US ARMY, AIR FORCE, AND NAVY
RPMA CONSOLIDATION IN PANAMA--
A COST-BENEFIT ANALYSIS

VOLUME I

Prepared by
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September 1979
This OSD-directed study applied the continuing objective of DOD policy to determine the feasibility of consolidating all RPMA in Defense Complex Panama. This study showed several feasible alternatives but only a single manager offered prospects of future savings. It was recommended for implementation only if tied to a longer-term goal of total BOS consolidation and standardization. Because of Treaty-induced turbulence, implementation of the RPMA phase should be postponed for 1 to 2 years. This evolutionary approach will maximize short-term transition difficulties, maximize long-term savings to DOD in Panama, and set a standard for wider application later.
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Appointed POCs in Panama collected and submitted timely data, answered numerous questions, and reviewed results, all with involvement of their commanders and parent commands. A specially formed Tri-service Coordinating Committee also contributed. Despite the thousands of miles separating many study contributors and participants, openness and cooperation characterized the study throughout. The study team owes a debt of gratitude to the POCs and all those who assisted them.

This study was prepared under the general supervision of Mr. Gerald E. Cooper by members of the Engineer Studies Center (ESC). The study team consisted of four full-time members: MAJ George A. Flowers, Project Director; Mr. Elton M. Underwood, Senior Analyst; CPT Ralph Grieaco, Analyst; and Mr. Pleasant P. Mann, Analyst. Mr. Robert H. Halayko provided part-time analytical assistance. Mr. Bruce Dunn, prior to transferring to the Office, Chief of Engineers, directed the early phases of the study.

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ABSTRACT

This OSD-directed study determined the feasibility of consolidating real property maintenance activities (RPMA) for all services in the Panama Canal Zone. It considered feasibility with regard to geographic, functional, and economic factors. It applied the continuing objective of DOD policy and guidance which is to ensure that RPMA at military installations is consolidated where such action is cost effective and does not result in mission impairment. The study showed several approaches to consolidation to be feasible though hardly equal. One alternative, a single manager concept, was found superior to the others. However, it was recommended for implementation only if tied to a longer-term goal of consolidating and standardizing all Base Operating Support (BOS) for the three services. Because of delays in working out Treaty details and Treaty-induced turbulence in general, implementation of the RPMA phase of BOS consolidation should be postponed for from 1 to 2 years. This evolutionary approach to all BOS will minimize short-term transition difficulties, maximize long-term savings to DOD in Panama, and set a standard for much wider application later.
SUMMARY

The primary objective of this OSD-directed study was to determine the feasibility of consolidating the management and execution of real property maintenance activities (RPMA) for US Army, US Air Force, and US Navy installations in Panama following implementation of the new Panama Canal Treaty. It considered feasibility with regard to geographic, functional, and economic factors. However, the study analysis also considered the desirability of consolidation because feasibility is a relatively weak criterion. Desirability is a stronger notion, requiring that an RPMA alternative lead to net benefits that are likely to be superior to those for the current method of operation (CMO).

The study report compares several explicit alternatives for managing and executing RPMA in Panama. Consolidation under a single manager (Army) with work reimbursement through a revolving fund is the most extreme major consolidation considered in detail. Also analyzed are partial consolidations under separate dual managers (Army and Air Force) with interservice reimbursement in accordance with comprehensive Interservice Support Agreements (ISSAs). The CMO is included as a base case for comparison and as a feasible RPMA approach in its own right. The major alternatives to the CMO depend heavily on current Army and Air Force practices; the single manager concept is based almost entirely on Army methods.

Initially emphasis was given to quantitative comparison of the major RPMA consolidation alternatives. Inevitably, the quantitative comparison of alternatives was liable to more uncertainty than has been encountered in most other consolidation studies. Comparing installation and RPMA data submitted by the three services is inherently more uncertain than would be a comparison based on data submitted by only one or two services. This is because the three services apply somewhat different definitions of RPMA, invoke different Manning procedures, and follow different reporting systems. For example, in converting all management and overhead elements of the CMO to the Army approach without consolidation, this study generated a CMO variation with 2.9 percent fewer people and 3.3 percent less annual salary. This theoretical CMO variation provides one measure of uncertainty in the interservice sense.

Significantly, the CMO today reflects many positive results of past intraservice and interservice analyses of RPMA and other functions of Base Operating Support (BOS). To varying degrees, the CMO already involves intraservice organizational consolidation, intraservice consolidation of some RPMA shop functions, and interservice consolidation of a
few other RPMA (or RPMA-like) functions. This feasibility study devoted almost all its attention to quantifying the potential for change in RPMA management and overhead spaces. But because Panama RPMA over the years had already become partially consolidated and centralized, especially in management and overhead functions, the potential for savings in those elements had already been heavily exploited in the intraservice sense. In Panama in 1978, management and overhead spaces accounted for about 18 percent of total RPMA strength; the shop force comprised the other 82 percent. The services themselves pointed out that the RPMA shop force in Panama probably provides a greater potential for savings than do the management and overhead elements. Yet, this study's quantitative analysis left the shop force largely intact for two reasons. The first was to assure equal level of RPMA service in the short run. The other is because there is as yet no sound basis for comparing the productivity of shop labor among the services, between military and civilian spaces, and between US and Panamanian employees.

This study finds that all the RPMA alternatives considered are feasible. Ignoring changes not directly attributable to consolidation, the study finds that the changes in RPMA management and overhead strength would be relatively slight under the dual manager concepts. Even with the prospect of discovering some relative shop force savings during and after implementation planning, this study does not regard the dual manager concepts as desirable or preferable to the CMO.

The single manager concept for RPMA-only consolidation does offer greater relative savings in the management and overhead spaces in the long run. Ignoring changes not directly attributable to consolidation, the study finds this relative saving to be about 2.6 percent of the total RPMA force and about 4.6 percent in salary costs. To its favor, the single manager concept also provides the prospect of later discovering some relative savings in shop forces during and after implementation planning, but as noted before, not all these would be directly attributable to consolidation.

The study team considered two extensions of the four major RPMA alternatives evaluated.

First, the services in Panama suggested that the CMO could exploit ISSAs to a greater extent than in the past and thereby meet or improve on other alternatives. The study team considered the enhanced CMO/ISSA approach to be too self-limiting in the long run because it retains multiple management and overhead structures. Furthermore, the team foresaw disadvantages in multiple manager concepts for dealing with the new problems that will arise in the later years of the Treaty and after its expiration.
Second, the study team introduced an even broader single manager concept than the original RPMA-only single manager alternative. This broadened concept consolidates all BOS in the long run, not simply as a mixture of existing service systems, but rather into a new standardized approach for operating, funding, and reporting. The concept fits DoD's notion for a single Defense Complex Panama but admittedly extends the considerations of this study beyond its originally assigned scope. Although not everyone is as enthusiastic about this broader approach as is the study team, many do agree that it presents a feasible and desirable long-term target. It equals or exceeds the advantages of the RPMA-only alternative while overcoming most of the latter's disadvantages.

The study recommends that as part of a firm long-term commitment to full, standardized BOS consolidation, implement RPMA consolidation under a single (Army) manager with reimbursement through a revolving fund. Using Army procedures, implement the RPMA phase in 1 or 2 years at the earliest, thereby allowing much needed reconciliation of current Treaty-related uncertainties. Augment the usual in-theater implementation staff with about 10 outside experts with general skills in planning and particular skills in personnel management, funding, and reporting procedures.
US ARMY, AIR FORCE, AND NAVY RPMA CONSOLIDATION IN PANAMA--A COST-BENEFIT ANALYSIS

I. OBJECTIVE

1. Purpose.

a. In performing a cost-benefit analysis, this study had a two-fold purpose:

   (1) Investigate the feasibility\(^{1/}\) of consolidating the management and execution of real property maintenance activities (RPMA) for US Army, US Air Force, and US Navy installations in Panama considering geographic, functional, and economic factors; and, if consolidation is feasible,

   (2) Provide a preliminary assessment of whether or not consolidation is desirable.\(^{1/}\)

b. The possible outcomes of analysis could be:

   (1) RPMA consolidation is infeasible with no need for follow-on implementation study and planning.

   (2) RPMA consolidation is feasible but clearly undesirable with no need for follow-on implementation study and planning.

   (3) RPMA consolidation is feasible but neither clearly desirable nor clearly undesirable with need for follow-on detailed implementation study to resolve the question of desirability.

\(^{1/}\) Feasibility and desirability are defined in paragraph 2a.
(4) RPMA consolidation is feasible and clearly desirable with implementation study and implementation to follow.

2. Some Key Distinctions and Definitions.

a. Feasibility and desirability. This study defines two criteria for ranking alternatives:

(1) Feasibility. An alternative is considered feasible when that approach provides a level of RPMA service at least equal to that of the current method of operation (CMO) without much, if any, increase in personnel spaces or costs.

(2) Desirability. An alternative that is desirable to the point of being preferred to the CMO must be feasible and must offer prospects for significant savings in manpower (or other costs) and/or improved level of service. Desirability is a stronger notion than feasibility.

b. Consolidation and centralization.

(1) Consolidation means to join within a single organization. The elements of an organization may be consolidated without being collocated.

(2) Centralization means to bring together at a single location. RPMA elements of different organizations may be collocated (hence, centralized) without being consolidated.

3. Background.

a. A continuing objective of Department of Defense (DOD) policy and guidance is to consolidate RPMA geographically at military
installations where such action does not result in mission impairment and is otherwise cost-effective.

b. DOD memorandums dated 18 and 19 October 1978 (see Annex A), included planning guidance for US military installations in Panama with respect to conducting a three-phased study on consolidating Base Operating Support (BOS). The Secretary of the Army was designated DOD Executive Agent for study of RPMA consolidation (Phase II of the three-phased study). The US Army Chief of Engineers, in turn, tasked the Engineer Studies Center (ESC) to study consolidation of Army, Air Force, and Navy RPMA in Panama.

c. This study was directly sponsored and supported by the Directorate of Military Programs, Office of the Chief of Engineers, Department of the Army. Members of that Directorate provided study coordination through the services' points of contact (POCs) in Panama, with parent commands in the Continental United States (CONUS), and with a special Tri-Service Coordinating Committee (TCC).

4. Study Scope.

a. In considering different kinds and degrees of RPMA consolidation in Panama, this study conducted a cost-benefit analysis to answer the following major questions about the post-Treaty period to 1999.

2/ DOD, ASD(MRA&L), Memo, Planning Guidance for US Military Installations in Panama, and DOD, DAS(D&I), Memo, Implementation of DOD Planning Relevant to US Military Installations in Panama.
(1) Is further RPMA consolidation feasible?

(2) Is further RPMA consolidation desirable?

b. The study taskers asked ESC to address the following specific issues and factors.

(1) Consolidation under a single service.

(2) Consolidation on a geographic basis (e.g., with the military installations clustered in three areas of Panama (Atlantic, Pacific Northeast, and Pacific Southwest) under the dominant service in each area).

(3) Continuation of the current organizations.

(4) Establishment of an industrially-funded organization.

(5) Inclusion of the maintenance and repair of administrative transportation equipment along with RPMA.

(6) The need for a complete and self-sufficient RPMA organization to incorporate other elements of DOS such as supply, procurement, family housing management, and civilian personnel administration to the extent necessary to the consolidated organization.

(7) Real estate recordkeeping.

(8) Impacts on management structures of more or less contracting.

c. At its outset, this study was intended to confine its attention to RPMA and only those other functions of DOS critical
to RPHA. The four original organizational alternatives considered disregarded other BOS and total BOS. As the study developed, it became necessary to broaden the perspective beyond the largely RPHA-only view.

d. The study is not an implementation study. Hence, it does not include an implementation plan. Therefore, the study does not:

1. Identify specific real estate and facilities that alternative RPHA organizations would occupy.

2. Estimate the time required for implementation of alternatives. (However, the general experience of other RPHA consolidations suggests that implementation probably would exceed 18 months.)

3. Include environmental impact statements corresponding to alternatives involving change.

4. Address specific requirements associated with obtaining approval or initiating changes in RPHA funding.

5. Develop detailed manpower documents or authorizations as would a formal manpower survey.

e. The balance of this Main Paper:

1. Discusses study constraints and assumptions in Sections II and III, respectively.

2. Briefly describes the RPHA CMO and introduces the principal RPHA alternatives with explanation of how these were selected for
detailed comparison from among the much larger number of imaginable choices (Section IV).

(3) Outlines quantitative analysis methodology and its application in Section V (covered in more detail principally in Annex H and its appendixes—Volume II). The section notes some necessary adjustments to the basic quantitative method.

(4) Summarizes and integrates the results of quantitative analysis and findings (including adjustments in the light of recent practical experience of the San Antonio Real Property Maintenance Agency (SARPMA)). That experience is reported in Section VI and in Appendix H-3 of Volume II.

(5) States conclusions about the feasibility and desirability of RPMA consolidation and closes with a recommendation made conditional on a broader approach to all BOS (Section VII).
II. CONSTRAINTS AND THEIR SIGNIFICANCE

5. Level of Service.

a. Given the continuing DOD objective of consolidation, an alternative must provide "at least the same level of service" as the CMO to be considered feasible. There is widespread agreement that this phrase verbally describes the single most important constraint on consolidation. There is not widespread agreement about the appropriate quantitative expression of the verbal description. In earlier work, the ESC study team equated "level of service" with the size of the shop or direct labor force. As long as an alternative did not reduce the size of the shops, it was considered capable of providing the same or better level of service for all shop functions. Admittedly, poor management and administration can reduce a shop force's level of service, but poor management is avoided in implementing RPMA alternatives. Similarly, completely neglecting the supply of materials would soon degrade the level of service, but again it was assumed that supply-constrained alternatives would not be implemented.

b. If a reduction in the level of RPMA service were permitted, many alternatives with fewer spaces and lower costs than the CMO would become feasible. (For example, a very low level of services could be provided by a very small number of people.) Furthermore, there would have to be a much more elaborate quantitative definition instead of the
relatively simple set of constraints requiring shop strengths to remain the same. In particular, it would become necessary to express the tradeoffs in performance among different functions.

c. For Army installations alone, there seems to be little dispute about equating same level of service with the same shop strengths. However, because the different services apply different ratios of shop-to-overhead strengths, the Air Force (with the appearance of higher overhead) argues that level of service is highly sensitive to overhead. There probably is merit to this assertion in the multiservice sense. Therefore, the study team made some adjustments of overhead strengths for affected alternatives.

d. Imposing a requirement for equal shop strength in order to assure at least the same level of service in the short run excludes roughly 82 percent of the total RPMA strength from reductions. By default, reductions must be drawn from the overhead strength, constituting only 18 percent of total current strength. The services themselves pointed out that the RPMA shop force in Panama probably provides a greater potential for savings than do the management and overhead elements. Yet, this study of the feasibility of RPMA consolidation did not address the shop force. But even if it had, there would have been practical difficulties. The foremost of these is that there is as yet no sound basis for comparing the productivity of shop labor among the services, between military and civilian spaces, and between US and Panamanian employees.
Other feasibility studies have usually been able to justify consolidation on the basis of savings in the management and overhead elements, leaving the promise of additional savings in shop forces unquantified pending first implementation planning and then the close real-time spaces management following implementation. But because Panama RPMA over the years had already become partially consolidated and centralized, especially in management and overhead functions, the potential there had already been heavily exploited.

The DOD "Definition of DOD Executive Agent Roles with Respect to Panama" refers to the development of standard formats for RPMA consolidation cost-benefit analyses and implementation plans with expectation of the availability of those formats by the end of 1978. However, the Construction Engineering Research Laboratory (CERL) was still developing the formats when this study was being prepared. Hence, this study has been patterned most closely after an earlier ESC study. That study, in turn, borrowed heavily in many respects from CERL Technical Report C-73 of June 1977.

3/ DOD, DASD(I&H), Memo, Implementation of DOD Planning Relevant to US Military Installations in Panama.
4/ DA, USAESC, Army and FMATC RPMA Consolidation in the National Capital Region.
5/ DA, OCE, CERL, Consolidation of RPMA at Fayetteville, NC.
III. ASSUMPTIONS AND THEIR SIGNIFICANCE

7. **Relevance of Historical Data.**

   a. Ideally each alternative RPMA consolidation should be tried and proved against realistic future workload requirements. However, in this case realistic future workload requirements are somewhat uncertain. For example, many of the details of the Panama Canal Treaty that will have RPMA implications have not yet been worked out between Panama and the US.

   b. Consequently, it is assumed that historical workload is a valid backdrop against which to evaluate RPMA organizational alternatives. The assumption shifts emphasis away from estimating absolute changes in personnel strengths and costs to the estimation of relative changes. The distinction between absolute and relative comparisons is discussed at greater length in paragraph 4 of Appendix H-3 (Volume II). Since future workloads will change continuously, the various alternative organizations will also change. However, the same analytical procedures will produce the same alternative rank ordering, by size and cost, as in the historical examination which uses FY 78 data. That is, future workload analysis would still yield the same relative ordering of alternatives, but each organization would vary in total personnel strength.

   c. ESC accepted workload data for FY 78 as representative of current and future requirements and considered that the RPMA organizations were at constant FY 78 recognized levels.
8. **RPMA Technology.** ESC assumed that technology for performing RPMA tasks would remain constant despite changing attitudes toward energy consumption and that new facilities may include some novel equipment that may require new techniques or new schedules. Some technological changes may affect absolute personnel strengths, annual costs, and level of services without changing the relative ranking of alternatives.

