prepare plans, programs, and budgets to support Commanders' technology exploitation and its development into materiel solutions to satisfy priority war fighting capability issues. Critical to this role is the validation and program support of laboratory identified and defined materiel candidates and U.S. Army Medical Materiel Development Agency (USAMMDA) defined development programs with priority, stability, and budget resources sufficient to accomplish timely and responsive transition and advanced development.

(4) Provide staff assistance to commanders to support their development of execution plans and resource allocation requirements for attainment of science and technology as well as development objectives.

(5) Develop annual Command Budget Estimate narrative guidance for resource allocation decisions. This includes identification of science and technology objectives (STOs) for
specific laboratories as well as providing draft tasks supporting each STO. During the development of the annual laboratory budget requests, RADs and Laboratory Commanders will negotiate specific tasks for meeting each assigned STO.

(6) Serve as a member of Medical System Review Committee (MSRC) and the HQ Program Budget Advisory Committee.

(7) Provide staff assistance to the HQ staff and Command Laboratories and Activities and develop Command coordinated responses to requests for information on the assigned functional RDTE programs from outside organizations and agencies, both federal and private (e.g., Congressional inquiries, public affairs, General Accounting Office investigations, and Inspector General inquiries).

(8) Provide staff assistance to HQ staff and Command Laboratories and Activities on interactions and requests for support from non-Department of Defense (DoD), DoD, Army and other Army Medical Department (AMEDD) organizations.

(9) Conduct, in conjunction with Laboratory Commanders, annual Review and Analysis of laboratory execution of RAD specific managed programs to assess and evaluate progress in attaining STOs and resolve issues.

(10) Conduct, in conjunction with Laboratory Commanders, periodic In Progress Reviews on selected topics. The five research areas are:

1) RAD I - Military Disease Hazards Research Program
2) RAD II - Combat Casualty Care Research Program
3) RAD III - Army System Hazards Research Program
4) RAD IV - Medical Biological Defense Research Program
5) RAD V - Medical Chemical Defense Research Program

The RAD's scientific focus extends from present day issues through the full range of the Program Objective Memorandum cycle activities. The RADs do not have tasking authority over the labs and the supporting activities (USAMMDA and USAMRAA). However, by judiciously consulting, cajoling, and giving/withholding money, the RADs are nonetheless able to successfully influence the actions of Laboratory Commanders.

Historically the position of RAD is considered to be an important and prestigious assignment. The thrust of the new political environment may change this focus because there is a growing tendency to move medical science from the research base in the Army's existing laboratories (in-house) to the research capabilities of the private sector (extramural). The first indication of this shift was seen in Program Budget Decision 755 which reduced almost $20 million from MRDC's in-house research capabilities.

Dollar reductions imposed on this command have not only reduced the scientific capabilities of the laboratories, but have also forced a reorganization of the headquarters element. While final decisions have not yet been made, proposals do include a reorganization of the Research Area Directors and their support staffs.
I. THEMES:

A. Even though the roles and responsibilities of the RADs are defined in a Headquarters memorandum, each RAD executes these roles and responsibilities in a different manner thereby creating confusion amongst the HQ staff and the various representatives from the laboratories.

B. The authority of the RADs has reportedly diminished and is thus in a state of flux. The relationship with the laboratories and the Deputy Commander, MRDC is thus not clear.

C. There is not a well defined database for use by the RADs and other members of the command.

D. The research managers have received little or no training for the job. There is no counterpart training program/process for the development of the executive scientist as there is for the individual who elects to pursue executive medicine. Opinions vary as to whether the RAD needs both scientific knowledge and managerial skills or only managerial skills.

E. There is little if any interaction of the RADs with the members of/consultants to The Surgeon General (TSG) and his staff.

F. A Clinical Investigation Program exists in both the MRDC and the U.S. Army Health Services Command, creating a dual system with perceived disconnects in process and resourcing.
II. FINDINGS:

A. RAD responsibilities are defined as planning and prioritizing science, and recommending and allocating resources for STOs; the laboratories are accountable for executing STOs and for negotiating for appropriate resources.

B. Since the RADs are accountable to the Commander, MRDC for planning the STOs, they are also accountable for providing continual assessment of the program execution efforts.

C. The RADs execute the Extramural Programs in their respective research areas.

D. While the RADs try to influence the laboratories through negotiation and cajoling, ultimate control is often exercised through control of money.

E. Some of the scientists do "end runs" around the RADs and talk directly with either the Deputy Commander or the Commander, MRDC. Some Laboratory Commanders also interact directly with the Commander, MRDC or the Deputy Commander on issues that should have gone to the RADs.

F. A synonym used by the RADs for the policy memos "accountable for planning the STOs" and "continual assessment of the program execution effort" was "manage" the research. Manage was also defined as ensuring the best quality research and the most relevant research. One RAD indicated that the management of the science was not detailed enough, that it was "a mile wide, and one inch deep."

G. The RADs feel they get mixed guidance from the Comptroller
and the Planning, Program, and Budget Officer.

H. Some RADs are junior to laboratory commanders or are civilian rather than military and this is felt to pose a potential command and control problem.

I. It appears that relationships with representatives in the Office of The Surgeon General are not strong.

J. The authority of the RADs is recognized more outside the command than inside.

K. The RADs spend more time working with the Planning, Programming, Budget Officer than any other single point of contact within the command. Both use the same information databases.

L. In the early 1980s the Clinical Investigation Program was a responsibility of MRDC. Later the responsibility migrated to the U.S. Army Health Services Command. Currently, the program is split between the two commands.

M. RADs, as defined in the 1992 memorandum, are involved with product development. An association with both in-house and contract developmental projects is required to fulfill their planning, programming and budgeting responsibilities for program elements 6.1 through 6.4. The STO/Task system, currently being implemented, conceptually is the beginning of a business plan for a specific science objective. MRDC's developmental activity has proposed a business plan concept that facilitates the product development role.
III. ISSUES:

A. Do the RADs recommend fund allocation plans to Commander, MRDC or approve the plans themselves?
B. Should the RADs be reorganized?
C. Should the RADs have access to Medical Command resource and policy points of contact to improve attention to science (research and development)?
D. Should the RADs manage Extramural research efforts or should that responsibility be assigned to the laboratories?
E. Do the RADs manage or direct research or are they advisors to the Commander, MRDC?
F. Should Medical Research and Development Command do all of the Clinical Investigation for the Army Medical Department?
G. Should the RADs and the Planning, Programming, Budget Officer combine or be collocated in order to provide a more efficient process?

IV. DISCUSSION:

Even though the July, 1992, MRDC memorandum defines the roles of the RADs, the Deputy Commander and Laboratories, individual management styles have altered the various relationships. The relationships between the RADs and the Laboratory Commanders reflects, at best, a strained collegial situation, with the Deputy Commander viewed as the point of resolution.

To manage the entire scope of MRDC's mission, that is to satisfy a basic battlefield deficiency for the Army and the
Department of Defense, a fully integrated business planning concept is necessary.

V. RECOMMENDATIONS:

A. The RADs should be reorganized under a Director of Operations for Research, Development, and Acquisition (Brigadier General). Within this organization will also be the office of Planning, Programming, and Budgeting (PPB). The program analysts assigned to the RADs will be under the direction of the PPB Director with designated RADs as their respective customers.

B. The role of the RAD will be to advise the Director on all aspects associated with his/her research area and to provide collegial coordination with counterparts at the U.S. Army Medical Command. The Laboratory Commanders will be under the direct command/control of the Commander, MRDC to execute both the in-house and extramural research programs, thus ensuring a complimentary and coordinated effort. The support staff of the headquarters will be under the direction of the Chief of Staff.

C. Issues that can not be worked out collegially between the RADs and the Laboratory Commanders should be reviewed by the Director of Operations, RDA, for resolution.

D. The business planning concept proposed by the developmental and acquisition activity should be formalized throughout the command to facilitate management from basic science to final product.
E. The Clinical Investigation Program, as an integral part of the Graduate Health Care Education Program, should be the responsibility of the Commander, Army Medical Department Center and School.
U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND

STAFF FUNCTIONS

BACKGROUND: The headquarters staff functions are currently organized into "Coordinating Staff" and "Special Staff" as indicated below. Coordinating Staff elements are supervised by either the Chief of Staff (those elements with "DCS" in their title) or by the Deputy Commander. Each of these elements is addressed in a separate paper (Research Area Directors and Research Plans, Program, and Budget) or in an attachment to this paper. Special Staff elements, on the other hand, report to the Chief of Staff and are addressed collectively in an attachment to this paper.

A. Coordinating Staff:

1. DCS, Comptroller
2. DCS, Operations
3. DCS, Logistics
4. DCS, Personnel
5. DCS, Information Management
6. Research Area Directors
7. Research Plans, Program, Budget

B. Special Staff:

1. Assistant Surgeon General for Research and Development
2. Command Judge Advocate
3. Human Use Review and Regulatory Affairs Office
4. Animal Use Review Office
5. Internal Review Office
6. Public Affairs Office
7. Acquisition Management Office
8. Safety and Environmental Health

I. THEMES:
   A. Some staff functions are not clearly defined and are not aligned in the traditional manner.
   B. Some Special Staff functions are not properly resourced.

II. FINDINGS: (See individual findings on attached papers)

III. ISSUE: Are staff functions properly aligned for efficient and effective operation?

IV. DISCUSSION: (See discussions on attached papers)

V. RECOMMENDATIONS:
   A. Place the Research Area Directors and Research Plans, Program, and Budget element under the Director, RDA Operations (formerly the Deputy Commander).
   B. Align administrative support functions within a newly created Administrative Support Directorate under the direction of the Chief of Staff.
BACKGROUND: The Deputy Chief of Staff, Comptroller (DCSCOMPT) serves as the principal advisor to the Commander on all fiscal matters; interfaces with the headquarters (HQ) staff, subordinate commands, HQ Department of the Army (DA), and major command (MACOM) staff as it relates to financial/fiscal policy; receives and issues funds; monitors the execution of the current year budget and reports the utilization of those funds to HQDA.

I. THEME: A disparity exists between the Medical Command (MEDCOM) resource management functional alignment (e.g., manpower and budget report to the Resource Manager (RM)) and the U.S. Army Medical Research and Development Command (USAMRDC) alignment. The USAMRDC is aligned like DA in that the planning and programming function is separate from the comptroller function (e.g., Program, Analysis, and Execution (PA&E) Office and the Army Budget Office).

II. FINDINGS:

A. Program 6 (P6) dollars flow from Secretary of the Army for Research, Development, and Acquisition (SARDA) and Program 8 (P8) dollars flow to USAMRDC through the Office of the Surgeon General (OTSG).

B. The manpower function currently is located in the DCS, Personnel.
C. Some planning, programming, and budget function elements are assigned to the Comptroller. Alternatively, long-range planning and programming activities are assigned to the Planning, Programming, and Budgeting System (PPBS) Office.

III. ISSUE: Does the entire planning and programming function belong in the DCS, Comptroller?

IV. DISCUSSION: In typical Army organizations, the programming and budgeting functions are an integral part of the Resources Management activity. At the Department of Army level, however, these two elements are separated due primarily to the disparate nature (and internal complexity) of the two elements. The Program Analysis and Execution activity (PA&E) develops the Army's long-range planning and programming function (the Program Objective Memorandum (POM)) whereas the Budget Office develops and executes the budget process necessary to support the POM program. Similarly within USAMRDC, the Plans, Programs, and Budget Office develops long range budgets and forecasts (PPBS) to accomplish the command's Science and Technology Objectives (STOs). The PPBS process is more operational in nature than fiscal. The Comptroller, on the other hand, is responsible for planning and executing the command's fiscal plan for the execution year. Thus these two offices operate with a different perspective and schedule within USAMRDC. Given the nature of research development and acquisition work, it does not make sense to combine these two functional elements.
V. RECOMMENDATION: Do not consolidate the Plans, Programs, and Budget office with the Comptroller.
DEPUTY CHIEF OF STAFF, OPERATIONS

BACKGROUND: The Deputy Chief of Staff, Operations (DCSOPS) is responsible for Operations Security, Nursing Activities, Quality Assurance, Foreign Science Information, International Activities, Base Realignments and Closures (BRAC), and Military Training.

I. THEME: The Operations Directorate within the command is not operating in the traditional mode of a DCSOPS.

II. FINDINGS:

A. The command brief is given to new USAMRDC employees by the ODCSOPS.

B. "Household" security functions (requesting security clearances, maintaining classified documents, etc.) are performed in ODCSOPS.

C. Military training and field exercises are set up within the DCSOPS activity.

D. The Operations staff is heavily involved in planning and coordinating meetings, conferences, and seminars.

E. This staff element assists in planning special foreign travel and coordinates visits by foreign dignitaries. De Facto, the DCSOPS functions as the command protocol advisor.
III. ISSUE: Could the functions of the DCSOPS be accomplished more efficiently in a different organizational and managerial structure?

IV. DISCUSSION:

Normally, the DCSOPS staff element is actively involved in all key operational issues involving the command. Generally, the DCSOPS is considered to be the principle staff officer within the command. Typically, all main-stream operation activities are coordinated by the DCSOPS. This is not the case within USAMRDC, however; the DCSOPS handles traditional issues such as BRAC, and a large measure of the conference and protocol issues which are normally associated with administrative support. This functional area also recently lost one of its missions (i.e., Intelligence). A great deal of the work currently being performed in the directorate is administrative in nature. As described previously, traditional military "operations" are those actions or procedures required to accomplish the command's primary objective(s). In the case of the USAMRDC that objective is the accomplishment of specific Science and Technology Objectives (STOs). Management of this effort is centered in the Research Area Directors rather than in the DCSOPS.

V. RECOMMENDATION: The operations and planning functions of the command should be aligned under the Director RDA Operations
(Brigadier General); and the residual functions of the current Operations Office should be transferred to a Directorate of Support (possibly headed by the SGS).
DEPUTY CHIEF OF STAFF, LOGISTICS

BACKGROUND: The Deputy Chief of Staff, Logistics (DCSLOG) serves as principal logistics staff officer and advisor to the Commanding General (CG) on all matters involving logistics support; and directs the Headquarters (HQ) logistics support functions consisting of supply operations, facilities engineering, property management, and biomedical maintenance.

I. THEME: The office of the DCSLOG combines supply and logistics functional activities into a single office.

II. FINDINGS:

A. The work of the ODCSLOG includes: managing the Command Inspection Program for supply accountability and facilities management; operating the HQ supply center (to include preparing the supply portion of the HQ's operating budget); managing the energy conservation program; managing the physical security program; maintaining the key control system; coordinating custodial services and building maintenance; monitoring the loan and disposition of government furnished equipment, the precious metals program and controlled substances program; monitoring disposition of excess equipment.
III. ISSUE: Could the functions of the DCSLOG be accomplished more efficiently in a different organizational and managerial structure?

IV. DISCUSSION: The ODCSLOG spends 25% of the time traveling to subordinate laboratories and detachments to inspect and monitor various supply and logistics programs. Other duties performed are housekeeping in nature and do not reflect the traditional role of a major subordinate command logistics element. This activity is currently functioning at the Battalion (Major) level. Requisitely, the command needs considerable long-range logistical planning and programming effort sufficient to meet future facility/logistical needs. (See also papers on laboratory facility planning needs).

V. RECOMMENDATION: The DCSLOG activity should be refocused on the long-range logistics/facility planning requirements. The day-to-day housekeeping activities should be studied for possible contracting out.
BACKGROUND: The Deputy Chief of Staff for Personnel (DCSPER) is responsible for the administration and management of resources in the specialized areas of manpower, military personnel, and civilian personnel; and the formulation of plans and policies to ensure that manpower and personnel programs are effectively and efficiently implemented and monitored.

I. THEME: The installation is unable to provide the level of specialized support provided currently by an in-house Civilian Personnel Division and Military Personnel Division.

II. FINDINGS:

A. The staff manpower function is located within the DCSPER activity. (Traditionally located in Resource Management.)

B. The Civilian Personnel Division and the Military Personnel Division provide close interface with their counterparts at the installation level and at DA.

C. The Civilian Personnel Division and the Military Personnel Division are heavily involved in recruitment, retention, and relocation of civilian and military personnel assigned to the headquarters.

III. ISSUES:
A. Could the functions of the ODCSPER be accomplished more efficiently in a different organizational structural alignment?

B. Are functions being performed within the ODCSPER also being provided by the installation or by higher headquarters (e.g., the Medical Command (MEDCOM))? 

IV. DISCUSSION: The manpower function was aligned with the DCSPER staff element to be consistent with the HQDA alignment of functions within the DCSPER. While such an alignment is appropriate at the Department of the Army level, at other Army major commands (e.g., Training Command, Forces Command) and especially at Division-level commands, the manpower function is aligned with the DCS for Resources Management (DCSRM) in order to more effectively integrate both dollars as well as manpower resources. USAMRDC has not chosen to follow this particular functional alignment, thereby further diffusing the resource activity (see also paper on Comptroller). Several other important functions concerning personnel resources are currently controlled by the DCSPER. To date, the office is properly resourced and performs its mission effectively.

V. RECOMMENDATIONS:

A. Align the manpower function within the Comptroller staff element.

B. Consider aligning the civilian personnel management functions at the MEDCOM with duty station at USAMRDC.
BACKGROUND: The Deputy Chief of Staff for Information Management (DCSIM) is responsible for the management of information to include coordinating, planning, organizing, analyzing, integrating, evaluating, and controlling information resources effectively.

I. THEME: The Information Management Office is accountable for maintaining the Work Unit Summary reporting system (DoD form 1498). However, most staff personnel feel that the system itself is dysfunctional.

II. FINDINGS:

A. Responsible for computer support, electronic exchange of information (to include teleconferencing), Library support, and archiving extramural contract reports.

B. Responsible for coordinating laboratory input for Work Unit Summaries (DOD form 1498) to include setting up and maintaining automated entry and retrieval.

III. ISSUES:

A. What is the 'value added' of fulfilling the DoD requirement for completing Work Unit Summaries?

B. Is control responsibility for Work Unit Summary located with the correct command element?
IV. DISCUSSION:

Computer support for the command element is adequately staffed and resourced. All personnel benefit from having good and timely computer support.

Laboratory and RAD personnel see little value in the Work Unit Summary reporting system. These summaries do not report research in a meaningful manner, and the funding reported on the forms is not easily crosswalked with reporting in the annual laboratory review and analysis.

V. RECOMMENDATIONS:

A. The Director, RDA Operations should assume responsibility for compliance consistency of the Work Unit Summary reporting requirement.
SPECIAL STAFF

BACKGROUND: The special staff currently consists of the following offices:

1. Assistant Surgeon General for Research and Development (R&D)
2. Command Judge Advocate
3. Human Use Review and Regulatory Affairs Office
4. Animal Use Review Office
5. Internal Review Office
6. Public Affairs Office
7. Acquisition Management Office
8. Safety and Environmental Health

I. THEMES:

A. Special Staff offices operate with minimal direction or supervision.

B. Special Staff offices are often not staffed adequately to perform their functions effectively.

II. FINDINGS:

A. Special Staff offices operate with little or no direction from senior staff and with minimal communication with other staff offices.

B. Special Staff offices tend to be minimally staffed unless they have high visibility outside the USAMRDC (PARC, Human Use, and
Judge Advocate General have the highest visibility outside of the USAMRDC.

III. ISSUES: Could the functions of the Special Staff be accomplished more efficiently in a different organizational structure?

IV. DISCUSSION:

The Assistant Surgeon General for Research and Development (ASGRD) is the Pentagon liaison staff function of the USAMRDC. This staff position is essential to the interface between USAMRDC and the various Army offices that impact on the mission, organization, and resources of the USAMRDC.

The Command Judge Advocate Office of USAMRDC is uniquely qualified to provide the Commanding General with advice on patent and intellectual property rights issues. This capability is not duplicated at any other place within the Army Medical Department and is of critical importance to USAMRDC.

The Human Use Review and Regulatory Affairs Office (HURRAO) administers the Surgeon General's procedures for review and approval of Army research and testing protocols involving human subjects. This part of the HURRAO function belongs in the Office of the Surgeon General rather than at USAMRDC; although it is very practical to have the HURRAO collocated with USAMRDC. HURRAO also assists in the preparation, review, and submission of New Drug
Applications (NDA) and Product License Applications (PLA). If this function were placed within the proposed Regulatory Compliance Office it could assist advanced technology base projects transitioning to full development.

The Animal Use Review Office (AURO) reviews and approves Army research and testing protocols involving animals and non-human primate subjects, and is the USAMRDC advisor on laboratory animal medicine. AURO conducts periodic visits to USAMRDC laboratories and contractors to ensure compliance with applicable laws and regulations.

The Internal Review Office is the command's focal point for coordination with external audit agencies and for internal audits and reviews.

The Public Affairs Office is the focal point for dissemination of accurate and releasable information to the news media and the general public.

The Acquisition Management Office currently is also the Office of the Principal Assistant Responsible for Contracting (PARC) and provides command policy and oversight on acquisition matters. If there is a decision to move the PARC to another location (such as the Medical Command) because of a reassignment of HCA authority, it would be beneficial to retain an Acquisition Management Office at USAMRDC to provide the Commanding General with sound business and acquisition advice and to oversee the acquisition functions of the command.

The Safety and Environmental Health Office consists of the
Command Safety Officer and the Command Environmental Health Officer. These two individuals operate independently, with minimal supervision and with no administrative support.
U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)

COMMAND AND CONTROL RELATIONSHIP

WITH USAMRDC LABORATORIES AND DETACHMENTS

BACKGROUND:

The U.S. Army Medical Research and Development Command (USAMRDC) had its origin in 1893 with the establishment of what is now the Walter Reed Army Institute of Research (WRAIR). The command itself was established in 1958. Today, USAMRDC has nine research laboratories, five Overseas Continental U.S. (OCONUS) detachments, and five CONUS detachments, all of which conduct basic research and/or exploratory development. Each of the laboratories is commanded by an Army Medical Department commissioned officer who reports directly to the Commander, USAMRDC. The OCONUS and CONUS detachments are similarly commanded by an Army Medical Department commissioned officer, however each of these reports directly to the Director, WRAIR.

Collectively, USAMRDC laboratories form a large, high-caliber, biomedical research organization. This organization encompasses specialized infrastructure, unique scientific expertise, and experience with military medical issues (emphasized by the presence of uniformed scientists) that is not available in any other single organization in the world. This represents a national strategic asset that is available not only for military-unique medical research but also research involving both civilian and military applications.
I. THEME: USAMRDC laboratories should be provided clear guidance and sufficient resources to accomplish the Science and Technology Objectives (STOs) of the Command. Similar guidance and resources should be provided concerning those portions of the advanced development program that can be most effectively executed by the laboratories.

II. FINDINGS:

A. Organizationally, USAMRDC laboratories are responsible for accomplishing the STOs for the Command. This includes conducting in-house research and providing scientific and technical oversight for the extramural program. There is some ambiguity concerning responsibility for overseeing and assuring accomplishment of STOs. This is mirrored by ambiguity concerning responsibility for the extramural research program.

B. Organizationally, the U.S. Army Medical Materiel Development Activity (USAMMDA) is responsible for executing the Command's advanced development program. USAMRDC laboratories may be utilized by the USAMMDA to execute portions of the Command's advanced development program. There is ambiguity concerning the relationship between USAMMDA and the laboratories in executing the advanced development mission. Three principal issues are: 1) Milestone decision authority; who decides when a program is ready to move into advanced development? 2) Who owns the product after it transitions to advanced development? 3) How can the labs plan for the work and funding from USAMMDA?
C. Historically, the focus of the laboratories has been science and investigator driven; laboratories are becoming more focused on validated requirements and issues identified by the combat developers. Staff and investigators at the laboratories are not fully cognizant of the process by which requirements are generated. Laboratory personnel do not feel that they are sufficiently involved in the development of requirements or the establishment of research priorities.

D. There has been some inconsistency between the research efforts that are emphasized at the laboratories and the priorities established by Headquarters, USAMRDC. Laboratories and Research Area Directors (RADs) have, on occasion, used each other as alibis for not focusing on or accomplishing priority objectives.

