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AUTHORITY

| AGO D/A ltr, 25 Jun 1975; AGO D/A ltr, 25 Jun 1975 |

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SECURITY MARKING

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1. Reference: AR 1-26, subject, Senior Officer Debriefing Program (U) dated 4 November 1966.

2. Transmitted herewith is the report of LTG Frank T. Mildren, subject as above.

3. This report is provided to insure appropriate benefits are realized from the experiences of the author. The report should be reviewed in accordance with paragraphs 3 and 5, AR 1-26; however, it should not be interpreted as the official view of the Department of the Army, or of any agency of the Department of the Army.

4. Information of actions initiated under provisions of AR 1-26, as a result of subject report should be provided ACSFOR OT UT within 90 days of receipt of covering letter.

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AVHGC-DST

SUBJECT: Senior Officer Debriefing Report - LTG Frank T. Mildren

Assistant Chief of Staff for Force Development
Department of the Army
Washington, D.C. 20310

1. Reference paragraph 6, AR 1-26.

2. Attached are three copies of the Senior Officer Debriefing Report prepared by LTG Frank T. Mildren. The report covers the period 22 June 1968 - 1 July 1970, during which time LTG Mildren served as Deputy Commanding General, United States Army, Vietnam.

FOR THE COMMANDER:

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DEBRIEFING REPORT

COUNTRY : Republic of Vietnam

DEBRIEF REPORT BY : Lieutenant General Frank T. Mildren

DUTY ASSIGNMENT : Deputy Commanding General, United States Army Vietnam

INCLUSIVE DATES : 22 June 1968 through 1 July 1970

DATE OF REPORT : 1 July 1970

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1. FOREWORD

A. (U) The role of Headquarters, United States Army Vietnam, has been to direct the operations of the Army component command in Vietnam, discharging all command functions except for specific combat and combat support units under the operational control of COMUSMACV. As the Deputy Commanding General, I exercised, for General Abrams, command of all US Army units in the Republic of Vietnam except for their tactical employment and intelligence operations.

B. (U) The mission of the Deputy Commanding General, USARV, is to exercise responsibility for sustaining a combat Army in any posture necessary to achieve the policy objectives of the United States, to provide necessary support to other Free World Military Assistance Forces and to assist in the internal development of the Republic of Vietnam. Inherent in this mission are the following tasks:

1. Improving force management.
2. Sustaining the military forces.
3. Supporting the tactical operations of the military forces.
4. Redeploying major portions of the military forces.
5. Assisting the internal development of Vietnam.

C. (U) It has been necessary to accomplish these tasks under a unique situation which has not existed previously in the history of our Army. We are simultaneously: continuing to maintain a combat posture to thwart the enemy; redeploying forces; restationing forces and resources to meet the changing demands of the tactical situation; and assisting in the internal defense and development of the Republic of Vietnam.

D. (U) The remainder of this report will discuss in some detail the major factors and actions which supported the accomplishment of my mission. Additionally, problems will be identified and some
lessons learned will be described.

E. (U) I will not emphasize ramifications of the USARV logistical system in view of the June 1970 publication of our study, "The United States Army, Vietnam Logistics Review, 1965 to 1969." This document reviews in depth the USARV logistics system and evaluation of its effectiveness, and recommends changes to existing supply procedures believed to be desirable.
II. AN OVERVIEW OF FORCE MANAGEMENT

A. (C) COMMAND AND STAFF RELATIONSHIPS WITH MACV.

1. Commenting briefly on USARV relationships with MACV, I consider them to have been cordial, cooperative, and militarily rewarding at both the MACV Headquarters and Field Force levels. I concentrated on infusing our command and staff efforts in the functional areas of operations, planning, and support and their timely integration into the tactical role of MACV as a joint headquarters and an operational headquarters for the field forces. I believe our efforts materially contributed to a smooth, constructive interfacing within the MACV, USARV, Field Force complex.

2. Within this framework, I functioned as both a commander and a force manager. From the command point of view, I was deeply involved in Army component planning for the provision of combat support and combat service support. This, of course, was essential to support both tactical plans for current operations and unilateral contingencies. This function precipitated necessary actions related to the procurement and deployment of Army forces. A valuable derivative from these activities was that of developing, processing, and disseminating Army lessons learned and influencing combat developments.

3. As a force manager, I was directly concerned with sustaining and supporting the combat forces encompassing a broad spectrum of managerial tasks, not the least of which was organizing and equipping Army forces, to include procurement of a wide range of combat items. These items, all of which seemed critical, had, of course, to be allocated in an efficient and expeditious manner. Two other important facets of the manager's role included manpower, its administration and replacement, together with programming, budgeting, and fiscal actions for the bulk of Army forces in Vietnam. In these important areas, I believe, we faced some of our greatest challenges successfully.
B. (C) RELATIONSHIPS WITH VIETNAMESE/ FWMAF COMMANDERS.

1. I consider my relationships with major Vietnamese commanders to have been harmonious and friendly. Army units have been, and still are, deeply involved in Vietnamization and many are either collocated with, share coincidental areas of responsibility with, or sponsor the training of, Vietnamese forces. While I have had no command relationship with the Vietnamese, there have existed a strong rapport and a mutual spirit of cooperation, particularly in I and III Corps areas. I attended the quarterly reviews of the Combined Campaign Plan at each corps headquarters and several times represented COMUSMACV as the senior MACV representative. In view of the support in all areas rendered the ARVN by USARV, I believe our relationship to be highly regarded and sincerely appreciated by the Vietnamese commanders.

2. In the case of the commanders of other free world military assistance forces, the relationship was much the same as with the Vietnamese; it was one of mutual cooperation, respect, and trust.

C. (C) PERSONNEL MANAGEMENT.

1. Maintaining the strength of the Army has been an area requiring a great deal of attention, particularly over the past year. During this period the USARV force structure has undergone several changes requiring continual adjustments to maintain the right number of men in the right skills. The overall USARV strength level since July 1969 can be described as a series of descending plateaus with minor irregularities superimposed upon them. These plateaus are attributed to the various increments of redeployments and the irregularities to replacement fill performance and lead times associated with the redeployments.

2. Each phase of the redeployments presented certain problems. In Phase I, we were faced with preparing one unit to be split into three packets, each with different redeployment criteria. The 9th Infantry Division had one brigade bound for CONUS for inactivation, one to Hawaii to remain in the force structure, and one to remain in Vietnam as a combat element. The decision to inactivate the Hawaii bound unit resulted in considerable personnel turbulence and also contributed to the difficulty we had in attaining the reduced strength ceiling.
together with achieving the desired skill mix within USARV. Another problem developed when, 21 days before the deadline for completion of the redeployment, we were advised to reduce by more personnel than had been originally programmed. Planning had been predicated on the reduction of 15,400 spaces from the Army portion of the OSD ceiling. The additional reduction was to be made from the actual personnel strength on hand on 8 June 1969. As the command had been understrength on that date by approximately 5,852 personnel, additional people had to be shipped from the command. In total, 21,600 personnel were redeployed between 10 and 31 August 1969.