9. **Higher Level Organizations.** It was assumed that changes in RPMA organizations in Panama would not lead to changes in the strengths in the engineer sections of the corresponding parent headquarters commands in CONUS. For example, the US Army Forces Command (USAFORSCOM) engineer is involved with so many other installations outside Panama that changes in Panama would probably have relatively little impact on FORSCOM organization. On the other hand, establishment of a new funding system for RPMA might well require the addition of spaces somewhere outside Panama.

10. **Comparability of RPMA Data Among Services.**

   a. It is assumed that interservice RPMA is comparable. Furthermore, it is assumed that Air Force and Navy workload data can be transformed into Army terms.

   b. The services apply different definitions of RPMA, operate different types of RPMA organizations with different structures, and routinely record RPMA information in different terms. Moreover, only the Army possesses a current staffing guide for garrison staffing.6/ Air

Force manning standards are under revision. The study team was able to examine some of the revisions in draft, but these applied to the shop, not the management and overhead spaces. In early stages of study, proposed rules for converting such data were proposed, reviewed, and agreed to with some reluctance by all, with the recognition that the results contained somewhat more uncertainty than would have data from a single set of installations. Everyone agreed that a better approach would have been desirable, but nothing better could be developed in the time available.

IV. THE CURRENT METHOD OF OPERATION AND OTHER RPMA ALTERNATIVES

11. Introduction. This section briefly describes the CMD, not just as a base case for comparison with major RPMA consolidation alternatives, but also as a feasible RPMA approach in its own right. (Annex C and its appendices (Volume II) contain a more detailed description of CMD.) In addition to the CMD, this section describes the principal features of the other original alternatives. Sections V and VI detail the method and results of comparing these alternatives. More detailed treatment of the features of the alternatives and comparisons among them appear in Annex H and its appendices (Volume II).
12. Alternative 1: CMD.

a. The Panama Canal and its associated installations comprise a relatively small geographic complex (see Figure 1). The ends of the Canal are roughly 50 miles apart. Most of the military installations are "concentrated" around each end--bases at each end of the Canal are separated by a few miles at most. In fact, the 150,000 acres under DOD control is less than one-fifth the size of Rhode Island.

b. In FY 78, the RPMA workload accounted for approximately 1.5 million man-hours of direct, in-house effort. The Army performed 65 percent of the total, the Air Force 26 percent, and the Navy 8 percent. The Atlantic side absorbed only 70 percent of the in-house effort. On the Pacific side, the remaining effort was split 55 percent and 45 percent between the east and west sides of the Canal, respectively. In addition, about $13 million of RPMA contract effort was expended.

c. The three services perform and define RPM differently. Accounting procedures, labor shop divisions, and even RPMA functions, to name a few, have developed separately from the same DOD guidelines. This situation made it more difficult to compare organizations for consolidation. These differences and the services' current methods are explained in Appendix C-1, Volume II.

d. Some RPMA consolidation already exists in Panama. For example, the Army RPMA organization is a 193d Infantry Brigade element.
Just as the 193d Infantry Brigade is a consolidated though multi-installation organization, so is its RPMA element. The other services reflect similar though by no means identical kinds of RPMA consolidation. In addition, through Interservice Support Agreements (ISSAs), the services have already achieved partial RPMA consolidation for some functions. Figure 2 shows the services' current organizations.

13. Reduction of the Number of Alternatives.

a. One might suppose with the number of US military installations in Panama that there might be as many as 10 RPMA managers involved in the CMO and that consolidation alternatives worthy of consideration might include choices with from nine to one RPMA manager. But, as noted in the preceding paragraphs on the CMO, the CMO already reflects a degree of consolidation and involves only three principal RPMA managers. This observation limits consideration to only alternatives involving two managers or a single manager.

b. The geography around the Panama Canal and the placement of US military installations are such that there are only three logical clusters to consider—separately and in combination: Atlantic side of the isthmus, east bank of the Canal on the Pacific side of the isthmus, and west bank of the Canal on the Pacific side of the isthmus.

c. The Army was considered the logical choice for single manager because it is the designated lead service and the principal performer of RPMA in Panama. Because of the Navy's small role in the total RPMA
ALTERNATIVE 1 -- CURRENT STRUCTURE

Air Force
  - Admin
  - Housing
  - Financial Mgt
  - Operations
  - Shops
  - ERGR
  - ERGR
  - Maintenance Control
  - Operations
  - Trans
  - Maint & Utilities

Army
  - Admin
  - Supply
  - EP & S
  - RMO
  - Atlantic
  - Pacific

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workload in Panama, the Navy was excluded from consideration as one of the dual managers in dual manager alternatives. The major alternatives to the CMO depend heavily on current Army and Air Force practices; the single manager concept is based almost entirely on Army methods. This emphasis is entirely in keeping with precedent studies in which the methods of the designated lead service predominate. Although an optimal approach combining the best features from all services is an attractive notion, the determination of such an ideal lies beyond the state-of-the-art of feasibility study. An appeal to such longer-term ideals is made in Sections VI and VII in terms of important variations to the major alternatives.

d. As noted above, the CMO is obviously a feasible RPMA approach. Therefore, the CMO is included in its own right as Alternative 1. As originally defined and analyzed, the CMO as an alternative for the future was assumed to rely on ISSAs as did the CMO for the exemplar year 1978. Following the quantitative analysis of all four alternatives, the services suggested consideration of an enhanced CMO more heavily dependent on ISSAs. This enhanced Alternative 1 was considered only to the limited extent as mentioned in Sections VI and VII.

e. The above considerations permitted reduction of the totality of imaginable alternatives to just the four major alternatives that were quantitatively compared.

a. Alternative 2. This is the most extreme RPMA consolidation considered and assigns the Army full responsibility for RPMA management and execution. However, it preserves other services and installation commander prerogatives through implementation of a revolving fund for reimbursement of all RPMA work performed. Figure 3 shows the organization for Alternative 2.

b. Following the quantitative analysis of Alternative 2 and its comparison with the CMO, the notion of Alternative 2 was generalized to broaden consideration of its relation to total BOS, not just the part of other BOS which supports RPMA. The study team had noted that the relative changes in management and overhead spaces for Alternative 2 were not great enough to disregard effects on other BOS. Therefore, it became necessary to introduce a variation to the original "RPMA in isolation" or "RPMA-only" Alternative 2. This variation ("Y" on Figure 7) is contingent on longer-term consolidation of all BOS. The variation is described only to a limited extent due primarily to time and data constraints. However, the study's final recommendation on RPMA consolidation is strongly dependent on the eventual approach to all BOS.

c. Alternatives 3 and 4. Both these alternatives place the Army and Air Force in RPMA manager roles over different parts of the geographic area. The Air Force is given responsibility for RPMA on the Pacific West, and the Army is given responsibility for RPMA on the
ALTERNATIVE 2:
SHARED CONTROL LINKED BY REVOLVING FUND

AIR FORCE
STAFF ENGR

RPMA
MANAGER

NAVY
STAFF ENGR

ADMIN

RMO

PROD MGR

EP & S

MAT & SVC
ACQUISITION

PAC E

PAC W

ATL

TECH SVC

* Procurement, supply, & contracting

Figure 3
Atlantic and on the Pacific East. Figures 4 and 5 show the general organizational outlines for Alternatives 3 and 4, respectively.

15. **Summary of the Features of RPMA Alternatives.**

   a. Figure 6 summarizes several features (the similarities and differences, in particular) of all four original RPMA alternatives retained for comparison. The figure also highlights an enhanced CMO as suggested by Panama and the expanded single manager for all BOS. It also shows the method of RPMA management, the basis for staffing, the method of funding, the provision of other installation support to RPMA, and some general remarks.

   b. Figure 7 is intended to put the retained alternatives in perspective with regard to the major consolidation variables. The two parallel axes suggest that RPMA management and execution can be regarded somewhat differently with respect to consolidation/unconsolidation and centralization/decentralization. The figure is not drawn to scale. The markers representing Alternative 1 (the CMO) have been positioned as a reminder that the CMO already incorporates some degree of consolidation and centralization. Alternatives 3 and 4 are shown somewhat to the left of Alternative 1 on the management axis to suggest only modest further consolidation of RPMA management. Alternative 2 (the single manager concept with revolving fund) is still further left because it is the most extreme RPMA consolidation given continued consideration in this study. Stovepipe funding (identified as Alternative X)
ALTERNATIVE 3 -- DUAL MANAGER

AIR FORCE RPMA MANAGER PAC W
  ↓
  ADMIN
  ↓
  RMO
  ↓
  PRODUCTION MGR
  ↓
  FIRE

NAVY STAFF ENGR

ARMY RPMA MANAGER PAC E ATL
  ↓
  ADMIN
  ↓
  RMO
  ↓
  PRODUCTION MGR
  ↓
  PAC E
  ↓
  ATL

Figure 4
ALTERNATIVE 4 -- DUAL MANAGER

Figure 5
## Comparison of Key Features of Alternatives

<table>
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<th></th>
<th>Management</th>
<th>Staffing</th>
<th>Funding</th>
<th>Other Instl Spt to RPMA</th>
<th>General</th>
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<td>As Is</td>
<td>As Is</td>
<td>As Is</td>
<td>As Is</td>
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<tr>
<td>2</td>
<td>Single Mgr (Army) + Pdn Mgr</td>
<td>Augmented Staff Guide</td>
<td>Revolving Fund</td>
<td>Provided by Army; RPMA absorbs much of supply, procurement, and contracting.</td>
<td>Staff Engr for Navy &amp; Air Force; Fire protection retained under Air Force Staff control.</td>
</tr>
<tr>
<td>3</td>
<td>Dual Mgr (Army &amp; Air Force) + Pdn Mgr</td>
<td>Augmented Staff Guide</td>
<td>More reliance on ISSAs.</td>
<td>Provided by mgr's service; RPMA absorbs much of supply, procurement, and contracting.</td>
<td>Navy supported by Pacific West Mgr (Air Force) thru Staff Engr.</td>
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<tr>
<td>4</td>
<td>Dual Mgr (Army &amp; Air Force)</td>
<td>Augmented Staff Guide using current organization structure</td>
<td>More reliance on ISSAs.</td>
<td>As Is</td>
<td>Navy supported by Pacific West Mgr (Air Force) thru Staff Engr.</td>
</tr>
<tr>
<td>Enhanced CMDO</td>
<td>As Is</td>
<td>As Is</td>
<td>More reliance on ISSAs</td>
<td>As Is</td>
<td>Services claim that more reliance on ISSAs will reduce CMDO costs.</td>
</tr>
<tr>
<td>Expanded Single Mgr</td>
<td>Single Mgr as Part of Total BOS Consolidation.</td>
<td>Standardized hybrid</td>
<td>Revolving Fund</td>
<td>All BOS provided by single mgr.</td>
<td>Standardized BOS system.</td>
</tr>
</tbody>
</table>

Figure 6
STRUCTURAL ALTERNATIVES -- SUMMARY

THE ALTERNATIVES BREAK OUT AS FOLLOWS:

CONSOLIDATION/ CENTRALIZATION / UNCONSOLIDATION/ DECENTRALIZATION

EXECUTION

MANAGEMENT

TOTAL INSTALLATION SUPPORT MGR

SHARED CONTROL LINKED BY REVOLVING FUND

STOVEPIPE

DUAL MANAGER

CURRENT STRUCTURE

RPMA

Figure 7
is even more extreme and directly funds a single RPMA manager over all RPMA to achieve even greater consolidation and greater centralization by further reducing the responsibility of installation commanders for RPMA. Alternative Y represents management consolidation to the point of a single manager over all BOS—in effect, creating an installation management command. Alternative Y is beyond the scope of this study, but something akin to Alternative Y is clearly part of DOD's longer-term considerations for Defense Complex Panama. In particular, DOD designated consideration of RPMA consolidation as a Phase II action and consideration of other BOS as a Phase III matter. However, this study found that it could not safely consider RPMA in isolation, that the separation of Phases II and III could not be complete. On the other hand, the study could not give much attention to the other and total BOS question. It did find it necessary to make its final recommendation (Section VII) on RPMA consolidation conditional on longer-term total BOS consolidation.

On the execution axis in Figure 7, Alternative 2 is placed only shortly to the left of Alternative 1 (the CMO). Although Alternatives 2, 3, 4, and Y do bring RPMA execution elements within their corresponding consolidated organizations, they leave almost all the shops in place physically. Thus, Alternatives 2, 3, and 4 provide more consolidation than centralization of RPMA execution. Alternative 2 consolidates and centralizes RPMA management.
V. METHODOLOGY

16. Introduction. This section describes the study's quantitative methods in general terms. Application of the methods, of course, involves a great deal of RPMA data which is described in Appendix C-1, Volume II. Appendixes H-1 and H-2 (Volume II) handle actual applications of methods to data. This section provides a step-by-step example of the results illustrating how the spaces were estimated for Alternative 2.

17. Discussion.

a. The basic method of the study was to compare alternative approaches to RPMA with regard primarily to manning levels, annual costs, and conversion costs, and secondarily to a number of qualitative or judgmental factors. The study team eliminated any alternative which did not meet the "at least same level of service" constraint.

b. A feasible alternative was one that appeared to satisfy the level of services constraint without undue increase in manning level, annual cost, and conversion cost. A desirable alternative to the CMO had to be feasible and also offer savings in manpower, savings in cost, and improved level of service.

c. Thus, the two basic questions to be answered were: "Is further Panama RPMA consolidation feasible?" and "If further consolidation is feasible, is it desirable?" Because the information generated and collected during this type of cost-benefit analysis is limited and
necessarily depends so heavily on the past, a slightly different answer on desirability might arise as the result of later implementation analysis and planning.

d. In actuality, historical workloads cannot be known with absolute certainty. The usually available data are liable to errors of both omission and commission. Moreover, the historical data may possess less resolution than desirable. The analyst is prone to succumb to the popular (but sometimes misleading) dictum: the only data available are the best data. When historical data come from different sources (e.g., different services), they may describe the same work in different terms, or (and this is more common) they may describe different work in different terms. The analyst then must take the difficult additional step of converting as much data as possible to some common base—perhaps expressing all in the terms of one of the sources, or perhaps all in an entirely different set of terms. The latter sometimes achieves the added blessing of giving the appearance of fairness to all. This study has followed precedent by translating all data provided into the terms of the designated lead service—in this case the Army.

e. This study used a less general approach to shop and overhead spaces. Most shop spaces were accepted directly as given. Only a very small fraction of shop spaces are regarded as subject to change. On the other hand, almost all the overhead spaces were derived in accord with
staffing guide principles. Accordingly, they were subject to change, dependent, not just directly on workload, but also indirectly on the degree of organizational consolidation imposed. In particular, the Army Staffing Guide makes manpower levels dependent on workloads in learning curve (actually step function) fashion. That is, it applies notions of economy of scale to work and work-like activities. Although the Army Staffing Guide is an official Army publication, it is only a "guide." Manpower surveys remain more authoritative, though these often depend to some extent on the Army Staffing Guide. In any case, there are often sound reasons for taking exception to the Army Staffing Guide within the Army. With some justification, the Air Force and Navy can express displeasure at the application of Army Staffing Guide principles to their own RPMA workloads and elements. But here again, the analyst applies an argument similar to that employed to justify comparisons based on historical data.

f. It was assumed that the ranking of alternatives and the relative differences among alternatives based on Army Staffing Guide principles provide valid approximations. It is not suggested that manning levels derived for the alternatives are the ones that implementation teams would determine. But it is claimed that the order and relative differences among alternatives would be the same. The assumption and suggestion are
offered somewhat in default because the Naval Public Works Center cannot be based on a nonexistent Navy staffing guide and because the Air Force will not formalize a new revised staffing guide for months to come. Instead, this study took the special step of standardizing the CNO (referred to as Alternative 1A) for all services in accord with Army Staffing Guide principles. This step is necessary to show that the total differences between the real CNO and the other alternatives are not entirely attributable to organizational consolidations, but also to definitional and procedural differences. This is not a true consolidation alternative, but rather an analytical step that quantifies effect.

g. Section VI shows the results of applying Army Staffing Guide principles with necessary adjustments to the original alternatives and estimated annual costs (primarily salary and benefits). Note that, at least in theory, the estimated salary costs have somewhat higher resolution than those estimated in some other known consolidation studies. In some studies, the manning and workload data were too gross to permit more than the application of average supervisory to nonsupervisory ratios across all functions. In this study, the salary ratios for each function were calculated separately. Thus, the estimated salary changes in this study are more sensitive to differential changes in supervisors and nonsupervisors among functions than if only a single average were used.
18. Development of an Example Alternative. Figure 8 shows an example applying Army Staffing Guide principles and following adjustments in the development of Alternative 2.

a. Step 0 (not performed) serves as a reminder that a completely unconsolidated RPMA structure in Panama would almost certainly have contained more people than does the CMO--probably about 72 (1,585 total) more people--spaces that cannot be attributed to further consolidation.

b. Step 1 shows that the CMO employs 1,513 people in RPMA and RPMA-related functions.

c. Step 3 shows an eight-space adjustment to account for the transfer of master planning to the Mobile District of the Corps of Engineers.

d. Step 3 was performed in order to "standardize" the CMO. The result is a smaller base case consisting of another 52 fewer spaces than the original CMO. The reduction in spaces due to standardization certainly cannot be attributed to consolidation.

e. Step 4 applies the Army Staffing Guide principles to Alternative 2. This 97-space reduction, primarily in overhead and installation support to RPMA, is overly optimistic in the sense that the Army Staffing Guide includes no special allowance for the physical dispersion of RPMA customers.
SUMMARY OF THE STEPS IN DEVELOPMENT OF ALTERNATIVE 2

STEP
0. Hypothetical, completely unconsolidated Panama.