E. Laboratories have historically been organized around academic disciplines, specific diseases, or even individuals. Recent organizational changes show an increasing focus on functions (e.g., vaccine development) or missions. Laboratory organizational and personnel structure is overly rigid.

F. The physical plant and research equipment at several of the laboratories is in need of repair and modernization.

G. The availability and quality of research managers at laboratories is inconsistent. Management, especially staff work, is seen as onerous and less prestigious than scientific investigation.
III. ISSUES:

A. What is the appropriate assignment of responsibility for overseeing and accomplishing all (in-house and extramural) research needed to accomplish a STO?

B. What is the requisite relationship between USAMMDA and the laboratories concerning advanced development efforts?

C. How does a laboratory commander ensure that staff and investigators at the laboratories are cognizant of the Command's research priorities? How can they be more involved in the development of these priorities?

D. What are the appropriate responsibilities of the RADs and laboratory commanders and what is the working relationship between the RADs and laboratory commanders?

E. How can laboratory commanders be given sufficient flexibility to align their personnel resources with the Commanding General's mission and funding guidance?

F. What is the best way to systematically plan and budget for maintenance of physical facilities and replacement of obsolete equipment?

G. How do we systematically identify and train future research managers?

IV. DISCUSSION:

The main operational work of the USAMRDC is to carry out scientific research and development efforts in order to field a variety of products designed to meet future Army warfighting
requirements. While the Commander, USAMRDC is clearly accountable for providing executive leadership over all such activities, the detailed work required to actually field a given product requires the integrated efforts of a number of key individuals. First, the Commander needs high level staff assistance in designing a comprehensive and long-range integrated operational strategy. This high level staff input is provided by the Deputy Commander, the five Research Area Directors, and the Plans, Programming, and Budget Office. Collectively, these individuals are accountable for developing the Commander's long-range research objectives. The actual conduct of the production work however, is carried out in the various subordinate commands (laboratories and activities) under the leadership of the laboratory (activity) commanders. While the nature of these differentiated roles has been clearly articulated in a series of operational memoranda published last year, confusion still exists. According to approved operating procedures, the RADs were to develop the long-term scientific and technical objectives (STOs). The detailed tasks required to accomplish a given STO were to be negotiated with and agreed upon between the RADs and the appropriate laboratory commander. In theory this concept required cooperation among all parties involved. The reality, however, is that some laboratory commanders choose not to provide input to the STO/task process. Accordingly, some RADs had to assume full responsibility for detailing the subordinate tasks for given STOs. This situation subsequently resulted in the RADs having to exercise virtual command authority
over a given laboratory in order to get a STO accomplished. The arrogation of authority in turn caused further friction between the RADs and the laboratories. This friction has created unnecessary conflict and duplication of effort between the two parties. The solution, however, is quite simple -- get all affected parties to abide by the previously developed and agreed upon role descriptions.

V. RECOMMENDATIONS:

A. Clarify and emphasize that it is the responsibility of the laboratory commanders to accomplish those parts of the STOs assigned to their laboratories. Extramural research, conducted as an integral part of the plan to accomplish a STO, is the responsibility of the laboratory commander. The extramural program should be complimentary or synergistic to the in-house effort rather than duplicative or embellishing.

B. Clarify the relationship between the Commander, USAMMDA and the laboratory commanders in the execution of advanced development objectives. Funding and workload must be programmed to minimize turbulence and sustain critical technological capabilities. The business planning process should consider the life cycle costs of equipment.

C. Key staff and investigators from the laboratories should be involved in the process of developing scientific plans and priorities, specifically STOs and tasks with identified products and target delivery dates.
D. Reemphasize the respective roles of the laboratory commanders (execution of the Research, Development, and Acquisition (RDA) program, accomplishment of STOs) and the RADs (long-range planning, prioritization, and resourcing of STOs). Emphasize accountability in the execution of those responsibilities.

E. Eliminate Schedules X. Give laboratory commanders sufficient authority to manage their workforce to match available resources and current mission objectives.

F. Develop and aggressively implement a systematic logistical and funding plan to repair deteriorating physical facilities and replace obsolete equipment.

G. Develop and aggressively implement a USAMRDC-wide program of training in Management of Science and Technology.
BACKGROUND:

The Planning, Programming, and Budgeting function is performed by a Planning, Programming, and Budgeting Directorate (PPB) that reports to the Deputy Commander. The function has consistently reported to the Deputy over the last fifteen years. Command logic for this arrangement holds that "planning and programming of science is too important to leave to Comptrollers." The Director, PPB has traditionally been a science-trained officer with experience at both a laboratory and in the Pentagon. Prior to establishment of the Pentagon Liaison Office as a permanent full time staff in the early eighties (1981), the PPB office was responsible for performing both functions.

The manpower function has reported to the Chief of Staff through various routes over the last fifteen years. At one time it reported directly; at another time through a Deputy Chief of Staff for Resource Management (DCSRM) who functioned more as an Assistant Chief of Staff. Currently the function is performed by a Manpower Branch reporting through the Deputy Chief of Staff for Personnel (DCSPER).

The Deputy Chief of Staff for Comptroller (DCSCOMPT) is responsible for compiling the Command Budget Estimate. Budget schedules are provided to the Office of the Surgeon General (OTSG) for Operations and Maintenance (O&M) Program & Medical and Program
Training functions. Program 6 (Research, Development Test, and Evaluation) related schedules are provided to the Assistant Secretary of the Army for Research, Development and Acquisition, Deputy Assistant Secretary for Plan and Programs (ASA(RDA) (SARD-RR)). The DCSCOMPT is also responsible for tracking execution year performance, reporting same to the staff and preparing for the mid-year ASA(RDA) review.

I. THEME: Resources Management in the Headquarters is fragmented. Planning, Programming, Budgeting, and Executing System (PPBES) responsibilities at USAMRDC are out of synch with the traditional Army Major Command (MACOM) model. A review is required to assure that the U.S. Army Medical Research and Development Command (USAMRDC) model adds value without consuming resources beyond the health care model.

II. FINDINGS:

A. The Deputy, PPB reports to the Deputy Commander.

B. The DCSCOMPT reports to the Chief of Staff.

C. The Chief, Manpower Branch reports to the Chief of Staff through the DCSPER.

D. The USAMRDC executes Program 6, Program 8 Medical, Program 8 Training, and Program 2 missions.

E. The DCSCOMPT performs a travel clearing function that coordinates requests for overseas travel from the laboratories
throughout the Headquarters (HQ) while securing country clearances from Embassies.

F. With a modified form of Managing Civilians to Budget in place, there is questionable value to requiring laboratories to submit Schedules X to document reorganizations and relocation of civilian workforce.

G. The planning and programming functions in the Command are directed toward development and justification of investment strategies rather than pure allocation of resources.

H. Separation of planning, programming, budgeting, and execution functions requires integration at the Deputy Commander level and demands tremendous coordination at the staff level. The command appears to be completing the staff coordination admirably.

I. The Deputy, PPB directs the command Review and Analysis.

J. There is concern about the loss of military Comptrollers. The current DCSCOMPT is proceeding with plans to civilianize the DCSCOMPT position upon his departure. This move will leave the command with military in comptroller positions as the Budget Officer, HQ; the Comptroller, Walter Reed Army Institute of Research (WRAIR); and the Budget Officer, WRAIR.

K. Currently, the command feels uninvolved in the integration of Operations and Maintenance Program 2 and Program 8 procurement requirements for products in development. This is largely a product of the Army system of Long Range Research, Development, and Acquisition Plan (LRRDAP) building.
L. The command DCS grade structure provides too much horsepower for the job requirement of the DCSCOMPT relative to the D, PPB.

M. Many of the current job duties and functional alignments appear to be the result of man-in-the-job reorganizations.

III. ISSUES:

A. What impact does the USAMRDC model have on command interactions with ASA(RDA) and the Medical Command?

B. Does the separation of functions waste resources?

IV. DISCUSSION:

The command has been very successful in acquiring resources both from the Office of the Surgeon General (OTSG) and ASA(RDA) communities. Likewise, they have been successful in defending their use of resources and enjoy an excellent reputation in the ASA(RDA) community. The separation of the planning and programming functions, based on the command's need to develop and defend a scientifically-based investment strategy rather than a service-type investment strategy appears to be well thought-out. The command's success in the Army resource allocation process adequately supports their organization decision.

The decision to separate out the manpower function makes much less sense, particularly in light of the strong tie between funds and personnel. The command's one time blessing of unlimited personnel dollars but constrained manpower authorizations, while
not reversed, is severely strained. In fact some programs within
the command may receive more authorizations than can be financed.
This position demands that the manpower function be directly
accountable to the DCSCOMPT.

Requiring that the laboratories submit Schedules X to
reorganize in the face of realigned missions and diminishing
resources appears to be counterproductive to the announced goal of
empowering the local commander. The decision to stop this practice
is not within the authority of USAMRDC but should be pursued
vigorously to conserve precious staff time. Other savings to
accrue from this action will be a shortened time for laboratories
to implement changes necessary for their mission survival.
Concomitantly, managers at all levels must be accountable for
personnel decisions.

The travel function performed by the DCSCOMPT appears to be a
function that more appropriately belongs with the requesting
laboratory or, if the command chooses to micro-manage overseas
travel, with an administrative support function. The value added
by the DCSCOMPT in the travel arena is minimal. If the command
desires to power down responsibilities for program execution to the
laboratories, there is little value added by this process in the
HQ.

The replacement of military Comptrollers with civilians is a
survival strategy that should not be stopped. With the downsizing
of the Army Medical Department (AMEDD) military Comptrollers and
the AMEDD's attention to the health care delivery mission, there is
every reason to believe that health care activities will receive first priority on shared resources. Further, the distinct differences between RDTE and Operations and Maintenance (O&M) planning, programming, budgeting, and execution rules dramatically increases the learning curve for military assigned to RDTE funded organizations. There appears to be little gained by maintaining a military Budget Officer in the DCSCOMPT. Upon civilianization of the DCSCOMPT there will be little further use for this training and experience within the AMEDD. The same may be said of the situation at WRAIR.

The command is correctly organized and fully capable of integrating and executing O&M, Program 2, Program 8, and Other Procurement, Army (OPA3) procurement responsibilities. Current interfaces between the DCSCOMPT, the U.S. Army Medical Materiel Development Activity (USAMMDA) and the U.S. Army Medical Material Agency (USAMMA) supports a smoothly working PPBES.

RECOMMENDATIONS:

A. The manpower function should be transferred to the DCSCOMPT. The DCSCOMPT should pursue suspension of Schedules X documentation for changes to organization structures in accordance with the rest of the AMEDD.

B. The planning and programming function should remain a separate element reporting to the Deputy for RDA Operations. Efforts should continue to maintain the strong the coordination and relationship between the PPB and the DCSCOMPT.
C. Civilianization of comptroller positions throughout the command should continue towards a goal of 100% civilian incumbents with appropriate grade structures to attract and retain qualified applicants.

D. The command should actively support integration of the USAMMA readiness mission and the USAMMDA project management mission. Command structures should be reviewed thoroughly to assure integration without duplication and continuance of mission requirements.

E. The travel function performed by the Comptroller should be returned to the laboratories or relocated to an Administrative Support Division within the HQ.
U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)

EXECUTIVE LEADERSHIP

BACKGROUND:

Executive leadership of the U.S. Army Medical Research and Development Command is provided by a Command Group consisting of the Commanding General (CG), the Deputy Commanding General (DCG), the Chief of Staff (CofS), and the Executive Assistant (EA) to the Commander, who are assisted by the Secretary to the General Staff (SGS), and the Command Sergeant Major (CSM). (See Manifest Organization Chart)

The CG plans, programs, and executes the medical research, development, test, and evaluation (RDTE) program to meet Army and Joint Service needs. The CG is the Army's principal staff agent for medical material development and serves as the Head of the Contracting Activity (HCA) for all procurement functions of the command.

The DCG assists the CG in executing his functions. More specifically, the DCG is responsible for the management and integration of a cohesive and accountable medical RDTE program. The DCG provides centralized staff management and direction to the Research Area Directors (RADs) and the Planning, Programming, and Budgeting (PPB) Director. This staff oversight includes the resource allocation for all RDTE programs as well as the provision of command direction and guidance to the headquarters (HQs) staff, and the labs and associated activities concerning external
information and support requests. The DCG also manages the international (Overseas Continental U.S. (OCONUS)) travel program.

The CofS directs, coordinates, and supervises the HQ's staff. He is the principal coordinator between the RDTE program and the administrative staff. The CofS also serves as the staff advisor to the CG on command and control issues.

The EA to the Commander assists the CG and DCG with triservice RDTE coordination and with coordination of all external Advisory Committees (e.g., ASBREM). The EA provides program analysis and evaluation to support resource allocations and performs other special assignments as directed by the CG or DCG.

The Secretary to the General Staff (SGS) provides administrative support to the Command Group and assists the CofS in the supervision and coordination of the administration and operation of the HQ. The SGS publishes command policy; coordinates Command Group correspondence; maintains the HQ suspense system; manages the CONUS travel program; serves as the HQ Freedom of Information Act (FOIA) Officer; maintains duty officer rosters; and performs other administrative duties as assigned.

The Command Sergeant Major (CSM) is the principal enlisted assistant to the CG and executes established policies and standards pertaining to performance, care, conduct, personnel management, and training of enlisted personnel.
I. THEMES:

A. The DCG is performing functional work and integration efforts at the Brigadier General level.

B. Some existing organization management systems are too cumbersome, time consuming, and confusing.

C. Difficult management decisions are sometimes not made, consequently administrative techniques are frequently substitutes for the absent decisions.

D. Command Group members sometimes function within their "comfort zones" rather than according to predefined position descriptions.

E. Multiple roles exist within some management layers.

II. FINDINGS:

A. The Deputy Commander provides day-to-day oversight and direction to all command elements in an attempt to integrate diverse RDTE activities.

B. The Deputy Commander spends approximately 50% of his time on PORK due to Congressional interest.

C. The Deputy Commander often assumes a direct management role in many PORK issues because there is not RAD available to do this.

D. The Deputy Commander provides direction and oversight to HQ staff in developing responses to requests for information concerning RDTE programs.
E. The Chief of Staff is primarily involved with HQ strategic planning and infrastructure issues.

F. The Chief of Staff places emphasis on primary and secondary impacts of actions (the "big picture").

G. The Chief of Staff meets regularly (daily) with the Deputy Commander to discuss operational issues.

H. The Chief of Staff "crosses jobs" with the Deputy Commander as needed.

I. The Executive Assistant and the Command Sergeant Major function as independent contributors supporting the CG.

J. The Executive Assistant reports to the Deputy Commander.

K. The SGS functions more as an extension of the Chief of Staff, performing other duties as assigned, rather than the "traditional" SGS duties.

III. ISSUES:

A. Does the functional variability, management style, and individual expertise cause a blurring of the Deputy Commander role and the Chief of Staff role?

B. Is the Executive Assistant's role in headquarters management adequately defined?

C. Is the SGS being properly utilized as an administrative manager?

IV. DISCUSSION:

A. DEPUTY COMMANDER:
The deputy Commander is primarily responsible for managing and integrating a cohesive and accountable medical RDTE program. He provides centralized staff management and direction to the Research Area Directors (RADs) and the Planning, Programming, and Budgeting (PPB) Director. The organizational structure of the Command HQ does not clearly delineate the importance of this integrative function. The integration function by itself constitutes BG-level complexity work, especially as it encompasses the long term planning requirements appropriate to the command.

The Deputy Commander also serves as the primary point of contact for all items of Congressional interest. Because of the DCG's unique scientific expertise and the sensitive nature of Congressional projects (Pork), the Deputy Commander has taken a direct daily management role in many of these projects. For example, the DCS is heavily involved in the full range of activities pertaining to the executive management of the Breast cancer research project recently mandated by Congress.

B. CHIEF OF STAFF:

The Chief of Staff has responsibility for supervising and coordinating the HQ staff, however key operational staff members (see the extant organization chart) are managed directly by the Deputy Commander (e.g., the RADs and PPB Director).

Because of past experiences with a variety of USAMRDC activities as well as his unique management abilities, the incumbent Chief of Staff is often called upon to function as an advisor to the CG on issues that impact directly on research
operations. This presents some "cross over" and potential duplication of effort with the role of the Deputy Commander.

C. EXECUTIVE ASSISTANT:

The Executive Assistant functions as an independent contributor to the Commanding General and the Deputy Commander working primarily on operational-related issues.

D. SECRETARY TO THE GENERAL STAFF (SGS):

The SGS position provides direct administrative support to the Command Group while many of the traditional SGS functions have been distributes among the HQ staff elements (e.g., planning and coordinating conferences and meetings, protocol, physical security). More efficient management of these traditional functions could be achieved by consolidating them under a single administrative manager. (See paper on staff elements.)

V. RECOMMENDATIONS: (See Requisite Organization Chart)

A. The Deputy Commander role should be an O7 position directly managing RADs and the PPB function.

B. The Executive Assistant role needs to be clearly defined.

C. Some modifications within the subordinate staff are required to improved efficiency of administrative support. (See paper on staff element.)
BACKGROUND:

The Defense Acquisition Workforce Improvement Act (DAWIA) required the Secretary of Defense to identify and report to Congress, all Department of Defense (DoD) personnel engaged in material acquisition. It also requested establishment of a trained and experienced Corps of senior personnel from the acquisition workforce to provide direction and stability to the acquisition environment. This senior group is to be identified as eligible to fill acquisition critical billets, based on their having achieved specified training and experience in acquisition skills appropriate to their respective fields.

The Act, a part of the FY91 Defense Authorization Bill, identified acquisition functions as Program and Project Management; Program Management Oversight; Production and Industrial Plant Equipment Management; Procurement and Contracting; Auditing; Business, Cost Estimating, and Financial Management; Systems Planning, Research, Development, Engineering, and Testing; and Acquisition Logistics. All positions in acquisition organizations and positions working 50% or more of the time in an acquisition function in non-acquisition organizations are to be identified as part of the Defense Acquisition Workforce. Upon full implementation of the law on 1 October 1993, personnel in identified positions must possess the education and experience
appropriate to the position level. The Office of the Director for Acquisition Career Management (DACM) is the sole office with the authority to certify that personnel possess the required education and experience to fill acquisition critical positions.

The Army Medical Department (AMEDD), by virtue of its responsibilities as Combat Developer, Materiel Developer, Logistician, and Contracting Activity is subject to the requirements imposed by DAWIA.

I. THEME:

The AMEDD must participate in the identification of acquisition workforce personnel and associated critical positions, and establish training and career management for personnel in such positions.

II. FINDINGS:

A. The AMEDD possesses unique military skills not found in the Army as a whole.

B. The AMEDD is capable of managing its own "Acquisition Corps."

C. There is no benefit to the AMEDD in establishing a separate Acquisition Corps for its civilian workforce because there are no AMEDD unique civilian specialties.

D. The AMEDD can define acquisition education requirements unique to its business, yet different from the Army as a whole, subject to acceptance and approval by the DACM.
E. The DACM controls all school quotas to gain required education.

F. The AMEDD has approximately 180 critical military and 150 critical civilian positions.

G. The DACM reports directly to the Assistant Secretary for the Army (Research, Development and Acquisition) as specified by law.

H. The DACM, by benefit of his responsibility to certify individuals as appropriately trained and educated, makes all critical position assignments.

III. ISSUES:

A. Does the AMEDD have sufficient positions to establish its own career management paths?

B. Where is the appropriate site for managing the "AMEDD Acquisition Corps"?

IV. DISCUSSION:

The AMEDD has the capability to manage its unique military acquisition workforce and associated critical positions. However, permission must be secured from the DACM to accomplish this since the act requires a single Corps. The DACM is believed to be disposed to allowing the AMEDD control over its workforce due to the uniqueness of the military positions and specialties. The civilian positions are not unique and can be managed within existing career fields.
Career management is an Operations and Maintenance (O&M) function and should be funded as such even though the majority of the positions are RDTE funded. Since acquisition positions cut across the AMEDD location of the function necessary to track assignments, education and utilization should be with the existing Corps Chief at the AMEDD Proponency Office (AMEDD Center and School). Collocating this activity with the Corps Chief within the AMEDD Center and School (C&S) will facilitate the integration of acquisition related career development efforts with overall AMEDD personnel assignment activities. Nevertheless, the office will require concentrated interface with both the Acquisition Career Management Office in Personnel Command (PERSCOM) and the DACM to insure accurate reporting of positions, training, and assignment control. The office should require less than two manyears to staff.

Establishment of the Medical Command (MEDCOM) should not create additional positions for inclusion in the Corps. Program management oversight positions requiring greater than 50% of the position's time should be aligned within the MRDC.

V. RECOMMENDATIONS:

A. The AMEDD should continue its efforts to identify positions and personnel for inclusion in the Defense Acquisition Workforce and Corps, as appropriate.
B. The AMEDD should plan to manage unique military specialties as a subset of the Army Acquisition Corps from within PERSCOM.

C. A cell to provide administrative support in tracking training and utilization should be located within AMEDDC&S (AMEDD Personnel Proponency Division).
I. BACKGROUND: The predecessor organization of what is now known as the U. S. Army Medical Materiel Agency (USAMMA) originated early in World War II. The Inventory Control functions of the Supply Division, Office of The Surgeon General, were established during 1943 in downtown Manhattan, New York City. In the ensuing 30 years, the organization was located first in Brooklyn, New York, and then in Phoenixville, Pennsylvania. As a result of the realignment in defense installations announced in the spring of 1973, USAMMA relocated to Fort Detrick in June 1974.

USAMMA is collocated with the sister service agencies, the Air Force Medical Logistic Field Office, the Navy Medical Logistics Command, and the DoD activity, the Defense Medical Standardization Board. These activities all perform wholesale level medical logistics functions and represent service specific interests to the Defense Personnel Support Center, the DOD manager for Class VIII, and their service logistics systems. Over the years there has been a continuous trend toward cooperative and joint activities. The Service agencies' missions focus primarily on operating units (TOE, deployed, etc) with some support also provided to TDA (installation) medical treatment activities.

Currently the AMEDD logistics support structure is split between TDA and TOE in command and control, mission, function and location. The Health Services Command (HSC) supports the (TDA) patient care structure while the USAMMA focuses primarily on the
deploying force structure. While HSC serves as a MACOM, the USAMMA serves as a FOA to the TSG. USAMMA functions as the Class VII materiel manager for the AMEDD and performs wholesale level logistics functions. They execute policy and programs directed from the Logistics Division of the Health Care Operations Directorate, Office of the Surgeon General. HSC manages the retail level logistics functions carried out at TDA treatment facilities.

II. THEME:

The AMEDD is the manager of Class VIII materiel. There is a bill to doing this business. As the Service Item Control Center, USAMMA is tasked with the operational implementation of class VIII management. They maintain a level of autonomy, protected resources, flexibility and responsiveness ensuring medical readiness posture. Functions performed are similar to Army Materiel Command (AMC).

III. FINDINGS:

A. The USAMMA functions as an FOA of the Logistics Division of OTSG.

B. The USAMMA Commander is rated by the Chief of Logistics.

C. 75% of USAMMA's mission is TOE related. The other 25% is operational TDA related.
D. A new mission for operational management of Class VIII Army Reserves (formally war reserves) has been tasked to USAMMA through OTSG by the Army Chief of Staff. (AMC will manage all other classes of supply.)

E. Although not resourced with a structure to handle current/contingency operations, USAMMA responds to contingency actions for the TSG (Grenada, Panama, ODS, Somalia).

F. Wholesale supply support is managed by USAMMA (TDA consumables and TOE sots/kits/outfits (SKOs) TOE medical equipment).

G. The National Maintenance Point serves as the Army proponent for medical maintenance.

H. USAMMA is the medical materiel fielding activity.

I. Publication of supply bulletins (Army wide for Class VIII), quality assurance alerts, technical bulletins and maintenance manuals are accomplished at USAMMA.

J. The Deployable Medical Systems (DEPMEDS) program management resides at USAMMA.

K. There is close coordination between Combat Developments (AMEDD C&S) and USAMMA.

L. There is no clear view of AMEDD readiness priority, resourced and unresourced programs compete for assets.

M. Foreign Military Sales for Class VIII materiel is managed by USAMMA with assets from United States Army Security Assistance Command (USASAC).