3. Due to efforts required to meet the Phase I ceiling during a short period of time, some shortages in certain skills developed within USARV. Of particular significance were the shortages of truck drivers, field artillery crewman, cooks, and medical corpsman. These deficiencies have been partially overcome by adjustment of subsequent requisitions. As a result of the June 1969 redeployment announcement, we had to reevaluate enlisted requisitions which had been submitted in January, February, and March for arrival in June, July, and August. As a result, 1800 requisition line items were cancelled for August and 7200 replacements were diverted at the ports.

4. With Phase II redeployment, completed in December 1969, actions taken to accomplish the reduction of 14,082 person nel spaces were less drastic due to a lower USARV strength level as we entered the reduction period. The Phase III redeployments of 29,400 Army spaces involved redeployment of units, inactivation of some units in country, and space reductions in certain units remaining in country.

5. The redeployment activities represent the major changes in strength levels or plateaus. The irregularities in Army strength which were superimposed on these major changes were partially caused by short-term actions associated with the timing of the redeployment announcements and partially by enlisted replacement fill performance. Prior to the start of the troop redeployments, replacement fill was characterized by monthly fluctuations of replacement arrivals either above or below the number of requisitions for the period. As a result of this performance and the adherence to a fixed 12 month tour, our strength also fluctuated in direct relationship to the replacement fill performance.
6. The general lesson learned from the redeployments to date is that more time is required between announcement of the redeployment decision and the desired completion date in order to make effective strength management decisions. Although at least 120 days is a desirable minimum, I recognize that factors beyond Army control will not always make this possible.

7. Before leaving the subject of personnel management, I believe a few comments about changes in the reenlistment area are warranted. In the latter part of 1968, it became obvious that the USARV Reenlistment Program was ineffective. I determined that there were two major contributing problem areas: a lack of command participation at all levels, and ineffective counseling concerning reenlistment. Additionally, an inspection team from USARV had found that the methods by which subordinate commands determined the number of eligible personnel retained were inaccurate and did not reflect the actual accomplishments of those commands. To correct these problem areas, I emphasized to commanders the importance of a dynamic reenlistment program and directed that orientations be conducted for reenlistment personnel. Further, I directed the implementation of a new system assigning each subordinate command a monthly objective based on enlisted strength rather than the percent of eligibles retained. As a result of these efforts, the percentage of personnel retained has increased substantially. In the first half of FY 1969, only 18 percent of the eligible personnel in all categories were retained, while in the first half of FY 1970, this increased to 37 percent. Because there is always the possibility that an active Reenlistment Program would result in reduced quality, I directed a study be conducted to determine the quality of personnel reenlisted. This study, which considered the average of the three highest ACB scores of each reenlistee, determined that 29 percent had average scores between 111 and 120 and that 20 percent had average scores greater than 120. This, I believe, reflects the quality of our Reenlistment Program.

D. (U) FINANCIAL MANAGEMENT.

1. Upon my arrival at USARV, I recognized the necessity of emphasizing financial management in order to achieve maximum utilization of the available funds. Although it appeared unlikely that
funds would be reduced to the point where combat operations would be affected, my philosophy was to achieve and maintain maximum fiscal efficiency and economy in performing combat support and combat service support missions. The FY 1969 budget had increased from the FY 1968 level of $392 million to $453 million indicating that improvements in the USARV financial management system were desirable. In late summer of 1968, therefore, I directed that a Program Budget Advisory Committee be established, chaired by the Deputy Chief of Staff for Personnel and Administration. The mandate for this committee was to develop a budget consistent with combat operations and insure that all nonessential items were eliminated. I established the policy that field commanders would be responsible for prudent management but not burdened with fiscal restraints. Throughout FY 1969, these and other supporting actions enabled us to return $98 million to USARPAC for use by other commands.

2. At the beginning of FY 1970, the USARV accounting system was standardized in order to relate financial information to practical budget line items. Although the system is not sophisticated, it serves our management needs and satisfactorily meets reporting requirements. It has proved very successful in identifying dollar savings. It is my opinion that our environment here in Vietnam will not support a more detailed accounting system due to the absence of a stable, well-trained work force and we should accept the simple, reliable system as the useful management tool it has proved to be.

3. FY 1968 obligations by the Centralized Financial Management Agency for out of country support of USARV amounted to $1.5 billion. Even with our limited participation in managing these funds, we generated actions which resulted in savings of over $100 million and USARV has now commenced a more active participation effort in budgeting for and managing out of country funds.

4. USARV and USARPAC have jointly developed an approach toward in country financial management, to include limiting the number of authorized requisitioners, establishing quarterly dollar targets, reporting budgetary and financial inventory accounting data, and analyzing supply activities in their progress toward established targets. In conjunction with these financial management inroads,
emphasis continues on improving supply efficiency. As compared with obligations of $1.4 billion in FY 1969, FY 1970 obligations for out of country supplies are programmed at $876 million reflecting a substantial savings and a significant managerial achievement.

5. Another area in which we have made substantive strides has been in reimbursement documentation. We now issue supplies to other services on a reimbursable basis. This requires capturing actual issue documentation and forwarding it to the Centralized Financial Management Agency for preparation of bills. Intensive efforts to simplify this system have resulted in the use of departmental level agreements whereby reimbursement for subsistence, bulk POL, and ammunition is based on logistical reports rather than on more voluminous and detailed documentation with other classes of supply.

6. Our efforts in the area of Assistance In Kind funds have been confined to improving our controls, establishing disciplined procedures, and reducing expenditures. Although the dollar amount of these funds available to USARV is modest compared to our total budget, they have provided the commander valuable additional financial flexibility. One project worthy of note in this area has been the Kit Carson Scout Program. I heartily endorse the use of these funds for that purpose as the employment of these scouts has paid many dividends in saving lives and reducing casualties.

E. (U) AUTOMATION.

1. I consider automation and data processing, in spite of its many inherent problems, a valuable tool in assisting a force manager. When I arrived, the force buildup had almost reached its peak and we had seen a corresponding increase in data processing equipment. In the logistics area we already had 46 NCR 500 systems supporting the DSU/GSU supply mechanization. In the personnel area the PERMACAP Program had been installed and was operational at all the division administrative companies and at the several personnel service companies. I faced the dual problems of getting the proper computers by type and number to help manage the vast personnel and logistics systems and of developing a management system by which we could effectively control the equipment itself.
2. In the logistics area it became increasingly apparent that it was necessary to determine what supplies we had and where they were located. As data processing was essential to this task, I took steps to have the computers in all major logistics installations upgraded to second generation equipment. By early fall of 1968, we had completed the upgrade action with new computers at Cam Ranh Bay and Qui Nhon Depots. By October of 1969, the computer capacity at Long Binh Depot had been increased. In the spring of 1969 we increased the NCR 500 systems from 46 to 60. Although our personnel system was already well established, much effort was put into purifying the data base and improving the PERMACAP and PERSIN systems. These two systems, working together, have provided the accurate and timely strength figures which were so important during the redeployments.