1. The CMO (i.e., already partially consolidated, partially centralized (Alternative 1))

2. The CMO adjusted for master planning.

3. The CMO adjusted to basicArmy Staffing Guide (Alternative 1A)

4. Complete consolidation, assuming complete collocation

5. Adjustment for geographic dispersion

6. Adjustment for revolving fund administration (Alternative 2)

7. Adjustment for unrealizable support

8. Adjustment for multisection "dialects"

9. Adjustment for multisection reporting systems

10. Safety factor

Figure 8

31
f. Therefore, Step 5 is applied to increase the strength of the organization to compensate for the additional burden of managing geographically dispersed activities. Step 5 adds 15 spaces.

g. Step 6 adds 19 spaces for the last step in building Alternative 2 because the implementation of a revolving fund requires some additional people.

h. Alternative 2 includes some BOS functions within the consolidated RPMA organization. Through this consolidation, some economies of scale are achieved. However, not all the theoretical savings are realizable. Some of the other BOS elements support activities besides RPMA. Thus, Alternative 2 requires some fragmentation and rounding of other BOS elements. The result is that 33 of the theoretical savings in support to RPMA are retained within the other BOS elements and thus are unrealizable as savings. Step 7 applies this upward adjustment for the unrealizable support savings.

i. Step 8 suggests that a multiservice consolidation might require a few more spaces than would a single service consolidation of the otherwise same size. This study did not make an adjustment at this step.

j. A standard or generalized RPMA reporting system seems several years off at best. This would probably require some additional spaces for multireporting for years to come. (Appendix C-3, Volume II, describes an effort to estimate the adjustment for multireporting.) Probably a bit
too optimistically, Step 9 does not add any multireporting spaces since experience was so limited.

k. The study team, as the rule of thumb in previous single service consolidations, regarded 3 percent to total strength as a tentative threshold of significance. In this study, because of the multiservice aspects, 4 percent was adopted as a new rule of thumb. This is a very rough rule of thumb. Depending on one's own ideas of what is safe or certain, the analyst can choose to add or subtract spaces in the name of scientific integrity, conservatism, liberalism, general or special uncertainties, and optimism or pessimism.

l. The bottom line in Figure 8, then, reflects the results of an orderly but somewhat uncertain process of estimation. Significantly, what began as a CMO point, 1,513 spaces (but even this must be uncertain by a few spaces), becomes somewhat diffuse by the Step 10 bottom line, and even more so with the optimistic zero adjustments of Steps 8 and 9.

m. Figure 8 may give the impression that the method is based only on total numbers of people, disregarding skills. Such an impression is both unintended and incorrect. The number of people by function for each alternative was determined with appropriate staffing procedures (see Appendix H-1, Volume II). This method preserves the distinction between supervisory and nonsupervisory strength for each function. The salary estimates (in FY 78 dollars) reflect these function-sensitive differences.
VI. RESULTS AND FINDINGS

19. Introduction.

a. This section summarizes the results and findings of this study. The report annexes, mostly in Annex H and its appendixes (Volume II), present detailed results and their development.

b. This study was especially careful to distinguish between differences purely attributable to consolidation and the differences achievable by other means; its estimates of net changes are probably more conservative than those in previous consolidation studies. The practical experience of SARFMA has tempered the interpretation of the quantitative evidence collected from Panama. The SARFMA experience has been particularly useful in providing new insight on the intensity and duration of turbulence associable with implementation planning and then actual implementation, on multiple and standardized reporting, and on BOS fragmentation. As this section shows, the net differences among alternatives are probably less than many people outside Panama expected. The principal reason for this is described in terms of a qualitative but important finding that was never a secret but was evidently not widely appreciated.

20. Pre-Treaty Panama. Significantly, the CMO today reflects many positive results of past intraservice and interservice analyses of RPMA and other functions of BOS. To varying degrees, the CMO already involves
intraservice organizational consolidation, intraservice consolidation of some RPMA shop functions, and interservice consolidation of a few other RPMA (or RPMA-like) functions. Thus, many of the usual advantages attributable to RPMA consolidation have already been exploited to a large extent, leaving relatively less to be gained by further consolidation. It is notable that the installations and organizations considered in some other RPMA consolidation studies were, at the beginning, much less consolidated and more dispersed than those in Panama today.

a. Many military installations, for example, belong to a single organization in Panama, the 193d Infantry Brigade. The brigade Facility Engineer (FE) is already a single manager of RPMA for those installations. His staff is smaller than would be the total for an equal number of unconsolidated installation FEs.

b. Regardless of the outcome of this study, on 1 October 1979, the Army assumed responsibility from the Panama Canal Company (PCC) for trash collection and maintenance and repair of medical, dependent education, and other facilities transferred from the PCC.

c. The theater, contrary to some opinion and certainly more so than many other regions, has been rather progressive in its treatment of RPMA over the years. The services in Panama have cooperated with one another and the PCC in many ways to the general benefit, though not necessarily the perfection, of RPMA matters. Admittedly some of the
past progress may have been influenced by outside pressures. Nevertheless, the Army, Air Force, and Navy in Panama deserve more compliments than criticism for the state of RPMA there today.

21. Secondary Topics. Family housing management and transportation are addressed here because the study tasker asked that they be included even though all or part of those functions need not be regarded within RPMA. Family housing maintenance is unquestionably included in the regular RPMA structure of the Air Force and Navy and is so treated throughout this study. Family housing management, especially the assignment of housing, is a controversial subject. Family housing management can be plugged into or unplugged from the RPMA alternatives without influencing the relative feasibility or desirability of the alternatives. Consideration of administrative vehicles has been merged with treatment of the regular RPMA equipment in paragraph 21b below.

a. Family housing management. Acting under DOD direction, in 1977 a tri-service team chaired by the Army studied the feasibility of consolidating all family housing management functions. That team concluded that it was feasible to consolidate and that the Air Force should be responsible for the new organization. Following independent review of the earlier study, ESC concurred with the team's conclusion on

feasibility. However, ESC did not find it necessary to include family housing management within an RPMA consolidation. Inclusion is not necessary to RPMA or to family housing management. The family housing management issue is at most incidental to the broader RPMA question; it neither makes nor breaks any case for or against RPMA consolidation. Because of other pressing matters, the services have not yet reduced their differences in family housing management to the point that its incorporation should occur in the early phases of even a total BOS consolidation.

b. Transportation. The overall transportation function includes both administrative vehicles and construction special purpose equipment maintenance and repair. The study tasker seeks an analysis of the former and RPMA consolidation demands consideration of the latter. These separate analyses address consolidation feasibility regardless of the RPMA consolidation decision.

(1) Maintenance and repair of administrative vehicles encompass all work accomplished above the individual transportation motor pool. This process, then, parallels the existing engineer equipment repair procedures. The Air Force and Navy now receive equipment maintenance from the Army via ISSAs. Our limited analysis indicates that savings, approaching seven personnel, can be realized by consolidating; and therefore, the command should initiate action for implementation.
(2) Currently each service owns and operates several pieces of high-dollar, mobile construction equipment. Potential savings can accrue from the consolidation of low utilization construction equipment. ESC analyzed the services' utilization rates, estimated when not submitted, to determine the number of actual hours used during the base year. Utilization was further refined to account for seasonal variations of availability. This process indicated that upwards of 69 pieces of equipment could be released if the services consolidate and pool the engineer equipment resources. In terms of cost avoidances from not having to replace as many pieces of equipment, the net capitalized cost savings to the Government would approach $100,000 per year. This warrants the consolidation of equipment.

22. Comparison of Alternatives.

a. Figure 10 is a tabulation of this study's quantitative estimates of the personnel space requirements and annual personnel costs for the initial alternatives. Both the original CMIO and the CMIO standardized to the Army Staffing Guide are included as Alternatives 1 and 1A, respectively. (Recall that Alternative 1A quantifies effect.)

(1) The first two columns represent the RPMA organizations proper. For Alternatives 2 and 2, the RPMA organization included 13 and 14 spaces, respectively, taken in from BOS and made organic to the RPMA organization.

(2) The third column represents Staff Engineer elements.
### TOTAL MANPOWER AND ANNUAL COST COMPARISON

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<sup>a/</sup> Estimates based on FY 78 manpower and salary data. Additional alternatives not included. See text.

<sup>b/</sup> Figures represent total change attributable to consolidation and to the use of Army procedures as compared with three separate procedures.

<sup>c/</sup> Change attributable only to consolidation.

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**Figure 9**
(3) The fourth column represents the other installation support (BOS) to RPMA, which spaces lie outside the RPMA organization proper.

(4) Column 5 identifies other BOS spaces that support RPMA but could not be reduced because of BOS residual roles and rounding off of fractional spaces.

(5) Column 6 presents the totals for all elements of the RPMA complex.

b. Figure 9 includes measures of the relative differences among the alternatives. These are shown in columns 7 and 8. Recall that these are comparative strictly in the sense of application against FY 78 workloads, but it is assumed that the relative differences would be the same for other years.

(1) Column 7 presents the gross changes in terms of the percentages of the corresponding values for Alternative 1. Recall however, that Alternative 1 is not expressed in Army Staffing Guide terms. Therefore, differences with respect to it cannot be entirely attributed to consolidation.

(2) Column 8 presents the changes in terms of percentages of the corresponding values for Alternative 1A. Inasmuch as Alternative 1A is the CMO standardized in terms of the Army Staffing Guide, it is a better basis for changes attributable to consolidation.
c. Relative to Alternative 1A, the changes in personnel strength attributable to consolidation are slight. Only the changes for Alternative 2 approach the rule of thumb threshold of significance, suggesting a slight prospect for savings. Notably the change for Alternative 4 is upward; relative to Alternative 1A, Alternative 4 adds spaces to the total RPN1A complex. Notice that annual personnel costs do not change by the same percentages as estimated for personnel spaces. Because the study's method applied costs sensitive to the salary differences among functions, a reduction in higher grade spaces causes larger estimates in salary fluctuations than for the less sensitive methods applied in some other studies. (The higher sensitivity may be misplaced in the short run inasmuch as some of the higher graded people well might exercise bumping rights and retain high salaries for the maximum allowable periods. Also, no adjustment has been made for the possibility that remaining supervisory and managerial spaces may have to be upgraded, with corresponding salary increases, to match the increased responsibilities of those fewer remaining supervisors and managers.)

d. Figure 10 is a graphical comparison of the personnel spaces and annual personnel costs extracted from Figure 9. Note first that the origin is not at 0 people, 0 costs, but at 1,200 people and a $16M cost level. The difference between Alternatives 1 and 2, disregarding the uncertainties and that portion of the difference not attributable to
TOTAL FY 78 SPACES & ANNUAL COST OF RPMA ALTERNATIVES

\[1\]

The additional alternatives were not quantified and are therefore not shown.

Figure 10
consolidation, looks tempting. But when allowance is made for these factors, the likelihood of reduction, even under the single manager concept, is seen to be slight.

e. In all cases, the shop strengths are preserved to assure the same or better level of RPMA service to all, provided RPMA management does not become negligent or biased.

f. The Air Force's contingency missions dictate that military personnel be in the RPMA force. Their mission "includes an on-call base operations sustaining capability to assure the continued launch and recovery of mission aircraft and fire crash/rescue." This necessitates that any consolidated organization be able to provide these functions. Special options for providing these functions are being considered in other theaters where contractor and host-nation support possibilities may be greater than in Panama, at least in the short run.

g. The study team regards the adjusted Army Staffing Guide estimates of personnel strengths and annual costs of the alternatives as optimistic. Part of this optimism may be attributed to the uncertainties already discussed and to the fact that the "adjustments" for RPMA definitional and reporting differences were set at zero. The team has also been influenced by the recent practical experience at SARPMA.

8/ DAF, AF Engrng and Svcs Ctr, HQ, ltr, Review of Comments on Draft Cost-Benefit Analysis of Panama RPMA Consolidation.
SARPMA reflects a large step forward but cannot as yet be regarded as a fully optimized approach. Appendix H-3, Volume II, lists many observations about SARPMA and closes with some lessons almost certainly relevant for Panama. Many of these lessons imply some additional (largely upward) adjustments in the numbers of people (some in the short run, others in the long run) required to manage and execute consolidated RMPA. The state-of-the-art for hypothetical and real RMPA consolidations is such that many of the additional adjustments have not been quantified. On the basis of SARPMA experience, the following points are offered to explain the study team's very cautious attitude about savings in spaces or costs.

(1) More effort and hence one-time expense for implementation planning seems necessary. Because so many implementers usually come from the affected commands, there may be a paradox—greater effort devoted to implementation planning in order to reduce turbulence may take so many people away from their regular jobs that turbulence is increased.

(2) Set up a high-level, collective work prioritization system or committee. This is needed to improve performance but adds to cost.

(3) Develop and operate a project tracking system. This adds worthwhile expense and spaces to the consolidated agency.

(4) Provide strong planning and programming (in the full program, not single project sense) in the consolidated agency.
(5) Give the consolidated agency sufficient authority to match its responsibilities for timely contracting and procurement.

(6) Give the consolidated agency sufficient civilian personnel clout—-for early recruiting and other actions. This adds to one-time cost but minimizes turbulence and start-up delays.

(7) During implementation planning and then during operation, include staff accustomed to reconciling larger scale priorities than typical of single installation experience. The requirement may be for "outsiders," perhaps with higher grades.

(8) Panama seems potentially much more turbulent than any other consolidation considered to date. Therefore, postponing Panama consolidation may be justified (i.e., the suggestion by some to let most of the Treaty chips fall where they may before attempting full consolidation may have some merit).

(9) No one service seems clearly superior to the other in all RFMA respects. Yet the "practical" approach to consolidation seems to be to let a lead service impose its approach. Ideally, a consolidation should adopt the best from each service. No one seems to have achieved this in practice. The optimal organization cannot be determined simply by further study. Indeed, the practical approach seems to be to implement first along lead service lines with optimization pursued later by evolution.
(10) Again, the consolidated RPHA agency must apply a regional outlook to satisfy customers in some best individual and collective sense. The need for the regional agency to balance local/global, special/general, and project/program cannot be overlooked in the selection of key faces to fill the agency's critical spaces. Additional and/or higher grade spaces are implied.

h. The method used to generate the staffing estimates for each alternative does not track spaces from the CMO on a one-for-one basis into new slots. Nevertheless, even at the feasibility study phase almost everyone is interested in the probable changes to the strengths of each service. The best estimate at this stage is simply to divide the total changes in spaces and salaries in proportion to FY 78 RPHA in-house and contracting costs. Figure 11 shows proportional estimates of the gross changes from the FY 78 CMO for each service for the quantified Alternatives 2 through 4. These are not projections of future changes; they are simply estimates applicable to the FY 78 example time frame and workload. Note, too, that these gross changes combine differences attributable to consolidation with the differences attributable to applying Army management and overhead guidelines across the CMO.
### APPROXIMATE GROSS SAVINGS PER SERVICE

<table>
<thead>
<tr>
<th>Service</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
</tr>
</thead>
<tbody>
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<td>Personnel (SM)</td>
<td>Salary ($)</td>
<td>Personnel (SM)</td>
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<tr>
<td>Navy</td>
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<td>.32</td>
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</table>

a/ Rough estimates proportional to FY 78 workload. Figures calculated from unadjusted CMO Alternative 1. These estimates are applicable only against the FY 78 workload. Only parts of these changes are attributable to consolidation. Savings generated by total BOS consolidation should far exceed those in figure.

b/ In FY 78 dollars.