N. Modernization and sustainment of deploying forces is the
command priority.

0. Tri-Service mission has migrated to USAMMA over time.

P. Resource management of AMEDD P2 (OMA), USAMMA P8 (OMD), P6.5 (TDTE), OMAR (P2), OPA (TOE), and DHP (TDA) funds is accomplished at USAMMA.

Q. USAMMA is the AMEDD materiel developer for non-developmental items (NDI) of equipment and the designated Army NDI Advocate for medical.

R. USAMMA is the Service Item Control Center (SICC) for Class VIII.

S. Customers include DoD, DLA, AMC, DA, CINCS, MRDC, AMEDDC&S, AF, Navy, DMSB, FDA, TOE units, TDA activities, and the RC.

IV. ISSUES:

A. Should USAMMA be functionally aligned within a major subordinate command within the MEDCOM structure?

B. Would the TDA functions being performed at USAMMA be better aligned within the MEDCOM patient care structure?

V. DISCUSSION:

The USAMMA services The Surgeon General as the Class VIII medical materiel manager (SICC). They perform a vital role in acquiring and sustaining the posture of deploying forces. They have maintained a responsive, autonomous structure allowing for unquestionable support to the TSG Army and CINCS. USAMMA performs
TDA resource allocation and database management for worldwide operations as directed by the TSG. They provide a leadership development base for the logistics/maintenance career fields. There is however evidence of a lack of trust with USAMMA and other AMEDD acquisition organizations in respect to protection and competition of resources and mission.

USAMMA performs assigned medical materiel related functions for the acquisition and logistics support of medical materiel systems and is the materiel developer for NDI. They are the principal TOE operational logistician developer for NDI. They are the principle TOE operational logistician in the AMEDD. Their mission is to provide support to Active Army, Army Reserve, and Army National Guard through medical materiel systems acquisition, and coordinating joint wholesale level logistics support with sister service agencies and allies. This is done by executing responsibilities as the Army executive agency for Class VII materiel support, DEPMEDS management, the Defense Medical Standardization Board, Medical Materiel Foreign Military Sales and Medical Maintenance. The USAMMA mission falls directly in line and definition with that of the U.S. Army Materiel Command (AMC) and should functionally exist within the AMEDD structure as such.

VI. RECOMMENDATIONS:

A. A Medical Materiel Command should be established as a major subordinate command under the MEDCOM structure.

B. The USAMMA should functionally align as a Medical Materiel
Management Activity similar to that of AMC.

C. After functional assessment of MRDC, areas of potential duplication of command realignment should be merged to support the Command structure (i.e., CPO, F&AO, Admin, etc).

D. TDA functions should be assessed and possibly aligned under the MEDCOM patient care structure (i.e., MEDCASE database management and financial accounting).
ENCLOSURE 12
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>TAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. USAMRDLC HEADQUARTERS</td>
<td>1</td>
</tr>
<tr>
<td>Headquarters Charts</td>
<td>2</td>
</tr>
<tr>
<td>HQ and Installation Integration</td>
<td>3</td>
</tr>
<tr>
<td>Research Area Directors (RADs)</td>
<td>4</td>
</tr>
<tr>
<td>Combat Developments Integration</td>
<td>5</td>
</tr>
<tr>
<td>FDA Regulatory Compliance</td>
<td>6</td>
</tr>
<tr>
<td>Leader Development</td>
<td></td>
</tr>
<tr>
<td>II. USAMRDLC LABS</td>
<td></td>
</tr>
<tr>
<td>USAMRIID</td>
<td>7</td>
</tr>
<tr>
<td>Funding Process</td>
<td>8</td>
</tr>
<tr>
<td>Military Personnel Division</td>
<td>9</td>
</tr>
<tr>
<td>USAMRICO</td>
<td></td>
</tr>
<tr>
<td>WRAIR</td>
<td></td>
</tr>
<tr>
<td>Organizational Alignments</td>
<td>10</td>
</tr>
<tr>
<td>Biometrics</td>
<td>11</td>
</tr>
<tr>
<td>Pathology</td>
<td>12</td>
</tr>
<tr>
<td>Entomology</td>
<td>13</td>
</tr>
<tr>
<td>Research Management &amp; Research Marketing</td>
<td>14</td>
</tr>
<tr>
<td>Blood Group Detachment</td>
<td>15</td>
</tr>
<tr>
<td>Vaccine Pilot Production Facility</td>
<td>16</td>
</tr>
<tr>
<td>WRAMC CPD Support</td>
<td>17</td>
</tr>
<tr>
<td>USAARL</td>
<td>18</td>
</tr>
<tr>
<td>USARIEM</td>
<td>18</td>
</tr>
<tr>
<td>ISR</td>
<td>19</td>
</tr>
<tr>
<td>III. USAMRDLC MATERIEL</td>
<td>20</td>
</tr>
<tr>
<td>USAMRAA</td>
<td>21</td>
</tr>
<tr>
<td>USAMMDA</td>
<td>22</td>
</tr>
<tr>
<td>Non-developmental items</td>
<td>23</td>
</tr>
<tr>
<td>USAMMDA - USAMMA Overlap</td>
<td>24</td>
</tr>
<tr>
<td>USAMMA</td>
<td>25</td>
</tr>
<tr>
<td>DEPMEDS</td>
<td>26</td>
</tr>
<tr>
<td>MDIS</td>
<td></td>
</tr>
<tr>
<td>IV. WELLNESS AND PREVENTIVE MEDICINE</td>
<td>27</td>
</tr>
<tr>
<td>USAEHA</td>
<td>28</td>
</tr>
</tbody>
</table>
STUDY METHODOLOGY

Data Gathering

*Interviews / Research*

Describe Current Work System

*Statements, Observations, Opinions*

Identify Common Themes

*Data Analysis*

State Findings

*Synthesize Themes*

Uncover Issues

*Interpret Findings*

Develop Recommendations And Solutions

*Apply Basic Organizational Design Principles to Issues*
Command & Control

CDR
DEPUTY CDR

LAB Cdrs
Materiel & Acquisition Cdrs
Dir. Rapid Prototype & Special Projects

PA & E
C/S
Reg. Compl. LOG PER IM Compt.
CREATE A PA & E CELL

- Rationalize internal Staffing requirements
- Consider possible RM consolidation with garrison
Budget Planning

CD Community

Customer Community

RADS

STO's

Research Projects / Protocols = $$

$ \frac{x\%}{x\%} = \text{overhead}

Available research dollars less 15% - 20% overhead
Nursing Staff Input

MRDALC Cdr

USAMRID

ISR

Inpatients

Inpatients

C/S

Command Chief Nurse
Chief Reg. Compliance

Recommendations

- Eliminate Command Chief Nurse Position
- Dual - Hat Chief Nurse at ISR as Cmd Chief Nurse
<table>
<thead>
<tr>
<th>INDEPENDENT CONTRIBUTOR</th>
<th>MANAGERIAL</th>
<th>&quot;STAFF&quot; / SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinguished P.I.</td>
<td>Chief of Staff Department</td>
<td>Directorate Division</td>
</tr>
<tr>
<td>Senior P.I.</td>
<td>Services</td>
<td>Services</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Branches</td>
<td>Branches</td>
</tr>
</tbody>
</table>
TAB 2

ENCLOSURE 12
ORGANIZATION AND STRUCTURE OF THE U.S. ARMY MEDICAL
RESEARCH, DEVELOPMENT, ACQUISITION AND LOGISTICS COMMAND
(PROVISIONAL) AND INTEGRATION WITH THE HEADQUARTERS FORT DETRICK

Background:

The Headquarters (HQ) U.S. Army Medical Research Development
Acquisition Logistic Command (USAMRDALC) staff has been analyzed
and subsequently reorganized and reoriented several times over
the past few years. The latest study occurred a year ago as part
of the original TFA study of the headquarters. A number of
specific staff recommendations emerged from that study e.g.
solidification of the RAD activity under the Deputy Commander;
downgrading of the DCSOPS position from 06 to 05 etc. The above
set of recommendations were provided to the command group which,
in turn, further evaluated them and integrated some
recommendations completely and/or parts of other recommendations.
The resulting HQ organization represented the commands best
judgement and compromises giving the prevailing conditions at the
time e.g. the manpower cuts, leadership style of the commander
SARDA concerns etc.

Many of these conditions have changed dramatically in the ensuing
year. Increased economic pressures have become commonplace; a
new commander has been assigned; the MEDCOM has been established
etc. But perhaps the two most significant developments that have
occurred which directly affect the HQ structure are the
following:

1) Designation of the USAMRDALC Commander as the
Installation Commander.
2) Analysis of the laboratory structure.
Each of these developments potentially affect the HQ structure.

Theme:
Designating the Commander USAMRDALC as the Installation Commander offers significant potential for achieving further economics of scale by integrating the two staffs.

Findings:

A. FUNCTIONAL ASSESSMENT.

The extent operating level of the various offices of the MRDALC (provisional) were assessed. This assessment produced the following results:

Level IV
Chief of Staff
Executive Assistant to Commander
Secretary to the General Staff
Director, Plan, Programs & Budgeting
Director, Military Disease Hazards Research (RAD I)
Director, Combat Casualty Care Research (RAD II)
Director, Army Systems Hazards Research (RAD III)
Director, Medical Biological Defense Research (RAD IV)
Director, Medical Chemical Defense Research (RAD V)
Director, Breast Cancer Research (RAD VI)

Level IV - Level III
Deputy Chief of Staff Logistics

Level III
Deputy Chief of Staff Regulatory Compliance & Quality
Deputy Chief of Staff Information Management
Deputy Chief of Staff Personnel
Deputy Chief of Staff Comptroller
Level III - Level II
Environmental Health
Safety
Level II
Public Affairs (?)
Internal Review Office
Acquisition Management Office

B. AREAS WITH POTENTIAL FOR SYNERGISM:

It is suggested that synergism may be gained with the following offices being combined with their counterpart office at the garrison. These suggestions are not meant to influence the Process Actions Team's (PAT) review and analysis of the Fort Detrick and MRDALC reconfiguration process.

Deputy Chief of Staff Logistics
Deputy Chief of Staff Personnel
Deputy Chief of Staff Comptroller
Deputy Chief of Staff Information Management
Environmental Health
Safety
Public Affairs
Internal Review Office
Acquisition Management Office

C. RECOMMENDATIONS TO PROCESS ACTION TEAM.

No specific recommendations are being offered as to how the offices can be best combined under a new command structure,
MRDALC office to a garrison office chain of command or a garrison office to a MRDALC office chain of command. However, the following issues should be considered for each of the offices and their counterparts when PAT assessments are made regarding combining offices.

Issues.

What are the important factors to be considered when combining garrison and Headquarters staff elements?

Discussion.

Because many Fort Detrick civilian employees are related to one another e.g. direct relatives, and because many of the senior positions exist at the headquarters level as opposed to the garrison level, it is necessary to exercise great care in exploring possible staff combinations in order to maintain a sense of fairness and justice. It would undoubtedly be dysfunction to combine activities in one direction only since this would ensure the survival of the senior HQ staff within each area. Rather extreme caution should be exercised when dealing with the civilian work force so as to preclude unnecessary morale problems.

1. The MRDALC Public Affairs: A new and greatly expanded role of marketing the MRDALC may be required from the PAO. Would this marketing role be possible if the PAO is assigned under the Garrison Commander? Many people in and out of the AMEEDD are woefully uniformed about USAMRDALC value to the Army and the Nation.

2. The MRDALC Environmental Health: The Environmental
Health Officer is primarily concerned with MRDALC and contract Laboratories and laboratory issues, if this position is assigned to the Garrison Commander rating chain, the Garrison Commander becomes responsible for environmental health issues at the various laboratories.

3. The MRDALC Safety: The Safety Officer is primarily concerned with MRDALC and contract laboratory safety issues, if this position is assigned to the Garrison Commander rating chain, the Garrison Commander becomes responsible for environmental health issues at the various laboratories.

4. MRDALC Deputy Chief of Staff Personnel: Many, if not all, of the functions of the Deputy Chief of Staff Personnel are duplicated at the Military Personnel Offices at the various installations.

5. MRDALC Deputy Chief of Staff Comptroller: This office may function effectively (more Effective) by being downgraded to an 0-5 (LTC position), under the direct control of MRDALC Director, Plan, Programs & Budgeting, rather than gaining synergism by being combined with the garrison (see also PA&E recommendation).

6. MRDALC Deputy Chief of Staff Information Management: Headquarters DCSIM has considerable responsibilities for Information Management systems throughout the MRDALC. In keeping with the AMEDD Chief Information Officer concept, there should be a single Information Management Officer for the USAMRDALC. USAMRDALC Chief of Staff should have a DCSIM/DOIM on the USAMRDALC staff.
HQ & Garrison Integration
TAB 3

ENCLOSURE 12
MEDICAL RESEARCH, DEVELOPMENT, ACQUISITION, AND LOGISTICS COMMAND

RESEARCH AREA DIRECTORS (RADS)

BACKGROUND:

Within the coordinating staff of the Commander, MRDALC, are five RADS, formerly known as Research Area Managers. The RADS are supervised by the Deputy Commander and senior rated by the Commander, MRDALC. Each RAD has a separate support staff that ranges from one to three staff officers, a civilian program analyst, and a secretary.

The RADS' scientific focus extends from present day issues e.g. Science and Technology objectives (STO's), through the full range of the Program Objective Memorandum cycle activities. The RADS do not have formal tasking authority over the laboratories and the supporting activities (USAMMDA and USAMRAA). However, by judiciously consulting, cajoling, and giving/withholding money, the RADS are nonetheless able to successfully influence the actions of Laboratory Commanders.

Despite a series of well thought-out initiatives to clarify the role of the RADS, confusion abounds as to the accountabilities, authorities and working relationships of the RADS to the laboratory commanders and other organizations within MRDALC. Most recently, a draft USAMRDC Memo 10-1 described 34 RAD functions in exquisite detail. During interviews with the RADS, laboratory commanders, and laboratory key personnel, it became clear that differences in perceptions of the role of the RADS persist throughout the command. These
perceptions concerning the roles and responsibilities of the RADs often sharply disagree with the functions outlined in the draft 10-1.

I. THEMES:

A. There are distinct differences between the work and functions which the RADs say they perform and the work which the laboratories say the RADs actually do for them.

B. Even though the roles and responsibilities of the RADs are defined in a Headquarters memorandum, each RAD executes these roles and responsibilities in a different manner, thereby creating confusion among the HQ staff and laboratory personnel.

C. Although most RADs "grew up" in their respective fields, they receive little or no training or orientation for the job. There is no counterpart training program for the development of the executive scientist as there is for the individual who elects to pursue executive medicine. Opinions vary as to whether the RAD needs both scientific knowledge and managerial skills or only managerial skills.

II. FINDINGS:

A. The RADs were clear in defining their roles and responsibilities. However, each RAD defined their roles differently.

B. The laboratories described various roles for the RADs, ranging from one of micromanagement focused on actually executing lab programs to one providing great assistance to the lab by assisting them in acquiring the necessary resources to carry out research. There are considerable differences within the labs in
the perceived authority of the RADs.

C. Some RADs are junior to laboratory commanders or are civilian rather than military. Some perceive that this relationship may pose a potential command and control problem.

D. Virtually all laboratory personnel interviewed felt that the Review and Analysis (R & A) preparation for the RADs was non-value-added work. The significant amount of time required to prepare for an R&A was found to be excessive, especially in that many felt that the information was already available to the RADs, with only the format being changed. Many of those interviewed reported that they received no feedback whatsoever from the RADs on their R & A submissions.

E. Feedback, in general, was reportedly minimal from the RADs to the laboratory commanders.

III. ISSUES:

A. Should the RADs be reorganized into a Program Analysis and Evaluation (PAE) Cell?

B. Do the RADs manage or direct research or are they advisors to the Commander, USAMRDALC?

C. Should the RADs be reorganized around the STOs?

D. Do the RADs have tasking authority?

E. Can the feedback loop from RADs to the laboratory commanders be improved?

F. How can the integration of combat developer and material developer be enhanced?

G. How can the RADs be better developed to assume their roles?
H. Is RAD approval necessary for OCONUS TDY for laboratory personnel?

IV. DISCUSSION:

A. The roles and responsibilities of the RADs remain an enigma for many despite the well-meaning initiatives to clarify their roles. One interviewee stated that the RADs did provide a system of checks and balances, while another felt that the RADs may have outlived their usefulness. Many interviewees felt that the RADs delved too deeply into the business of the laboratories. Reports of direct taskings from the RADs to individuals within the laboratories were common. In addition, many others articulated confusion between responsibilities of the RADs and USAMMDA.

Data collected from the laboratories supported the feeling that the RADs could operate very effectively as a PAE cell. The PAE cell would also include the Planning, Programming and Budgeting Office as well as the Comptroller. The PAE cell would be under the control of the Deputy Commander.

Another potential reorganization of the RADs includes organizing around the Science and Technology Objectives. This feeling is supported by a large number of individuals within USAMRDALC.

B. In some instances the RADs are junior to the laboratory commanders. This often creates an awkward situation. Consideration should be given to providing executive training for RADs to develop their management skills.
C. Most laboratory personnel felt that the inordinate amount of work for repeated Review and Analyses (R&As) was excessive and non value-added. Specifically, most interviewees felt that requested information was critical to the RADs; however, they often felt that the information was already in the hands of the RAD in another format. Therefore, excessive time was allegedly being wasted on merely format changes. Most interviewees also reported little or no feedback from the RADs concerning the R&As.

D. Most interviewees had a poor understanding of the relation between the combat developer and the researcher (material developer). When asked about combat developments, both the RADs and the laboratory personnel equated the combat developer with one senior civilian within the combat development directorate.

E. The excessive approval loop for OCONUS TDY of laboratory personnel could not be adequately explained by any interviewee. This is not appropriate work for the RADs. Approval by the local laboratory commander seems adequate.

V. RECOMMENDATIONS:

A. A Process Action Team should be established to consider reorganizing the RADs.

B. Consideration should be given to establishing a PAE cell consisting of the RADs, Comptroller, and office of Planning, Programming, and Budgeting. The PAE cell should be under the control of the Deputy Commander.

C. Consideration should also be given to organizing
research around the STOs under the direction of the laboratory commanders.

D. Despite well-intentioned initiatives, the roles and relationships of the RADs need to be further defined and clarified.

E. RADs need to provide a better feedback mechanism to the laboratories, especially for the R&A process.

F. The relationship between the RADs and USAMMDA needs to be clarified.

G. Continue to support the USAMRDALC Liaison officer to better integrate the combat developer and the material developer.

H. Develop a clear leader development track for RADs.

I. Discontinue RAD approval of OCONUS TDY of laboratory personnel.
RADS

- No Staff Orientation
- Lack of feedback
- Working relationship's unclear
  - Time consuming
  - R & A Too

WRAIR

USAMMDA

LABS
CREATE A PA & E CELL

- Rationalize internal Staffing requirements
- Consider possible RM consolidation with garrison
Research Focus

Hobby Horse

- Too much “Hobby” Research
- Lack of Customer Focus
- Few “meaningful” deliverables

Soldier

- Focused research
- Oriented on Soldier needs
- Tangible products
Research Focus

- Robust Resources
- Soviet Threat
- Loose Ties to CBRS
- Labs / PI autonomous

Requisite Control System

- Constrained resources
- Multipolar Threat
- Heightened focus on deliverable products
- Centralized HQ Control (RAD's / STO's)

- Align accountability & Authority with lab cdr.
- Control through PA & E
- No Protocol approval
- No Authority
- No Common reporting process
BACKGROUND:

Virtually all research and development performed within MRDALC is generated by the operational capability requirements (OCRs) that have evolved from the Enhanced Concept Based Requirements System (ECBRS). Few individuals within the research and development community are fully aware of the close ties they have with the combat developments community, especially those within the AMEDD Center and School. The mission of the Directorate of Combat and Doctrine Developments is to define the future warfighting requirements facing the AMEDD. Since combat developers are at the headwaters of the Life Cycle System Management Model for Material, MRDALC needs to be acutely aware of their activities and vice versa.

When questioned about the combat developers' role in their research, most individuals equated combat developments with Dr. Mosebar, the well-respected and longtime chief of the Clinical Consultants Office. Although Dr. Mosebar is key to activities within MRDALC, he is one of a host of players who play an integral part in the combat developments arena.

Inherent in the ECBRS process is the evolving concept of Battle Labs. Battle Labs allow the Commanders' energies to be focused on the integration of requirements and second order consequences generated by the rapidly changing dynamics of the battlefield. Several different Battle Labs have been established
in which the AMEDD has a varying degree of involvement. Battle Labs prioritize and integrate requirements across the combined arms force. They also have the ability to explore new ideas and experiment with new technologies through the employment of advanced computer simulations, virtual prototypes, and hands-on tests with soldiers on ranges and maneuver areas.

The Battle Labs suffer from a lack of information and understanding regarding their implementation role as well as to what products are likely to be derived from their utilization. The AMEDD must become extensively involved throughout the Battle Labs process as it continues to evolve.

MRDALC maintains a liaison officer on the staff of the AMEDD C&S. The liaison officer facilitates coordination and promotes cooperation among the staffs and organizational elements of USAMRDALC, AMEDD C&S, and MEDCOM HQ, in the timely fulfillment of medical research, development, acquisition, and logistics functions. He also provides direct operational interface, technical input, and MRDALC representation on actions and issues involving elements of the AMEDD C&S or MEDCOM HQ.

I. THEMES:

A. Elements of MRDALC and the AMEDD C&S do not fully understand each other's roles.

B. The Threat function within DCDD must be maintained.

C. The Battle Labs suffer from a lack of understanding and information about their implementation rule.

D. The MRDALC Liaison Officer at AMEDD C&S and the MEDCOM continues to make significant progress in coordinating the work
II. FINDINGS:

A. Many laboratory personnel and RADs equated the combat development function with Dr. Mosebar, the Chief of the Clinical Consultants Office.

B. Most researchers and RADs do not understand the role of the ECBRS and combat developer in determining requirements.

C. The threat function within DCDD will soon be vacant with no replacement programmed.

D. Battle Labs suffer from a lack of understanding.

E. The proponent for advanced technology is unclear.

F. The MRDALC Liaison Officer is operating effectively in his assigned roles.

III. ISSUES:

A. Many individuals within MRDALC do not understand the wide spectrum of combat development activities which generate the operational capability requirements which, in turn produces the impetus for research and development. By the same token, many combat development personnel do not understand the plethora of activities associated with MRDALC.

B. The Threat Branch at DCDD has been downsized. In addition, the Army has not trained enough officers in medical intelligence. There is no clear career track for medical intelligence.

C. Many initiatives in advanced technology have evolved so rapidly that the overall proponent for advanced technology is unclear.
IV. DISCUSSION:

A. Although many interviewees associated combat developments with Dr. Mosebar, there is good reason for this association. As Chief of the Clinical Consultants Office by virtue of his longevity within the directorate, Dr. Mosebar is performing a de facto role of deputy director. This provides both continuity and a historical perspective which are considered essential given the rapid turnover of active duty military directors.

However, the spectrum of activities of combat developments encompasses far-ranging areas both in and out of the clinical consultants office. The medical combat developer plays a major role in medical modernization plan development; medical threat assessment; OCR definition and ranking; and medical science and technology objectives review, prioritization, and coordination.

B. A simple working knowledge of the ECBRS is key and essential to any individual working within MRDALC. This knowledge allows individuals to better understand how requirements are generated. By the same token, combat developers need to understand the MRDALC community better.

C. A key element in any military operation is threat assessment, analysis, and reporting. The medical threat cell at AMEDD C&S plays an integral role in assessing the medical threat. Since the Medical Mission Area Threat 1993-2013 is classified, the threat officer at AMEDD C&S has written an unclassified version ("The Medical Threat Facing a Force Projection Army"). This document should receive wide distribution.
However, the threat cell faces both short and long term deficits in manning. The cell has been downsized to one officer. This officer will soon be lost to PCS with no projected replacement due to a lack of trained medical intelligence officers.

D. The entire concept of Battle Labs needs better understanding within the AMEDD. In particular, the MRDALC community can benefit from a fuller comprehension of what the Battle Labs do and what they do not.