3. To meet the problem of managing the data processing assets, I formed a new general staff section, Office of the Assistant Chief of Staff for Management Information and Data Systems, charged with the mission of controlling the inventory, monitoring utilization, and budgeting of all USARV automatic data processing activities. It was fortunate that we had placed emphasis on the management of data processing, for in the latter half of 1969 we were faced with the first phase of redeployment as well as a rather extensive budget cut in the data processing area. As a result, we reutilized systems from units that were inactivated or redeployed and I decided not to expand the PERMACAP system by introducing new machines.

4. Finally, we initiated programs in our personnel accounting and logistic support areas to examine data processing utilization to insure we were getting all that could be gotten for our dollars. Since the fall of 1969, over 100 under-utilized machines and the supporting contractor maintenance have been discontinued for a saving of three quarters of a million dollars.

F. (U) CONSERVATION OF RESOURCES.

1. One of the primary objectives of our resource conservation program has been the elimination of unauthorized construction and the reduction of unnecessary expenditures of construction effort and funds for "nice to have" facilities.
2. In the late summer of 1969, I was advised of the dwindling Military Construction, Army (MCA) resources at my disposal. Based on this information, on 6 August 1969, I halted all MCA and Operations and Maintenance, Army (OMA) financed troop vertical base construction that was less than 90 percent complete. I also precluded initiation of new projects without written explanation of the necessity and urgency of the project by the senior commander and I reinstituted the USARV Facilities Review Board.

3. Chaired by the Deputy Chief of Staff for Plans and Operations, the Board sought to: conserve dwindling construction resources; eliminate nonessential construction; reforge a balanced construction program; and concentrate remaining required construction on the long term bases necessary to support the Vietnamization program. Subsequent to 6 August 1969, the Board has considered 678 new and previously approved MCA projects totalling $162.4 million. Based on recommendations of the Board, I disapproved 489 MCA projects worth $126.3 million and approved $36.1 million as recognized requirements. The Board also considered 341 OMA projects totalling $1.8 million. In this area, I disapproved 88 OMA projects worth $.4 million and approved $1.4 million as recognized requirements. Further, USARV provided over $50 million to Vietnamization related uses, to include $14.8 million to the Lines of Communication Program.

G. (U) CIVILIAN PERSONNEL SERVICES.

1. On 1 July 1968, USARV was authorized 500 United States civilian employees and was granted further recruitment authority for an additional 287. With a strength of 467 employees, recruitment efforts were initiated to obtain employees for utilization in combat service support activities, to include manning civilian positions in the Army Depots at Long Binh, Cam Ranh Bay, and Qui Nhon. A recruitment campaign was conducted in CONUS and improved the strength posture of the command to the extent that by the end of March 1969, the number of employees had increased to 712. An all-time high in civilian manpower utilization was reached in August 1969 when a total on hand strength of 787 employees was attained.

2. "Pipeline" requisitions were introduced in the civilian recruiting processes in August of 1969. This system provided information on
the departure date of employees to permit recruitment planning and actions to schedule arrival of replacement employees in a timely manner to coincide with the departure of the in-country employee. This system has proved beneficial to USARV except for positions in Safety, Education, Special Services, and a few in Logistics, which have been and still are, in short supply.

3. A reduction in authorizations to 706 employees effective 30 June 1970, to include a reduction of 40 man years utilization prior to 30 June 1970, have required 21 reduction-in-force actions.

H. (U) CLUBS AND MESSES.

1. The operation and control of clubs and messes in Vietnam has been a problem due to a rapid growth of the system and a lack of experienced personnel. This problem has been reduced by personal command and staff interest together with close supervision.

2. In early 1969, I directed the establishment of a rigid screening system to eliminate present and future custodians and managers whose backgrounds rendered them unfit for club service. This action, I am confident, has resulted in considerable savings to messes, their members, and the government. Additionally, tours of custodians and managers have been restricted to 12 months.

3. Two additional major steps have been taken. I believed that the centralization of nonappropriated fund purchasing would provide substantial protection against misuse of funds, waste, and the opportunity for personal gain. Accordingly, USARV established the Central Purchasing Agency (CPA). To combat the lack of business expertise in the open mess system and to enhance command supervision, GI established the Vietnam Open Mess Agency (VOMA). Both agencies were operative in the late summer of 1969. The former provided a single point of contact between clubs and commercial vendors, while the latter permitted close command monitorship of all activities in the individual clubs and messes. We have also conducted a series of training courses to raise the quality of club management.
A. (U) GENERAL.

1. Topics discussed in this section fall into the area of efforts required to sustain the military forces in any necessary posture. The discussions focus on improved techniques for managing resources, maintenance management procedures, combat service support methods, and improving operational readiness.

2. USARV combat service support elements had to be extensively tailored to provide the support required by US and FWMAF in the peculiar geographical and insurgency environment of Vietnam. This subject is discussed in detail in the study "United States Army, Vietnam, Logistics Review, 1965 to 1969." A few significant aspects of that study are addressed in this section.

B. (C) OPTIMIZING COMBAT SERVICE SUPPORT.

1. In mid-1968, the USARV combat service support system was providing continuous support to US and FWMAF Forces in Vietnam. USARV had the common service support mission for all areas except ICTZ which will be discussed later. The command was engaged in sorting out the mass of supplies and equipment that had been pushed into Vietnam during the buildup when budgetary constraints were less stringent and demand data and management information systems were less sophisticated.

2. General supply and maintenance support was furnished on an area basis by four semi-autonomous, self-sufficient "logistical islands" controlled by Support Commands under the 1st Logistical Command. Each support command was further subdivided into general and direct support level units designated as Logistical Support Activities (LSA) at semi-permanent locations and Forward Support Activities (FSA) at temporary landing zones or fire bases.

3. The LSA and FSA logistical structure was a variation of the COSTAR principle of functional organization and support in which the functional elements were fragmented and recombined into composite teams to provide the peculiar mix of support required by customer
units in the local area. This tailoring of logistical units conserved manpower over a pure TASTA concept organization because it eliminated duplicative administrative and control elements. In effect, 1st Logistical Command performed both TASCOM and FASCOM type missions.

4. This tailoring was necessary to adequately support decentralized combat and combat support operations in widely dispersed and relatively isolated areas. In some instances 1st Logistical Command DS elements were substituting for divisional DS elements when the tactical units' organic support capability became over-extended by highly fragmented operations. Fragmented operations were essential to cope with the topography and enemy situation. These conditions demanded the utmost flexibility in the logistical support structure. In many instances the TOE/TDA did not authorize the type and quantity of skills and equipment needed for the fragmented support missions. As an interim measure, equipment available in the supply system was placed on temporary loan in excess of the units' authorization. Because the equipment was not accompanied by an equal increase in skilled operators and maintenance personnel and because of heavier workloads and continuous use, deadline and washout problems were compounded.

5. In the case of the 11th Armored Cavalry Regiment, which has no organic DS maintenance capability, considerable difficulty was encountered in providing continuous support as elements of that organization were relocated out of the jurisdiction of one maintenance unit into another's jurisdiction on short notice. An organization of this size and having such a density of tracked vehicles needs an organic DS maintenance capability.