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**VII. CONCLUSIONS AND RECOMMENDATIONS**

23. Conclusions. This study's conclusions are:

a. Alternative 1, CMO. The CMO in its own right is clearly feasible but it is not the most desirable.

b. Alternative 2. This single manager organizational structure is also feasible and does offer prospects for relative savings. BOS fragmentation and interservice differences, however, increase uncertainty which leads to the conclusion that it is only marginally desirable.

c. Alternative 3. Consolidation under this dual manager alternative is feasible but suffers the disadvantage of staffing the Air Force by Army procedures. This alternative is therefore considered undesirable.
d. Alternative 4. This dual manager alternative applies staffing procedures similar to those of the parent services. Although it is a feasible approach to consolidation, it is clearly undesirable.

e. Enhanced CMO. ESC concurs with the services that an enhanced CMO which expands reliance on ISSAs and contracting offers prospective short-term savings. This concept is also feasible, but it is not a desirable long-term approach.

f. Expanded single manager. This study's analysis concluded that a single manager RPMA is feasible but lacks clear desirability because of nonstandard service procedures. Therefore, an additional qualitative step was postulated. The short-term solution advocates an Army RPMA incorporating the long-term objective of a new, standardized BOS system for all services. This solution is clearly feasible and desirable.


a. The consolidation of the maintenance and repair of administrative vehicles and equipment is feasible.

b. If any of the multiple RPMA manager alternatives is adopted, real estate-accountable recordkeeping should remain with each service. A single manager alternative, however, consolidates this function in the new RPMA.

c. Consolidation of family housing management is feasible but is not needed within a consolidated RPMA organization.
25. **Recommendations.** ESC recommends implementing Alternative 2 if and only if it is explicitly united with the longer-term objective of standardizing all BOS for Defense Complex Panama. To this end, all future actions should be geared towards:

   a. Implementing the RPMA phase of total BOS consolidation in 1 to 2 years at the earliest, thereby allowing much needed reconciliation of current Treaty-related uncertainties.

   b. Augmenting the usual in-theater implementation planning staff with about 10 outside experts with skills in planning in general and personnel, funding, and reporting in particular.

   c. Implementing primarily along Army RPMA lines with the target of later integration within an evolving, standardized, optimized BOS.

   d. Developing and implementing standardized reporting, funding, and ADP systems.

   e. Exempting the services in Panama from duplicative, non-standard reporting requirements.
ANNEX A

STUDY REQUESTS
### ANNEX A

**STUDY REQUESTS**

| Memorandum, Office of the Chief of Engineers, Director of Military Programs, subject: Consolidation of Real Property Maintenance Activities (RPMA) at US Military Installations in Panama, 13 December 1978 with Inclosure | A-11 |
MEMORANDUM FOR

Secretary of the Army
Secretary of the Navy
Secretary of the Air Force
Director, Joint Staff, OJCS
Director, Defense Logistics Agency
Director, Defense Mapping Agency

SUBJECT: Planning Guidance for U.S. Military Installations in Panama

This memorandum addresses facilities planning and base operations in Panama for the period subsequent to the entry into force of the Panama Canal Treaty on October 1, 1979 (T-Day) and is pursuant to DEPSECDEF memorandum of June 20, 1978, Subject: "Panama Canal Treaty Implementing Guidance."

Considerable change will be experienced by U.S. Forces and their dependents and civilian employees in Panama within the next few years as a consequence of the Panama Canal Treaty. Military units and activities will be relocated. Several retail functions, the postal service, dependent schools system, and health and medical system will be transferred to the Services from the Canal Zone Government/Panama Canal Company. Adjustment to those changes incident to initial implementation of the Treaty will be difficult, but has been facilitated by the planning initiated and coordinated by Commander-in-Chief, U.S. Southern Command (USCINCSO) and approved by DEPSECDEF. It is essential that follow-on planning be initiated now to assess the impact of anticipated change in the post T-Day period and provide for timely development of the most cost effective base structure required to satisfy U.S. requirements for the life of the Treaty. This planning encompasses regional complex master planning and consolidation of certain base operating support (BOS) elements and real estate management.

Coordination of T-Day and post T-Day base structure planning can best be realized within the framework of an approved Panama regional complex master plan (RCMP) based upon force
levels approved in FY 80 Program Decision Memoranda after consideration of Service POM Supplements, FY 80-84. This planning will involve all Defense Components in Panama in the analysis of the primary functional subsystems that constitute the military base structure in Panama and planning for their subsequent efficient interaction. In serving as the baseline for future base development in Panama, such a comprehensive plan is expected to:

--- realize maximum utilization of available facility assets in terms of overall requirements of U.S. Forces.

--- support programming of post T-Day facility construction, especially that stemming from further Treaty-generated displacement of military units and activities.

--- eliminate construction of redundant facilities which might otherwise result from independent installation planning.

--- identify any as yet unspecified facilities and areas, not required to support a U.S. mission, for timely transfer to Panama.

The utility of this master planning in supporting the programming of necessary military construction cannot be overemphasized. Since such programming will encounter severe scrutiny at every level of review, the RCMP will serve as its fundamental supporting document.

The study of inter-Service consolidation of BOS functions is viewed as a three phase effort. The first phase consists of earlier USCINCSO efforts which will lead to the assumption by individual Services of various inter-Service support roles on T-Day. The second phase, essentially limited to that portion of BOS concerning real property maintenance activities (RPMA), has been assigned to the Secretary of the Army for execution and is expected to be completed by 30 April 1980. RPMA represent the dominant elements of BOS in terms of cost and potential for savings. The third phase will include those elements of BOS not included in the other phases and represents the dominant portion of BOS in terms of number of functions to be analyzed. In view of the considerable effort to be expended in implementing the first two phases of BOS consolidation, the third phase will be studied at a later time. If, however, targets of opportunity for functional consolidations present themselves during the first two phases, they shall be jointly implemented where possible.
Lands to be made available on T-Day by Panama to the U.S. for defense of the Panama Canal will constitute an entity entitled Defense Complex Panama. The Panama Canal Company/Commission will initially maintain real estate (land) records and will conduct boundary surveys for the Defense Complex Panama on a reimbursable basis. Effective management of these lands, can best be achieved through a single Defense Component.

The Secretary of the Army, with dominant Service representation in Panama, is hereby designated as DOD Executive Agent for the development of the Panama Regional Complex Master Plan and management of DOD lands in Panama. The development of the master plan and a feasibility study of land management will require coordination with all involved Defense Components. These assignments are consistent with earlier assignments of the Army as DOD Executive Agent for administration of military construction and study of RPMA consolidation.

Further detailed guidance to all concerned concerning the execution of the aforementioned Executive Agent roles will be promulgated by DASD(I&H).

JOHN P. WHITE
Assistant Secretary of Defense
(Manpower, Reserve Affairs & Logistics)

cc: Commander-in-Chief, U.S. Southern Command
    DoD Rep for Panama Canal Treaty Affairs
MEMORANDUM FOR Assistant Secretary of the Army (IL&FM)
Assistant Secretary of the Navy (MRA&L)
Assistant Secretary of the Air Force (MRA&I)
Director, Joint Staff, OJCS
Director, Defense Logistics Agency
Director, Defense Mapping Agency

SUBJECT: Implementation of DoD Planning Guidance Relevant to U.S. Military Installations in Panama

This memorandum provides detailed guidance concerning the execution of DoD executive agent roles in Panama and is pursuant to ASD(MRA&L) memorandum of 18 October 1978, Subject: "Planning Guidance for U.S. Military Installations in Panama."

Planning and programming accomplished by DoD to date in the implementation of and adjustment to the Panama Canal Treaty is summarized in Enclosure 1. These efforts will be continued through the execution of specific DoD Executive Agent roles assigned to the Secretary of the Army. In this capacity and as defined in Enclosure 2, the Executive Agent is an element of OSD with responsibility for coordination with all involved Defense Components and other Federal agencies and submittal of reports and plans for approval to this office prior to implementation. In turn, involved Defense Components will provide appropriate assistance to the Executive Agent as necessary.

Enclosures 2

cc: Commander-in-Chief, U.S. Southern Command
DoD Rep for Panama Canal Treaty Affairs
SUMMARY
DOD PLANNING AND PROGRAMMING RELEVANT TO THE
RESTRUCTURING OF THE MILITARY BASE COMPLEX IN
PANAMA BY T-DAY

Background

The Panama Canal Treaty (which impacts upon military basing) and the Treaty of Neutrality were signed on 7 September 1977. On 16 June 1978, the instruments of ratification, which become effective on 31 March 1979, were signed and exchanged in Panama. This document calls for the placing in force of the treaties within six months, or, by 1 October 1979. Implementing legislation for the Panama Canal Treaty will be submitted to the next (96th) Congress.

Programming - O&M and MILCON

Shortly after the signing of the treaties, USCINCSO initiated an evaluation of the impact of the Panama Canal Treaty on U.S. Forces in the Canal Zone and prepared, in coordination with Service Components, a proposed plan for their assumption of various roles from the Panama Canal Company by T-Day. This plan was incorporated into DEPSECDEF memorandum, dated June 20, 1978, Subject: "Panama Canal Treaty Implementing Guidance." Resources ($44.1 million) required to support the assumption of these roles and required relocation of military units and activities by T-Day were identified in a request for a FY 1979 budget amendment submitted to OMB on 22 July 1978.

This budget amendment request included $36.9 million for rehabilitation of existing facilities and some new construction. Other requirements, estimated at $32.0 million have also been identified and are under consideration for Defense Component programming in the FY 80-83 MILCON Programs. In the absence of OMB action on this budget amendment request and as an alternative thereto, a request for commencement of the more critical elements of construction with SECDEF contingency funds in the amount of $10.9 million was submitted to Congress on 5 Oct 1978. Under this alternative, the remaining MILCON would be programmed as a FY 79 budget supplement.

Construction Execution

DASD(I&H) memorandum, Subject: "Military Construction Incident to Implementation of the Panama Canal Treaty," dated July 20, 1978, designated the Army, as dominant Service in Panama, to serve as DoD construction agent for all military construction in Panama and requested submittal

Enclosure 1
of a construction execution plan by August 15, 1978, for that construction included in the budget amendment. This execution plan, providing for award of a cost-plus construction contract in October 1978 and completion of the majority of the work by T-Day, was approved by DASD(I&H)IC.

RPMA Consolidation

ASD(MRA&L) memorandum, Subject: "Assessment of FY 77 BMAR and Certain Consolidations of Real Property Maintenance Activities (RPMA)," dated June 19, 1978, requested that Army prepare a cost-benefit analysis for inter-Service consolidation of all RPMA organizations in Panama. By DAEN-FER memorandum to ASD(MRA&L), Subject: "Consolidation of Real Property Maintenance Activities (RPMA) in Panama (Canal Zone)," dated July 14, 1978, Army advised that this analysis could be completed by March 30, 1980, and recommended, instead that its scope be expanded to include all elements of base operations support.
DEFINITION OF DOD EXECUTIVE AGENT ROLES
WITH RESPECT TO PANAMA

I. GENERAL.

The Secretary of the Army has been designated the DOD Executive Agent for (a) development of a regional complex master plan (RCMP), (b) administration of military construction programs, (c) development of a plan for inter-Service consolidation of Real Property Maintenance Activities (RPMA), and (d) determination of the feasibility of consolidation of management of all DOD real property in Panama. Concurrently through the Panama Canal Area Joint Interservice Resource Study Group, Commander-in-Chief, U.S. Southern Command is directing a continuing study of functional consolidation which will further assist in the evolution of the most efficient military base structure. The results of this effort will be incorporated into the RCMP by the Executive Agent.

II. EXECUTIVE AGENT ROLES.

A. Panama Regional Complex Master Plan (PRCMP).

The PRCMP will be accomplished in two phases:

(1) Information collection and analysis to develop an overall conceptual plan for the integration of the requirements of all Defense Component (and other Federal Agencies, as appropriate).

(2) Refinement of the conceptual plan as required by Defense Components to reflect any subsequently approved E.O.S consolidations, to provide record drawings defining land boundaries, as-built utilities, roads, etc.

The first phase is urgently required to support FY81 and beyond MILCON programming. The second phase can be accomplished as time and resources permit, matching the needs of the Defense Components and integrating the results of parallel study efforts.

The Executive Agent will submit a plan of approach, with milestones (POAM) to DASD(I&H), covering both PRCPF phases, by 15 November 1978. The POAM will be coordinated with USCINCSO and other involved Defense Components.

Enclosure 2
B. Military Construction.

The Army has been designated as the Executive Agent for military construction in Panama. Normal procedures will apply.

C. Real Property Management.

The Canal Zone Government (CZG), utilizing the resources of the Panama Canal Company (PCC), currently has primary jurisdiction over real estate constituting the Panama Canal Zone and permits to the Services for their exclusive use, those areas constituting military installations. The PCC also performs certain real estate functions at the request of the Services on a reimbursable basis, such as providing record drawings and conducting boundary surveys. These roles will change with the placing in force of the Panama Canal Treaty on October 1, 1979 (T-Day) or shortly thereafter. Accountability for those lands and waters to be made available to the U.S. for the defense of the canal will become the responsibility of the Department of Defense, through its Executive Agent for real property management, effective that date. The assumption of the CZG support role will be a matter of negotiation between the Executive Agent and the PCC, although it is understood that the latter will execute the treaty-required boundary surveys and continue to provide real estate services for the Executive Agent some time beyond T-Day.

The Executive Agent will evaluate and make recommendations to DASP(I&H) for managing all real property that will be made available to DoD in Panama. This evaluation will consider the performance of all technical real estate services by a single Service, including acquisition, disposal, outgranting and record keeping for all U.S. Forces. Control of real property, including determination of requirements, facilities assignments, utilization, budgeting and establishment of maintenance standards will remain with the individual Service. The Executive Agent will submit a POAM for the evaluation of real property to DASP(I&H) by November 15, 1978.

D. RPMA Consolidation.

The following RPMA functions will be assumed by the Army from the PCC on October 1, 1979:
trash collection and maintenance and repair of medical, dependent education and other facilities transferred from the ACC. The assumption of these roles by the Army results in a partial inter-Service RPMA consolidation. The Executive Agent has been directed to study the further consolidation of remaining RPMA. A cost-benefit analysis and consolidation implementation plan will be developed in coordination with all concerned, and particularly with the participation of representatives of the Navy and Air Force familiar with industrial-funded consolidated RPMA organizations. In coordination with USCINCSO, this RPMA consolidation study will consider:

a. Consolidation under a single service.

b. Consolidation on a geographic basis, e.g., with the military installations clustered in three areas of Panama (Atlantic, Pacific NE and Pacific SW) under the dominant Service in each area.

c. Establishment of an industrially-funded organization.

d. The inclusion of the maintenance and repair of administrative transportation equipment along with RPMA.

e. The need for a complete and self-sufficient RPMA organization to incorporate such other elements of BOS as supply, procurement, and civilian personnel administration to the extent necessary to the consolidated organization.

Standard formats for RPMA consolidation cost-benefit analysis and implementation plans are under development by the DCDRMP Consolidation Committee and are expected to be available for application to this effort prior to the end of 1978.

The RPMA consolidation study with recommendations is to be submitted to DASD(I&H) by April 30, 1980. The Executive Agent will submit a POAM for this study including dates for necessary inputs and reviews, by November 15, 1978.
MEMORANDUM THRU DEPUTY CHIEF OF ENGINEERS
FOR ENGINEER STUDIES CENTER

SUBJECT: Consolidation of Real Property Maintenance Activities (RPMA)
at U.S. Military Installations in Panama

1. References:

   a. DEPSECDEF Memo, 20 June 1978, subject: "Panama Canal Treaty
      Implementing Guidance."

   b. ASD(MRAAL) Memo, 18 October 1978, subject: "Planning Guidance
      for U.S. Military Installations in Panama."

   c. DASD(I&H) Memo, 19 October 1978, subject: "Implementation of DOD
      Planning Relevant to U.S. Military Installations in Panama."

   d. DAEN-ZCL Memo, 22 November 1978, subject: "Implementation of
      Planning Guidance, U.S. Military Installations in Panama--DECISION
      MEMORANDUM."

   e. "Department of Defense (DOD) Guidelines for Consolidation of Real

   f. CERL Technical Report C-73, "Consolidation of RPMA at Fayetteville,

   g. ESC Report, "Army and DMATC RPMA Consolidation in the National

   h. ASD(MRAAL) Memo, 8 December 1978, subject: "Implementation of DOD
      Planning Guidance Relevant to U.S. Military Installations in Panama."

   i. DASD(I&H) Memo, 22 November 1978, subject: "Consolidation of Family
      Housing Management Functions in the Canal Zone."
DAF.N-MPR

SUBJECT: Consolidation of Real Property Maintenance Activities (RPMA) at U.S. Military Installations in Panama

2. Purpose: To request the Engineer Studies Center (ESC) to develop and analyze an organizational concept for consolidated management of RPMA to support DOD forces in Panama during the life of the Panama Canal Treaty. The RPMA Consolidation Study will include a comprehensive cost/benefit analysis of the possible alternatives for the proposed consolidation of RPMA functions and responsibilities at all U.S. Military Installations in Panama, as directed by reference 1c. The proposed consolidation alternatives will be compared with the current method of operation to determine the economic feasibility of consolidation. Support for this study effort will be provided by the Directorate of Military Programs and the services, major commands, and installations involved.