E. The rapid developments in tech base research and the transition of potential products into advanced development has demonstrated the critical need for liaison between MRDALC and the AMEDD C&S.

V. RECOMMENDATIONS:

A. MRDALC personnel need to better understand the combat development process and vice versa.

B. The threat cell at DCDD should receive priority in staffing.

C. MRDALC personnel should be more familiar with the medical threat.

D. A career track for medical threat officers should be established.

E. MRDALC should be better informed on the Battle Labs process.

F. The proponent for advanced technology should be named.

G. The MRDALC Liaison Officer should be commended for his present and future initiatives to accomplish his mission.
Combat Developments

= Dr. Mosebar
THREATS

ENVIRONMENTAL

ENDEMIC

OCCUPATIONAL

HOSTILE-GENERATED

OUTCOME: INTEGRATED COMPREHENSIVE PROGRAM
Battle Labs

Combat Arms Labs

ECBRS System

USAMMDA

USAMMA

Rapid Prototyping

Labs

PI's

JSAMRDALC

Medical Requirements

AMEDDC&S

Threats

Combat Support Labs
USAMRDALC

FDA Regulatory Compliance

Background:

The DCS position for Regulatory Compliance and Quality is a critical senior staff position required by Army regulations. Much research throughout the command is absolutely dependent on strict adherence to FDA requirements for protocol development and execution. Officers at all of the labs emphasized that point repeatedly. For example, USAMMDA’s executive officer estimates that he spent 80% of his time with program managers fine tuning protocols prior to sending them to FDA.

Theme:

USAMRDALC has identified a requirement for a Command Chief Nurse position although there appears to be little or no requirement for such a role. To compensate for a shortage of work, the Chief Nurse has been dual-hatted as the DCS for Regulatory Compliance and Quality.

The dual-hatting of the Chief Nurse as the DCS for Regulatory Compliance and Quality appears to create a redundant staff position.

Findings:

1. USAMRDALC officers described multiple and redundant pathways for quality review.

2. Internal customers of the DCSRCQ include the HQs review
board and the Labs' principle investigators involved in protocol
development.

3. External customers include FDA approval authorities and
editors of scientific journals.

4. Each laboratory has an individual assigned to the Human
Use and Regulatory Compliance role.

5. The TSG requirement for Human Use Review is performed by
the USAMRALDC Regulatory Compliance and Quality office.

Issue:

Are either the CN or QA nurse positions part of the
requisite organizational structure needed to ensure that research
units meet regulatory compliance and quality requirements?

Discussion:

At present the Deputy Chief of Staff for Regulatory
Compliance and Quality (DCSRCQ) is dual-hatted as the USAMRDALC
Chief Nurse. Presently COL Galante, AN is the DCSRCQ. Another
AN officer is in-bound to take the vacant QA nurse position as a
separate function.

In MTF settings throughout the AMEDD, AN officers are
frequently the most proficient QA-oriented personnel. It is
somewhat logical then that nurses be employed in this capacity in
USAMRDALC. However, we could find no evidence, other than
convention, supporting why AN officers are specifically required
for USAMRDALC staff positions.
The Army Nurse Corps corporate position is that nursing input is indispensable wherever direct patient care is concerned. However, with the exception of USAISR, the only direct patient care unit in USAMRDALC is at USAMRIID, and there is not much patient care activity there. An additional rationale offered sometimes is that only nurses can or should rate nurses. The AN rating conflict, however, can be overcome, consistent with AMEDD progress toward branch immaterial career development positions.

Recommendation:

Eliminate both Chief Nurse and QA Nurse titles at USAMRDALC and establish branch immaterial qualifications for the DCSRCQ position. Empower the DCSRCQ to enforce compliance command-wide by delegation, not multiplication, of review authority.
Regulatory Compliance
ARSTAFF Chain

- TSG accountable to CSA for Regulatory Compliance

- USAMRDALC Cdr accountable to MEDCOM / TSG / SARDA for Regulatory Compliance

- Lab Cdr accountable for LAB / PI Regulatory Compliance

FDA Chain

- Material Developer / PI accountable to FDA for regulatory compliance.
Nursing Staff Input

Recommendations

- Eliminate Command Chief Nurse Position
- Dual - Hat Chief Nurse at ISR as Cmd Chief Nurse
TAB 6

ENCLOSURE 12
CAREER/LEADER DEVELOPMENT WITHIN
US ARMY MEDICAL RESEARCH, DEVELOPMENT,
ACQUISITION AND LOGISTICS COMMAND

BACKGROUND:

The majority of personnel within the medical research and
development community possess very unique career patterns. The
compartmentalized, highly specialized qualifications of many of
these individuals often leads to atypical career patterns for
both military personnel and civilian employees. Normal military
and civilian career progression is often the exception rather
than the rule.

As these individuals become engrossed in their scientific
research, normal career paths often fade in importance.
Executive management positions and military schools are sometimes
viewed as impeding the progress of an individual's research
focused career. On the other hand, the institution views these
career "gates" as important milestones in military career
advancement. Often, the individual is torn between competing
demands, do I follow a research track or do I try to compete on
an equal plain with my operational counterparts?

The discussion that follows discusses three classes of
workers in the command--military officers, enlisted, and
civilians. Each class of individuals has a separate set of
career milestones and requirements.

I. THEMES:

A. Officers often become so engrossed in research that they
ignore career military milestones looked upon favorably by promotion boards (military schools, leadership positions, overseas assignments, etc.)

B. The additional training requirements placed on enlisted MOS 01H have essentially eliminated these valuable individuals from continuing in their present career path.

C. Civilian researchers are often reluctant to accept management positions in the organization as it precludes them from performing research and publishing papers. Without the ability to perform research and publish papers, many civilians feel they lose status within the scientific community.

II. FINDINGS:

A. Officers:

1. Normal military schooling (advanced course, CGSC, etc.) often interferes with bench research.

2. Many research protocols take several years to develop and produce meaningful results. The PCS rotation of researchers interrupts research protocols. It is extremely difficult for one researcher to take over another researcher's protocol. This troubled one interviewee to the point that he suggested that all researchers should be civilian.

3. As many research oriented officers do not PCS as often as other officers, they do not receive the same opportunity for awards as other officers.

4. Several senior officers noted a decline in the number of young researchers, even without the loss of the one-
year research fellowship.

5. Assignment to the overseas laboratories is an excellent leader development opportunity.

6. Although RADS are in very senior positions within the organization, they are often junior to many of the laboratory commanders.

7. Several officers noted that the Commanding General of MRDC has rarely been from a research background.

8. Several officers commented that assignment to MRDALC for an MS officer is the "kiss of death", especially for Colonels.

B. Enlisted:

1. Enlisted personnel within MRDALC are the lifeblood of bench research.

2. Enlisted personnel in MOS 01H now have additional training requirements of 70 weeks' duration. These additional requirements will virtually eliminate these valuable and highly skilled members from the MRDALC community.

3. Military schooling for these individuals is extremely difficult.

C. Civilian:

1. Civilian researchers must perform research and publish papers to flourish in the professional community, thus effectively eliminating them from aspiring to executive positions within the command.

2. It is important for civilians to get grants and develop impressive resumes to make them more credible to the
civilian sector.

3. SES positions are for senior civilian employees in executive management positions. Some SES positions in MRDALC were given as rewards for performing outstanding research.

III. ISSUES:

A. Officer:

1. Should officers be required to interrupt their research for military education?

2. Is the normal PCS rotation of 3-5 years acceptable to allow good research?

3. Do leaders adequately reward individuals within their command? Why are OERs continually late?

4. Should the Army continue the research fellowship currently being continued with authorizations from the WRAMC TDA?

5. Is there truly a decline in the interest of young officers in the research field?

6. Do all officers recognize and take advantage of the leader development opportunity of assignment to an overseas laboratory?

7. Is the RAD position viewed by potential RADS as a career development opportunity?

8. With so few general officers emerging from the research community, what is the incentive for officers to follow a traditional military career path?

9. Are leader development opportunities within the MRDALC community equitable for all Corps?
B. Enlisted:

1. If the additional training requirement for MOS 01H continues, will the Army be able to attract any more of these highly skilled individuals?

2. Can enlisted personnel attain necessary training for enlisted leader development?

C. Civilian:

1. Does accepting a management position for a civilian researcher truly restrict one's career path within their profession and/or the government service career path?

2. Are the SESs within MRDALC performing in true SES positions?

IV. DISCUSSION:

A. Officers:

1. Officers in the research and development community must compete for promotion and other selection processes with other officers in their respective corps. To be competitive, all officers must achieve certain leader development milestones such as military schools, awards, skill badges, leadership positions, etc. When an officer does not complete these milestones, his or her record must compete primarily on the basis of his scientific research. As many officers sitting on promotion boards do not fully understand the importance of scientific research, especially as it relates to normal military career progression, officers considered for promotion may be at a disadvantage.

Therefore, officers in the research and development
community should be offered the same leader development opportunities or considered for a separate research and development career track. There is no counterpart training program/process for the development of the executive scientist as there is for the individual who elects to pursue executive medicine. As these officers belong to various AMEDD Corps, the variability in career tracks for the various corps should also be considered.

2. Several interviewees described problems associated with following a normal PCS rotation pattern of 3-5 years for officers. Very often a research protocol will take 3 years to be developed and productive research begun. If a researcher must PCS at that time, work on this protocol must be transferred to another researcher who may not have the same credentials or interest in a particular area. One interviewee stated that this has occurred at least 25 times in the last 10 years. One interviewee even suggested that if we cannot stabilize military officers, consideration should be given to civilianizing all research scientists.

3. If officers are to compete with their peers in the rest of the AMEDD, they must receive the same opportunity to be rewarded for outstanding performance. As officers are often on station in USAMRDALC for very long periods of time, they receive few PCS awards. It is strongly suggested that as officers produce outstanding products and research, better use of impact awards should be made.

From various sources, it appeared that the OERs were
continually late, sometimes at the expense of an officer being considered for promotion.

4. Many interviewees noted the importance of the one year research fellowship offered by WRAIR in the Division of Medicine. They recognized the fellowship as the Army's lifeblood of young researchers and were concerned that the AMEDD has targeted it for elimination.

It is to the credit of the program that it is continuing with authorizations from the WRAMC TDA. However, this also takes front line health care providers from WRAMC. A decision should be made to continue or discontinue this GME program, but not using authorizations from another institution's TDA. Every effort should be made, however, to continue to attract young researchers into the very unique field of Army medical research and development.

5. Many interviewees noted the distinct leader development opportunities associated with assignment to overseas laboratories. The research opportunities available to them along with the leadership positions they often enjoy make assignment to one of these laboratories a unique opportunity to develop leader skills while continuing outstanding research.

6. There appears to be no defined career development path for RADs. Recognizing the senior position RADs occupy within the command, it would seem logical that these individuals would be senior individuals within the command. However, many of the RADs are junior to many of the lab commanders. The obvious question is whether RADs who are junior can operate effectively
with senior laboratory commanders.

7. Several interviewees indicated that they were not concerned with normal military career progression because they knew they could make colonel without these traditional "gates". The statement was made that unless one wanted to be a general, he/she didn't have to worry about resident CGSC or many of the other military schools and badges.

8. As all of the AMEDD Corps are represented within MRDALC, the various career tracks of these corps should be considered in leader development positions. In this era of corps immaterial positions, consideration should be made of allowing members of all corps to compete for leader positions based on their qualifications and not their corps.

B. Enlisted

1. Recognizing the additional requirements placed on the AMEDD C&S for consolidation of the 01H MOS to 92B (70 weeks training to meet CLIA requirements), it seems apparent that these highly skilled and qualified individuals will no longer be attracted to serving in the Army. Consideration should be given to allowing training at another location rather than the AMEDD C&S.

One interviewee commented that to replace one of these individuals would take $40,000 per year and an additional $20,000 to recruit. As many of these individuals go on to AN or PA training, another source of accessions into these career fields will be diminished.

2. Enlisted personnel in the research arena must
attain the same leader development skills as other enlisted soldiers. As many of these individuals become engrossed in research work, military schooling and other training may receive lower priority. This cannot be permitted if enlisted personnel within the command are to stay competitive with their peers.

C. Civilian:

1. Civilian employees are vital to provide continuity within the command. Their stability in not moving among the commands makes them the linchpins of the laboratories and other directorates. However, career progression for these valuable individuals is vague at best.

It is clear that civilian researchers must publish papers in order to prosper within the community, and the scientific profession. Taking on executive positions is often viewed by civilian scientists, as taking them away from their research and, therefore, their profession. As civilian researchers must publish to get grants and acquire impressive resumes, few are inclined to accept management positions, if offered.

2. The SES position within the government is awarded to civilians in senior executive positions. It appears that several of the SES positions within MRDALC were awarded to individuals for outstanding research. Several of these individuals currently do not operate at the senior executive level.

V. RECOMMENDATIONS

A. Officers:

1. Work with the AMEDD C&S to define a clear leader development track for officers of all corps and AOCs working
within the research and development community. Continue to participate in the Leader Development Decision Node process with the AMEDD C&S.

2. Develop clear PCS policies for officers in the research and development community to allow productive research while providing leader development opportunities.

3. Better use of impact awards can be made to compensate for the lack of award potential by infrequent PCS moves. Develop a better system to ensure timeliness of OERs.

4. Develop a strong program to ensure young researchers entering the field. However, the research fellowship should not be continued at the expense of the WRAMC TDA. If it is to continue, it should continue from MRDALC authorizations.

5. Ensure all officers have leader development opportunities associated with overseas laboratory assignments.

6. Develop and follow a definite career progression program for the RADs.

7. Ensure equity among the AMEDD Corps by providing leader development positions to all officers; develop corps immaterial positions.

B. Enlisted:

1. Work with the AMEDD C&S to develop a workable solution to the 01H consolidation to 92B problem.

2. Ensure enlisted are afforded adequate time for military training and schooling.

C. Civilian:

1. Develop and follow a definite career path for
2. Ensure SES positions are working at the appropriate level within the command.
Officer Leader Development

HQ Staff

MC Leader

MEDCEN

Bench Scientist

MTF

Military School

Labs

AMEDD C&S CD

Military School

Staff

Unit

MTF

Military School

Staff

Unit

Labs

Military School

Unit

Labs
Talent Pool Management

USAMRDAIJC

LABS

TALENT POOL

PI

- Less and less input of bright young talent
TAB 7

ENCLOSURE 12
BIOLOGICAL DEFENSE SCIENCE AND TECHNOLOGY OBJECTIVES (STO) FUNDING AND ORGANIZATIONAL STRUCTURE AT THE US ARMY MEDICAL RESEARCH INSTITUTE OF INFECTIOUS DISEASE (USAMRIID)

I. BACKGROUND:

USAMRIID performs product and/or tech based research in accord with Army approved Science and Technology Objectives (STOs) which have been derived from the threat list developed by the Armed Forces Medical Intelligence Command (AFMIC). The purpose of STOs is to focus research on projects related to potential hostile generated combat threats only. USAMRIID receives 94% of its money for research on biological defense (BD) projects and only 6% of its money for research on infectious disease (ID) items. Research projects are organized around the STOs. Because the STOs often involve several tasks, a STO Coordinator is appointed to integrate/coordinate the full range of tasks in support of each STO. Each task is accomplished through the use of protocols which are performed by a principal investigator (PI). Approximately 130 PIs exist in USAMRIID. Each PI is given his/her own funding for their protocol. Structurally, the Institute is organized with a Commander and a Deputy Commander. The Division Chiefs report to the Deputy Commander with Department Heads reporting to division chiefs. Most STO projects involve PIs from more than one division. Consequently, to accomplish a STO project including all of the subordinate tasks, PIs from different
divisions, all with their own funding, must somehow work together harmoniously on a particular project. This type arrangement is confusing and leads to inefficiencies. Situations often arise as to who is actually in charge of the STO project and tasks, or who controls the allocation of research money. Additionally, it is often difficult for a department head to perform a performance rating when a particular PI might be working outside their department exclusively.

II. THEME: The current funding process within USAMRIID appears to be cumbersome and inefficient.

III. FINDINGS:

A. Military related research is greatly enhanced by using the STO system as mandated by recent changes in public law.

B. Funding for each STO, as developed from the AFMIC threat list, is received from the Research Area Directors (RAD). The money for each STO is then allocated down through the Deputy Commander and Division Chiefs to the PIs based on the protocols that are assigned to them.

C. The rating and supervisory responsibility for PIs rests with the department heads and division chiefs. The PIs might be working exclusively on a protocol for a STO that does not rest in their home department, making ratings difficult.
IV. ISSUE: Should each PI receive their own funding for a protocol or should the division chiefs (and subsequently department heads) be allocated money for each STO task residing in their respective areas?

V: DISCUSSION:

A critical challenge facing USAMRIID is how best to allocate money in order to accomplish STO directed research. When a STO is received it is broken down into subordinated research tasks that often involve multiple divisions/department heads. Each task, in turn, is further divided into specific research protocols. Because STOs involve multiple PIs, often from different departments, it is generally necessary to appoint a STO coordinator to integrate diverse efforts. STO coordinators, however, do not have control over funding levels. To have over 130 PIs, each with their own funding, seems extremely complicated and unnecessary. An easier and more efficient way of allocating resources must be found. For example, if the money received from the RAD for each STO was allocated, after close communication among the deputy commander, division chiefs, and department heads, to the STO team leader (project chief) based on protocol complexity and length, the entire process would be more efficient and less confusing.

VI. RECOMMENDATION:

To facilitate efficiency and clarity, research money
for STO protocols should be allocated to STO project chiefs, not PIs, which should greatly reduce the number of funding lines and make the entire funding method simpler and easier.
USAMRIID Funding Stream

$\rightarrow$ STO Project Chief $\leftarrow$ $\rightarrow$

$\rightarrow$ Pi 's $\rightarrow$ Pi 's

Bench Scientist's
TAB 8

ENCLOSURE 12
BACKGROUND: The USAMRIID Military Personnel Office (MILPO) performs Battalion PAC functions for the approximately 275 military personnel assigned to USAMRIID. Depending on the nature of the specific action, coordination is effected with either the MRDALC DCSPER office or the Ft. Detrick Military Personnel Office. The Chief of the Military Personnel Division is also dual hatted as the USAMRIID Medical Company Commander.

I. THEME: The USAMRIID MILPO performs a necessary support function for USAMRIID as well as command and control oversight over the USAMRIID Medical Company.

II. FINDINGS: The USAMRIID MILPO and Medical Company provide personnel support to the military personnel assigned to USMRIID. Presently some information management type functions (mail, forms and publications and reproduction) are being performed by the MILPO and/or Medical Company.

III. ISSUES:
A. Is a separate MILPO necessary to support USAMRIID when these functions could be performed by the Garrison MILPO with the Medical Company providing a liaison function?
B. Should responsibility for IM functions be consolidated at MRDALC DSCIM?
IV. DISCUSSION: The USAMRIID Medical Company and MILPO have been operating efficiently under the guidance of one person for approximately one year. There are only two areas that appear to need additional review. First, there appears to be an artificial separation of personnel support work between USAMRIID, MRDALC and the Garrison MILPO. Secondly, due to geographical collocation, IM functions performed at USAMRIID and MRDALC could be consolidated under the IM office.

V. RECOMMENDATIONS:

A. Dual hat the USAMRIID Medical Company Commander and Military Personnel Officer. Consolidate the MILPO and Medical Company operations.

B. Include the USAMRIID MILPO and HQ Company functions in the ongoing PAT which is evaluating consolidation of Garrison and Hq, MRDALC functions.

C. Shift responsibility for USAMRIID IM functions and resources to the responsibility of the MRDALC DCSIM office.
TAB 9
ENCLOSURE 12
U.S. Army Research Institute of Chemical Defense (ICD)

Background:

ICD performs basic chemical defense research based on the chemical threat to soldiers. It is organized along three mainstream research divisions: Pathophysiology, Pharmacology, and Drug Assessment, which coincide with the natural process of counteracting a specific chemical agent, e.g. "what's happening; how does it work; and what can I do about it?" In addition to the research divisions, USAMRICD also oversees three sustaining activities: a veterinary medicine division, and two support divisions. To date, ICD, like all USAMRDALC labs, has absorbed some directed staff and mission reductions, which has caused it to proactively pursue its own reorganization efforts in order to improve its effectiveness and efficiency.

Theme:

ICD appears to have a robust support and headquarters staff in proportion to its mainstream research elements.

Findings:

1. The support divisions are currently undergoing a reorganization.

2. Some respondents questioned the value added nature of the scientific advisor role.

3. USAMRICD currently conducts a Biological and Chemical Defense Course (BCDC) together with USAMRIID.
4. Attendance at the BCDC course has recently fallen off; some respondents attribute this to the fact that it requires two weekends for completion because of the dual locations, e.g., USAMRIID and USAMRICD.

5. It was unclear as to how much BCDC course material has been integrated into existing AMEDD C&S instruction.

6. Numerous attempts at moving the BCDC program have reportedly been avoided in the past.

Issues:

1. Do the Deputy Commander and Scientific Advisor roles overlap at ICD as they did at several other labs in MRDALC?

2. Is there a continuing justification to manage the chemical portion of the Biological and Chemical Defense Course (BCDC) at ICD in Edgewood. BCDC is a highly valuable but optional and underattended course that may be more productive if it were located elsewhere.

3. Could the Research Operations Division (ROD) and the Administration Division be combined at a future date to create one large support division?

Discussion:

Unlike USAMRIID, ICD is organized along the natural process lines of pathophysiology, pharmacology, and drug assessment, e.g. what’s happening, how does it work, and what can I do about it? The TFA organizational analysis revealed a large special staff at the headquarters level relative to the size of the entire lab.
While a support staff reorganization was still being ironed out, it appeared that some additional synergies and efficiencies could be obtained by reengineering present support structures. For example:

1. A large portion of the ICD Deputy Commander’s role is to supervise the ongoing science program, part of which can and should involve monitoring the external science environment. While ICD’s scientific advisor (SA) was not available for our interviews, a number of people we talked to at ICD (and at other labs in reference to their respective SAs) questioned the value added by the SA. The SA role was characterized across the command as a reward to a senior researcher who could not be promoted due to CPO constraints.

2. The BCDC program naturally evolved from the research conducted at ICD. However, the Edgewood, MD location precludes combining BCDC with other important medical training offered elsewhere. According to ICD staff, the C3 course is frequently operated at significantly less than capacity. Relocation of BCDC at this time would allow reductions at ICD in an area not within its mainstream research function. There are natural synergies between BCDC and medic basic and advanced individual training, BNCOC, ANCOC, OBC, OAC, and C4 presently offered at the AMEDD Center and School.

3. The ROD is still adjusting to absorbing the Research Information Systems Branch (RISB) as a self-directed reorganization effort. After this recent change has settled, and after the new Executive Officer has been on board for some time,
future study may indicate a natural combination of the Administrative Division and ROD.

Recommendations:

1. Combine the Deputy Commander and Scientific Advisor roles. In addition to saving a senior, reportedly underutilized authorization, hereafter the Deputy Commander would formally hold internal and external environmental scanning roles.

2. Transfer the BCDC course to the AC&S. The education component of ICD research is much more consistently aligned with the education mission of AC&S than it is with the basic and applied research effort conducted at Edgewood. Given the criticality of chemical defense as a component of NBCDC protection, optimal productivity is more likely with the combined education and field training facilities at the AC&S. Future expansion using modular export teaching techniques and teleconferencing will also be better at AC&S. Improved course productivity can be measured by numbers of soldiers attending the C3 course separately or as part of other training.

3. Recommend future study of combining Administration Division and ROD. This is not an urgent recommendation but the current separation of support into two divisions may not be tenable under future projected and especially unforecasted personnel reductions.
USAMRICD

Inst. of Chem. Defense
Deputy Cdr.

Path. | Pharm. | Drug

Vet. | Research | Admin.

- Study feasibility of combining ROD with Admin. Div.

Mainstream Production Units

- Combine the Dpty. Cdr. & Scientific Advisor Role
- Integrate BCDC course into AMEDD C&S POI's

Deputy Cdr.