6. We operated separate vertical systems for medical supply and aircraft supply and maintenance, and cryptological and area communications services and maintenance in order to insure responsiveness. Facilities engineering support was provided by contract under the cognizance of the USARV Engineer Command (Provisional) which was also responsible for the Line of Communications (LOC) construction program and land clearing activities.

7. Overall, our combat service support strength accounted for 43% of US Army Forces in Vietnam. By a cursory analysis this appears
to be disproportionately high. But in addition to supporting US Army forces we also were providing support to RVNAF, a seven nation FWMAF approximating 4 divisional force equivalents, 15,000 MACV advisors, USAID and other US Government agencies, and other US Military Services.

8. The capabilities of combat service support units have been significantly diluted to meet security and defense requirements of logistical installations and convoys in this counterinsurgency environment. The security factor must be considered when evaluating the unusually high percentage of combat service support troops. Additional weapons and communications equipment also had to be issued to logistical units.

C. (U) **MAXIMIZING AVIATION MAINTENANCE SUPPORT.**

1. One of my primary and continuing goals has been to achieve and maintain maximum aircraft operational readiness rates through intensive management of personnel and material resources. With the deployment of large numbers of Army aircraft to Vietnam, we found that we had three separate systems for direct supply aircraft maintenance, each with its own peculiar advantages and disadvantages. The infantry divisions centralized their aircraft direct support capability in the aircraft maintenance company of the maintenance battalion; the airmobile divisions centralized their capability in the transportation aircraft maintenance battalion; and the lst Aviation Brigade company-sized units were authorized an attached direct support aircraft maintenance detachment. In addition, the 34th General Support Group provided back-up DS and GS aircraft maintenance and repair parts resupply support. At the same time, we found that the volume of manually processed requisitions for spare parts periodically overwhelmed the supply system.

2. In examining the aircraft maintenance system for areas where we could achieve improvements, we first decided that the bulk of our efforts should be oriented towards meeting, and whenever possible exceeding, established operational readiness rates by type aircraft for all of our inventory. Gaining experience with the basic aircraft maintenance organizations, we determined that
consolidation of the attached direct support KD Team capability into the service platoon of the aviation company provides the most responsive aircraft maintenance support. The aviation unit commander controls his entire maintenance effort and requests outside assistance only when unusual maintenance demands, such as excessive combat damage, exceed organic maintenance capability. We have adopted this decentralized organizational maintenance concept in the airmobile divisions and the 1st Aviation Brigade, but no change was considered necessary in the infantry divisions because of the small number of aircraft involved. The 34th General Support Group continues to provide backup DS and limited depot maintenance theater wide.

3. The rapid buildup of our aircraft inventory focused attention on the inadequacy of our manual requisition system. The DSSAs, and particularly the AMMC depots, were overwhelmed with the volume of requisitions. Consequently, we devoted a major effort toward maximizing system automation and minimizing manual operations. Automation also has permitted the identification and elimination of repair part excesses that have accumulated in depots and DSSAs during the past years.

4. We have also found that the responsiveness of the aircraft supply system is directly related to the responsiveness of the various intra-theater transportation means to expedite the repair part from the depot to the user. This problem was solved through utilization of dedicated in-country aerial resupply of aircraft repair parts.

5. We also have developed managerial tools which encourage rapid retrograde of repairable parts for in-country rebuild and reissue to the field.

D. (U) ANALYZING AIRCRAFT OPERATIONAL LOSSES.

1. The fact that aircraft operational losses have exceeded combat losses over the past two years has been a matter of serious concern. Operational losses tend to rise as the level of combat decreases, indicating that such losses are directly related to safety relaxation on the part of aviation crewmembers and commanders. The more predominant recurring problem areas that contribute to operational losses are: aviator inexperience; dropping sling loaded aircraft during recovery; shortage of qualified mechanics; exceeding aircraft and crew limitations; and dust obscuring pilot visibility on takeoffs.
and landings. All of these areas require unrelenting command emphasis on a continuing basis. Each has been addressed on a recurring basis and progress has been made in reducing the overall aircraft accident rate.

2. Safety education and supporting literature have been the best vehicles for reaching individual aviation crewmembers with prevention data. We publish accident results in the USARV Aviation Pamphlet and USARV Weekly Summary of Accident Experience and include recommended corrective actions. I have encouraged commanders to discuss accidents and accident prevention in safety meetings. Through my Aviation Officer, accident trends are immediately isolated and identified for the commanders in the field.

3. Command influence has been the biggest deterrent to aircraft accidents. Commanders must insure that aviators operate their aircraft in accordance with established procedures and do not overextend the capabilities of either the aircraft and crew. Supported unit commanders must have a basic understanding of, and appreciation for, aircraft limitations to preclude their assigning missions that are beyond these limitations.

4. Most of our aviators are first tour personnel who are recent graduates of flight school. I have stressed standardization and training as a remedy for this problem of aviator inexperience. The USARV Aviation Officer now validates all orders for instructor pilots and standardization instructor pilots for all aviation units in Vietnam. This has resulted in better quality control of standardization and training.

5. I am now attacking aircraft accident prevention through utilization of qualified aviation safety officers at the company level, to include the assignment of school trained aviation safety officers. However, there have been insufficient school trained aviation safety officers in the command to fulfill this requirement. The Director of Army Aviation has been advised of this shortage and has taken action to increase the quotas to the Aviation Safety Course from 150 to 250 in FY 1971. As an interim measure, I requested that the United States Army Board for Aviation Accident Research conduct an aviation accident prevention course in Vietnam during May and June 1970. The first class began 6 May 1970 and approximately 300
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aviation company safety officers have attended this course.

6. Aircraft accidents per 100,000 flying hours have been greatly reduced, however. In fiscal year 1967, our aircraft accident rate was 34.1, in fiscal year 1968 it was 28.0, and was further reduced to 20.6 in fiscal year 1969. Through fiscal year 1970, the rate has been 23.1. Additionally, crew error type accidents have been reduced by almost 50 percent over the past two years.

7. Crew inexperience will continue to be an area of major concern and will require the greatest emphasis if we expect to further reduce the aircraft accident rate. Inexperience of aviation maintenance personnel and a shortage in qualified technical inspectors will continue to require a major effort to insure that this inexperience does not contribute to increased operational losses.

8. My Aviation Officer has closely examined the high incidence of dropping sling loaded aircraft during recovery operations. We are stressing the importance of proper rigging and following prescribed recovery procedures through safety publications and messages to the field. Continued emphasis in this area is required.

9. Dust suppression and soil stabilization in and around helicopter operating areas have received top priority. Penetprime is the best available product for dust suppression. An ambitious and continual dust suppressive program has contributed greatly to reducing operational aircraft losses.

10. I believe the major problem areas contributing to operational losses have been isolated and I anticipate that greater reductions in the aircraft loss rate will be achieved.