3. Background:

a. A continuing objective of Department of Defense (DOD) policy and guidance is that real property maintenance activities at military installations in a given geographic area will be consolidated where such action is cost-effective and does not result in mission impairment. Reference 1b directed the study of interservice consolidation of certain Base Operating Support functions in Panama.

b. The Panama Canal Treaty, which impacts upon military basing, and the Treaty of Neutrality were signed on 7 September 1977. On 16 June 1978 the instruments of ratification, which become effective on 31 March 1979, were signed and exchanged in Panama. This document calls for the placing in force of the treaties within 6 months, no later than 1 October 1979. Implementing legislation for the Panama Canal Treaty will be submitted to the next (96th) Congress.

c. ASD(HMRAL)), by reference 1b, has designated the Secretary of the Army as the DOD Executive Agent for the development of the Panama Regional Complex Master Plan and for management of DOD land in Panama. This assignment is consistent with the earlier designation of the Army as the DOD Executive Agent for administrative of military construction and study of RPMA consolidation.

d. Army will have dominant service representation in Panama.

e. As the Executive Agent, Army has requested and received approval from DASD(I&H), by reference 1d, of the plan of approach with milestones (POAP) for the following studies:

(1) Panama Regional Complex Master Plan. POAP, Tab A, has been coordinated and agreed to by USCINSCOC and other involved Defense components.
SUBJECT: Consolidation of Real Property Maintenance Activities (RPMA) at U.S. Military Installations in Panama

(2) Evaluation of Real Property Management Plan for all property under the control of DOD forces. (This study has been superseded by a decision, reference 1h, to designate Mobile District as the Real Property Management Agent for military technical real estate services in Panama, to include acquisition, disposal, and outleasing. How recordkeeping for real estate will be accomplished will be a subject for the RPMA Consolidation Study.)

(3) Consolidation of Real Property Maintenance Activities (RPMA).

f. In October 1979 Army assumes responsibility for trash collection and maintenance and repair for facilities assigned to medical and dependent school activities.

g. RPMA consolidations have been studied for a number of geographic areas. Useful precedents have been published for Northern Oahu, HI; San Antonio, TX; Fayetteville, NC; and National Capital Region. In particular, reference 1f provides a general template for conducting RPMA consolidation studies. The method described therein complies with the DOD guidelines outlined in reference 1e. Reference 1g provides a current example of application of the method of reference 1f (with extensions to geographically separated installations).

4. Scope.

a. The requested analysis must entail great breadth and depth. The physical dispersion, variety of functional responsibilities, varying missions and processes, different supervisory structures, seasonal effects, and current base FE and FE support areas interface of the installations specified, demands the accumulation of a vast data base for analysis. Descriptive data must accurately reflect the commonalities and differences among installations in order to provide a sound basis for the evaluation of alternatives. Using FY 1978 data, the analysis team is to review the current methods of operation, determine the levels of workload effort accomplished, and examine cost data related to accomplishing real property maintenance at the specified installations. Consideration must be given to the space, equipment, and vehicle requirements of current and alternative RPMA approaches. The team must also analyze the costs and levels of work effort attributable to RPMA-related support functions such as comptroller, communications, civilian personnel, management information systems, adjutant general/administration, supply, procurement, and transportation.

b. Study tasks, phasing, and milestones are outlined at Incl 1. A minimum of two IPR's (one in May and one in July) will be held during the study period. Other informal meetings will be held as required.
SUBJECT: Consolidation of Real Property Maintenance Activities (RPMA) at U.S. Military Installations in Panama

5. All services, major commands, and installations in Panama will be included in the study effort.

6. Alternatives to be considered should include, but need not be limited to:
   a. Consolidation under a single service.
   b. Consolidation on a geographical basis within the three Defense areas (Atlantic, Pacific Northeast, and Pacific Southwest) under the dominant service in each area.
   c. Status quo.

7. The following factors will be included in the RPMA study:
   a. Establishment of an industrially funded organization.
   b. Real estate recordkeeping.
   c. The RPMA Consolidation Study will include an analysis of the feasibility of consolidating the maintenance and repair of administrative transportation vehicles and equipment. This consolidation could be either as a separate function under the current transportation motor pool or as a part of the consolidated RPMA organization. This function is not included in RPMA in the Army and Air Force but is part of the Navy Public Works organization.
   d. Impact(s) on management structures of more or less contracting.
   e. Need for a complete and self-sufficient RPMA organization incorporating elements of base operating support; i.e., supply, procurement, family housing management functions, and civilian personnel administration. Special note is made of a study of consolidation of family housing management functions in the Canal Zone. Consolidation is held in abeyance (reference 11) until other significant actions associated with treaty implementation have been accomplished.

8. Data requirements and collection:
   a. Reference 1f defines data requirements for a type cost/benefits analysis of RPMA consolidation. Subject to minor modification, the requirements outlined therein are appropriate for this analysis. Copies of reference 1f will be provided to installation POC's. The experience gained by ESC in performing the NCR Consolidation Study will be applied to the data collection requirements.
   b. In general terms, required data will include:
Subject: Consolidation of Real Property Maintenance Activities (RPMA)
at U.S. Military Installations in Panama

(1) Summary descriptions of installations' facilities, occupants, and customers.

(2) Characterization of FY 1978 RPMA workloads by RPMA functions to include budgetary cost data to support program execution. FY 1978 is to serve as a baseline year; anything exceptional about FY 1978 and any projected differences should be noted. Detailed data requirements will include the need to express workloads in terms consistent with FE Staffing Guide procedures, taking into account the staffing procedures of the involved services.

(3) Extent to which RPMA workloads are performed by RPMA staff, troop projects, self-help, and contracting-out.

(4) Current RPMA organizational diagrams, manpower authorizations, and on-board strengths by skill. (Any changes to TDA's now in process should be with estimate of likely outcome.)

(5) Current space, equipment, and vehicle requirements of RPMA.

(6) Current and projected ISSA's.

(7) RPMA dependence on other installation and off-installation support. Quantitative expression necessary, but qualitative expression of any unusual support is better than nothing.

(8) Special mission considerations.

c. The above data requirements are representative only. In accordance with the project task schedule at Inclosure 1, the Engineer Studies Center (ESC) will develop, not later than 31 January 1979, the specific data requirements to include formats for collecting the data. Given the complexity of the problem and the likelihood that new issues may be raised, supplementary data requirements may be issued later. Every effort should be made to keep supplementary requests to a minimum. The ESC and the MP Directorate staff will check data for completeness and consistency; if necessary, they will contact Installation POC's directly for clarification, completion, or correction of data. ESC will perform normal data validation functions.

d. It is in the interest of all installations to provide data that accurately describe their requirements and activities. Installations will be encouraged to provide any additional information necessary to record special problems and considerations. Such additional submissions should be as concise as possible.

9. Directorate of Military Programs Support:

a. The Directorate will task the major commands to provide the detailed data required in the formats developed by ESC.
DAEN-MPR

SUBJECT: Consolidation of Real Property Maintenance Activities (RPMA) at U.S. Military Installations in Panama

b. Data will be submitted directly to ESC. The Directorate will assist ESC in checking/editing the submissions and contacting the installations for clarification, completion, or correction of data.

c. In order that part of the evaluation of RPMA alternatives may be based on application of FE Staffing Guide principles, the Directorate will designate a staffing guide expert to provide assistance to the study team.

d. The Directorate will be responsible for all coordination and staffing of the report. ESC's role is to be limited to technical accomplishment, incorporation of comments, and assistance in preparing briefings.

10. Points of Contact:


b. Engineer Studies Center (ESC) - Mr. Bruce Dunn, phone 202-282-2965.

c. Each involved service, major command, and installation will be requested to provide a POC not later than 14 December 1978.

11. Tri-Service Coordinating Committee, an Army/Navy/Air Force Coordinating Committee, will be formed to assure close coordination and effective and timely exchange of information during the course of the consolidation study. An initial meeting of the Tri-Service Coordinating Committee will be held on 14 December 1978 to discuss detailed data collection requirements.

FOR THE CHIEF OF ENGINEERS:

[Signature]

WILLIAM F. WRAY
Major General, USA
Director of Military Programs

A-16
**PANAMA RPMA CONSOLIDATION STUDY**  
**PROJECT TASK SCHEDULE**

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<td>14 Dec 78</td>
<td>Form Army/Navy/Air Force coordinating committee; issue background material</td>
</tr>
<tr>
<td>16 Dec 78 - 28 Feb 79</td>
<td>Develop conceptual guidance</td>
</tr>
<tr>
<td>1-31 Jan 79</td>
<td>ESC modify old HQ RPMA data reqts to provide specific data requirements (to include formats for collecting the data) for Panama RPMA Consolidation Study</td>
</tr>
<tr>
<td>1 Feb 79</td>
<td>Issue data collection requirements</td>
</tr>
<tr>
<td>1 Mar 79</td>
<td>ESC begin full-time conduct of study</td>
</tr>
<tr>
<td>1 Mar 79 - 30 Apr 79</td>
<td>Develop detailed concepts for alternative organizations and staff with services</td>
</tr>
<tr>
<td>31 Mar 79</td>
<td>Installations submit data to DMP/ESC</td>
</tr>
<tr>
<td>1 May 79 - 30 Jun 79</td>
<td>Develop cost analysis</td>
</tr>
<tr>
<td>1-31 Jul 79</td>
<td>Obtain approval of preferred alternative organizational concept</td>
</tr>
<tr>
<td>1 Aug 79 - 30 Sep 79</td>
<td>Prepare final consolidation study and cost analysis</td>
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<tr>
<td>Task</td>
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<tr>
<td>1. Inform installations of need for participation, give preview of data requirements, and request identification of POC's</td>
<td>X</td>
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<tr>
<td>2. Develop preliminary evaluation criteria</td>
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<tr>
<td>3. Define detailed data requirements, subject to later expansion</td>
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<tr>
<td>4. Issue detailed data requirements to installations</td>
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<td>5. Prepare data for submission to ESC</td>
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<td>6. Check/edit submitted data</td>
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<tr>
<td>7. From submitted data, develop descriptions of current workloads, methods, and costs of operation. Prepare draft on current (FY 7R baseline) RPMA</td>
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<td>8. Define candidate sets of installations for RPMA consolidation</td>
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<tr>
<td>9. Define alternative approaches to RPMA consolidation: physical, organizational, and funding alternatives</td>
<td>X</td>
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<td>10. Structure alternative approaches for alternative sets of installations</td>
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<td>11. Develop refined evaluation criteria</td>
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<td>12. Obtain additional data necessary for evaluation of alternatives</td>
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<td>13. Analyze/evaluate/cost alternatives</td>
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<td>14. Coordinate with installations on any seeming anomalies</td>
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<td>15. Develop conclusions</td>
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<td>16. Staff draft report to involved services</td>
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<tr>
<td>17. Analyze comments, prepare final report with recommendations</td>
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ANNEX B

SUMMARY OF COMMENTS ON DRAFT REPORT—PANAMA RPMA CONSOLIDATION STUDY (JULY 1979)
ANNEX B

SUMMARY OF COMMENTS ON DRAFT REPORT—PANAMA RPMA CONSOLIDATION STUDY (JULY 1979)

This annex presents, in abbreviated subject form, the comments received by the Engineer Studies Center (ESC) from various DOD offices/agencies in response to the draft text of the Panama Real Property Maintenance Activity (RPMA) Consolidation study and ESC's reply to those comments (see Figure B-1). The original comments as received are reproduced in Appendix B-1 to this annex.
<table>
<thead>
<tr>
<th>Study Comments</th>
<th>ESC Response</th>
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<tbody>
<tr>
<td>Study was vague, inconclusive, and did not support any one particular alternative.</td>
<td>Because readers, not writers, are the better judges of clarity, ESC apologizes for any vagueness in its earlier expression of conclusions and recommendations. We believe we have expressed results more clearly in the final report. The conclusions, though reworded, remain basically unchanged. As admitted earlier, the differences among alternative RPMA organizations for Panama are not as great as projected in some earlier studies of other regions in which RPMA could be considered in near isolation. However, taken in the broad perspective of all BOS and the economics of defense, the Panama results are conclusive. Thus the study does not recommend RPMA consolidation as an isolated change. Rather it recommends RPMA consolidation if and only if tied to a firm longer term commitment to total BOS standardization and consolidation across all services. Because of some delays in treaty-related negotiations and because of an increased estimate of the amount and duration of treaty-related turbulence, ESC's original recommendation has been modified to include the suggestion that implementation of the RPMA phase of BOS consolidation be postponed for 1 to 2 years.</td>
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</table>
SUMMARY OF COMMENTS ON DRAFT REPORT—PANAMA RPMA CONSOLIDATION STUDY (JULY 1979)—Continued

**Study Comments**

Study did not fully consider the impacts of the treaty transfers, associated turbulence, and changed RPMA responsibilities.

**ESC Response**

This comment arises from confusion about the distinction between absolute and relative differences in workloads and personnel strengths. Ideally the analyst prefers exact data to eliminate the uncertainty involved in forecasting events. Unfortunately the future is still quite uncertain, and attempts to project such future workloads would be subject to substantial errors. ESC elected to compare consolidation alternatives against the firmest data available; FY 78. This snapshot produced estimates of relative, not absolute personnel changes. If a similar analysis were performed at some future date with all new workloads, we would expect the same relative results. The expanded explanation of the significance of study assumptions about absolute and relative differences in strength and about study method should be reread in the Main Paper and Appendix H-3 (Volume II).

Study action should be delayed for up to 5 years to allow for stabilization of treaty-related turbulence and then conduct a new study.

**ESC Response**

In response to service comments and in recognition of the fact that treaty-related details are not being worked out as quickly as planned, we advise that the RPMA phase of consolidation be delayed for a period of 1 to 2 years. This proposed moratorium defers RPMA implementation phases of the recommended longer term BOS consolidation. Implementation study is required, but no more "feasibility study" is needed.

(Figure B-1 Continued on Next Page)
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<tr>
<td>Study should not include any other BOS consolidation considerations. (FORSCOM recommended inclusion of all BOS.) Section entitled &quot;Beyond the Analysis&quot; should be deleted from report.</td>
<td>Admittedly BOS consolidation lies beyond the designated scope of this study. By DOD memo, ASD(MRA&amp;D), RPMA is the second phase of a three-phase effort to consolidate all BOS, and that if opportunities for functional consolidation arose that these should be included. As this study progressed, significant differences in RPMA definition and procedure were found and the consolidation alternatives produced substantial BOS fragmentation. Therefore, ESC concluded that the achievement of optimal results could only be linked to the long-term objective of standardizing BOS definition and procedures.</td>
</tr>
<tr>
<td>Recent and existing consolidations and cooperation among services in Panama not fully exploited. Continued local consolidation would be a more feasible, desirable approach.</td>
<td>ESC acknowledges that past consolidation efforts have contributed to the savings of manpower, equipment, and dollars. We also concur with local officials that more CIO consolidation via ISSAs is possible. But when considering DOD’s stated objective is to consolidate BOS, the longer term benefits will not be maximized. The ISSA approach is more limiting. As long as there are three distinct sets of systems, local efforts will soon reach the point of diminishing returns. Standardization among DOD agencies is required to achieve maximum benefits.</td>
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(Figure B-1 Continued on Next Page)
A consolidation cannot be classified as such unless it considers the entire work force.

ESC acknowledges that the shop labor force provides a possibly greater potential for savings in the long run. ESC itself labor force largely intact throughout the analysis of all alternatives to assure equal level of RPMA service in the short run and because as yet there is no sound basis for comparing the productivity of RPMA labor among the services, between military and civilian spaces, and between US and Panamanian spaces. Other feasibility studies have usually been able to justify consolidation on the basis of savings in the management and overhead elements, leaving the promise of additional savings in other factors unquantified pending first implementation planning and then the close real-time spaces management following implementation. But because Panama RPMA over the years had already become partially consolidated and centralized, especially in management and overhead functions, the potential there had already been heavily exploited.