XO
Chem. Case Care Offc.
Chief Med NCO
Spec. Staff
PROJECT & PROCESS DESIGN CONSIDERATIONS

USAMRICD

Projects

Pathophysiological Assessment (Phase 1)
Pharmacological Assessment (Phase 2)
Drug Assessment (Phase 3)

Advanced Anticonvulsant
Respiratory Agents
Chemical Agent Prophylaxes
Sodium Channel Neurotoxins

"What's Happening?" "How Does It Work?" "What Can I Do About It?"

Vet Med Div
Rsch Ops Div
Admin Div
USAMRICD Project Work

Home Base Manager

Pathophysiological Assessment (Phase 1)

Pharmacological Assessment (Phase 2)

Drug Assessment (Phase 3)

Project 1
Advanced Anticonvulsant

PI Joe

PI Jane

Project 2
Topical skin Protectant

Borrowing Manager
TAB 10

ENCLOSURE 12
BACKGROUND: Organizations exist to get work done and work gets done by people who occupy roles in some sort of organizational structure. The nature of the resulting structure and its attendant roles is determined by the functions implied by the organization’s mission. Essential functions are generally grouped into logical categories that reflect a basic synergy or interdependence. During the course of interviewing key personnel at WRAIR, a number of examples of apparent misalignment of functional areas were observed. These misalignments appear to result from a series of quick fixes and temporary modifications that have become institutionalized over the years.

I. THEME: WRAIR would be well served with a complete reassessment of its organizational structure.

II. FINDINGS: The following are examples of organizational misalignments that became apparent during the interview process (there are probably others):

A. Manpower functions are currently being performed by the Civilian Personnel Office in the Personnel Division. Manpower is generally a Resource Management function. Effective resource planning must include numerous decisions on manpower. While manpower management obviously can work while aligned with other functions, efficiency is usually realized by aligning it with RM
functions.

B. Medical Audio Visual Support (MAVS) is currently aligned under the Associate Director for Research Marketing and Policy Development. This appears to have been an alignment for no other reason than convenience since no other association could be determined. Audio Visual services are an Information Management function.

C. Library services, records management (including mail room functions), and printing and publications are also IM functions. These functions have not been realigned since AR 25-1 placed them under IM (see separate paper). Realigning these functions into Information Management would appropriately make the Director of the Division of Biometrics the Information Management Officer and relieve the Executive Officer of that responsibility.

D. Staph enterotoxin B (SEB) research is currently being conducted in the Pathology Division. This is a primary research function that should be overseen by one of the research divisions. (See separate paper)

E. Retrovirus research was separated from the Department of Virus Diseases, Division of Communicable Diseases and Immunology several years ago. The unique funding and tri-service staffing of this Division may make a case for keeping it a separate entity. However, if this arrangement is going to be continued, a command decision needs to be made to formally establish the staffing requirements for the Division by TDA changes or other appropriate mechanisms.
F. The Division of Rickettsial Diseases, while not misaligned, is a one person Department that works full time with the Navy. It is unclear as to whether this is a viable continuing mission for WRAIR.

III. ISSUE: Several misalignments have been allowed to exist over the years at WRAIR. "Create to placate" seems to have been an organizational design "non-principle" utilized all too frequently to avoid hard decisions.

IV. DISCUSSION: Some common themes surfaced whenever organizational structure was discussed. They were: "It’s always been that way.", "It was moved because person A couldn’t get along with person B." or "We’re waiting for the new WRAIR." Completion of the new WRAIR is still several years out and numerous positive organizational realignments should be made before that event. Preparation for moving to the new WRAIR is, however, a tremendous opportunity to initiate a complete review of the WRAIR organizational structure. The design concept of the new building allows for considerable flexibility in organization. This feature should be exploited to its fullest. The organizational realignment currently proposed by the facilities transition office (see enclosure 1) is a good starting point for discussion on the subject. Other alternatives need to be developed and assessed. Team organization around STOs and project organizing are considerations.
V. RECOMMENDATIONS:

A. Realign manpower functions to the RM Division.

B. Consolidate all IM functions into the Biometrics Division. Rename the Biometrics Division to be the Information Management Division.

C. Realign SEB research to the Division of Communicable Diseases and Immunology.

D. Assess retroviral and rickettsial research for their proper alignment.

E. Initiate an Institute wide PAT to develop recommendations on the best functional alignment for WRAIR in the future.
Research Outposts

WRAIR

Assoc. Dir.
Overseas Labs
& CONUS Detachments

Thailand
Kenya
Brazil
Blood Gap
Detachment
Inst.
Dental Res.
Brooks
Wright
Pat.

USAMRU - E

* Research on foreword deployed Troops and families
TAB 11

ENCLOSURE 12
BACKGROUND: Policy for the Army Information Resources Management Program is established by AR 25-1. This regulation contains a discussion about Information Mission Areas (IMA). The specific goal of the IMA concept is the elimination of all artificial barriers between information and information systems. IMAs include the disciplines of telecommunications, automation, visual information, records management, library management, and printing and publications. DA Pamphlet 25-1-1 provides guidance to carry out the policies and procedures of AR 25-1. It further delineates operational information activities as follows: telecommunication centers, telephones, installation support radio systems, information processing facilities, visual information support services, mail/distribution centers, printing plants, duplication/reproduction centers, records holding areas, forms/publications support centers, information centers and information service support centers.

I. THEME: The various disciplines of Information Management need to be consolidated under one manager.

II. FINDINGS:

A. The Division of Biometrics at WRAIR consists of the Department of Biostatistics and Applied Math, Department of Data Processing, and Department of Biomedical Engineering.
Responsibilities of the division fall into the general categories of biometrics consultation, automation/data processing technical support, and automation training.

B. Responsibility for library services, medical audiovisual services, printing and publications, mail/distribution center, and other records management functions are spread out over various other activities within WRAIR.

III. ISSUE: Would existing information management functions, which are currently fragmented throughout WRAIR, be more effective if they were combined into a single functional area.

IV. DISCUSSION: By combining all of the information management functions identified in AR 25-1 and DA Pam 25-1-1, additional efficiencies in management of this area should be achieved. The various IM disciplines support one another just as IM, in general, supports the organization as a whole. Combining these functions under one manager would break down the artificial barriers between information and information management that now exist. It would give that manager accountability for the IM function and authority over the assets that support that function.

V. RECOMMENDATION: Reorganize IM assets as defined in AR 25-1 and DA Pam 25-1-1 into the Division of Biometrics. Consider renaming that division the Information Management Division to more clearly identify its expanded role.
WRAIR
INFORMATION MANAGEMENT

- Consolidate all IMO functions into the Division of Biometrics
- Consider renaming the Division
  - Information Management & Biometric Support
BACKGROUND:

The traditional role of a pathology department in medical facilities generally falls into the category of providing support to other services. Pathology support is important in many aspects of both patient care and research. Unfortunately, this support is not always funded as a necessary expenditure. It is similar to other support services in that it should be recognized by management as a required cost center and funded as such. For example, in a research facility, if dollars are programmed toward specific research projects, management should also program, up front, a percentage of overhead or fixed costs to be charged to that project. That charge should be made off the top and the money allocated to run the individual support services. If funded this way, support activities such as pathology services would not be viewed as unnecessary expenses cutting into research dollars.

I. THEMES:

A. The WRAIR Pathology Division has what appears to be a misaligned research function assigned to it. This apparent misalignment may be interrelated with a chronic underfunding issue of support activities in general.

B. Some pathologists within the Division (Comparative Pathology Department) appear to be underutilized.
II. FINDINGS:

A. The Division of Pathology at WRAIR is a division of approximately sixty personnel. There are two assigned missions for the division: biotoxin (specifically Staph enterotoxin B (SEB)) research and pathology support service, including electron microscopy (EM) capability. The Division is subdivided into four departments. These are Comparative Pathology, Ultrastructural Studies, Experimental Pathology and Molecular Pathology. Ultrastructural Studies is primarily involved in EM pathology support and other EM capabilities. The Experimental Pathology and Molecular Pathology Departments conduct almost exclusively biotoxin research. Pathology support is assigned to the Comparative Pathology Department. This support does not extend to the overseas labs. However, some pathology service is provided to AFIP and WRAMC. Funding to support pathology services frequently flows through SEB channels.

B. SEB research has been going on for over twenty years in various locations within MRDALC including USAMRIID, USAMRICD and WRAIR. The project is currently working toward a 1996 suspense.

C. Some pathologists in the Division are partially underutilized and have the capacity to absorb additional pathology workload from in-house research divisions. An associated finding from interviews with other divisions is that some of the research divisions directly contract for pathology services with extramural private contractors reportedly because they perceive a faster turn around time and better service than with the in-house pathology support activity.
III. ISSUES:

A. Would SEB research be more appropriately aligned into one of the divisions with a primary research focus?

B. Would pathology assets be more appropriately utilized if support requests were channeled through the Pathology Division?

IV. DISCUSSION:

A. It is unclear as to how SEB research and numerous non-pathology personnel migrated to the Pathology Division. But it does seem clear, however, that currently this represents a mismatch of functions. While a senior pathologist should be well suited to oversee medical research in general, it seems to be an artificial functional separation to place a research project on one specific etiologic agent in an activity that is a primary pathology service. There was some indication that the two functions were historically commingled to accommodate personnel reassignments and individual personalities. Information also suggested that this alignment was perpetuated to facilitate funding support of the pathology assets.

B. Pathology support workload for research projects varies according to progress and timing of research protocols. During times of peak workloads, all individual requests cannot be supported in a timely manner. Conversely, there are times when pathology support needs are decreased. The fiscally responsible method by which support services with this type of cyclic workload should be staffed is to plan for the average workload.
If rapid turn-around time is critical, overload support could then be contracted out. During lulls, assets could be diverted to other projects or work where turn-around time is less critical. To maximize efficiency in contracting of overload support requests, a central review process should exist. This also leads to the question of economics of contracted verses in-house support services. While moving into a business planning environment, this question should be answered for multiple functional areas. Consideration should also be given to reviewing the possibility of sharing workload between pathology services at WRAIR and USAMRIID. If this is feasible, it could potentially modulate variations in workload.

V. RECOMMENDATIONS:

A. Realign the SEB research function of the Pathology Division into a research oriented division. After realignment, critically review the number of assets dedicated to and progress of the SEB project.

B. Incorporate the Pathology Division, as well as other necessary support services, into budget planning. Allocate money to support services accordingly. (This recommendation is contingent on downloading some of the accountability and authority for budget planning to the labs.)

C. Reassess policy for extramural verses in-house pathology support. Develop guidelines which either best utilize available pathology assets, consolidates NCR pathology support, or contracts the service extramurally.
Pathology Support

- Extant situation contract support purchased
- Better service
- Faster turn around

WRAIR

Dept.

Comparative Pathology Div

Mission:
Pathology support to existing research divisions
- Cyclical Workload
- No Central Planning
BACKGROUND: The military, in times of conflict or natural disaster, requires rapid response measures to protect soldiers from disease-vectors and nuisance-biting arthropod populations. History provides many examples of conflicts and battles, the outcomes of which have been influenced by diseases transmitted by insects/arthropods. Suppression of vectors of disease and nuisance biters through appropriate control/suppression measures is essential to reducing non-battle casualties and conservation of the fighting force.

I. THEME: Limited biosystematic studies on arthropods of medical importance are conducted at universities and NIH.

II. FINDINGS: The Walter Reed Biosystematics Unit (WRBU), located at the Smithsonian Institution in Washington, D.C., is a unique national resource, maintaining the largest world collection of medically important arthropods in the world. Historically, mosquito identification was managed by US Department of Agriculture (USDA) and the Smithsonian Institution. Responsibility was transferred from USDA to the Army in 1972 for identification of medically important arthropods. Physical space is provided by the Smithsonian Institution in turn for curation and identification of collection.
Accurate vector identification and a knowledge of vector biology are essential for arthropod-borne disease risk assessment and for development of appropriate strategies for vector suppression, arthropod-borne disease reduction, and vaccine and drug development. Through laboratory and field research, the WRBU provides vector identification, bionomic and behavioral data as an integral part of the arthropod/disease suppression program. Vector identification, by both morphological and molecular techniques, is a World Health Organization requirement for evaluation of basic epidemiology, chemotherapy and arthropod-borne disease vaccine field studies. However, this information is not fully utilized by vaccine testing groups at WRAIR, resulting in an incomplete knowledge of the vector and possible experimental inadequacy. The WRBU, Smithsonian Institution, provides a world wide consolidated data base that is not available anywhere else. A computer-based identification key that provides contemporary data on biology, ecology, epidemiology, insecticide and drug resistance, and countermeasures for vectors of disease, etc., is being developed to provide front-line users a tool for rapid assessment of medical threat in regions of conflict or natural disaster. This program has not received the support necessary for full implementation.

III. ISSUES:

A. Does the WRBU provide support for the soldier that is
conducted at other institutions?

B. Does the WRBU necessarily have to be a DoD activity?

C. Does the WRBU contain adequate staffing to fulfill the above requirements in an expeditious manner?

IV. DISCUSSION: The WRBU is the acknowledged repository of disease vector information and is the DoD's sole resource for accurate identification of vector species, for quickly providing information to the field, and for training military and civilian entomologists who study vector-borne diseases worldwide. Significantly, the changing U.S. military strategic perspective will increasingly place conventional forces in geographical areas to which they have never deployed and where vector-borne diseases are prevalent. The WRBU is the cornerstone of all efforts to identify and determine geographical distribution of vectors, determine the potential military impact and select vector/disease suppression strategies.

V. RECOMMENDATIONS: Maintain the WRBU and support program funding essential to its mission.
WRAIR BIOSYSTEMATICS UNIT

- Maintain the WRAIR Biosystematics Unit
TAB 14

ENCLOSURE 12
MERGING OF OFFICES OF ASSOCIATE DIRECTORS OF
RESEARCH MANAGEMENT AND RESEARCH MARKETING AND POLICY
DEVELOPMENT

BACKGROUND: With the current downsizing of the Department of Defense, severe economic constraints placed on the military community, and the concomitant need to eliminate redundancy throughout the government, it is extremely important that every effort be made to coordinate medical research and technology transfer between government and civilian organizations. The Associate Director for Research Marketing and Policy Development and the Associate Director for Research Management are heavily involved in such coordination, both individually and jointly. The position of Associate Director for Research Marketing and Policy Development was established primarily to facilitate technology transfer and to liaise with the local community and research, academic, government and commercial activities external to WRAIR. While much of the emphasis of the Office of the Associate Director for Research Management is internally oriented, some of the associate director’s major responsibilities require significant coordination with activities external to WRAIR (i.e. management of extramural research programs and management of the National Research Council postdoctoral program for USAMRDC).

I. THEME: Each of these directorates contributes immensely to WRAIR’s research mission. The functions of the directorates overlap, and both directorates have significant interaction with activities (government, academic, and commercial) external to
II. FINDINGS:

A. Although they operate as separate entities, the Associate Directors for Research Marketing and Policy Development and Research Management frequently coordinate on issues of interest to both directorates. The working relationship between the activities is professional and congenial.

B. Many of the duties and responsibilities listed in C. and D. below overlap. While no one person could perform all of these functions, the overlapping of the areas necessitates close interaction between the directorates.

C. The Office of Associate Director for Research Marketing and Policy Development, a GM 15 position, is a one-person operation with no clerical/support staff. The duties inherent in this position are numerous and include, but are not limited to, the following:

1) WRAIR Point of Contact for technology transfer
2) Liaison between WRAIR and local community government
3) Liaison between WRAIR and research organizations
4) Liaison between WRAIR and technical/commercial organizations
5) WRAIR research policy development responsibility
6) WRAIR quality assurance and quality control officer
7) Public Affairs Officer

D. The Office of Associate Director for Research Management is a three person operation with some part-time assistance. Duties
of the Associate Director include, but are not limited to, the following:

1) Acquisition Management Liaison Officer for extramural contracts (in excess of $70M)
2) Provides for continuing review and analysis of extramural research, both internal and external
3) Management of National Research Council Postdoctoral Program
4) Senior Executive Secretary of Human Use Review Committee
5) Quality assurance

E. Both Associate Directors are involved in the management and administration of WRAIR's In-house Laboratory Innovative Research (ILIR) Program.

F. The Associate Director of Research Management reports to the Associate Director for Research Marketing and Policy Development on matters related to quality assurance.

G. Both Associate Directors coordinate with universities and colleges, government agencies, and research and commercial activities.

H. The Associate Director for Research Marketing and Policy Development has no clerical assistance. He usually does his own typing and filing.

III. ISSUE: Would it be beneficial to combine the Directorates of Research Marketing and Policy Development and Research Management into one directorate?
IV. DISCUSSION: Consolidation of the two directorates would enhance WRAIR’s capability to facilitate research and technology transfer endeavors within WRAIR and between WRAIR and its numerous external associates. Consolidation would lead to streamlining technology transfer and quality assurance efforts through merging of the data bases in both directorates. Combining the activities would also support better utilization of clerical staff.

A sound relationship already exists between the activities. Integration of the two would encourage improved coordination and communication of external and internal research efforts and technology transfer.

V. RECOMMENDATION: Combine the offices of the Associate Director for Research Marketing and Policy Development and the Associate Director for Research Management into one Directorate/Division of Research Management.
Research Management & Research Marketing

WRAIR

Research Mgt.

Research Market & Policy Dvlp.

Merge the Research Management Office with Research Marketing & Policy Development Activity
BLOOD GROUP DETACHMENT, WRAIR

BACKGROUND: The military, in times of conflict or natural disaster, requires a reliable source of blood for transfusion from the front line all the way to hospital centers. Sterile blood substitutes that can be maintained on front lines would save lives. Extending the shelf life of whole blood would increase available blood sources during national emergencies or conflicts.

I. THEME: Blood research is being conducted at multiple locations throughout the country.

II. FINDINGS: The Blood Group Detachment (BGD), WRAIR, originally was stationed at LAIR. There was discussion to place the Army Blood Group with the Naval Blood Research Post in Boston. This is still an option. The objectives of the BGD is to produce artificial blood for front line troops and develop methods that will extend the life of whole blood from donor to recipient. Approximately 1/3 of the existing effort is spent on extending shelf life of blood and the remaining 2/3 of the effort is spent on producing blood substitutes. WRAIR receives about $1.5 million for blood substitute research while NIH receives about $5.0 million. Current manpower staffing consists of 15 personnel with a plan to expand the program to 23 personnel.
III. ISSUES:

A. Would the soldier be better served if blood research efforts were consolidated?

B. Does the research agency necessarily have to be a DoD activity?

IV. DISCUSSION: The BGD is inhibited from performing their research and meeting their objectives due to a lack of space and manpower. Their direct supervisor is the Overseas Operations Director since they are a CONUS detachment. Their studies do not overlap with those of the Hematology Department in the Department of Medicine. However, the Chief, Department of Hematology, works/collaborates closely with the BGD. It appears that NIH, the Navy and the Red Cross are funded to a much greater extent and are conducting much of the research on blood shelf life extension, blood substitutes, and studies to reduce bleeding in injured personnel. Increasing the blood shelf life is not a unique requirement of the military. The Red Cross is moving rapidly to comply with proposed FDA regulations and is ahead of the military in achieving these goals. FDA regulations, if imposed, will require that blood and blood substitutes be obtained/produced, transported, etc. in accordance with GLP standards. The BGD is underfunded and understaffed to perform its function.
V. RECOMMENDATIONS: Funding for specific criteria not unique to the military could be provided to other agencies, i.e., Navy, NIH and Red Cross, already conducting research on blood substitutes and blood shelf life extension. The Department of Hematology could absorb the assets of the BGD to increase emphasis on tropical diseases, the assets could be dispersed to other areas or they could be deleted. Funding and administration of military unique requirements could be provided by the Department of Hematology, WRAIR.
BLOOD GROUP DETACHMENT

WRAIR

Depty Dir

Div of Med

Dept of Hemat.

Asc Dir Ovs Labs

Blood Grp Det

- Merge BGD with Dept Hematology
- Eliminate blood substitute research
- Eliminate shelf life research
TAB 16

ENCLOSURE 12
WRAMC/MRDAL SUPPORT TO CIVILIAN PERSONNEL DIVISION

BACKGROUND: Walter Reed Army Medical Center’s Civilian Personnel Office (WRAMC CPO) is the servicing CPO for Walter Reed Army Institute of Research (WRAIR). This support is provided through an Interservice Support Agreement (ISSA) between WRAMC and WRAIR. The Civilian Personnel Division (CPD) at U.S. Army Medical Research, Development, Acquisition and Logistics Command (Provisional) (MRDAL) is considered WRAIR’s liaison CPO. WRAIR’s Personnel Division receives guidance, instructions, and taskings from both WRAMC CPO and MRDAL CPD.

I. THEME: Support received by WRAIR from the WRAMC CPO is inadequate. While support from the Civilian Personnel Division at MRDAL Command (Prov) is satisfactory, much of what is provided or requested duplicates what is provided or requested by WRAMC CPO (i.e. guidelines, instructions, taskings).

II. FINDINGS:

A. As a tenant activity, WRAIR has a formalized ISSA with WRAMC. Personnel services are included as support that WRAMC is to provide WRAIR. (It should be noted that although some contracting and finance and accounting services are provided WRAIR by WRAMC, the bulk of these services are received from activities at Ft. Detrick, MD).

B. WRAIR, as a tenant activity, receives a lower priority than WRAMC for services from WRAMC CPO. There is a definite perception that CPO personnel "cater to" the MEDCEN and that tenant
activities are serviced grudgingly. (This perception also exists with support received from the WRAMC Department of Public Works and the Finance and Accounting Office).

C. WRAIR's Personnel Division does not believe that WRAMC CPO has sufficient employees to adequately support the MEDCEN and the tenant units.

D. Major reasons that support from WRAMC CPO is considered inadequate include:

1. CPO guidance and instructions to WRAIR Personnel Division is frequently unclear and usually not provided in a timeframe that allows timely response on the part of WRAIR.

2. Most suspense actions from the CPO are "short-fused".

3. To get WRAMC CPO to complete an action requires constant vigilance and follow-up by the WRAIR Personnel Division.

4. Actions are rarely completed in a timely manner.

5. Many actions completed by the CPO are not done correctly and must be re-done and re-submitted by the WRAIR Personnel Division back to the CPO.

E. There is often duplication of effort between what is being provided/requested by MRDAL CPD and what is being provided/requested by WRAMC CPO. For example, MRDAL CPD will occasionally provide WRAIR with guidance or instructions and request that WRAIR contact servicing CPO should there be any questions. The same information will be provided by WRAMC CPO.

III. ISSUE:

A. What is the best way to obtain improved civilian personnel
services for WRAIR employees?

B. Does WRAIR Personnel Division require both a servicing and a liaison CPO when their respective support actions result in redundancy and additional workloads for WRAIR Civilian Personnel Division employees?

IV. DISCUSSION: For the last several years, support from the servicing CPO has been inadequate and untimely, while support from the liaison CPO is adequate but frequently duplicates the servicing activity’s efforts. The servicing CPO’s inability to provide effective and timely support has resulted in delayed and inaccurate civilian personnel actions for WRAIR employees. The redundancies in the system have unnecessarily increased the workload for WRAIR’s Personnel Division.

V. RECOMMENDATIONS:

A. Change WRAIR’s servicing CPO to Ft. Detrick. Although this may occasionally be inconvenient, it is not anticipated that WRAMC CPO can or will improve services to WRAIR.

B. If the recommendation in A above is not possible, the MRDAL Commander should give formal notification to the WRAMC Installation Commander that CPO services to WRAIR are substandard and require correction by a designated date.
FINDINGS

FINDING: The Executive Officer serves as the Information Management Officer for WRAIR. This duty should be reassigned to the Director of the Division of Biometrics.

FINDING: The Acting Director of Division of Medical Audio Visual Services currently reports to the Associate Director for Research Marketing and Policy Development. Services of this division are considered information management activities and, as such, should be realigned under the Division of Biometrics.