E. (U) OPERATING THE POL PIPELINES.

1. Here in Vietnam, our POL pipelines have often run through insecure areas and have been subjected to both enemy action and pilferage of the product by local nationals with resulting high losses. To expedite POL movement, cross-country pipelines were laid between Qui Nhon and An Khe, An Khe and Pleiku, Vung Ro Bay and Tuy Hoa, and Qui Nhon and Phu Cat. These pipelines suffered high loss rates because they traversed areas not secured against enemy action and pilferage.

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2. In July 1969, in an effort to counter pilferage of product, I directed that the Qui Nhon to An Khe pipeline be filled with water and that areas of particularly high pilferage be buried. As a result, when the pipeline began pumping POL again, losses decreased from 25% to 15%. Additionally, at my direction important portions of the pipeline between Vung Ro Bay and Tuy Hoa were also buried. This reduced the overall losses in that area from 25% to 4%.

3. The pipeline losses between An Khe and Pleiku continued to be high. Burial of the pipelines in this area could not be economically justified. Thus, in January 1970, we closed the pipeline and line haul was initiated. While burial of the pipeline between Qui Nhon and An Khe resulted in a reduction of product loss, the losses were still considered excessive. Consequently, in March 1970, I ordered this pipeline closed and line haul initiated.

4. Between 1 July and 1 November 1969, POL losses through the Qui Nhon - Phu Cat pipeline had averaged 24 percent each month. Early in November we closed this line to install welded, buried pipe while continuing the POL flow using line haul. The line was reopened on 28 April 1970 after completing the northern two thirds. As a result, losses were reduced to 8.9 percent and efforts are continuing to complete the southern one-third of the pipeline.

5. In addition to burying pipelines, new operating procedures were put into effect which involved pumping during daylight hours only and closing the valves on the lines at night to further reduce losses resulting from pilferage.

6. Currently, existing POL pipelines are either buried or located in relatively secure areas and, as a result, losses have been generally less than 10%. Constant emphasis on pipeline surveillance and daylight pumping should continue to minimize these losses.

F. (C) IMPROVING ARTILLERY OPERATIONAL READINESS

1. In the summer of 1968, we experienced low operational readiness rates for the heavy artillery weapons, 175mm/8" guns, due to their heavy use and relatively inexperienced weapon crews in the area of maintenance. Maintenance floats were not established for these weapons due to lack of sufficient assets to support both the normal washout rate and a float program.
2. Recognizing the importance of these weapons to successful combat operations and the urgent need for additional crew maintenance training, we developed and implemented an aggressive maintenance Repair and Return (R&R) Program for the heavy artillery. This program entailed the maintenance standdown of the weapon, with crew, in a DS maintenance facility for a complete maintenance service under the supervision of experienced maintenance personnel at least every six months.

3. This R&R Program resulted in obtaining maximum service life from the weapons by making needed repairs, providing invaluable maintenance training to weapon crews, and increasing the operational readiness rate average of heavy artillery above 95%. Over 400 R&R's have been completed to date. The success of the heavy artillery R&R Program has led us to expand the concept to include 105mm and 155mm SP howitzers.

G. (U) MAINTAINING LAW AND ORDER.

1. As our force buildup leveled off and the overall situation began to stabilize, we experienced a steady rise in offender rates throughout Vietnam. We have been successful in keeping the "normal" crimes, regulations violations, and offenses in check and have consistently remained below the worldwide and CONUS incident rates. Two areas, however, have required us to institute new and frequently untried methods. These problem areas are currency manipulation and drug abuse.

2. The main point at which we can exercise controls to deter the illicit currency market is at the place where the Piaster, negotiable dollar instrument, or Federal Reserve Note is sold. Throughout Vietnam, authorized Piaster conversion points have been established in numerous locations on each installation to provide military and civilian personnel with a legitimate source of Piasters at the legal rate of exchange. Administrative control measures now require each authorized MPC user who desires to buy a negotiable dollar instrument to identify himself using a Currency Control Plate, in addition to the usual military or civilian identification card. Details of each purchase also must be recorded, to include a certificate, when required, executed by the individual's commanding officer or civilian supervisor who has the
responsibility of determining that the prospective purchaser legitimately obtained the funds involved. Persons who wish to buy traveler's checks or Federal Reserve Notes must also have valid PCS or leave orders which specify they will depart Vietnam within 24 hours. Sales of money orders started a fairly steady decline in November 1969 after the introduction of a requirement that they be mailed immediately by the selling clerk instead of delivered to the buyer. An added feature has been the introduction of a new money order form which is sold only overseas and payable only in CONUS. Effectiveness of this control measure is yet to be determined. Another recent innovation has been authorization for transfer of personal checks between individuals by means of limited indorsements for deposit to the recipient's account. Previously, such transfers were prohibited entirely. This measure is intended to facilitate settlement of private debts without forcing individuals to make irregular transactions in the illicit market.

3. In the area of drug abuse, marihuana, which constitutes 80 percent of the drug abuse in Vietnam, is readily available and inexpensive. Its use, we have found, is confined almost exclusively to enlisted men under 25 years of age. Our Drug Suppression Program has approached the problem on two fronts: enforcement and education. Military Police in conjunction with the Vietnamese National Police have conducted numerous raids on known traffickers in narcotics. We have made fly-overs in search of marihuana fields, which have been destroyed when discovered. We have introduced the marihuana detector dog which is beginning to be increasingly accurate in finding marihuana. We have employed mobile training teams of narcotics experts to have presented classes to junior commanders and noncommissioned officers to help them identify marihuana and to recognize the symptoms of its use by individuals. On the educational side, my Drug Suppression Council has used the approach of informing the young soldier of the dangers of drugs both to himself and to his buddies. Additionally, down-to-earth discussion sheets, films, TV programs, and radio announcements have been used extensively to dissuade our soldiers from using drugs.

4. The programs I have mentioned have contributed materially to bringing both problems, currency and drugs, under control. We
have indeed helped to cut illegal money transactions but, so far, we can only partially judge the effectiveness of our Drug Suppression Program. When we reach the point that the number of drug offenders apprehended begins to decrease, we will know our educational programs are working.

5. The Military Justice Act of 1968, which became effective 1 August 1969, required qualified lawyer counsel in Special Courts-Martial when requested by an accused and allowed convening authorities to detail trained Military Judges when available. However, only two full-time judges were assigned to Vietnam for duty. As a result of our subsequent actions, three additional full-time Special Court-Martial judges arrived in Vietnam early in 1970. By March of 1970, over 55 percent of Special Courts-Martial had detailed military judges as compared with only 17 percent in August 1969. As over 94 percent of these cases are tried by one military judge sitting without officer court members, the monthly saving of line officer manpower has been in the thousands of hours, country-wide.
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IV. SUPPORTING THE TACTICAL OPERATIONS OF THE MILITARY FORCES

A. (U) GENERAL.

1. This section addresses our efforts to materially support tactical operations through the improved employment of men and materiel. This support included the provision of critical tactical items as well as introducing new items of equipment and evaluating the effectiveness of doctrine, concepts, techniques, and materiel.