(Figure E-1 Continued on Next Page)
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<tr>
<td>Consolidation should include all vehicle maintenance and operation rather than general purpose maintenance and operation. The maintenance and repair of administrative vehicles portion of the study should be reworked based upon actual data.</td>
<td>The study tasker directed attention to &quot;administrative vehicles.&quot; Nevertheless, ESC did consider including maintenance and management of all vehicles at all levels, but decided that there were too many fundamental differences among the services' vehicles and their use to warrant total consolidation of all vehicles at all levels. Therefore, as defined in Annex E, the study considered only the maintenance and repair of administrative vehicles above the motor pool level. Although less than all available vehicle data were collected, the data that were used appear sufficient within the usually acceptable bounds of error.</td>
</tr>
<tr>
<td>Family housing management should be deleted from the study. Future studies should not include family housing management.</td>
<td>The OCE study tasker requested consideration of the need for a complete and self-sufficient RPMA organization which included, in part, family housing management. DASD(I&amp;H), dated 3 August 1979, requested that benefits and savings be included in the final report. This study reviewed the 1977 Family Housing Management Consolidation Study(^a) and found that study.</td>
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\(^a\) DA, USAFORSCOM, 193d Inf Bde (CZ), Dir of Ind Op, Family Housing Management Consolidation Study.
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<tr>
<td>Establish engineered/ statistical standards for shop forces.</td>
<td>ESC concurs that standards are required, but maintains that they must go beyond Panama RPMA-only. Current joint actions are establishing Engineer Performance Standards that hopefully will lead to standardized staffing procedures. This early initiative must be continued to achieve total standardization of procedures and systems among the services. Although the existence of such standards would obviously simplify consolidation actions, the absence of such standards does not justify an indefinite moratorium on consolidations. On the contrary, consolidation can help greatly in the development of standards.</td>
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<td>basicly sound. However, ESC concluded that it is feasible but not necessary to include family housing in a consolidated RPMA. The family housing management question is at most incidental to the broader RPMA issue; it neither makes or breaks any case for or against RPMA consolidation. If, however, DOD elects to standardize and consolidate BOS, then the necessity of inclusion is obvious. ESC notes that, because of other pressing matters, the services have not yet reduced their differences in family housing management to the point that its incorporation in RPMA should occur in the early phases on any RPMA/BOS consolidation.</td>
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<td>Study Comments</td>
<td>ESC Response</td>
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<td>Air Force and Navy comments should be service supported.</td>
<td>The draft study included Panama POC comments on the alternatives and their answers to several questions from ESC. The comments were used to refine the consolidation alternatives for the study. Service comments on the draft study are in Appendix B-1 and represent official positions.</td>
</tr>
<tr>
<td>Study team should revisit SARPMX.</td>
<td>SARPMX is the major, on-going consolidation effort within DOD. Consequently, there is substantial knowledge of its operation. ESC has been to SARPMX in the past, and therefore, knew many of the details prior to its last visit. SARPMX is doing well, but it has had its problems also. These valuable lessons need to be considered and checked first hand by any Panama implementation study team if RPMA/BOS consolidation is undertaken. There is no need for a revisit as part of feasibility study.</td>
</tr>
<tr>
<td>Air Force military personnel required in the RPMA force for maintenance of essential base operations during contingencies.</td>
<td>ESC concurs that for the time being military personnel are required to maintain essential operations and retains them within the RPMA work force. However, in recognition of initiatives being explored in other theaters for various kinds of contract, quasi-military, and military host nation support in pursuit of new damage minimization and repair techniques, ESC does not regard reliance on Air Force uniformed RPMA personnel as permanent. The R&amp;D community, DOD, and the State Department may radically alter the picture before 1999.</td>
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<td>Study Comments</td>
<td>ESC Response</td>
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<td>Study should show how each service contributes to each alternative and the savings that would accrue to each service if implementation is directed.</td>
<td>The services’ contribution to a consolidated organization cannot be accurately projected until implementation matches all personnel to the new positions. However, ESC estimated each service’s contribution based on their participation in the CMO. The results are incorporated in the final text. There a display is offered in terms of the 1978 workload with the obvious hazard that it may be cited in error as an absolute projection against unknown future workloads and the results of implementation study.</td>
</tr>
<tr>
<td>Another draft report required before submission to DOD. Panama IPR differed materially from draft report.</td>
<td>Although the draft report stated ESC’s conclusions less clearly than desired, the service comments indicated that the study was understood. The IPR differed from the draft only to the extent that conclusions and recommendations were rephrased. Graphics used at the IPR did not include all the cautionary notes presented in the draft text, especially those expressing RPMA consolidation as conditional on longer term commitments to BOS standardization and consolidation. ESC agreed that some IPR material could too easily be interpreted out of context. The final report incorporates service comments, and restates conclusions and recommendations in a way intended to better preserve their context. ESC considers that another draft would be nonproductive.</td>
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<td>ESC Response</td>
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<td>Air Force objects to use of Army Staffing Guide and questions applicability to Air Force and Navy manning.</td>
<td>This study, like its predecessors, had a designated lead service. Army procedures were used to staff the various alternatives just as Air Force procedures were used for the development of the SARPMA organization. The fact that there is objection to the use of any one procedure suggests that there should be a long-term development of standardized definitions, procedures, and systems to facilitate consolidation and maximize savings.</td>
</tr>
<tr>
<td>Air Force Staffing Guide is available.</td>
<td>ESC attempted to obtain the current Air Force manpower standards, but they were no longer in print. We did get copies of the new draft standards for several BCE functional codes. These standards are excellent documents, but were not applicable since they were drafts.</td>
</tr>
<tr>
<td>Study should not estimate equipment utilization data. Estimates should not be allowed to tip scales in favor of consolidation.</td>
<td>ESC’s initial data request in February 1979 asked for a listing of equipment with purchase price, year manufactured, hours utilized, etc. The Air Force data submission stated that &quot;Hours Available (Seasonally Adjusted) and column j, Hours Utilized, is not available. Reference CERL page 73. AF Forms 1447, Monthly Mobile Equipment Use Records are no longer</td>
</tr>
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(Figure B-1 Continued on Next Page)
maintained, therefore, hours available, downtime and hours used is unknown. Shop equipment utilization data is not available due to shop moves during FY 78 when some Albrook AFS Maintenance shops consolidated equipment assets and turned in others." Contrary to that statement during the August IPR, ESC became aware of the existence of such data in the Transportation Squadron, but did not obtain copies of it, and has not changed the section. Some high-dollar, low-use construction equipment savings are possible without consolidation. Our recommendation is not connected to the decision to consolidation.

Figure B-1
APPENDIX B-1

USD, SOUTHCOM, SERVICE, FORSCOM, AND ARMY STAFF COMMENTS ON DRAFT REPORT OF JULY 1979

Item of Correspondence

Memorandum from Office of the Assistant Secretary of Defense, Subject: "Review of Draft Report - Panama RPMA Consolidation Study," Dated 3 August 1979


Message from Commander, US Army Forces Command, Subject: "Review of Draft Report - Panama RPMA Consolidation Study (ESC July 1979)," Dated 31 August 1979

Letter from Headquarters, Air Force Engineering and Services Center, Subject: "Review of Comments on Draft Cost-Benefit Analysis of Panama RPMA Consolidation," with Attachment 1, "Basis for Nonconcurrence," Dated 23 August 1979


DF from Director of Operation and Maintenance, Comptroller of the Army, Subject, "Review of Draft Report - Panama RPMA Consolidated Study," with Inclosures Withdrawn, Dated 3 August 1979

CHT 2 from Chief, Utilization and Standards Division, Office of the Deputy Chief of Staff for Personnel, Army, Subject: "Review of Draft Report - Panama RPMA," Dated 7 August 1979

DF from Director of Operations and Readiness, Office of the Deputy Chief of Staff for Operations and Plans, Subject: "Review of Draft Report - Panama RPMA Consolidation Study," Dated 31 July 1979
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<th>Item of Correspondence</th>
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<tr>
<td>DF from Director of Resources and Management, Office of the Deputy Chief of Staff for Logistics, Subject: &quot;Review of Draft Report - Panama RPMA Consolidation Study,&quot; Dated 31 July 1979</td>
<td>B-1-28</td>
</tr>
<tr>
<td>CMT 2 from Director of Installations Planning Division, Office of the Chief of Engineers, Subject: &quot;Review of Draft Report - Panama RPMA Consolidation Study,&quot; Dated 7 August 1979</td>
<td>B-1-29</td>
</tr>
<tr>
<td>CMT 2 from Director of Real Estate Division, Office of the Chief of Engineers, Subject: &quot;Review of Draft Report - Panama RPMA Consolidation Study,&quot; Dated 31 August 1979</td>
<td>B-1-30</td>
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MEMORANDUM FOR Chief of Engineers, Department of the Army

SUBJECT: Review of Draft Report - Panama BPMA Consolidation Study

This is in response to DAB2-441 memorandum of 23 July 1973, re: subject.

Based upon joint review of subject draft report by members of our respective staffs on 21 July 1973, it is requested that the following be incorporated thereto prior to submittal of the final report:

1. Identification of one-time cost of implementation of alternatives 2 and 4.

2. Identification of savings to Services if either alternative 2 or 4 is selected for implementation.

3. Determination of benefits and savings expected from inclusion of facility leasing component.

4. Provision of estimate of cost avoidance resultant from redistribution of staff resources.

5. Indication of the specific real estate services to be provided in accordance with tasking of Army as executive agent for management of DCA land in Panama, irrespective of any BPMA consolidation (ASD(Navy) memo of 19 Oct 73 to Service Secretaries and others and DAB(12) memorandum of 19 Oct 73 and 12 April 74 to Service Assistant Secretaries and others herein).

The draft report represents a formidable effort. There is without question.

Perry J. Fitts
Deputy Assistant Secretary of Defense
(Installations and Logistics)
SUBJECT: Draft Report - Panama RPMA Consolidation Study

1. I have reviewed the draft consolidation report and find numerous areas which are inconclusive in demonstrating that consolidation of RPMA in Panama would be beneficial at this time. The summary, as presented by both the draft report and study group spokesmen, does not present a decisive conclusion to the question proffered by OSD. Both indicate that further consolidation is not very desirable in that the promises of savings or improved service, if at all existent, would be very slight.

2. It is readily apparent that a great deal of time and energy were expended in preparation of the report, however, pertinent areas requiring analysis were omitted. Notable among these omissions was the impact upon all the services of the implementation of the Panama Canal Treaty. The turbulence, reorganization, and relocation brought on by the Treaty is of such magnitude that the addition of further turmoil caused by a "marginally desirable" RPMA consolidation is unacceptable at this time.

3. A major issue which was mentioned in the study, but was not fully exploited is the savings in manpower, equipment, and dollars that are being realized and will be further evidenced by local consolidation and cooperation through use of local arrangements and ISSA's. The study states that, "Thus, many of the usual advantages attributable to RPMA consolidation have already been exploited to a large extent, leaving relatively less to be gained by further consolidation." Further analysis of this area may prove that the current method of operation with continued local consolidation would result in a more feasible and more desirable alternative than the one chosen as most desirable.

4. Based on these conclusions and input received from the component services, I can only offer my nonconcurrence with the recommendations presented by the study group. To accompany this nonconcurrence I offer the following recommendations:
SUBJECT: Draft Report - Panama RPMA Consolidation Study

a. No action be taken on recommendations presented in the draft study.

b. A two-year moratorium be placed on RPMA consolidation in Panama and a new study be initiated at that time.

c. Family housing management and maintenance of administrative vehicles be completely divorced from future real property maintenance studies.

d. The current method of operations be continued in Panama and local consolidation of maintenance activities be carried on.

5. I look forward to your final report on this subject and, hopefully, your concurrence in the proposals set forth above.

FOR THE COMMANDER IN CHIEF

R. B. Howe
Captain, USN
Chief of Staff
SUBJECT: REVIEW OF DRAFT REPORT - PANAMA RPMA CONSOLIDATION
STUDY (E SC JULY 1979)

A. LIMITS, CAEN-MPR, UNCL OATED, SAP. (U)
B. HCG, CAEN-MPR 0317972 AUG 79, SAP. (U)
C. MEETING, REPRESENTATIVES OF TRI-SERVICE COORDINATING COMMITTEE,
7 ALG 79, FT CLAYTON, CANAL ZONE. (U)

1. FORSCOM DOES NOT RECOMMEND IMPLEMENTATION OF SUBJECT REPORT
AT THIS TIME BECAUSE OF THE FOLLOWING CONSIDERATIONS:

A. TREATY IMPLEMENTATION FOLLOWING 1 OCT 79 WILL RESULT
IN SUBSTANTIAL PERSONNEL TURBULENCE, AND IN SIGNIFICANTLY CHANGED
CONDITIONS OF RPMA RESPONSIBILITY IN PANAMA, THAT CANNOT NOW
BE ACCURATELY ANTICIPATED. SIGNIFICANT REORGANIZATION OF THE
RPMA AGENCIES SIMULTANEOUS WITH TREATY-INDUCED CHANGES IN PERSONNEL,
PROCEDURE AND RESPONSIBILITY, CAN IMPERIL THE ABILITY OF THE
AGENCIES TO PERFORM CRITICAL RPMA IN THE IMMEDIATE FUTURE.

B. IMPLEMENTATION OF SIGNIFICANT REORGANIZATION SHOULD
NOT BE INITIATED PRIOR TO 1 OCT 81 WHEN RPMA RESPONSIBILITIES
RESULTING UPON TREATY IMPLEMENTATION WILL BE MORE ACCURATELY
DEFINED. A CONSOLIDATION IMPLEMENTATION STUDY SHOULD NOT BE

PAGE 01
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INITIATED PRIOR TO 1 OCT 80 WHEN INITIAL TREATY-INDUCED PERSONNEL AND FUNCTIONAL TURBULENCE WILL BE REDUCED, AND MORE REALISTIC ESTIMATES OF RPM RESPONSIBILITIES AND CAPABILITIES CAN BE FORESEEN.

C. A CONSOLIDATION IMPLEMENTATION STUDY SHOULD INCLUDE CONSIDERATION OF HOUSING MANAGEMENT.

D. IT IS PREFERRED THAT AN RPM CONSOLIDATION STUDY FOR PANAMA INCLUDE CONSIDERATION OF ALL BASOPS FUNCTIONS IN CONSIDERATION OF RPM ALONE, SINCE CONSTRUCTION, BUILDING UTILIZATION, HOUSING MANAGEMENT, PROCUREMENT, TRANSPORTATION, PERSONNEL, ETC., ARE TOO CLOSELY INTERRELATED TO BE PRACTICALLY SEPARATED, OR TO BE SEPARATELY PERFORMED AS THE AMERICAN PRESENCE IS EVENTUALLY REDUCEDiw TERMS OF THE TREATIES.

E. A RELIABLE EVALUATION OF THE STRUCTURAL EFFECTS OF CONSOLIDATION CANNOT BE MADE WITHOUT A DETAILED EXAMINATION OF SHOP STAFFING REQUIREMENTS. IT IS NOT AGREED, AS ASSUMED IN THE REPORT, THAT PRIMARY SAVINGS CAN BE ACHIEVED IN OVERHEAD/ADMINISTRATIVE STAFF REDUCTION, FOR EXPERIENCE WITH THE SAN ANTONIO REAL PROPERTY MAINTENANCE AGENCY WOULD TEND TO INDICATE THAT THE PRINCIPAL SAVINGS FOUND IN SHOP PERSONNEL REDUCTIONS ARE, IN FACT, SUBSTANTIALLY OFF-SET BY ADMINISTRATIVE STAFF INCREASES.

F. GENERALIZED ASSUMPTIONS CONCERNING ENGINEERING EQUIPMENT REQUIREMENT AND UTILIZATION IN CONUS ARE NOT APPLICABLE TO CANAL ZONE CONDITIONS. A RELIABLE ESTIMATE OF THE EQUIPMENT NEEDED CAN BE VALIDATED ONLY BY DETAILED EXAMINATION OF THE FUNCTIONAL REQUIREMENT RELATED TO THE PECULIAR PROCUREMENT, REPAIR, TRANSPORTATION, AND CLIMATIC PROBLEMS OF PANAMA.

G. AN IMPLEMENTATION STUDY OF RPM CONSOLIDATION SHOULD BE CONDUCTED BY A SPECIAL STAFF EXPERIENCED IN MILITARY INSTALLATION RPM, UNDER THE DIRECTION OF TRI-SERVICE OR IMPARTIAL MANAGEMENT.

2. IT IS NOTED THAT CONCLUSIONS OF THE RPM CONSOLIDATION STUDY PRESENTED BY THE ENGINEERING STUDIES CENTER CONSIDER ONLY THE CONSTRAINED ALTERNATIVES PARALLELED IN OTHER CONTEMPORARY CONSOLIDATION STUDIES IN SAN ANTONIO, FAYETTEVILLE, AND WASHINGTON. THE WIDER ALTERNATIVES ALLUDED TO IN THE POSTSCRIPT SHOULD ALSO BE CONSIDERED IN ANY IMPLEMENTATION EXTENSION OF THE PRESENT STUDY: ONE-SERVICE COMMAND/OPERATION OF THE COMBINED INSTALLATIONS, INDUSTRIAL-FUNDED BASOPS OF THE COMBINED FACILITIES, AND UNIFIED-SERVICE BASOPS SHOULD BE CONSIDERED AND RELATED TO THE UNIQUE AMERICAN MILITARY REQUIREMENT THAT WILL DEVELOP WITH IMPLEMENTATION OF THE PANAMA CANAL TREATIES.
3. FOR THE PRESENT, IT IS RECOMMENDED THAT INSTALLATION COMMANDERS IN PANAMA BE PERMITTED TO ADJUST THE CURRENT METHOD OF OPERATION, UTILIZING ISSA'S AND OTHER AD HOC AGREEMENTS, TO ACCOMMODATE PROGRESSIVE IMPLEMENTATION OF THE TREATIES. COMMANDER SOUTHCOM MAY REVIEW THE PROBLEM PERIODICALLY TO DETERMINE THE NEED FOR REORGANIZATION OF THE ENGINEERING RESPONSIBILITY, AND CAN ADVISE THE CHIEF OF ENGINEERS WHEN EXTENSION OF THE RPMA STUDY MAY BE REQUIRED.