FINDING: The Director of the Library reports to the Executive Officer. Library services are considered information management activities and, as such, should be realigned under the Division of Biometrics.
INSTALLATION SUPPORT

USAMRDALC

CPD

WRAIR

CPD

WRAMC

POST
CPO
TAB 17

ENCLOSURE 12
BACKGROUND: The Walter Reed Army Institute of Research (WRAIR) has undertaken important initiatives in vaccine research against infectious disease threats to the Army. In order to produce vaccines for clinical evaluation, WRAIR invested considerable resources in establishing a state of the art vaccine pilot production facility at the Forest Glen annex. All efforts have been made to ensure that this new facility rigorously complies with standards of good laboratory practice required by the FDA. The new facility is designed to support the activities of the new WRAIR, and will be in close proximity to it. At issue is whether the WRAIR production facility would be most efficiently operated and productive as a government owned, contractor operated (GOCO) enterprise, or whether control and potential earnings should be retained by the Army.

I. THEME: The vaccine pilot production facility provides critical support for vaccine development efforts by WRAIR. Whether the facility can recoup operating costs and ensure continued and successful operation are the driving concerns for advocating transfer of production tasking to a contractor.

II. FINDINGS:

A. WRAIR is internationally recognized as a source for developing and testing vaccines. Adequate production of vaccine
candidates to support these activities is critical.

B. Past methods of producing vaccine candidates required government contract with a sole contractor. This system was time-consuming and costly.

C. Production and submission of a vaccine for testing under FDA regulations is a cumbersome process, which requires expensive investment. It is likely that restrictions in production and testing of vaccine candidates will be the bottleneck in getting products to the soldier.

D. Streamlining of the vaccine development and production process will be required in times of scarce resources. Coordinating development and production offers the possibility of better returns on investment, as achieved in industry.

E. Arguments in favor of a GOCO facility rely on savings on costs through contractor coordination of vaccine production. Contractors might also increase the efficiency of scheduling vaccines for production. Contractor operation is a fixed cost.

F. The WRAIR production facility may lose money in developing products. Alternatively, the facility could make money, especially if it saves on outside contractor production costs, accelerates rates of vaccine production, and supports the testing of vaccine products. Also, several companies and other government agencies have expressed interest in purchasing production slots at
III. ISSUE: Would the missions of DCD&I, WRAIR, and the USAMRALDC be better served if a dedicated vaccine pilot production facility were run and operated by the Army and not by a contractor?

IV. DISCUSSION:

Whether a government facility is run by the USAMRALDC or a contractor may seem trivial, but the findings would indicate otherwise. WRAIR occupies a unique niche in developing vaccines for disease threats which have been largely ignored by industry and academia. In doing so, WRAIR has cultivated expertise in producing and testing vaccine products.

Having development and production of vaccine candidates at WRAIR makes intuitive sense for streamlining the process, avoiding the costs and additional delays in shipping, scheduling, and training for production at an outside contractor facility. Moreover, the new WRAIR facility accommodates the different vaccine designs being developed at WRAIR.

The pilot production facility is already in operation, with supervision on site by experienced personnel. These key personnel are already committed to the effort, and their expertise is retained and utilized in the process.

Use of GOCO for the facility may be adequate for coordinating production, avoids extra paper work, and may save costs. However, adding a contractor will probably not add to the efficient
operation of the production facility. Nor will it contribute significantly to savings from scheduling, production expertise, or coordination with WRAIR development. It may even decrease efficiency, because the contractor may be unfamiliar with the vaccine products, their priority, or similar designed vaccine products in development.

Contractors will always be a cost, regardless of whether the facility makes or loses money. If the production facility loses money, it is unlikely that inefficient management will be the sole cause. More likely, failures in production or selection of vaccine candidates will be responsible for deficits. These are issues which are decided at WRAIR, and not at the production facility.

V. RECOMMENDATIONS:

The USAMRDALC should support the operation of the vaccine pilot production facility as a USAMRDALC asset under the control of WRAIR. It supports the WRAIR mission by committing resources in order to maintain development and streamline production of innovative vaccines.

While start-up costs are significant, the production facility is on-line. Arrangements for determining order and precedence of vaccine production are already in place at the facility. It makes little sense in an era of scarce resources to substitute purchased management for experienced and committed supervision.

In lieu of an inside contractor, there should be greater accountability of the WRAIR pilot production facility to the
USAMRDALC. There should be a master plan available to the AMEDD for the direction of efforts towards vaccine products for the soldier.
VACCINE PILOT PRODUCTION FACILITY

- Run production facility as an Army operated activity
TAB 18

ENCLOSURE 12
MRDALC APPLIED RESEARCH LABORATORIES

US ARMY AEROMEDICAL RESEARCH LABORATORY (USAARL)

US ARMY RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE (USARIEM)

BACKGROUND:

Unlike WRAIR, USAMRIID, and USARICD, which perform basic level bench research, USAARL and USARIEM perform applied research directed toward the aviation community and the soldier. USAARL focuses on issues such as the development of contact lenses for Apache helicopter pilots, night vision goggles, helicopter crash injury research, aviator flight performance, helmet impact and retention testing, and air crew protection. USARIEM performs research directed toward the soldier, his clothing and equipment, and their operability in various environmental conditions. This applied research mission is fundamentally different than that of basic research.

I. THEME: The applied research laboratories - USAARL and USARIEM - perform critical work for the Army and the AMEDD. They are fundamentally different from the three labs that perform basic research with regards to customer, STO development, and interaction with the AMEDD combat developer. This difference results in competition with the three basic research labs for limited research dollars.

II. FINDINGS:

A. The primary customer of USAARL and USARIEM is the combat
soldier and therefore the CINCs. The primary customer of the three basic research labs is the AMEDD combat development community.

B. The Science and Technology Objectives (STOs) for USAARL and USARIEM are derived from the aviation combat developer and other non-AMEDD combat developers based on the requirements of their customers. They have little involvement with the AMEDD combat developer. The STOs of the three basic research labs are derived from the Threat List or the AMEDD combat developer. In some instances, applied research could be considered test and evaluation work or occupational medicine.

C. When MRDALC had ample resources for research, no conflict existed since each lab always received adequate funding each year. In this era of declining resources, conflict has arisen as to MRDALC priorities for these resources. As an example, USAARL was cut 40% of their annual budget and 40% of their civilian staff in one year causing great disruption to their operations and subsequently low morale amongst remaining personnel.

D. Resources are directly linked to STO development. STOs derived from the Threat List are very clear and easily funded whereas USAARL and USARIEM are having to obtain STOs derived from non-AMEDD combat developers. Since STOs were not part of the R&D community until two years ago, this has put the applied research labs behind the funding power curve.

III. ISSUE: Should the AMEDD continue to fully support and fund these applied research missions or should the missions be transferred to another organization?
IV. DISCUSSION:

The applied research missions of USAARL and USARIEM are critically important to the Army. What is the cost benefit analysis going to show when a helicopter crashes and soldiers are killed because the pilot couldn't see properly at night? The current annual budget of USAARL ($4.6 million) is very small and does not even pay for a helicopter. This is a small investment for our soldiers.

The AMEDD is best qualified to perform these missions as it is the only organization that has the appropriate disciplines to accomplish the underlying work. To transfer the mission (and work) would be to dilute it further.

V. RECOMMENDATION: The AMEDD and the MRDALC should retain these missions and they should be fully funded once the appropriate STOs are developed. STOs, for the applied area, must focus on a different customer base, e.g., the soldier and the CINCs.
PREVENTION
"To bar or preclude the occurrence of"

USAMRDAL

Basic Research

Applied Research

AEHA

- USAMRIID
- USAMRICD
- WRAIR

- USARIEM
- USAARL

Occupational

Industrial Hygiene

Environment)

Science
TAB 19

ENCLOSURE 12
The Institute of Surgical Research is located at Ft. Sam Houston and is commonly referred to as the Burn Center. It is the only military tertiary burn center supporting all three Services. This organization is unique within the USAMRDL in that it is the only element which has a direct patient care mission as well as a research mission. The patient care portion of the ISR is located on the fourth floor of the main Brooke Army Medical Center and the Program 8 Medical dollars to support this mission are provided by BAMC. The research mission is supported by Program 6 Research dollars which are budgeted through USAMRDL. As the patient care and research missions are co-dependent, there is an almost invisible line across which both colors of dollars flow, i.e. all nursing staff salaries are funded with P6 dollars.

ISR is the recognized national leader in the treatment of burn patients. Although the research performed at ISR is directed toward the treatment of burns, the advances achieved are applicable to the treatment of all trauma victims. The Institute has 99 teaching memorandums of understanding and provides for International fellowships. There is no research performed at the Institute that does not benefit an injured soldier and there is a focus on combat specific problems as burns are one of the most common wartime injuries. Although the focus is on the soldier, approximately forty percent of the patients treated at
ISR are civilian. These patients are Secretary of the Army designees.

I. THEMES:

A. There appears to be a general feeling that BAMC believes that ISR is just another Medical Center Service.

B. Treatment of burn patients is very specialized critical care which requires a very stable workforce.

C. Readiness is the first concern. ISR must have the capability to deploy teams wherever and whenever necessary.

II. FINDINGS:

A. ISR can recruit doctors, but has great difficulty keeping them. Once trained in this highly specialized field, they are very marketable and command extraordinarily high salaries at civilian facilities.

B. The advances achieved by ISR are well documented and undeniable, however, there is a perception that the Army does not recognize the value of ISR until a mass casualty occurs.

C. ISR has no PAO of their own and must depend on BAMC for that support, consequently, the publicity received usually is designed to shed a good light on BAMC rather than ISR.

D. There is no contract in place to support the readiness mission, i.e., when a mass casualty or deployment occurs, there is no mechanism to bring specifically trained individuals into ISR immediately.

E. Much support is provided by BAMC and occasionally, decisions are made which
affect ISR without consulting ISR staff.

F. ISR has been commanded by Dr. Pruitt for over twenty-five years. There is fear within the AMEDD is no heir apparent.

G. Burn care is very labor intensive (approximately 150 professional staff on the ward) and very costly. ISR provides care on the three stage ward (acute, step-down, convalescent) at a cost of $2,700 a day per patient. This is considerably less than the same care in a civilian facility.

H. Currently the Secretary of the Army has the authority to designate which civilian patients can be transferred to ISR if they are more than 150 miles from BAMC. This causes delays which can be critical for some patients. The Secretary of the Army has never failed to approve any request made by ISR.

I. The inability of ISR to control all dollars creates some difficulties.

J. The Air Force, in response to a GAO complaint no longer transports civilian patients prior to formal Secretary of the Army approval; a departure from a long standing traditional agreement.

III. ISSUES:

A. What can be done to keep highly trained burn specialists in the Army?

B. How should ISR be funded?

C. How can ISR best fulfill its readiness mission?

D. Is there a way to change the relationship of ISR and BAMC so that they are more mutually supportive?
IV. DISCUSSION:

As the AMEDD continues to adjust to both internal and external economic factors affecting the delivery of health care services, it is absolutely critical that the readiness mission take priority. The proper funding and staffing of ISR appears to be critical if the Army continues to expect the best quality care for injured soldiers. During the most recent mass casualty, ISR deployed teams to transport patients and still was able to expand the ward to accept all the injured soldiers. Some difficulty was encountered with bringing additional staff on board as there was no personal services contract in place which designated nurses by name. The Chief Nurse spent an inordinate amount of time tracking down nurses who had past experience with ISR and hooking them up with an agency. As a result, nursing staff were working very long shifts in a highly stressful critical care environment until additional civilian nurses became available.

The relationship of ISR to BAMC appeared to be a sore subject with most ISR personnel. There is a definite feeling that BAMC likes to take the credit whenever there is good press, but is slow to support ISR when help is needed. Most staff felt as though BAMC felt that they owned ISR and were treated as though they are just another service. The Chief Nurse reported that on one occasion, the BAMC Chief Nurse scheduled a mock JCAHO inspection on her ward.

The inability of ISR physicians to make a decision to transport a civilian patient without Secretary of the Army approval was disconcerting to Dr. Pruitt, particularly in light of the fact that ISR had never failed to receive approval in the past. His concern is based upon the fact that it is critical to get patients into a burn center as quickly as possible and the approval process is an unnecessary waste of time that could potentially be life threatening to the
patient.

ISR is the third largest lab within the USAMRDAL and recently it has taken some significant cuts in their staff. The Executive Officer expressed concern that they have no safety officer specifically dedicated to perform the safety mission. Currently one of the biochemists is dual-hatted as the Safety Officer. Additionally, the Medical Maintenance NCO was reduced in grade from a 35U to a 35G (PFC right out of school). With the amount of sophisticated medical equipment required to support patient care at ISR, he feels that the assignment of a Warrant Officer or very senior and experienced NCO is justified.

Stability of staffing is a major concern of the Chief Nurse and physicians at ISR. Because of the specialized, critical care nature of the work, it takes a nurse a full year to be well trained. The current system rotates nurses too quickly and that disrupts the ward more than necessary. Stabilization of both enlisted and officer nursing personnel and specialists for a period of at least 5 years would greatly enhance the working of the ward.

V. RECOMMENDATIONS:

A. Recommend that USAMRDAL work with PERSCOM to establish longer assignments to ISR for all military nursing and specialist personnel. Consistent with staff recommendations, tours should be no shorter than 5 years.

B. Recommend that USAMRDAL realign military personnel internally or request more military nursing authorizations from the USAMEDCOM in order to ensure that nursing is staffed with as many military personnel as possible. This is critical to support ISR when deployment occurs or transport of mass casualties is necessary.

C. Recommend that ISR work with BAMC to emplace a contract that will allow specific
individuals to augment the ISR ward staff in the event of mass casualties or deployments.

D. Recommend ISR identify and begin grooming an heir apparent to Dr. Pruitt.

E. Recommend that USAMRDAL work with the MEDCOM on the P6, P8 funding streams. If ISR becomes totally self-sufficient, perhaps the relationship with BAMC could improve. Authorize ISR a "small", less than $100,000.00, P8 funding stream to reduce reliance on BAMC.

F. Recommend that funding and authorizations be made available to ISR for a senior Safety Manager and an experienced PAO. Additionally recommend that USAMRDAL relook the Medical Maintenance position.

G. Recommend that USAMRDAL aggressively pursue approval authority for Secretary of the Army designees. This should be delegated to the ISR Commander.
TAB 20

ENCLOSURE 12
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY

BACKGROUND:

The U.S. Army Medical Research Acquisition Activity (USAMRAA) has the mission of providing contracting support for U.S. Army Medical Research, Development, Acquisition and Logistics Command's (USAMRDALC) (Provisional) extramural research and development program, Fort Detrick Garrison, DoD tenants on Fort Detrick, Walter Reed Army Institute of Research (WRAIR) and its OCONUS detachments (laboratories), selected approved programs/projects, and support of Foreign Military Sales.

THEME:

The USAMRAA is one of the few USAMRDALC (Prov) activities that possesses the potential for increasing its profitability through judicious marketing of its reimbursable activities. Current staffing levels also offer the potential for achieving further economies.

FINDINGS:

1. The USAMRAA currently has 89 authorizations and is scheduled to downsize to 69 by the end of FY 99.

2. The USAMRAA's budget is approximately $4,875,000 plus approximately $42,000 in reimbursables.

3. The USAMRAA has historically had a military commander, but has recently converted that position to a civilian director. The new director has been on the job for approximately five months. During the first week of May 1994, USAMRAA shut down for an off-post, facilitated strategic planning conference.

4. The USAMRAA is made up of the following organizational entities:
   a. Director, GM-15
   b. Deputy Director, 0-4, who also serves as the Chief of the Policy and Compliance Office
   c. Procurement Administration Support Office
   d. Research and Development Contracts Division
   e. Installation Procurement Support Division

5. Most administrative support (including logistics, resource management, information management, personnel, and operations and security) is provided by the USAMRDALC (Prov) headquarters.
6. A number of years ago, the Fort Detrick Garrison gave 20 authorizations to USAMRAA to provide contracting support for the Garrison and its tenants.

7. Most of the subordinate laboratories of the USAMRDALC (Prov) get their routine contracting support from the local installations. This service is provided as part of BASOPS support and the laboratories are not charged for it. All of WRAIR's contracting support is provided by USAMRAA; U.S. Army Research Institute of Environmental Medicine (USARIEM) and U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) get a significant portion, but not all of their contracting service from USAMRAA. All Extramural Research contracts are handled by USAMRAA.

ISSUES:

1. Does USAMRAA need a deputy? This appears to be a redundant position; the duties of which could be handled by one of the division chiefs.

2. Will the scheduled implementation of credit card procedures eliminate any work? Will any spaces be saved when the imprest fund is transferred back to post or eliminated?

3. The Policy and Compliance Office appears to be primarily checking work before it goes to the Director for signature. Could the division chiefs do this?

RECOMMENDATIONS:

1. Eliminate the deputy position. This position appears to have little added value.

2. Eliminate Policy and Compliance Office. Checking should be completed at the divisions before being sent to the Director for signature.

3. Examine possible synergistic effect of putting Principal Assistant Responsible for Contracting (PARC) assets at USAMRAA. Dual hat the Director, USAMRAA as the PARC.

4. Examine all aspects of automation and bring USAMRAA up to the state of art on automation.

5. Pursue reimbursables aggressively and charge a fee up to what the market will bear. For example, 5 percent of the 200 million dollar breast cancer job would be 10 million dollars -- two and one half times USAMRAA's current budget.
DISCUSSION:

1. While USAMRAA appears to be providing outstanding contracting support (e.g., WRAIR prefers to get its support from USAMRAA rather than the Walter Reed Army Medical Center (WRAMC) contracting activity), there nonetheless appears to be some redundant work on-going within the activity. For example, the policy and compliance element appears to be checking the work of the other divisions before it is sent to the Director. In a period of constrained resources, can the Command still afford this added type of work. At the very least it is inconsistent with other Medical Command (MEDCOM) proposals which have reduced or eliminated similar checking activities.

2. The work of the deputy also appears to be duplicative and of marginal value added. Perhaps one of the division chiefs could be deputized as situations demand. Along the same lines, it appears that some additional synergies could be obtained by dual-hatting the PARC as the director of the contracting activity. Is this not the current situation in the MEDCOM?

3. Finally, USAMRAA should aggressively pursue additional reimbursable business. Pursuit of such business builds naturally on one of the strengths of the activity and cost savings (profits) could be used to offset steadily dwindling budgets.
USAMRAA MANIFEST ORGANIZATION

CDR
USAMRAA

Deputy CDR
Chief of Policy / Compliance

Research & Development Contracts Div.
Installation Procurement Support Div.
Procurement Administration Support Div.
USAMRAA REQUISITE ORGANIZATION

PARC → USAMRAA

- Dual Hat CDR as the PARC

Deputy CDR
Chief of Policy / Compliance

- Eliminate Deputy & Chief of Policy / Compliance

Research & Development Contracts Div.
Installation Procurement Support Div.
Procurement Administration Support Div.
TAB 21

ENCLOSURE 12
US ARMY MEDICAL RESEARCH, DEVELOPMENT, ACQUISITION, AND LOGISTICS COMMAND

US ARMY MEDICAL MATERIEL DEVELOPMENT ACTIVITY

BACKGROUND:

The US Army Medical Materiel Development Activity (USAMMDA) manages the execution of the development component of the AMEDD’s materiel developer responsibilities in order to achieve Department of the Army and joint service materiel system objectives. USAMMDA manages the development of critical medical materiel (vaccines, immunoglobulins, drugs, and hardware) that supports the soldier, sailor, airman, and marine; it is DOD’s principal developer of medical materiel.

USAMMDA is governed by DODD 5000.1, DODI 5000.2, and DOD 5000.2-M. This regulatory guidance affects all defense acquisition. Direction is provided for specific management phases and decision points. Programs and program documentation have been streamlined and standardized. In addition, a greater emphasis has been placed on user’s needs and defining and meeting cost, schedule, and performance objectives.

The continual evolution of roles and mission among USAMMDA, some USAMRDALC HQ staff, USAMMA, RADs, and the laboratories has strained working relationships. These working relationships will continue to be strained until resolution is reached on control of resources, planning of product transition, and several other issues. Many of the findings reported in the previous organizational analysis effort (see enclosure 1) persist.
I. THEME:

The USAMMDA development mission and functions must be better understood and functionally integrated into the full spectrum of the MRDALC mission and execution.

II. FINDINGS:

A. Many individuals feel that there is overlap work between USAMMA and USAMMDA.

B. Recognizing the need for a system of checks and balances, many laboratory commanders feel that USAMMDA performs its regulatory compliance role in an adversarial manner.

C. There are significant differences between the manifest and extant organizations of USAMMDA (see figure 1).

III. ISSUES:

A. USAMMA and USAMMDA both feel that each organization sometimes does overlapping work with the other.

B. Non-development items and product improvement programs are in a continual state of confusion as to whether USAMMA or USAMMDA has proponency.

C. Many feel the potential source of overlap with USAMMDA occurs within the Applied Medical Systems Project Management Division.

D. Many outside USAMMDA felt that they performed their compliance monitoring role in a particularly adversarial manner.

E. The laboratories viewed the incremental funding by
USAMMDA as non-value added and felt that there were other ways to leverage the labs to adhere to established protocols.

F. Significant differences exist between the extant and manifest organizations (see Figure 1).

IV. DISCUSSION:

A. Many interviewees felt that there was significant overlap between the work of USAMMA and USAMMDA, particularly in the area of non-developmental items and product improvement programs. Others felt that USAMMA modified requirements after handoff from USAMMDA; therefore, doing developmental work. Another individual reported that there are duplicate logistics support packages developed by both USAMMA and USAMMDA. Some reported that USAMMA does market investigations after USAMMDA has already performed the searches.

The overlap between USAMMA and USAMMDA could be a vestige of the two commands reporting to two different individuals. As USAMMA reorganizes under the umbrella of MRDALC, the commands should explore the potential synergies associated with combining overlapping functions. In particular, the Applied Medical Systems Project Management Division of USAMMDA is a potential source of overlap with USAMMA work.

B. The laboratory compliance role of USAMMDA is perceived as being necessary and an "honest broker" role of checks and balances. However, many of the laboratory personnel felt that this role is carried out by the entire organization in an adversarial manner with little regard for customer focus. The
need for a regulatory function is well-recognized by the laboratories, but the boundaries of this function are often vaguely defined.

C. The laboratories viewed the incremental funding from USAMMDA as contributing to the lack of customer focus. Although the purpose of incremental funding was recognized by the laboratories, many reported that bench research could not be turned on and off like a faucet. The amount of time and effort required to set up protocols is significant. Civilian salaries are also an issue with incremental funding. It would appear prudent to explore other ways to leverage the labs to adhere to established protocols.

D. The two main differences between the extant and manifest organizations lie in the Project Management Support Division (PMSD) and the Deputy Commander’s office. Although the PMSD is listed as a separate division in the manifest organization, results of interviews indicated that extant the resources management branch and information branch reported to the commander.

Most division chiefs stated that they reported directly to the Commander; however, the manifest organization shows division chiefs working for the Commander through the Deputy Commander. The QA office also indicated it worked directly for the Commander, but the manifest organization shows it reporting to the Deputy Commander.
V. RECOMMENDATIONS:

A. Explore the potential synergies of combining overlapping functions with USAMMA, especially as they apply to the Applied Medical Systems Project Management Division.

B. Refocus the regulatory compliance and quality assurance functions of USAMMA on the customers.

C. Explore ways other than incremental funding to leverage the laboratories to follow established protocols.

D. Analyze the organization to resolve differences between the extant and manifest organizations.
USAMMMDA
Funding Stream

Resourcing

Trickle down process

Incremental funding

Bench Scientist

- Research protocols = Significant start up time
- Scientists are hired by the year not by the month.

Replace Incremental Funding
TAB 22

ENCLOSURE 12
NON-DEVELOPMENTAL ITEMS (NDI)

Background:

The Department of Defense Acquisition Instruction, DoD 5000, calls for the material developer to begin with Milestone 0 and to carry the product through advanced development utilizing 6.3B and 6.4 money. The product is then turned over to the acquisition organization for procurement. In the Medical Research Development Acquisition and Logistics Command (MRDACL), the material developer is the US Army Medical Material Development Agency (USAMMDA) and the acquisition/logistician is the US Army Medical Materiel Agency (USAMMA). For biologicals and pharmaceutical products developed by the MRDACL, the need for USAMMDA is very clear and uncontested. USAMMDA is responsible for interacting with the Food and Drug Administration (FDA) to submit to the FDA all complex precise documentation to take the product to the point of USAMMA being able to legally procure and distribute the item. However, for equipment-like items that do not have to go through the FDA and can be purchased "off the shelf" from a commercial manufacturer the main issue is the hardening and ruggedizing the items for combat. Both USAMMDA or USAMMA are developing these so-called non-developmental items (NDI) even though program management was transferred to USAMMA.