2. During the logistical buildup in Vietnam, the primary objective was to provide adequate and timely support to combat troops regardless of cost. In the absence of accurate demand data, the US Army Materiel Command had responded effectively to USARV needs by forwarding "push packages" which arrived in great quantities before an adequate system had been devised to control the influx. The stock records of all supply activities contained erroneous and incomplete data. Unidentified excesses clogged the storage areas. Critically needed items remained hidden beneath the excesses and were not accounted for while priority requisitions for the same items were being expedited. Many units had been diverted to alternate destinations so that follow-up supplies arrived at the wrong ports and depots. By mid-1968, the support requirements had become somewhat stabilized, which permitted us to direct more effort to improving supply support by standardizing the logistical system, gaining visibility of assets, and eliminating excesses.

B. (C) IMPROVING THE SUPPLY POSTURE.

1. Project Count had been initiated by the 1st Logistical Command as an initial step in purifying inventory records and identifying excesses. A wall-to-wall inventory was conducted in each depot to determine both quantities and location of stocks. As a result of identifying excess stocks we were able to cancel over $11.5 million in dues-out. Actual shortages necessitated additional requisitions valued at over $8.5 million to correct zero balances. A higher demand satisfaction rate occurred as items previously recorded at zero balance were discovered to be on hand. By the end of 1969, inventory accuracy had approached the established goal of 85 percent, and denial rates had been greatly reduced.
2. Project Strip was an effort to identify, consolidate, recapture, and redistribute excess repair parts from major subordinate commands. To encourage field units to return excesses to the supply system, we sanctioned free turn-in of excesses to DSU/GSU's who in turn screened excesses against requirements. DSU/GSU excesses were identified and reported to the respective depot or USAICCV as appropriate. We managed to recover over $20.8 million worth of repair parts in this project.

3. Another activity, Project STOP/SEE, was an effort to frustrate or divert CONUS shipments which would have otherwise further aggravated the excesses caused by push packages. Aided by the installation of a new generation of computers and in conjunction with improved inventory data from Projects Count and Strip, it was possible to frustrate over $9.6 million in shipments and to divert over $6.2 million of cargo to more appropriate destinations by the end of FY 1969. In addition, some $56 million worth of requisitions were cancelled during the same period.

4. In coordination with the USAMC, Logistic Control Office-Pacific (LCOP), and USARPAC, we established the Logistic Intelligence File (LIF) which recorded all Military Standard Requisitioning & Issuing Procedures (MILSTRIP) transactions passed to CONUS for supply action. From this file we knew if the item had been shipped, if the requisition was still being processed, or if the requisition had not yet been received at the supply source. The information was forwarded by LCOP to the 1st Logistical Command and combined with transportation information in an intransit data report which told our item managers the identity of the vessel, date of departure from CONUS, and the date and port of arrival in Vietnam. We were now able to divert critically needed intransit supplies to the proper location as priorities changed. This inventory-in-motion concept permitted a significant reduction of supplies on hand with attendant cost savings in storage, handling, pilferage, and deterioration.

5. We applied the inventory-in-motion technique with considerable success to Class V supplies. This meant that rather than placing large tonnages of ammunition on the ground where it would be a lucrative target and a hazard to troops, the amount of Class V intransit could be subtracted from in-country stockage. This
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required an adjustment of stockage levels. The safety level was recomputed based on the intensive combat rate of consumption during Tet, 1968, and the operating level was recomputed based on the post-Tet period in 1968 which was relatively stable. We determined that 75 percent of the stockage objective would be on the ground and 25 percent would be intransit from one to 15 days at sea. From this we identified 33,000 tons on the ground which were excess to our needs. Every effort was made in coordination with MACV and USARPAC to dispose of our excess Class V through transfers to ARVN and other US service components or through retrograde; particularly retrograde of unserviceable and suspended ammunition. Since January 1969 we have disposed of over 1,000 tons of excess ammunition each month, except for February 1970, while continuing the Class V support mission.

6. In my estimation, pure harassment and interdiction (H&I) fires in the Vietnam environment have little, if any, value and are extremely costly while doing practically no damage to the enemy. We discovered that some units were particularly enamoured with H&I fire as reflected in their Class V consumption rates. Therefore, I made it a point in my discussions with tactical commanders to enlist their support in curtailing H&I fires. Their response was gratifying in that only 1% of total artillery Class V expenditures are now attributed to H&I fire as opposed to the previous 10%.

7. The rapid buildup had caused our depots to become choked with Engineer supplies and the imbalance in location caused limited transportation assets to be needlessly tied up with transshipments. Approximately 700,000 tons of this material—lumber, plywood, poles, pilings, sandbags, cement and MCA project stocks—were all literally deteriorating in place. We recognized that immediate action had to be taken to stop this influx of material from continuing to enter Vietnam. Several actions were initiated, designed to shortstop the pipeline and insure more effective management and utilization of on-hand stocks. Certain items were placed under USARV command control, others were designated for "intensive management" by the 1st Logistical Command. Outstanding requisitions were cancelled insofar as possible and pending shipments were frustrated in CONUS ports. Several MCA projects were cancelled. New construction was virtually stopped.

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with a view toward precluding any false sense of permanency in Vietnam, as well as reducing the input of Class IV supplies into the country. With tighter controls established, it became possible to more accurately gauge consumption and to predict future requirements. Accordingly, excesses were identified and used to fill ARVN requirements or retrograded. Our efforts resulted in Engineer Class IV materials being reduced to 250,000 tons. However, this figure is still too high.

8. We established the Vietnam Asset Reconciliation Program (VARP) to identify and establish accountability for end items excess to unit authorizations, but for which valid requirements existed. Implementation of VARP within USARV has proven most successful in the identification of excesses. To date, approximately $60 million of major end-term excesses have been identified and accountability established.

9. During the first ten months of FY 70, a monthly average of 10,000 tons of identified excesses have been retrograded to offshore destinations. For economy purposes, excesses were retrograded only after confirmation that in-country requirements for these assets are nonexistent. Command emphasis was placed on redistribution of USARV excesses in accordance with carefully structured priorities.

C. (U) REDUCING MEDICAL SPACES AND ELIMINATING EXCESSES.

1. It became apparent that some of the special staff elements and the major subordinate commands under their supervision were duplicating efforts in some areas. To explore this possibility, I had the Surgeon examine the feasibility of combining his office and Headquarters, 44th Medical Brigade into a single organization. The overlap and duplication of effort surfaced as a result of his examination were primarily in the command and administrative areas. His examination further revealed that a 17 percent savings in personnel could be effected by combining the two activities with no degradation of functions or efficiency.

2. On 1 March 1970, based on the Surgeon's study, the US Army Medical Command (Prov) was activated. This organization was designed to perform a dual function as the USARV Surgeon's Office and command all field army level medical units. Additionally,
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organization of the Medical Command has improved responsiveness and flexibility to changes in medical support requirements.