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Review of Comments on Draft Cost-Benefit Analysis of Panama RPMA Consolidation

DAEN-708

1. We have reviewed the draft cost benefit analysis of the proposed RPMA consolidation in Panama that was prepared by the US Army Engineer Studies Center. We must nonconcur as it is written. The report is in need of extensive rewriting before it can be used as a tri-service report on the proposed RPMA consolidation. While the report is prefaced by a caution that it is not yet edited, the digressions on the lack of uniformity of organizational structure, the development of evaluation data based on estimates rather than obtainable data, and the inclusion of the housing consolidation question (which was not to be included in the study), as well as many other points, indicate more than simply an unedited one. Our basis for nonconcurrency relating to specific parts of the draft report are attached. Based on the uncertainties and lack of evidence provided in the draft report, we can find no reason to support a change to the current method of operation in the Canal Zone.

2. Manpower requirements determination is only as good as the management tools and data used to evaluate requirements. The study is dependent upon modified Army staffing guides to determine manpower requirements. The validity/applicability of the guides to the Air Force must be unequivocally demonstrated. We are skeptical of the ability of these guides to accurately cover Air Force manpower requirements. In this regard we would not concur in any proposed consolidation until our Air Force Management Engineering Agency (AFMEN) has reviewed the final report and implementation plan. We have sent a copy of the subject draft report to AFMEN for their advance information. Request you provide AFMEN/MCR a copy of all future correspondence pertaining to this proposed consolidation.

3. We do not concur with this report being finalized. A new draft should be issued for a second review since the present report has not progressed to the stage where it could be considered a tri-service effort for presentation to OSD. In addition, we understand that the draft report discussed at the Canal Zone meeting on 7 August differed materially from the draft that was forwarded for review.
4. We support the concept of consolidation to achieve efficiencies and monetary benefits provided our mission capabilities are maintained or enhanced. This report does not generate that support.

5. We suggest that the study team revisit SARPMA. The previous one-day visit was not long enough to really analyze all the problems. The problems in the Canal Zone would be compounded over those in SARPMA because it would be tri-service, rather than two-service, and in a foreign country. We feel that problems in reporting, personnel, data automation and responsiveness would be magnified. We believe that if all problems are addressed and quantified, the "savings" may disappear.

FOR THE COMMANDER

[Signature]

1 Atch
Basis for Nonconcurrence

EARLE R. COLE, Colonel, USAF
Director, Operations & Maintenance
I. Page 7, paragraph 5. Any consolidation, to be realistic, must consider a resizing of the direct labor force, if the same service can be provided. Especially alternative 2. There is no reason to believe, that with a fully consolidated organization (alternative 2), some reduction and consolidation of direct labor could not be achieved. You cannot exclude 82 percent of the RPMA strength from review and have a meaningful study. However, it would be hard to convince managers that indeed no degradation would result from a lower direct labor force. The level of the downsized force would have to be agreed to by all services.

2. Page 8. The assumption that the direct labor work force would remain constant through any consolidation while expedite for this study is probably not accurate and could have a significant impact on the final cost-benefit ratio of any proposed consolidation. The draft analysis as it now stands doesn’t address inefficiencies in the direct work force operation which result from unconsolidated RPMA operations. Prior to any decision on RPMA consolidation, the effect on the direct labor force for 82 percent of the work force should be examined.

3. Page 12. This paragraph is one of many instances throughout the report where it states that only the Army has a RPMA manning guide. This gives the impression that the Air Force is operating inefficiently. This is especially true when the statements are coupled with references to high Air Force overhead such as found on page 8. While the Air Force manning standards are under revision, the magnitude of the changes to be expected at any base is small and, therefore, there is no real reason that the Army Engineering Studies Center could not have used them.

4. Page 22, Alternative 2, paragraph 14a. Housing management for Air Force resources would have to be shown under the Air Force Staff Engineer in Figure 3.

5. Page 27, paragraph b. Suggest deleting Figure 7. It serves no purpose other than to confuse.

6. Page 35, paragraph 18a(3). Staffing guide should only be applied to Army. It is unknown if it could be applied to Navy. Do not concur with it being applied to Air Force.

7. Page 46. Total staffing requirements are summarized for each alternative. Recommend additional figures which show how each service contributes to each alternative, i.e., show how much each service contributes to each organization and associated savings.
3. Page 50, paragraph 22f.

a. The reference to rapid runway repair in this paragraph should be deleted because it implies a capability to repair three craters in four hours. Howard AFB does not have the equipment required to accomplish this. Rather, the following verbiage should be used: "...includes an on-call base operations sustaining capability to assure the continued launch and recovery of mission aircraft and fire crash/escape." Also, while the last sentence states this function must be accomplished by military or civilian personnel, the realities of the situation dictate that we not depend on foreign national labor. Therefore, the words "whether military or civilian" should be deleted from the last sentence.

b. The basic requirement to retain Air Force military engineers at Howard AFB remains firm. The uninterrupted operation of Howard AFB is essential to the successful accomplishment of the Air Force's U.S.SOUTHCOM mission. The potential for political, social, or labor strife during the upcoming years of transition in Panama precludes total dependence on a foreign national work force. These same factors are making the recruitment of U.S. civilian workers increasingly difficult. The presence of a core of Air Force military engineers is essential to insure the continuous operation of Howard AFB under all possible conditions.

While the requirement to retain Air Force military engineers at Howard AFB complicates the development of a workable concept of operations for a consolidated RPMA in Panama, it is the contingencies which these military are required to support which form the basis of why we are to maintain bases in Panama. Failure to recognize them so as to simplify RPMA consolidation would be negligent.


10. Pages 60, 61 and 62, Beyond the Analysis. The statements in this section relating to the differences between the various services' RPMA organizational structures are unsubstantiated and should be deleted from the report. No where in the report is there any data to indicate one RPMA organizational structure is either more efficient or providing a higher level of service to its customers than any other RPMA organization. The study fails to recognize service mission differences; i.e., an Air Force base is the center of mission accomplishment while an Army fort is a point of departure to a forward location. It is this type of analysis which requires that this report be rewritten in a more objective manner.
11. Page 62. There is little, if any, justification for the ESC recommendations on hogs consolidation in Panama. The report does not thoroughly review the costs and benefits of RPMA consolidation. **RECOMMENDATIONS:**

- Nonconcur #1, Panama should not be proving ground due to volatile, foreign situation.
- Nonconcur #2, not supported by study.
- Nonconcur #3, not supported by study.
- Nonconcur #4, not a part of tasking. Too big a decision to make based on consolidation study. Systems were not designed with consolidation in mind. Each service has different mission and has unique procedures and automated systems to accomplish that mission.

12. Page B-26, question 10. The reference to rapid runway repair should be deleted, substituting instead the words "The mission requires the capability to sustain operations including the continuing assured launch and recovery of mission aircraft."

13. Page C-1-16, paragraph 5c(1). Prior to the draft being written and now before it is made final, questions concerning discrepancies in data should have been resolved. Noting such discrepancies without trying to explain for them only raises questions as to the validity of the analysis. Delete sentence beginning "These anomalies . . . ."

14. Page C-1-16, paragraph 5c(2). Usage data on Air Force equipment, while not maintained on AF Form 1447, is maintained by the Transportation Squadron. The report does not take the time to resolve this data problem. Delete sentence beginning "It is curious . . . ."

15. Page C-1-17, paragraph 5d(3). The wording of this paragraph should be reworked so that it is clear that Prime BFPP military authorizations are not in addition to the work force called for by RPMA work requirements but rather a subset of that work force. This is necessary to prevent the erroneous assumption that Prime BFPP military personnel are excess to the PRMA work force.

16. Page C-1-32, paragraph 8. In the last sentence if neither FSC nor the Air Force (TAC) know where the data came from and neither can verify it, it shouldn't be used. This adds more doubt into the report's analysis and conclusions.
17. Page E-4, paragraph 5a. There is no need to estimate the number of Air Force vehicles in Panama. The local transportation squadrons or HQ TAC can provide that data.

18. Annex E.

a. The proposed concept of consolidation has many undesirable features. As envisioned, consolidation of general purpose vehicle assets will leave the Air Force with the management and maintenance responsibility of residual vehicle fleet consisting of all fire fighting vehicles, 463L equipment, refueling vehicles, materials handling assets, and the entire civil engineering base maintenance fleet. This will result in a situation whereby the Transportation Squadron will be required to retain an organization structure and manpower force to manage and maintain this portion of the fleet. In a practical scenario we are giving a portion of the fleet (general purpose vehicles) for maintenance and management purposes to another service (Army) while maintaining similar responsibilities for a residual vehicle fleet. In our view, this prospective method of consolidation will negate the benefits, if any, that from a conceptual standpoint would have accrued by consolidating. Vehicles are a "wing resource entity" that from a management, maintenance, and operational viewpoint requires the existence of many ancillary activities such as: (1) tire shop, (2) battery shops, (3) bench stocks, (4) tools, (5) welding shop, (6) maintenance facilities, (7) administrative control (8) replacement programs, and (9) a manpower and management structure that makes possible providing users responsive support. One of the primary purposes of consolidation should be to combine these ancillary functions so as to optimize utilization of resources and reduce costs. Under the proposed concept, these ancillary functions will have to continue in existence to support the residual vehicle fleet under a concept of diminishing return due to less than optimum utilization because of a reduced fleet managed and maintained by the USAF. The approach of placing management and maintenance responsibilities for general purpose vehicles under one service (Army) while leaving these responsibilities for a residual fleet under Air Force control, equates to a "functional fragmentation" or "resource entity" negating the primary objectives of consolidation. Further, it is axiomatically true that every time that a resource entity is divided into two separate functions with each requiring a separate management overhead, a waste of material and manpower resources invariably occurs. Another undesirable feature of this proposed fleet consolidation concept is that it forces users to work out vehicle problems with two services operating under two different vehicle management systems. This will create a very untenable situation for the user.
b. The B-10 position on this matter is to not consolidate unless there is a significant reduction in the wing mission profile. If, however, this issue is pursued in the future, consolidation must be studied in terms of total fleet assets versus the current proposal to consolidate maintenance and operation for general purpose vehicles exclusively. Only with this approach in mind can consolidation of the in-being infrastructure of manpower, facilities, ancillary functions and management overhead structure be accomplished. In summary, our position is to approach consolidation of all vehicle categories with their corresponding management and material support infrastructures or not address the issue at all. We do not favor consolidating a portion of the fleet (general purpose vehicles) even when the service acting as the single manager assumes maintenance responsibilities for that portion of the fleet.

c. The recommended further study must encompass a detailed assessment of the following areas with a mutually agreed standardization on how to accomplish: (1) transfer of vehicle accountability (2) transfer of facilities, tools, and shop equipment, (3) transfer of manpower spaces to include possible slots outside the unit, (4) related fiscal matters, i.e., gas, maintenance of facilities, reimbursement for services, (5) unique wing mission requirements, i.e., mobility, disaster preparations, contingencies, (6) wing flying requirements, (7) unique daily mission crews for security, police, fire department, emergency maintenance, and tenants, (8) localization of support, component infrastructures and concept of operation, (9) expected standards of service—scope—responsiveness, etc., (10) transfer of COPARS contract responsibilities, (11) vehicle lay program, (12) permanent dispatch of vehicles, (13) single management system for vehicle operations and maintenance, (14) maintenance priorities, (15) issuance and controlling military licenses and records, (16) accident investigations, (17) peculiar administrative transport needs of USAF, i.e., crews, VIPs, inspections, visitors, etc., and a clear understanding that from an Air Force viewpoint any contractual arrangement incident to consolidation will only be made by the methodology cited in OMB Circular A-76.

19. Annex F. In light of Navy and Air Force objections, and because family housing management was not to be included in the study, this annex should be deleted.

a. The main conclusions of the study indicate the consolidation would save money, reduce managerial and clerical positions, maximize utilization of personnel, equalize conditions for all DOD personnel in the Canal Zone and decrease procurement costs for universal services.
b. Operating results are provided below. It would appear from this data that the present Army method of operation and maintenance of assignment practices are not obtaining the best results for DOD.

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<th>Number of Units</th>
<th>Percent of Occupancy</th>
<th>Operation and Maintenance Cost/Unit</th>
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<td>96.7%</td>
<td>$3,913</td>
</tr>
<tr>
<td>Adequate</td>
<td>3,082</td>
<td>97.4%</td>
<td></td>
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<tr>
<td>Substandard</td>
<td>233</td>
<td>88.1%</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>312</td>
<td>97.8%</td>
<td>$3,644</td>
</tr>
<tr>
<td>Adequate</td>
<td>300</td>
<td>98.4%</td>
<td></td>
</tr>
<tr>
<td>Substandard</td>
<td>12</td>
<td>84.0%</td>
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<tr>
<td>Air Force</td>
<td>1,182</td>
<td>97.4%</td>
<td>$3,630</td>
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<tr>
<td>(All Adequate)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

c. A detailed tri-service evaluation of all factors would indicate that there are few benefits to be realized and that cost savings have been overstated. Consolidation would detract from the current Air Force quality of life. Family housing management in the Canal Zone should remain an individual service responsibility.

d. Many factors are omitted, significantly overstating the estimated annual savings. The one-time cost of upgrading an existing facility to accommodate a consolidated Family Housing Office is not shown; modernizing and expanding the communications network to meet the requirements of managing a widely scattered housing complex and a two-way radio system for the housing inspection program are not addressed. In addition, POV mileage reimbursement costs for inspectors, HRC and other housing personnel would greatly increase due to widely dispersed housing areas. Additional office machines
and equipment would be required. Finally, the increased cost of nonproductive man-hours spent in travel time for both the sponsors and the customers (without considering the inconvenience involved) was omitted.

e. The end manpower position, both in number required and grade composition, would be dependent on a Civilian Personnel Office classification action study, position audit, and manpower management study. Only then can a dollar savings be computed. Even if reductions in the number of positions did result from consolidation, the tremendous increase in management responsibilities might result in grade increases off-setting savings expected from reduced numbers. The study omitted the time for computing, coordinating and publishing unique regulations and forms.

f. The location of the consolidated MP Office would be a significant factor. Travel distances for inspectors and covers would be indicated on this location. Minimizing nonproductive travel time would necessitate inspections and furniture movement be conducted by zones on certain days, thus decreasing the ability to respond to customer requests in other areas. Decreasing inspector flexibility could increase dollar savings due to quarters remaining vacant for longer periods of time.

g. Consolidation isn’t necessary to take advantage of increased procurement costs opportunity since consolidated procurement of common services and products is currently being used. Examples include procurement of furniture maintenance, gravel, concrete, asphalt, fire protection, and refuse collection.

h. It is also conceivable that consolidation would increase moving expenses to the government, i.e. more personnel would be living on the economy, await housing. Some personnel may move into MFH on PCS orders, but if delayed, additional moving dollars would have to be budgeted by the housing office.

20. Page F-3, paragraph 3a. The statements on consolidating bachelor housing and family housing are unsubstantiated and should be deleted. Rather than casting doubt on the thoroughness of the Army Audit Agency report, this report could have just as easily assumed that the auditor found valid reasons for not consolidating.

21. Page H-2-11, paragraph 5a(1). The statements on Air Force overstaffing should be deleted unless the study examines the efficiency and level of service provided by the Army and Air Force organizations. The assumption that the Army system
is the best as a baseline for this study in a position that cannot be accepted. Alternative 1a is not a viable alternative. It is unknown if the Army staffing Guide can be applied to the current Air Force and Navy organizations since they are organized differently from the Army and have different missions. Only 16 spaces should be deleted from Alternative 1a since that is the amount the Army is over the Staffing Guide.

22. Page H-1-18, paragraph b, Alternative 2. Since this organization does not address consolidation/reductions in the direct labor area, it is no real alternative - 82 percent of the work force was wrased in this effort.

23. Page H-1-22, paragraph 5a(3)(a). If the consolidated RPMA structure is adopted, a separate staff engineer will be required for the Army. Having the consolidated RPMA structure subordinate to the Army leads to a biased situation where the RPMA organization does not have true independence. Such a situation could lead to less than acceptable service to Air Force and Navy customers.


25. Page H-1-30, paragraph 5d. As noted in comment 2, the statement "the Air Force has no manning guide" is misleading and inappropriate. Also, to base manning on facility square footage does not take into account utility system requirements. The analysis of Alternative 4, for the above reasons, can only be considered as incomplete and inconclusive.