I. THEME:

USAMMDA is the AMEDD's material developer and engages in a wide range of developmental work as required by DoD 5000. USAMMA is the AMEDD's logistician and engages in acquisition and procurement work as required by DoD 5000. Both are extremely important to accomplishing the AMEDD's mission.
II. FINDINGS:

A. The use of NDIs is rapidly increasing in DoD to save development money and shorten the time for a product to reach the soldier. This trend can be expected to continue.

B. As part of the recommendations of the BRAC 93? commission, the US Army Biomedical Research and Development Laboratory (USABRDL) was disestablished with its functions moved to other DoD laboratories. To assist with its NDI role, USAMMDA picked up seven (7) individuals from the USABRDL fabrication and prototyping shop and six (6) people from the USABRDL engineering and testing section.

C. The USAMMA DEPMEDS program office was staffed with 10 people working on DEPMEDS fielding. As fielding is almost complete, nine (9) of these individuals were utilized to form part of a new directorate called the Materiel Acquisition Directorate. This new directorate lists non-developmental item advocate for TSG as one of its mission.

D. Overlapping responsibilities currently exist between USAMMDA and USAMMA regarding NDIs.

This results in inefficiencies as to the use of scarce manpower.

III. ISSUES:

A. Would the MRDALC mission for non-developmental items be better served by consolidating this function at USAMMA?

B. Could manpower and fiscal efficiencies be made by consolidating the NDI mission in one organization?

IV. DISCUSSION:

The market analysis is the first task that must be performed when deciding if a requirement can be satisfied by a NDI. If the market analysis shows a NDI that can satisfy the requirement, then the item must be hardened to make it suitable for use in a combat situation. The evaluation for hardening can
be performed by having the NDI contract written to include field testing. The USAMMA Materiel Acquisition Directorate utilizes contracts to evaluate an item for hardening whereas USAMMDA utilizes the 13 people from USABRDL to perform the hardening evaluation.

USAMMDA’s expertise seems to lie in its ability to interact with the FDA for biologicals and pharmaceuticals. The human testing phases with the required Investigational New Drug Application and New Drug Application is very time consuming and extremely complex. Regulatory compliance with all FDA rules is mandatory and must be followed exactly.

Consolidating the NDI mission at USAMMA follows the transfer of the mission to them. By having USAMMDA divest itself of NDI work would enable them to focus their efforts on biologicals and pharmaceuticals and achieve manpower savings and command efficiencies.

V. RECOMMENDATIONS:

A. USAMMDA should divest itself of NDI work which would enable the command to have one point of contact. All NDI work would then be the responsibility of only one office in the command - USAMMA.

B. Transfer or elimination of the Industrial Services Branch (prototyping) and the Test and Engineering Branch (testing) should be considered.
TAB 23

ENCLOSURE 12
US ARMY MEDICAL RESEARCH, DEVELOPMENT, ACQUISITION, AND LOGISTICS COMMAND

US ARMY MEDICAL MATERIEL DEVELOPMENT ACTIVITY

BACKGROUND:

The US Army Medical Materiel Development Activity (USAMMDA) manages the execution of the development component of the AMEDD's materiel developer responsibilities in order to achieve Department of the Army and joint service materiel system objectives. USAMMDA manages the development of critical medical materiel (vaccines, immunoglobulins, drugs, and hardware) that supports the soldier, sailor, airman, and marine; it is DOD's principal developer of medical materiel.

USAMMDA is governed by DODD 5000.1, DODI 5000.2, and DOD 5000.2-M. This regulatory guidance affects all defense acquisition. Direction is provided for specific management phases and decision points. Programs and program documentation have been streamlined and standardized. In addition, a greater emphasis has been placed on user's needs and defining and meeting cost, schedule, and performance objectives.

The continual evolution of roles and mission among USAMMDA, some USAMRDLALC HQ staff, USAMMA, RADs, and the laboratories has strained working relationships. These working relationships will continue to be strained until resolution is reached on control of resources, planning of product transition, and several other issues. Many of the findings reported in the previous organizational analysis effort (see enclosure 1) persist.
I. THEME:

The USAMMDA development mission and functions must be better understood and functionally integrated into the full spectrum of the MRDALC mission and execution.

II. FINDINGS:

A. Many individuals feel that there is overlap work between USAMMA and USAMMDA.

B. Recognizing the need for a system of checks and balances, many laboratory commanders feel that USAMMDA performs its regulatory compliance role in an adversarial manner.

C. There are significant differences between the manifest and extant organizations of USAMMDA (see figure 1).

III. ISSUES:

A. USAMMA and USAMMDA both feel that each organization sometimes does overlapping work with the other.

B. Non-developmental items and product improvement programs are in a continual state of confusion as to whether USAMMA or USAMMDA has proponency.

C. Many feel the potential source of overlap with USAMMDA occurs within the Applied Medical Systems Project Management Division.

D. Many outside USAMMDA felt that they performed their compliance monitoring role in a particularly adversarial manner.

E. The laboratories viewed the incremental funding by USAMMDA as non-value added and felt that there were other ways to
leverage the labs to adhere to established protocols.

F. Significant differences exist between the extant and manifest organizations (see Figure 1).

IV. DISCUSSION:

A. Many interviewees felt that there was significant overlap between the work of USAMMA and USAMMDA, particularly in the area of non-developmental items and product improvement programs. Others felt that USAMMA modified requirements after handoff from USAMMDA; therefore, doing developmental work. Another individual reported that there are duplicate logistics support packages developed by both USAMMA and USAMMDA. Some reported that USAMMA does market investigations after USAMMDA has already performed the searches.

The overlap between USAMMA and USAMMDA could be a vestige of the two commands reporting to two different individuals. As USAMMA reorganizes under the umbrella of MRDACL, the commands should explore the potential synergies associated with combining overlapping functions. In particular, the Applied Medical Systems Project Management Division of USAMMDA is a potential source of overlap with USAMMA work.

B. The laboratory compliance role of USAMMDA is perceived as being necessary and an "honest broker" role of checks and balances. However, many of the laboratory personnel felt that this role is carried out by the entire organization in an adversarial manner with little regard for customer focus. The need for a regulatory function is well-recognized by the
laboratories, but the boundaries of this function are often vaguely defined.

C. The laboratories viewed the incremental funding from USAMMDA as contributing to the lack of customer focus. Although the purpose of incremental funding was recognized by the laboratories, many reported that bench research could not be turned on and off like a faucet. The amount of time and effort required to set up protocols is significant. Civilian salaries are also an issue with incremental funding. It would appear prudent to explore other ways to leverage the labs to adhere to established protocols.

D. The two main differences between the extant and manifest organizations lie in the Project Management Support Division (PMSD) and the Deputy Commander’s office. Although the PMSD is listed as a separate division in the manifest organization, results of interviews indicated that extantly the resources management branch and information branch reported to the commander.

Most division chiefs stated that they reported directly to the Commander; however, the manifest organization shows division chiefs working for the Commander through the Deputy Commander. The QA office also indicated it worked directly for the Commander, but the manifest organization shows it reporting to the Deputy Commander.

V. RECOMMENDATIONS:

A. Explore the potential synergies of combining overlapping
functions with USAMMA, especially as they apply to the Applied Medical Systems Project Management Division.

B. Refocus the regulatory compliance and quality assurance functions of USAMMA on the customers.

C. Explore ways other than incremental funding to leverage the laboratories to follow established protocols.

D. Analyze the organization to resolve differences between the extant and manifest organizations.
II. FINDINGS:

A. The USAMMDA perceives that they should have control of 6.3A (non-system Advanced Development monies). This resource category is primarily directed at demonstrating the feasibility of materiel solutions and the validity of nonmateriel solutions. Pre-product candidates are reviewed and considered as an element of the Medical Mission Area Materiel Plan (MedMAMP). Category 6.3A provides information that reduces uncertainties and technical risk, avoids costly false starts in formal development programs, and ensures timely insertion of the most responsive technology into developmental systems.

B. USAMMDA currently picks up responsibility at the 6.3B (Systems Advanced Development) point. The 6.3B point has been identified as a choke point by laboratory scientists who feel that potential products have often not been in the technology base (<6.3B) long enough.

C. Transition of products from the technology base (<6.3B) is identified as a "pull" by Research Area Directors (RADs) who generally feel that such pull places too much authority at USAMMDA.

D. The Medical Systems Review Committee (MSRC) process is reported by many respondents to be broken.

E. The Task or Technical Area Manager (TAM) process is also reportedly broken.

F. The management of the "Milestone 0" decision point (marks the formal transition into the concept exploration and definition phase of the acquisition program) is felt to be a USAMMDA lead.
G. Transition of current operations into compliance with the new DoD Directive 5000 series is perceived to be a problem between the USAMMDA and the respective RAD.

H. The role of USAMMDA as the only DoD Materiel Developer is not fully defined nor acknowledged by the DoD community.

I. There is no method for a product improvement program to be implemented given the current disparate roles of USAMMDA and U.S. Army Medical Materiel Acquisition Agency (USAMMA).

III. Issues:

A. Is the Medical Systems Review Committee the proper vehicle for determining the transition point for a "product"?

B. Does the current draft USAMRDC Regulation 70-xx, "Medical Materiel System Development Program," appropriately address findings?

C. Should USAMMDA manage 6.3A dollars?

D. Are the laboratories poor performers in relation to cost schedules?

E. What should be changed (if anything) to formalize USAMMDA's role as the DoD's Medical Materiel Developer?

IV. Discussion.

The medical research and development process yields both information and materiel products. Information products generally transition directly from the science and technology base (6.1, 6.2, 6.3A) to the user community. Materiel products, on the other hand,
TAB 24

ENCLOSURE 12
U.S. Army Material Management Agency (USAMMA)

Background.

USAMMA performs medical materiel acquisition, cataloguing, and maintenance of Class VIII supplies and equipment for both TDA and TOE units. Its current organization employs four mainstream directorates, two special project offices, and three support cells. Non-developmental Items (NDI) program management has already been transferred from USAMMDA to USAMMA. Nine USAMMA personnel formerly assigned to the DEPMEDS project have already been reassigned to support NDI.

Theme.

Given the evolution of some of its major programs, some features of USAMMA's organization may need to be further reorganized.

Issues.

1. Now that DEPMEDS has been fielded, can the requirement for further DEPMEDS input be transferred to the MEDCOM, which eliminates the need for the project manager at USAMMA?

2. Does the Medical Digital Information Storage (MDIS) project command sufficiently high visibility under a separate project officer within USAMMA or should it become one of USAMRDALC’s new product lines, aligned under the Rapid Prototyping and Special Project activity.
3. Should the Operational Support Directorate (OSD) be combined with the Administrative Support office?

Discussion.

1. Along with the DEPMEDS Project Manager, MAD was chiefly responsible for acquiring and fielding the DEPMEDS equipment. Transferring DEPMEDS actions to the MEDCOM (which could assign them in turn to the HSSAs) would end USAMMA's responsibility for DEPMEDS.

2. Compared to the DEPMEDS program, the MDIS project as a key NDI area is growing. MDIS needs high visibility positioning in order to maximize its effectiveness. MDIS could replace DEPMEDS as the main product line in the MAD business unit and achieve some economy through reduction of the separate project structure; resources formerly assigned to DEPMEDs could be transferred to MDIS. Alternately, MDIS could be identified as a stand alone project within USAMMA but outside of MAD. A third option would be placement in an emerging technology activity, separate from USAMMA but still within USAMRDALC.

3. OSD functions could be combined with the Administrative Support cell. There appears to be some logical consistency between the largely administrative support OSD provides to the field and what the admin cell provides to USAMMA at large.

Recommendations.

1. Eliminate DEPMEDS as a special project within MAD and transfer any remaining DEPMEDS actions to the MEDCOM.
2. Transfer MDIS to a Rapid Prototyping/Advanced Technology special project status and dual hat the MDIS project chief as the coordinating head of all AMEDD telemedicine/teleimaging efforts.

3. Evaluate the feasibility of combining OSD with the Administrative Support cell.
TAB 25

ENCLOSURE 12
Background.

USAMMA performs medical materiel acquisition, cataloguing, and maintenance of Class VIII supplies and equipment for both TDA and TOE units. Its current organization employs four mainstream directorates, two special project offices, and three support cells. Non-developmental Items (NDI) program management has already been transferred from USAMMDA to USAMMA. Nine USAMMA personnel formerly assigned to the DEPMEDS project have already been reassigned to support NDI.

Theme.

Given the evolution of some of its major programs, some features of USAMMA's organization may need to be further reorganized.

Issues.

1. Now that DEPMEDS has been fielded, can the requirement for further DEPMEDS input be transferred to the MEDCOM, which eliminates the need for the project manager at USAMMA?

2. Does the Medical Digital Information Storage (MDIS) project command sufficiently high visibility under a separate project officer or should it become one of USAMMA's mainstream business units, aligned under the Materiel Acquisition Directorate (MAD)?

3. Should the Operational Support Directorate (OSD) be
combined with the Administrative Support office?

Discussion.

1. Along with the DEPMEDS Project Manager, MAD was chiefly responsible for acquiring and fielding the DEPMEDS equipment. Transferring DEPMEDS actions to the MEDCOM (which could assign them in turn to the HSSAs) would end USAMMA's responsibility for DEPMEDS.

2. Compared to the DEPMEDS program, the (MDIS) project as a key NDI area is growing. MDIS needs mainstream positioning in order to maximize its effectiveness. MDIS could replace DEPMEDS as the main product line in the MAD business unit and achieve some economy through reduction of the separate project structure. Any resources formerly assigned to DEPMEDS could be transferred to MDIS. Alternately, MDIS could be positioned in a future Advanced Technology activity, not yet formulated but proposed to be located somewhere in USAMRDALC.

3. OSD functions could be combined with the Admin Support Cell. There appears to be some logical consistency between the largely administrative support OSD provides to the field and what the admin cell provides to USAMMA at large.

Recommendations.

1 & 2. Replace DEPMEDS with MDIS as the main project in MAD and transfer any remaining DEPMEDS actions to the MEDCOM.

3. Evaluate the feasibility of combining OSD with the Admin Support cell.
U.S. ARMY MEDICAL MATERIEL ACTIVITY

COMMANDER

DEPUTY COMMANDER

PM for DEPMEDS

PM for MDIS

Data Sys. Office
Admin. Support
Resources Mgt. Div.

Materiel Acquisition Directorate
Readiness Support Directorate
Operations Support Directorate
Maintenance Eng. & Ops. Directorate
- Eliminate DEPMEDS Project Office
- Dual hat CDR USAMMA as CDR of Log Power Projection Platforms
- USAMMA CDR to function as the AMEDD Log Operational Consultant

USAMMA

USAMMCE

6TH TAMC

KOREA LOG UNITS

18TH MEDCOM
U.S. ARMY MEDICAL MATERIAL AGENCY

MEDICAL DIAGNOSTIC IMAGING SUPPORT (MDIS)

BACKGROUND: The MDIS Project is a special AMEDD project that has been working on the development of advanced medical diagnostic imaging techniques/procedures, with a primary focus oriented on teleradiology. The project is currently housed in a temporary building behind USAMMA and the Project Manager reports to the Commander, USAMMA.

I. THEME: Medical diagnostic teleimaging is a rapidly advancing technology having potential for widespread application thereby exponentially increasing patient access to specialized health care. The technology is not limited to teleradiology; telemedicine, telepresent surgery and various forms of teleconsultation are other applications of similar technology.

II. FINDINGS: The MDIS project has been operating since its inception on a proverbial "shoestring". Both its budget and organizational status have been "off-line" e.g., out of the mainstream development process. While this stature was marginally adequate for a few years, since costs were relatively low and the gain on returns was unknown, the needs and potential uses of the project have recently rapidly outpaced resources. Efforts are currently under way to add MDIS funding to the POM. The project is currently staffed by borrowed labor. The project appears to meet the requirements of a Rapid Prototype fielding
concept, e.g., it (1) has immediate practical benefit, (2) is both an exploration and concept validation platform and (3) is a testbed for additional new technology.

The technology platform utilized by MDIS has application for other information system uses. If it were not being used for a specific, medical application, most of the hardware is essentially a telecommunications set.

Similar medical application technologies are being developed at Advanced Research Project Agency (ARPA) and with the telemedicine projects at DDEAMC (in cooperation with the Medical College of Georgia) and at WRAMC. Medical teleimaging is also receiving significant research interest in the private sector. The American Telemedicine Association is a professional affiliation of some of the organizations pursuing this effort.

III. ISSUES:

A. MDIS started as a Special Project. It has outgrown that concept and, in its current configuration, is an inappropriate drain on USAMMA and other MRDALC resources.

B. There are several similar, but disjointed efforts currently ongoing in the medical teleimaging arena.

C. There is a controversy over whether medical teleimaging equipment should be classified as medical equipment or as information management equipment.

IV. DISCUSSION: Synergy can be achieved by combining all military medical teleimaging efforts under one umbrella and
increasing cooperative efforts with the private sector.

A corporate decision needs to be made as to whether medical teleimaging equipment is medical or information management equipment. The same hardware used in medical teleimaging can also be used for other forms of telecommunication and information management. Duplicative equipment procurements can be avoided if the equipment can be used for dual purposes.

V. RECOMMENDATIONS:

A. Institutionalize MDIS funding and personnel resources. Expand the focus of MDIS to include all forms of medical teleimaging. Designate a single, coordinating point of contact for all Army efforts in this arena.

B. Designate the AMEDD CIO to establish a PAT to develop a recommendation to TSG on how medical teleimaging equipment should be classified and utilized.
MEDICAL DIAGNOSTIC IMAGING SUPPORT (MDIS)

- Appoint MDIS Project Chief Coordinating head of all AMEDD Telemedicine / Teleimaging efforts
- Assign coordinating authority
ADVANCED TECHNOLOGY INTEGRATION

SUSTAINING HEALTHCARE
MEDCEN
MEDDAC
AMEDD C&S

OTHER THAN COMBAT
MEDICAL DEPLOYMENT
RESTRICTED CAPABILITY REDUNDANCY

COMBAT CARE

MRDALC

AUTHORITY
COORDINATING

TAMC
AKAMA1
MAMC
MDIS
EAMC
JWID
MDIS

HSSA TEST BEDS
TAB 27

ENCLOSURE 12
WELLNESS AND PREVENTIVE MEDICINE

Organizational Alignment
US ARMY WELLNESS & PREVENTIVE MEDICINE COMMAND

Executive Summary

Background:
The quality, scope and emphasis on preventive medicine services varies substantially across the MEDCOM. Some programs have flourished while others have stagnated. Alternatively, the delivery of environmental and occupational health services have fared much better. Finally, wellness issues have emerged as a key social concern within soldiers and Army families. All of this has culminated in the AMEDD exploring a number of alternative ways for meeting rapidly changing customer needs.

Issues:
1. Should the MEDCOM integrate existing diverse efforts into a stand-alone Command for Wellness and Preventive Medicine?

2. If a command is established, what is the best possible alignment strategy for the MEDCOM to adopt?

Discussion:
Existing preventive medicine programs are provided by a number of separate AMEDD agencies. AEHA currently provides a family of community PM services such as environmental control of pollution while USAMRDAI and its attendant labs provide a different set of services e.g. epidemiology: infectious disease control: occupational hazards assessments etc. Centralizing existing programs into a
single command offers the promise of substantially improving quality while simultaneously eliminating possible redundancies and/or overlap.

Unresolved, however, is how best to align the new command so as to provide America's Army with the best possible quality of service. Two alignment options exist:
1. Align the command as a separate stand-alone command of the MEDCOM.
2. Align the command as a subordinate element under USAMRDAL.

Each option encompasses a number of advantages and disadvantages. However, no clear favorite emerges. A recommendation is developed by analyzing three separate criteria: the intrinsic nature of the work to be performed; a soldier's (customer) perspective; and existing AMEDD organizational design principles. The outcome of the analysis produced the following recommendations:

Recommendations:
1. Establish a provisional WPMC Command.

2. Align the Wellness and Preventive Medicine Command as a separate subordinate command entity under the command and control of USAMRDAL.

3. Revisit this alignment posture prior to the end of the provisional period to ensure that it continues to meet the needs of America's Army.
Background:
Historically, the delivery of a majority of main stream preventive medicine (PM) services took place under the auspices of local MTF commanders, except for those unique services provided by the Walter Reed Army Institute of Research (WRAIR). Unfortunately, the quality and emphasis pertaining to many of the mainstream preventive services delivered at the MTF level tended to receive less attention than the more traditional health care programs. Therefore, it is not surprising that PM efforts varied substantially across the command e.g. some programs flourished while others languished. In other words, many preventive medicine efforts simply did not receive as much command scrutiny as other health care programs. Perhaps the most descriptive term that could be used to describe the overall PM focus within the mainstream health care system was one of "benign neglect".

Concomitantly, environmental and public health services tended to flourish under the purview of the Army Environmental Hygiene Agency and the Walter Reed Army Institute of Research (Epidemiology services and epicon teams have been provided throughout the recent past mostly by the WRAIR preventive medicine division). As environmental issues became more and more important, particularly in light of base closure actions and the severe penalties tied to environmental violations (both criminal and civil).
AEHA assumed a growing role in this vital area. Environmental issues were even found to have an impact on battlefied operations (e.g. analyzing the effects of the Kuwaiti oil fires on soldier and community health).

Today, wellness issues have emerged as key social concerns throughout America. Wellness and prevention measures range from increasing efforts on physical fitness and nutrition programs; to anti-smoking campaigns; drug and alcohol awareness efforts; HIV education; increased immunization (especially of children); and the use of specialized prevention tools such as mammography. Soldiers and their dependents, like all Americans, expressed a similar interest in these areas. The Army staff, in turn, responded to soldier and family requests and generated a number of taskings designed to improve overall access and quality of multiple wellness and prevention programs e.g. child development efforts; nutrition programs; exceptional family member programs; immunizations; and environmental health programs etc. The budget of AEHA steadily increased during this period and a number of special Army sponsored programs received "fenced" resources.

All of this culminated in the Army Medical Department studying the feasibility of significantly increasing command emphasis in the entire wellness and prevention area. In 1993, a process action team (PAT) was chartered to develop a series of detailed recommendations. After substantial debate, the AMEDD decided to create a special Wellness
and Preventive Medicine Command to increase emphasis in this vital area.

**Theme:**
The delivery of wellness, environmental, and preventive medicine services would be greatly enhanced if all of the organizational elements currently involved in this effort were combined into a single stand alone command.

**Findings:**
- Many preventive medicine programs are currently being provided by medical assets in the MTF e.g. the preventive medicine physician; pediatrician; community health nurse etc.

- Occupational and environmental health issues are carried out by AEHA assets who operate worldwide within an existing regional organizational structure.

- Medical R&D priorities were reported by some respondents to have consistently conflicted with Preventive Medicine operational requirements. USAMRDAL's involvement in operational Preventive Medicine was reportedly influenced by whether or not a research program was to be initiated/enhanced or whether or not a publication would result e.g. Menningitis.
• USAMRDAL’s response to operational Preventive Medicine requests was also reportedly impeded by their plate being "too full" with R&D requirements.

• AEHA is gathering Hanta virus specimens which are then to be analyzed at USAMRIID.

• Congress has directed the Army to study lyme disease - previously it was not identified as a viable USAMRDAL research topic, hence the issue was handed over to AEHA for research and analysis.

• USAMRDAL's existing medical paradigm is research-focused rather than operationally oriented. AEHA's paradigm is operationally focused.
• AEHA's effectiveness increased dramatically when the Army staff made environmental programs more visible and "fenced" funding levels for those programs.

• Many AEHA programs are funded directly by the customer.

• AEHA's management structure is reportedly more compatible with the customer base than USAMRDAL's.