3. In view of the phase down of forces in Vietnam, we felt it necessary to place special emphasis on the prevention, identification, and retrograde of excess medical materiel. This program included three major areas of effort: reduction of unused medical TOE equipment by hospitals; retrograde of Mobile Unit Self-Contained, Transportable (MUST) equipment; and retrograde of excesses related to hospital redeployment.

4. USARV hospitals have developed fixed facilities over the years, increasingly utilizing non-TOE equipment. Unused medical TOE equipment had been, therefore, subjected to deterioration, cannibalization, and loss. In June 1969, we received authority to retrograde this excess equipment based on its condition. We implemented a program in September 1969 to identify, classify, and dispose of this property. To date, equipment valued at $400,000 has been retrograded for application against worldwide medical assemblage requirements.

5. Excess Mobile Unit Self-Contained, Transportable equipment utilized by three surgical hospitals in Vietnam, valued at $2 million, was retrograded to CONUS in 1970. Included in these retrograde shipments were excess MUST parts valued at $400,000.

6. Disposition of excesses associated with hospital closures, medical unit redeployments, and reduced demands has amounted, thus far, to $8.7 million. Medical materiel excesses are offered to the Republic of Vietnam Armed Forces and the United States Agency for International Development for application against their requirements prior to retrograding. Excess materiel valued at $1.3 million has been transferred in this way on a reimbursable basis.

7. Prevention of over-requisitioning is equally as important as elimination of excesses on hand. During the first three quarters of FY 1970, the requisitioning objectives for items in the Medical Depot system were reduced by 35 percent. During this same period, requisitions previously passed out of country in the amount of $5.6 million also were cancelled.

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D. (U) REALIGNING AVIATION UNITS.

1. During the period from June 1968 to June 1970, the relocation of ground tactical elements had little significant effect on the movement of and continuous support provided by our aviation units. In November 1968, the Americal Division was reorganized with its headquarters at Chu Lai. The aviation support for that division came from the 16th Aviation Group at Da Nang. The 16th Aviation Group, minus the 212th Battalion, was detached from the 1st Aviation Brigade and attached to the Americal Division providing it with three assault helicopter companies and two assault support helicopter (CH-47) companies. It also had a reconnaissance airplane company in direct support, which is still stationed at Chu Lai for that purpose.

2. As this attachment was taking place, the aviation flying strength in Vietnam began to peak out. However, the aviation companies were hard pressed for the various types of backup support which is necessary to maintain aircraft in an operational status. There was a lag in the arrival of Transportation, Signal and Medical Detachments. This was causing a heavy workload on the 34th General Support Group, which provided the general support maintenance and backup direct support maintenance to the 1st Aviation Brigade. However, in the latter part of July, these units began arriving. The last week in July 1968, eighteen Airfield Service Detachments also arrived in country and soon became operational.

3. Not in all cases did each aviation unit move into an area which was completely secured by the supported unit(s). Crewmen and maintenance personnel had to be diverted for this purpose, thereby decreasing the operational effectiveness of the aviation units. In many of these cases, security elements were soon provided for and subsequently attached to release aircraft specialists for more time in their primary area of responsibility. Field artillery radar and searchlight units and organizational security platoons were attached to aviation battalions and these units were particularly effective in alleviating this problem.

4. When the 101st Airborne Division was reconfigured to an Airmobile Division, the 1st Aviation Brigade provided aviation assets to complete the reorganization. It furnished the 308th Aviation Battalion, consisting of two assault and assault support helicopter companies, a heavy
5. An ever increasing reliance on the "Air Lines of Communication" for resupply of forward units in Vietnam and the use of larger aircraft to accomplish that resupply, forced us to become more deeply involved in combat air traffic control. Major modifications in the equipment available, concepts in training, and methods of employment were required to insure the safe and orderly flow of air traffic in and around forward airfields. Self-contained tactical towers, GSCs, and navigational equipment were needed; controllers and equipment repairmen had to be trained to operate and maintain Army equipment. A more viable organization was developed to accomplish these tasks in February 1969. The 58th Aviation Battalion (Flight Facilities Mobile) (Provisional) was reorganized to become the 165th Aviation Group (Combat). Due to the command structure of this group and the relatively heavy combat operational support requirements of the other Aviation Group in III CTZ, the 120th AHC and the Command Airplane Company were assigned to the 165th CAG in April 1969. These units provided rotary wing and fixed wing transportation for MACV and USARV Headquarters.

6. The reorganization of the 165th Aviation Group (Combat) left the Brigade with the following force structure. The 212th Aviation Battalion (Combat) in I CTZ provides support for XXIV Corps with 6 aviation companies. The 17th Aviation Group (Combat) provides support in II CTZ to IFFORCEV with 29 companies. In III CTZ, IFFORCEV receives support from the 12th Aviation Group (Combat) with 25 aviation companies. In IV CTZ, DMAC is supported by 18 company sized units of the 164th Aviation Group (Combat).

7. During the draw down phase of US Forces it is significant to point out that the air cavalry capability has been retained in all cases, and those assets were shifted to the 1st Aviation Brigade.

8. In supporting Vietnamization, the turnover of real property and facilities, such as in Saigon, Vung Tau and Soc Trang, has had two effects on aviation. On one hand it has reduced the span of control of battalion and group headquarters by consolidating units into fewer areas. This has also simplified many logistical support requirements to maintain and sustain aviation operations. On the other hand, it has created severely crowded conditions in many locations. It has
increased the vulnerability to enemy indirect fire attacks and has created the inherent flight safety problems caused by congested airspace and ramp facilities.

E. (U) DISPOSING OF PROPERTY.

1. As our involvement in the Vietnam war began to decline, the problems of property disposal (PD) began to increase. The need was seen to develop several long range plans of action with the objective of establishing a base of men and equipment with the capability to perform a mission of property disposal of the magnitude never before attempted in conjunction with continuing combat operations. In this type war, any abandoned property could become a liability as it could easily be picked up by the enemy and converted to his own uses. Needed was a "reverse supply line" or property disposal system with a logistical function second in importance only to the supply of the unit in the field.

2. Training property disposal personnel became an important aspect to insure their availability to assume the responsibility and accomplish the mission. The training was organized in three distinct phases designed to complement each other. The first phase included the establishment of a CONUS training base. Instruction in property disposal at Fort Lee, Virginia, was expanded to include a course geared to the operational functioning of a property disposal yard and an existing course in property disposal management was broadened. Effect of this training first was felt in January 1970, as graduates began to arrive in Vietnam and contributed their knowledge to the task at hand.

3. Phase two was implementing the concept of the Instruct and Assist Team. A nucleus of select personnel was trained in all phases of property disposal and it was their task to provide informal training to disposal personnel who had not had CONUS instruction. Additionally, they had to clarify points peculiar to the operation of our disposal activity for those who had received CONUS training.
4. Phase three was simply the application of the individual’s knowledge of property disposal to the problem. In February 1970, the first of a series of quarterly seminars with disposal personnel was held to explore and exchange their ideas based on experiences.