26. Page H-1-31, paragraph 5d(1). Comparisons of Alternatives 3 and 4 can only be valid when the efficiency and level of service provided by the two service RPMA organizations have been analyzed.

27. Page H-1-37, paragraph 4. The section on equipment is not accurate because of using solely estimated equipment usage data. The local transportation situation can provide actual Air Force use data if requested. The cost savings estimated from the equipment analysis should not be allowed to be the factor that tips the analysis in favor of RPMA consolidation.

28. Pages H-3-13 through H-3-21, paragraph 6. The analysis of SARPMA should be reduced to only those factors which relate to the consolidation concept for Paname. Comments on SARPMA performance based on a one-day visit should be deleted from this report.
The subject study states that the states at the expected amount of function by the level of the Maym, involving the partment accomplishment, further consideration of the project and implementation plan.

Of this total, the Army performed only a small part. In addition, the study states that the Army's performance is considered as essential. The consolidation of the PVI-3 project is being developed with the assistance of the PVI-3 project. The study also notes that the Army's consolidation of the PVI-3 project is being developed with the assistance of the PVI-3 project. Additionally, the Army will develop a cost-benefit analysis based on historical data. The consolidated responsibility and scope of operations of the Maym will accommodate the Army's consolidation and implementation. All pre-existing operations have been included.

The study also notes that the Army's consolidation of the PVI-3 project is being developed with the assistance of the PVI-3 project. Additionally, the Army will develop a cost-benefit analysis based on historical data. The consolidated responsibility and scope of operations of the Maym will accommodate the Army's consolidation and implementation. All pre-existing operations have been included.

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PANAMA RPMA CONSOLIDATION ALTERNATIVES

GENERAL COMMENTS

A brief resume of Naval Activities in the Panama Canal Area and the current method of operations (CMO) appears germane for this requested review of real property management activities (RPMA) alternatives in order to set the basic stage for the enclosed Navy comments.

U.S. Naval Station Panama Canal is the major naval activity and reports through its appropriate chain of command to the Commander in Chief, U.S. Atlantic Fleet. U.S. Naval Communication Station Balboa reports through its chain of command to Commander, Naval Communications Command and U.S. Naval Security Group Activity Galeta through its chain of command to Commander, Naval Security Group. Thus, each of the three larger commands reports through a separate major claimant. Included within the Naval Station are a number of tenant commands and supported activities such as the U.S. Marine Barracks which also report to several separate major claimants.

Even with this spectrum of activities, a number of consolidations have occurred over the years which have reduced duplicating support requirements within both the Naval Community and among the services. These consolidations include refuse collection and disposal, custodial services, exterior and interior painting of both family housing and other structures, grounds maintenance, civil engineering support equipment (CESE) maintenance and repair, supply procurement support, construction contracting and inspection, engineering planning and design, and the majority of family housing functions. Various other services such as fire protection, automotive repair parts support and pest control are received in varying degrees from the Panama Canal Company, U.S. Army and U.S. Air Force.

These efforts have allowed the Naval Activities, through the use of consolidation, ISSA and contract, to reduce the required work force levels to a lean-and-mean "generalist" versus "specialist" level of staffing in most cases. Even these reductions have left each activity specialized work forces in such areas as antenna maintenance and repair, fuel operations and maintenance and waterfront operations and maintenance. These specific areas are command-specific and require stringent operational control in response to mission readiness capabilities. All the above notwithstanding, many of the consolidations were successful due to the commonality of reporting, accounting, and staffing requirements within the Department of the Navy. Even these consolidations were not without significant problems and the requisite compromise solutions. The magnitude of a Tri-Service Consolidation is essentially without past precedent and though conceivable, has extreme problems associated with the total concept. These problems, coupled with the Panama Canal Treaty Implementation, would appear potentially to impact both efforts adversely due to the diverse manpower requirements of each program in conjunction with daily business as usual. All three manpower demands are occurring at the same time out of one, unchanged manpower pool.

Enclosure (1)
With this in mind, the questions presented by the Engineering Studies Center (ESC) will be answered by a coordinated Navy response. Specific problems for a separate activity will be identified as such. The responses are predicated on the following precepts for any consolidation study of the RPMA areas or any other BOS areas:

1. The proposed actions demonstrate significant cost effectiveness and efficiency with no resultant decrease in mission readiness nor command capabilities.

2. The proposed actions provide equal or better service than under the CNO at the same or reduced costs.

3. The proposed actions preserve the Commanding Officer's prerogatives and control over RPMA functions within his purview.

4. The proposed actions provide for and foster uniform treatment of customers.

5. The proposed action gives visibility to all costs and charges for both the RPMA manager and the customer.

6. The proposed actions are fully compatible with the Navy's command management system and philosophy.

Compliance with these precepts is deemed essential for any consolidation to be considered acceptable and feasible by the Naval Command in Panama.

2. General:

a. This office has reviewed pertinent sections of the draft report. The reviewer’s analysis of the report considered not only (a) the OSD tasking memoranda, and (b) the thrust of the report, but also (c) his knowledge of Panama Canal Treaty Implementation requirements, wherein the Army assumes new and/or expanded support functions effective 1 October 1979.

b. This directorate’s impression is that the EDC’s draft report is a reasonably good document, given the time frame available for collecting, analyzing, and aggregating requisite data and information on EPMA activities by the Army, Navy, and Air Force in the Canal Zone.

c. This directorate is in agreement with the thrusts in the Summary related to (1) desirability, and (2) the continuation of the current method of operations (CMO). It is not in agreement with any linkage, implied or direct, of EPMA consolidation with any other base operations functions. EPMA consolidation has occurred on Oahu, Hawaii, and in the San Antonio Area (SARPA), no other base operations functions are involved, nor should there be with respect to Panama.

3. The study report summary is at best, uncertain in its discussion of both the feasibility and the desirability of further EPMA consolidation in Panama. The inference is that the facts are non-supportive of a positive conclusion, thereby leading to the deductive observation that consolidation is “not feasible” (or “not harmful”) or is it “undesirable”. There is no intent to criticize the study group; however, the impression gathered is that since the “front door” facts are not conclusive, there should be further efforts to shore up the study recommendations through the “back door” in that two negatives are positive. In sum, EPMA consolidation is either feasible and/or desirable, or it is not, and the study should cease to gripe with both in its final recommendations.

4. Implementation of the Panama Canal Treaty:

a. The study does discuss to some extent on pages H-3-1 to H-3-7 the additional support responsibilities to be shouldered; however, not in sufficient depth to convey the true magnitude of the changes to occur—shortly—which should be considered in any further consolidation analysis.

b. The scope and scale of these changes are reflected in the Army’s increased FY 80 resources for treaty implementation, as submitted to the Congress in the FY 80 President’s Budget.
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Footnotes:

A/ Includes $25.5 million requested in the FY 79 MCA Supplemental. The Congress moved this amount into FY 80. Thus, the $25.5 million is now being treated in the FY 80 MCA Authorization and Appropriation Bills as though this amount was requested in the FY 80 budget.

c. Appendix N states that treaty implementation costs are not included in the alternative analysis but does acknowledge that the treaty-related functions impact on FRMNA is important. Paragraph 3c., pages N-3-3 and N-3-7, also states:

"The initial increase in workload followed by a decrease to current levels necessitates good prior planning to reduce personnel turbulence and force reduction costs in 1984."

d. Figure N-3-1, page N-3-4, depicts changes from January 1979 to October 1984 for number of buildings and square feet resulting from the treaty. Figure N-3-2 compares improved grounds and paved surfaces from January 1979 to October 1979.

e. The trends in both figures are misleading. Although the number of buildings and square feet to be maintained drop slightly from October 1979 to October 1984 (4 and 6 percent respectively), it is not correct to regard the October 1984 level as "a decrease to current levels", i.e., to the pretreaty real property inventory to be maintained.

f. What is omitted is the major change in the composition of Army real property maintenance and repair responsibilities. The Canal Zone Government Health Bureau's medical facilities, e.g., Gorgas Hospital, the dependent school facilities, upgrading of current facilities to administrative offices, etc., all constitute a major change in the maintenance and repair functions which is not portrayed in the nominal performance factors of number of buildings, square feet, etc.
The overriding issue is the Army's capability to perform its treaty related functions, including KPMA, effectively, so as not to degrade the support provided to military and civilian personnel and their dependents - which is a fundamental premise underlying the Army's planning for treaty actions and associated resources since February 1978.

3. Another major factor is the organization of the 193d Infantry Brigade (CB). The brigade staff is dual-hatted; it serves as the tactical brigade staff and as a large installation staff. Essentially, it is a lean organization for normal tactical and support missions which has had an extensive treaty planning and implementation workload superimposed upon it. During treaty planning, serious consideration was given to forming an installation staff organization apart from the tactical staff. Additional manpower and funds would have been required for the installation TDA.

Given what was known at that time (April-June 1978), FORSCOM decided not to recommend to DA that the tactical and installation functions be separated and additional staffing provided. In sum, the FORSCOM decision was to proceed into the treaty environment with essentially the 193d staffing structure. No matter how one looks at further KPMA consolidation, the end result is added Army workload in Panama to an already heavily committed/extended staff. The second major premise of Army treaty planning has been to maintain the capability of the 193d to execute its tactical missions.

And this factor also needs to be carefully considered in any action that adds workload to the Army's major element in Panama, the 193d Infantry Brigade.

4. Conclusions: From the foregoing, this director concludes:

a. The study is ambiguous in both the feasibility and desirability of further KPMA consolidation in Panama.

b. Projected savings are both minor and tenuous and exclude additional manpower and funds for treaty implementation actions.

c. The markedly changed nature of the Army KPMA workload under the treaty was not analyzed in the study.

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4. The Army's existing organizational staffing in Panama for tactical and support requirements under the treaty was not considered.

5. The turbulence and transfers of functions and civilian manpower to occur on and after 1 October 1979 were not addressed, nor were the time and effort required to assimilate both and achieve a stabilized, higher level of operations in a yet to be determined treaty environment.

5. **Recommendations:** This directorate recommends that the ODA position to the EPMA consolidation study be:

a. There be no direction to further consolidate the EPMA function in the Republic of Panama at this time.

b. If further study indicates substantial savings, e.g., 20 to 25 percent, and there is no impairment of the Army's tactical and support responsibilities under the treaty, that the earliest further EPMA consolidation is considered to be 1 October 1984, at which time the Army's functional support workload in Panama generally reaches a stabilized level.

c. In any event, there be no linking of consolidating other base operations functions in Panama with further EPMA consolidation.

d. Any decision to proceed before 1 October 1984 should be made in the command - not staff - channel.

6. **Summary:** In sum, the central issue comes down to this "bottom line": How much more support responsibility, if any, should be placed upon the Army component in the Republic of Panama by internal DoD/DA realignment/consolidation of functions, at a time this component is extended to its limit in carrying out treaty related provisions and responsibilities? Any decision which adds more responsibility should be made upon the basis of what is best for the Army overall in the treaty environment.

FOR THE CONTROLLER OF THE ARMY:

J. D. HEARD
LTC, CS
Execution, OODA

COREY J. WRIGHT
Brigadier General, CS
Director of Operation and Maintenance, Army

Incl:
1. w/d
2. added

(EESC NOTE: Inclosures Withdrawn)
In response to the ASU/Hads (Hall) memorandum, the proposed report is as follows:

1. The Deputy Chief of Staff for Personnel
2. From date [redacted]
3. Date 07 Aug 1979
4. [Signature]

Constitutional Study
Division of Legal Affairs - Panama Canal

[Redacted]
Frat Otaft report

A. Comaolidation Study

1. I recommend that specific recommendations be made to CS with respect to the consolidation of the fire district, as outlined in the implementation section. The majority of the recommendations in the study are consistent with CS directives and other service efforts and appear to be a feasible course of action. Consistent with CS directives, the implementation section of this report is consistent with the recommendation for an OCP. Directed consolidation should be considered.

2. Recommendations are presented on a combination of two or more existing fire districts. The specialty of each operation is consistent with that of the others.

3. In the final analysis, the only way to achieve effective consolidation is to provide a clear understanding of the objectives and the responsibilities of each fire district. Directed consolidation is consistent with the goals of the study.

For the benefit of CS for Operations and Plans:

Major General, CS
Director of Operations

Date: 8/1/79

[Signature]
1. Reference D.P. DAEN-MPH, 23 July 1979, subject as above (attached).

2. In response to above reference, the following comments are offered.

   a. Recommend the section "Beyond the Analysis" (pp. 50-63) be dropped from the report. Reason: The section is exactly what the title states; it is opinion and not analysis and therefore beyond the scope of the study.

   b. Recommend the section dealing with Transportation be revised and all additional data not included in the original study. Reason: The study admits that certain significant required information was not collected. Therefore, the conclusions regarding transportation appear not to be based on solid data.

3. The situation in Panama is particularly uncertain because we do not really have information upon which to make our estimates of the situation after 1 October 1979. We do know that as a result of treaty implementation, the Army will maintain 2,017,800 square feet of real property held prior to the treaty. Part of this additional footage will be covered by reimbursements (e.g., DOD schools), but part of it will be very complex and demanding in terms of resources (e.g., hospitals). It would appear that due to changing conditions in Panama, it might be preferable to put aside further consideration of this consolidation until approximately one year after treaty implementation. This would give us the opportunity to assess what real property maintenance will be required and at what cost. The study currently assesses the situation in a pre-treaty environment. If the study recommendations are implemented, they would be implemented in a post-treaty environment. The two conditions are significantly different and since the study findings do not provide for such changes, it is highly questionable that we should depend on the present time.

For the Deputy Chief of Staff for Logistics:

[Signature]

WILLIAM X. QUIGLEY
Brigadier General, GA
Director of Resources and Management
SUBJECT: Review of Draft Report - Panama REMA Consolidation Study

ED: ASD
FROM: DASM-101
DATE: 7 Aug 1979
To: CINCPAC

1. As per your request, this office has reviewed the subject report. Additionally, it was reviewed by the Programming Division, DASM-101. Combined comments follow:

a. The report suggests four viable alternative methods for conducting REMA in Panama. However, it fails to support a particular alternative. In ESC's "bottom line" there is a recommended approach to the problem. Is this ESC's answer? This is somewhat vague. Based on the nature of much of the report and the need to estimate risk of the support data, this office suggests that another In-Process Review (IPR) be held to clarify issues and to get additional guidance.

b. Comments from the Air Force and Navy should be Service-supported positions and not those of the REMA POC's only. This would form a basis for continued negotiations among the Services that would not change or have to be modified as POC's retire out of Panama.

c. Action should be taken to set empirical/statistical standards for the shop force. Points REMA attempts in the final four tests with the operational REMA support force. The Air Force should take the lead in this area, but because they have the available manpower in DIA/ES and standards.

d. The "Conclusions," Section VII, appears to support Alternative 2, consolidation of REMA under a single manager, but this is not made clear. On the other hand, the report "Conclusions" neither supports nor opposes Alternative 3 and 4: "Larger REMA consolidation in Panama is not clearly desirable alone and in its own right, ... but to it clearly undesirable." A clear ESC position should be stated.

e. Any questions regarding the report should be referred to MAJ Robert A. Brown, 694-DASH.

Inc

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1. References:
   a. DASD(16H) Memo, 6 Dec 73, for ASA(16PM), ASN(NIAL), ASA(NIAL), etc., subject as above.
   b. DAEN-ZCI MSG, DTC 16O2432 DEC 78, subject: Implementation of DOD Planning Guidance for US Military Installations in Panama. (Copy furnished.)
   c. DAEN-MFR Memo for ESC, 13 Dec 78, para 3e(2); Annex A, page A-11.

2. It is noted that, by Reference A, OSD stated: "Consistent with accelerating those actions necessary for implementation of the treaty, the RPM study requirement is hereby cancelled, with the evaluation of feasibility of consolidating management responsibility for facility improvements incorporated into the RPMA Consolidation Study. The remainder of the study effort, concerning single service performance of technical real estate services, is unnecessary. The Army, as DOD executive agent for those land and water areas to constitute Defense Complex-Panama, will establish an appropriate office in-country for that purpose and in advance of 1 October 1979." It is also noted that Reference b stated, "The feasibility of record keeping and accountability for facilities improvements: i.e., buildings, structures, roads, parking areas, fencing, utilities, etc., by a single service has been incorporated into RPMA Consolidation Study."

3. The final sentence of Reference lc refers to "record keeping for real estate" and states that means for accomplishment of such record keeping "will be a subject of the RPMA Consolidation Study." In view of Reference lc, and the guidance as noted in paragraph 2 above, it is requested that future draft changes and the publication of the subject study be coordinated with this directorate.

4. Recommend that definitions of the terms set out below, and the functions envisaged by use of the terms, be put into the draft and final study:
   a. Real estate record keeping (e.g., para 24c of Study).
   b. Record keeping for real estate (e.g., Reference lc above).
5. The study report should specifically distinguish between the terms "real estate records" and "real property accountability records." The technical real estate services function performed by the Corps of Engineers does not include maintenance of real property accountability records.

FAREWELL.

1 Incl

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