• The EPICON aspect of Preventive Medicine will occasionally need urgent, high level microbiological support that exists only in the R&D areas. It was reported by some respondents that it would be easier to obtain this support if the WPMC is under USAMRDAL.
• It was reportedly difficult to get R&D involvement in analyzing whole body vibration during the development phase of the Bradley fighting vehicle.

• EPICON missions exist at WRAIR and special task organized EPICON teams are routinely deployed to study disease outbreaks.

• Specific authorizations for EPICON teams were given up by WRAIR in a cost cutting move several years ago although the assets remain in an overstength category.

• Preventive medicine programs at the installation level vary widely throughout the command in terms of quality, scope, and emphasis.

• A number of Army staff elements have expressed interest in increasing the emphasis and visibility of Preventive Medicine programs e.g. DA-DCSPER; DA-ACISM.

• Existing preventive medicine programs and tools are generally executed at the installation level by MTF medical assets e.g. immunization programs; mammography etc.

• WRAIR has reportedly never developed into a center of education and consultation for General Preventive Medicine physicians, in spite of it's P8 mission and funding, because of conflicts with research priorities.
Issues:
1. Should the MEDCOM integrate existing diverse efforts into a stand-alone Command for Wellness and Preventive Medicine?

2. If a command is established, what is the best possible alignment strategy for the MEDCOM to adopt?

Discussion:
Should the MEDCOM integrate existing diverse efforts into a stand-alone Command for Wellness and Preventive Medicine?

The proposed mission of a Wellness and Preventive Medicine Command is to "develop, implement, and evaluate prevention and wellness programs to achieve optimum force readiness, operational efficiencies and quality of life for America’s Army". The operative words contained in the above mission are to develop, implement and evaluate - the goals are to "optimize force readiness, operational efficiencies and quality of life" Such a mission thus implies the following essential functions:

Clinical (including dental) preventive medicine

- Medical surveillance
- Disease prevention and control
- Epidemiology
- Health Assessment
- Health screening
- Occupational medicine
- Toxicology
- Clinical radiation support

Health Promotion and Wellness
- Community assessment
- Health risk appraisal
- Nutritional health
- Stress management
- Medical aspects of physical fitness and weight control
- Preventive aspects of managed care
- Maternal, Infant and Preschool health
- Discharge planning/ home health
- School health issues
- Smoking cessation
- Medical aspects of injury prevention
- Substance abuse prevention

Environmental health
- Drinking water
- Personal hygiene and field sanitation
- Air quality
- Water pollution control
- Hazardous waste
- Regulated medical waste
- Health risk assessment
- Health hazards assessment
- Industrial hygiene
• Medical systems safety
• Ionizing and non-ionizing radiation
• Pest and disease vector/resevoir surveillance

When one analyzes the above functions, it becomes obvious that currently all or part of these functions are performed within three separate MEDCOM subordinate commands, the Health Care System (HSSAs), AEHA and USAMRDAL.

For example, epicon is the deployable element at WRAIR to study disease outbreaks. Even though USAMRDAL gave up the epidemiology and epicon authorizations in a cost cutting move two years ago, the AMEDD continued to staff these unauthorized positions because of their overall importance to the Army (The new WRAIR construction project was partially justified based on a need to upgrade facilities involved in meeting the epicon disease control mission). These authorizations have been added to the Wellness and Preventive Medicine Command (WPMC) to form the Army Medical Surveillance Center. The center will collect, analyze, and distribute information on all Army disease statistics and prevalence rates, and thus will address TSG’s desire to create a single source for this type of data.

The preventive medicine services model focuses on individual and community health. AEHA currently provides community PM services consisting of environmental control of pollution (water, air, soil), while WRAIR provides public health PM services of epidemiology
and epicon. Transferring these two entities to the new Wellness and Prevention Command and adding other wellness and health promotion programs consolidates all of the services of the traditional PM model into one command that can lead the AMEDD to national recognition, which in turn can serve as a viable DoD model.

2. Should the command be aligned separately under the MEDCOM or as a subordinate element of an existing command?

A significant issue involves selecting the best alignment strategy for the WPMC command so as to provide the maximum amount of service to soldiers and their families. Chart 1 (enclosure 1) depicts where the majority of work in each functional area is currently being carried out. As is evident from chart 1, the functional services are being performed throughout the command. (As discussed previously, creation of the new command will overcome this deficiency but, nonetheless, leaves the alignment issue unresolved).

After thoroughly examining the proposed mission and functions to be carried out by the WPMC command, two possible alignment options exist. The first option is to align the command separately as a stand alone command reporting directly to the MEDCOM commander, much like the other health care delivery organizations. A second possible option is to align the command as a subordinate element of the new Research Development, Acquisition and Logistics Command (USAMRDAL). This option is viable because of the overlapping nature of multiple functions within the Wellness and Prevention Command
and existing USAMRDL subordinate activities. The following discussion explores the pros and cons associated with each option.

Option 1 - Align the Center as a separate stand alone Command.

Advantages:
- Increases the visibility of the Center to the external customer base (e.g. DA-DCSPER;DA-ACSIM).

- Creates a colleague relationship with the HSSAs and provides for a more direct and viable working relationship with Preventive Medicine elements within the MTFs (e.g. one less organizational layer to coordinate through).

- Facilitates the delivery of services throughout DoD.

- Potentially more responsive to MEDCOM command and control.

- Reduces the risk that if DoD-HA centralizes existing research activities that the Center could be potentially lost in the process.

- Identifies Wellness and Preventive programs as a separate medical "service line" similar to dental and veterinary services and in line with national health reform initiatives.

- Maintains a clean separation of the P6 research based funding stream from the P8 operational accounting stream.
Disadvantages:

- MEDCOM HQ staff still moving from HSC. Additionally, critical focus of MEDCOM currently on HSSAs and lead agency contracts.

- Involves the MEDCOM headquarters, which is designed to carry out strategic level work, in tactical level work, thereby by-passing the intermediate operational command and control level e.g. the work carried out by the HSSAs, DSSAs and VSSAs.

- Potentially duplicates some existing on-going efforts within the USAMRDAL community (e.g. occupational health research at UASRIEM).

- Requires the transfer of existing preventive medicine personnel and functions from WRAIR to the center thereby eliminating the current synergy of such assets with other WRAIR research efforts.

- Reinforces the isolation of R&D programs and efforts from operational needs.

- Potentially sets the stage for WPMC to "interfere" in MEDCEN business.

Option 2:
Align the WPMC as a subordinate command under USAMRDAL.
Advantages:

- Separates tactical level work from operational and strategic level work consistent with the overall AMEDD organizational design principles.

- Facilitates the integration of R&D initiatives with operational programs so as to provide a comprehensive fully integrated program: putting the soldier and family needs first!

- PM business plan development and implementation is encumbered.

- If a general officer is placed in command of this activity, aligning it with USARMDAL provides for an opportunity to dual-hat the commander and thereby provide more general officer horsepower to the research and development area (which continues to assume an increasingly important role in the medical community e.g. telemedicine).

- Provides synergy between researchers and operators thereby permitting both areas to more effectively meet soldier needs.

- Facilitates task organizing to address unique issues e.g. mystery illness.

- Facilitates the elimination of potential duplication between R&D programs and operational prevention programs.
• Provides a key corps immaterial leader development position for all aspiring wellness and preventive medicine personnel. Establishing a key O-7 billet thereby allows for a natural progression from O-6 to an O-8 command level.

Disadvantages:
• Increases the span of control of USAMRDAL.

• Increases the potential risk of losing control of key operational programs if DoD- HA centralizes all service R&D programs.

• May require some additional staff overhead at USAMRDAL to manage effectively.

• Combines P6 and P8 funding streams thereby making it more difficult to manage effectively.

• The perceived lack of parity among AEHA, AEL, and the Safety Center is further exacerbated (Safety Center is under the DAS; AEL is under the ACSIM's ODEP).

Discussion:
An analysis of chart 1 (enclosure 1) shows that much of the work of the proposed WPMC is also being performed in various elements of USAMRDAL. For example, a significant portion of the assigned research missions of RAD III sponsored Program 6 research is really
in the area of "occupational and preventive medicine". This includes a variety of tech base programs in support of materiel developers and field operations such as determining safe limits for training e.g. how much heat is too much heat, how much noise or blast is too much for conversation; how much microwave exposure is hazardous to an operator etc.

- USARIEM does work on prevention of heat illness, cold injuries, altitude sicknesses, epidemiology of injuries to the arms and legs, assessments of strengths and weaknesses to carry out tasks within an MOS etc.

- USAARL traditionally does research on pilot workload, stress in flight, bio-medical assessment of proposed optical and electro-optical devices; night vision devices and systems; auditory aspects of blast overpressure, aviator fatigue etc.

- WRAIR does work on microwaves, lasers and other ocular hazards as well as the biomechanical threats of blast overpressure. Much of the work of the Division of Neuropsychiatry is preventive in nature, including the work on drugs and performance, sleep deprivation, psychiatric stress, stimulants and performance.

- USABRDL (now being carved up and sprinkled around) does tech base research on short and long term exposure of soldiers and civilian workers to workplace toxicants, fumes etc. Much of this work
was tech base database development in nature thereby permitting AEHA to establish Army standards.

- AEHA has worked on the control of health hazards associated with the Army's industrial activities since 1942. It supports DoD worldwide preventive medicine efforts. AEHA publishes regulations, pamphlets and medical bulletins in support of a variety of Army programs (and some tri-service activities, as well). AEHA, however, does not do tech base research to establish dose/response relationships which are the basis for the standards it develops for the Army. AEHA gets its data from the Industrial Hygiene commmunity in the civilian sector and from RAD III sponsored research conducted in USAMRDAL.

AEHA maintains experts in many topical areas which are a direct parallel to work currently done in USAMRDAL e.g. occupational medicine physician; toxicologists, audiologists, optometrists, chemists etc. AEHA, however, also employs some specialists which are not found within USAMRDAL: industrial hygienists, acoustical engineers, health pyhsicists, sanitary engineers, environmental engineers etc. Interaction between AEHA experts and USAMRDAL experts is reportedly sometimes extremely well coordinated and at other times nearly non-existent.

Integration issues:
In 1983, the Army created the Health Hazards Assessment program to ensure that health hazards generated by operating our own
materiel and weapon systems were accounted for in the design and throughout the life cycle development of all Army materiel systems. AEHA was supposed to fund and staff personnel spaces for the health hazards assessment program and call upon USAMRDAL subject matter experts for technical support, as required. Further, AEHA was supposed to determine unidentified research requirements and pass them along to USAMRDAL via RAD III for programming new research to permit the AMEDD to establish new exposure standards etc. This coordinated effort has worked well to date in some subject areas and not so well in others.

In the area of occupational health management, AEHA maintains a data bank and provides advice and assistance to commanders on occupational health programs to meet legal requirements in prevention and treatment of occupational injuries and illnesses. While much of this work is of an industrial hygiene nature, it nevertheless is complementary with some USAMRDAL RAD II programs. Furthermore, USARIEM ergonomists recently helped AEHA prepare the course material for the workplace ergonomic portion of their occupational medicine course. This cooperation is described simply to illustrate the natural relationship between the two organizations.

There are many common specialties and closely related mission applications in what USAMRDAL's RAD III tech base program encompasses and the day-to-day work of AEHA. Rather than create a separate command and make cross fertilization and cooperation more
difficult, it is more appropriate to align the new WPMC as a subordinate command of USAMRDAL. Such an arrangement permits complementary programs to be tied together more closely. Jointly, the two organizations would be optimally suited to carry out the AMEDD's broad mission of doing tech base research, developing Army health standards and procedural policies, maintaining a "watch dog" function by providing on-site evaluations and consultative assistance while simultaneously being attentive for determining new research requirements to be handed over to the research community.

A major issue likely to be raised and which must be successfully dealt with is the merging of two distinct funding streams - P6 and P8. USAMRDAL's funding stream is mostly P6 while the WPMC is likely to fall into the P8 category. While this poses a problem, it should not deter the AMEDD from doing what is best for America's Army. The successful blending of P8 and P6 has been around for years. For example, USAARL now co-funds the Aviation Epidemiology Register with RAD III P6 funds for research and MEDCOM P8 funds for data entry personnel. The Air Force School of Aerospace Medicine (until 1989) funded the entire organization with a combination of P6 and P8 funds, before it was moved to the Armstrong Lab.

While it is acknowledged that the mixing of the two funding streams represents a difficult challenge to the resource management (RM) community, it nevertheless appears to be a doable task. The bottom line is that the organization should align itself into a structure which makes the most sense from a customer perspective and not from a
support staff focus. After all, the organization exists in the first place to meet customer needs, not staff needs.

The question that remains, however, is whether or not the synergy gained by aligning the WPMC with USAMRDAL is sufficient to overcome the aforementioned strengths and/or weaknesses associated with establishing a separate command reporting directly to the MEDCOM? Another way to address this question is to view it from the soldier's perspective (customer base) and then apply a number of basic organizational design principles to the issue and see if the same conclusion emerges.

First the soldier's perspective. A soldier deployed to an overseas location is confronted with a number of threats. First, there are those unique chemical / biological agents which an adversary might choose to employ - these are known as hostile threats and it is the responsibility of USAMRIID and USAMRICD to prepare antidotes and protocols for dealing with such agents. Next comes a family of infectious diseases which are endemic to a given geographic area. Developing protection against such diseases is a major mission of WRAIR. Next comes a variety of occupational risks associated with the equipment which soldiers use or employ, this area includes such topics as blast overpressure, vibration, noise, radiation levels etc. Finally, there exists a host of environmental threats which could potentially impact on the soldier e.g. chemical (pesticides - agent orange); toxic fumes (petroleum products etc.); cleaning agents etc.
The soldier doesn't really care who is accountable for evaluating, analyzing or developing antidotes or countermeasures for coping with any or all of the above threats so long as somebody is held responsible. The important issue from an organizational perspective is to ensure that a comprehensive totally integrated effort is ongoing and that a single person is accountable for integrating the vast range of efforts required to field a comprehensive program. Such an individual could be the MEDCOM Commander or it could be the USAMRDAL Commander. The best way to determine who should be accountable is to first determine whose work is it? To answer that question, however, requires that one first analyze the nature of corporate work and the underlying functions indigenous to the corporate level.

Organizational Design Principles - Identifying and Aligning Corporate Level Functions:
Organizations exist to get work done. that is what they are all about. Work gets done by people who occupy roles and roles are always aligned in some sort of organizational structure. The nature of the resulting structure and it's attendant roles is a function of fulfilling the basic purpose (mission) of the organization itself.

Business organizations exist to satisfy customer needs. And satisfying customer needs requires that certain critical functions be performed. From a corporate perspective, organization's must maintain both a competitive entrepreneurial strategic thrust as well as an operational group of functions to oversee strategic groups of operating business
units (HSSAs). (These functions are depicted in figure 1). In this way, the organization simultaneously deals with current as well as future customer needs.

The development of a continuous stream of new products and services is a fundamental challenge facing every organization. Sometimes these products/services originate as stepwise improvements to existing products/services in the mainstream operational delivery units (e.g. MTFs) while at other times they represent corporate level advanced development projects. There is no clear distinction between the two, other than the fact that development efforts constitute the day-to-day work of an important part of the organization (see figure 2). To burden operational units with complex advanced development work sometimes undermines their ability to focus on their day-to-day production requirements.

Building a competitive entrepreneurial edge is an appropriate mission of an advanced business development (ABD) function which is generally accepted as a corporate activity. The ABD officer typically oversees the carrying out of laboratory and field work to enable the organization to maintain a technological competitive edge. Specifically, the business development function is concerned with keeping abreast of technological developments worldwide, and developing (or acquiring) new products or new production technology which is used either to transform existing businesses or
CORPORATE MISSION: PROFITABLY SATISFYING THE NEEDS OF CUSTOMERS

1. Maintain a competitive entrepreneurial thrust
   - lean strategic HQ
   - Business Opportunities Development Group
   - a New Ventures Group

2. Maintain an Operations Group
   - Strategic Business Units
   - Group-wide Service Units

THE CEO AT WORK
to create new ones. When the functions are established at stratum VI (three star level), the Chief Development Officer (CDO) often requires two different kinds of subordinate functions.

- Commercial and technological studies - keeping abreast of all technological developments which might have commercial significance for products or production technologies which would sustain the company's competitive edge (This function might require a small, high level group of staff advisors).

- Technology laboratories - concerned with the development of new technological knowledge, products and production technologies, of commercial and competitive interest to the company. Subordinate functions often comprise a series of laboratories, each led by a stratum IV manager (Colonel). The bottom level of direct output is generally at stratum II or higher, except for laboratory assistant and direct work related services which, incidentally, often tend to be under resourced.

The business development function is focused on project work, and carries heavy managerial duties in connection with delegated direct output work of large numbers of subordinates in laboratories etc.

Alternatively, the operational mission of a business unit is to develop (D), produce (P), and market and sell (M/S) goods and services for customers, and to sustain a reasonable rate of profit plus business
survival and capital enhancement in the long run (these functions include acquiring raw materials and components, and delivery of them). D.P. and M/S constitute the operational spine functions of a business unit: the true business functions that the business unit was established to serve (see figure 3). D. P. and M/S need to be aligned in as many stratum IV roles as are required by the volume of work.

The sole difference between the work carried out by a large corporation versus a small one is whether or not the functions described above are combined into a single (or small number) role or are differentiated into several separate stand alone roles. For example, in a Mom and Pop grocery store all of these functions are performed by the owners themself whereas in a large supermarket chain there is likely to be a number of additional separate roles e.g. a separate delivery function; a separate procurement function; finance; human resources etc.

The critical work of the business unit president is to integrate the interplay between product development, production, and sales and marketing in relation to the market, while still giving sufficient priority to resource enhancement efforts. Unless the business unit president seriously accepts this integration work, one gets the all-too-common tendency for a marketing director to take over, or for a production manager to take the lead, or for a "deputy" to step in and dominate the others.
Similarly, the CEO is accountable for integrating advanced development work (including R&D efforts) and operational work into a cohesive business strategy sufficient to ensure the long-term survival of the corporation.

A word of caution about the business development and/or product development function. There is a tendency to refer to these activities as research and development (R&D) activities. This terminology is incorrect for research is simply a method that can be used to produce development outcomes or research reports; but it is not a development function per se. There are two bad consequences of viewing the functions as research. One is that bright young researchers often get focused on producing reports or academic "publishable" papers as a measure of their success and are disappointed if their work has to be "too focused on commercial marketing issues". A second is that R&D departments tend to be thought of as "back room" research work, when in fact such departments should be kept in the "front room", actively in contact with the market, so that a sensing of market needs is sustained through active direct contact.

The organizational structure of the development function typically requires three sets of subordinate functions.

- A discipline home base for technical staff - physics, chemistry, economics, computer science etc.
- The discipline home base provides the technical staff for the creation of project teams. by attachment or secondment, with designated project team leaders accountable for carrying out projects with their teams.
- Depending upon the complexity of the development work, it may also be necessary to establish free-standing independent contributor roles at stratum II - IV.

The application of these organizational design principles to the AMEDD is as follows:

- USAMRDAL constitutes an important element of the Advanced Business Development (future) thrust of the AMEDD (along with the AMEDDC&S).
- The laboratory structure constitutes an important subordinate element of the Advanced Business Development effort.
- The WPMC constitutes a new business opportunity which has the potential of either transforming the delivery of existing services (e.g., within the MTF) or becoming an entirely new business itself. At present, it should remain aligned under the Advanced Development functional area. like any new development initiative until sufficient time has passed for it to become a mature business. To separate it at this time is premature and in turn jeopardizes the future growth of this essential activity.
• Separating the research program from the customer base exacerbates the difficulties in keeping R&D efforts focused on customer needs. Such a bifurcation is especially troublesome when it is based primarily on a desire to separate two funding streams - this is an example of the means interfering with the end.

When one combines an application of the above design principles to the alignment issue together with the logical arguments surrounding the possible alignment options, the following recommendations seem warranted.

**Recommendations:**
1. Establish a provisional WPMC Command.

2. Align the Wellness and Preventive Medicine Command as a separate subordinate command entity under the command and control of USAMRDAL.

3. Revisit this alignment posture prior to the end of the provisional period to ensure that it continues to meet the needs of America's Army.
WELLNESS AND PREVENTIVE MEDICINE FUNCTIONS

Clinical preventive medicine

- Medical surveillance - AEHA: WRAIR
- Disease prevention and control - USAMRIID: WRAIR, AEHA
- Epidemiology - WRAIR: AEHA
- Health Assessment - AEHA
- Health screening - MTFs
- Occupational medicine - USARIEM: AEHA
- Toxicology - USAMRIID: USAMRICD; AEHA
- Clinical radiation support - WRAIR

Health Promotion and Wellness

- Community assessment - AEHA
- Health risk appraisal - AEHA: MTFs
- Nutritional health - AEHA; AMEDDC&S
- Stress management - WRAIR
- Medical aspects of physical fitness and weight control - MEDCOM
- Preventive aspects of managed care - HSSAs
- Maternal, Infant and Preschool health - HSSAs
- Discharge planning/ home health - MTFs
- School health issues - MTFs
- Smoking cessation - WRAIR; MTFs
- Medical aspects of injury prevention - USARIEM; USAARL
- Substance abuse prevention - WRAIR; HSSA
Environmental health

- Drinking water
- Personal hygiene and field sanitation
- Air quality
- Water pollution control
- Hazardous waste
- Regulated medical waste
- Health risk assessment
- Health hazards assessments
- Industrial hygiene
- Medical systems safety
- Ionizing and non-ionizing radiation
- Pest and disease vector/reservoir surveillance
TAB 28

ENCLOSURE 12
BACKGROUND: USAEHA is currently aligned with Health Services Command as a separate stand-alone field operating agency, and in peacetime is tasked to monitor safety, health and environmental practices to determine if they conform to local, state and federal regulations, e.g., EPA. In addition, the USAEHA evaluates military operations to determine if they conform to Federal and international safety and environmental laws. Recommendations for the prevention of injuries and disease transmission are established from field evaluations, information acquired from other agencies (USDA, universities, etc.) and government regulations.

I. THEME: USAEHA could better serve the military as an integral part of the Wellness and Preventive Medicine Center aligned with USAMRDALC.

II. FINDINGS: USAEHA does not conduct research to decrease occupational and environmental health and safety hazards. Currently, the USAEHA underutilizes USAMRDALC to provide technical expertise and/or strategies to increase safety and environmental standards.

III. ISSUES:

A. Could USAEHA better serve the military by conducting
occupational and environmental health research?

B. Would alignment of USAEHA, as part of the Wellness and Preventive Medicine Center, with USAMRDALC better serve the military?

IV. DISCUSSION: Aligning the Wellness Center with USAMRALDC would facilitate liaison between operations (customers) and R&D. Frequently requirements for increased safety and health protection are not conveyed from USAEHA to help direct health related research conducted by R&D. Alignment with the USAMRDALC could further draw on the pool of resources from both groups, i.e., clinical and research assets (R&D) and monitoring and regulatory assets (USAEHA), to focus on common objectives. This would increase operational research coordination, enhance productivity, and save dollars.

Alignment with USAMRALDC would also provide better AMEDD service to provide specific coordination, e.g., the desert storm mystery illness, through combined task force approach. (See also separate Wellness and Preventive Medicine staff paper).

V. RECOMMENDATIONS: Align the Wellness and Preventive Medicine Center with USAMRALDC.
ALIGNMENT OF 10TH MEDLAB

MEDCOM

WPMC

7TH MEDCOM

10TH MEDLAB
Preventive Medicine

- Transfer Preventive Medicine & Epidemiology functions to WPMC
- Clean up TDA
PM Missions

WRAIR
Preventive Medicine Division

W & PHC
Preventive Medicine Division

MSN:
1. Identify & assess emerging infectious disease - Hanta Virus
2. Retro - viruses

- Problem definition & assessment
- Epidemiology mission support

• Transfer Prevention mission to W&PHC
• Evaluate impact on existing research protocols
  - who does retro - virus & hanta virus research
  - P6 vs. P8 funding issue
• WPHC PAT Team prepare MOU between WPHC and Cdr. MRDALC

WPHC PAT Team