5. With the training base established, attention was turned to the job of forecasting the tonnages of scrap and usable items being generated. As tonnages rapidly increased, it was determined that certain items of equipment peculiar to the operations of scrap yards would be required to handle the excesses. Items such as shears, metal and paper bales, truck scales, cable strippers, and magnetic attachments for cranes were procured and an intensive program of delivery, installation, and operation followed. The property disposal facilities in Vietnam eventually attained a degree of sophistication previously considered impractical in a combat zone.

6. Probably the single most significant accomplishment resulting from the operations of PD was establishment of the Property Disposal Agency. This organization was charged with control of all property disposal in Vietnam to include the Foreign Excess Sales Office. In December 1969, the 1st Logistical Command directed its subordinate elements to establish provisional property disposal companies with the use of available assets until a TDA could be staffed and approved, and in April 1970, we formally established the Property Disposal Agency, Vietnam (Prov).

F. (U) REDUCING COSTS.

1. During previous fiscal years the cost reduction program had been conducted at headquarters level. However, for FY 1970, the 1st Logistical Command was assigned the blanket goal of reducing costs by $12,057,000. Thus, the individual support commands did not have specific goals. Headquarters, 1st Logistical Command assisted support commands in the accomplishment of their mission by sending an action officer to each unit upon request. These officers helped the program coordinators with specific actions and other technical advice.

2. All qualifying management actions were submitted to the Army Audit Agency (AAA) for validation. As of the end of the 3rd Quarter FY 70, we had reached $30.6 million in validated Cost Reductions.
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C) ASSUMING COMMON SERVICE SUPPORT IN I CORPS TACTICAL ZONE

1. The acceleration of Navy and Marine redeployments gave impetus to our planning for the complete takeover of common logistical functions in I CTZ. Our plan was developed based on an assumed July 1970 takeover, coordinated with the Navy, and published on 27 February 1970.

2. As a result of Navy redeployments in Keystone Bluejay, USARV already has assumed responsibility for: PCL operations at Da Nang, Chu Lai, and Tan My; port operations at Tan My; facilities engineering support at Phu Bai and Tan My; and operation of the Da Nang Dial Telephone Exchange. These functions were taken over by 15 April 1970. To accomplish this we had to relocate several hundred 1st Logistical Command personnel from other Corps Tactical Zones. Personnel for these additional missions in I CTZ have been taken from our current military personnel authorization at the same time we were supporting redeployments and also experiencing a drawdown of 1st Logistical Command strength.

H. (C) EVALUATING TACTICAL CONCEPTS AND EQUIPMENT.

1. Continuing the improvement of combat effectiveness of Vietnamese and other Free World Military Assistance Forces as well as that of US Forces is a significant task. One of the most effective ways of accomplishing this task, however, has been through evaluations of specific aspects of actual combat operations. We have evaluated countless new or improved operational and organizational concepts, doctrine, tactics, techniques, and/or procedures in our combat environment. We have requested field commanders to use an item or try a new concept or tactic during his field combat operations and determine if his command benefited. We requested the commanders provide their recommendations and comments on suitability or adequacy of the item or concept for use in Vietnam. There were two factors which we always considered paramount; evaluations must not interfere with combat operations, and secondly, only those evaluations which required the specific operational environment of Vietnam were conducted.
2. There was an aspect of evaluations we attempted to avoid and that was inter-Service roles and missions issues. Whenever we were unable to avoid this, we immediately coordinated the proposed action with MACV in order to resolve any problems. The RDT&E community in Vietnam was an effective and cooperative group that played a significant role in the overall evaluation schedule of new and nonstandard items of equipment.

3. We evaluated hundreds of items of equipment introduced into Vietnam thru the ENSURE and VLAPA Programs and thru the Army CD&ME program. Some of the more significant field evaluations we conducted were on the Sheridan, M551; the Air Cushioned Vehicle; Belly Armor for M113's; Multishot Portable Flame Weapons; XM 706 Armored Cars, Small Shallow Draft Boats; The INFANT; and the Nighthawk, an in-country fabricated system. These items have all contributed to improving and upgrading friendly force operations.

4. For example, the Sheridan has provided the cavalry platoon with increased combat capabilities and a high degree of mobility. The cavalry platoon can now move as an effective team of scouts and infantry, to include mortars. The Nighthawk and INFANT systems have provided field commanders an excellent combination of aircraft and equipment for acquiring and engaging targets at night, both covertly and overtly.

5. Finally, the Multishot Portable Flame Weapon which was evaluated by ACTIV, with each division, infantry brigade-size unit, and the 11th ACR participating, has been determined to be an improvement for our troops. This weapon fires an encapsulated flame round out to 700 meters for area targets, and 200 meters for point targets. The weapon reflects a radical departure from traditional flame throwers and, importantly, it relieves the field soldier from the burden of mixing flame fuels for the weapons.

6. Of course we have had our losers, too. An example is the GECODAR. This was supposed to have been a man portable tunnel detector, or more appropriately, it was provided in response to a stated requirement for a man portable detector (it weighed 450 pounds). It required a highly skilled technician to interpret its oscilloscope output and was not able to negotiate
all types of terrain as it was a sled-type radar system. Unfortunately, it failed to detect any tunnels during a unit evaluation.

I. (C) IMPROVING INTELLIGENCE ACQUISITION AND DISSEMINATION

1. A major problem encountered by our field commanders has been obtaining accurate and timely intelligence. We required means to find and fix an elusive enemy; one who utilized the cover of night in movement of troops and logistical supplies. Techniques were required to provide surveillance, both night and day, in areas in which it was unfeasible to continuously maintain combat operations. Both a highly responsive target acquisition system and an equally effective method of dissemination were required for timely reactions to intelligence.

2. An important advancement in surveillance and target acquisition has been the steady increase in the employment of unattended ground sensors. Commanders have learned that well planned, imaginative, and aggressive employment of unattended ground sensors provides a highly effective means to monitor enemy activities in remote areas and to provide early warning when employed on avenues of approach to friendly bases. The unattended ground sensor has enabled commanders to interdict lines of communication and routes of infiltration, thereby forcing the enemy to select alternate routes, seriously disrupting his movement of supplies and personnel. Over 5000 active sensors in use in Vietnam today provide an accurate, timely source of intelligence, day or night, regardless of climatic conditions. Further enhancing the use of unattended ground sensors is the Battle Area Surveillance System (BASS). Sensor strings receive automatic readouts at a central location, normally within the TOC, and are recorded on a plotter, a portion of the BASS. Readout operators analyze each detection sequence, resulting in an accurate definition of valid targets with a minimum of time delay.

3. Another important asset we have made available to the commander has been the Airborne Personnel Detector. The
XM3 Airborne Personnel Detector (APD) has been provided on a basis of issue down to and including separate brigade/regimental level. The helicopter mounted system is used as a primary detection system and for supplementing normal visual reconnaissance. An effective method of employment is in conjunction with the AH-1G, which can provide suppressive fires or strike identified targets when required. Increased effectiveness in employment and reaction to intelligence collection has been achieved by controlling the APD at brigade level.

4. The employment of ground surveillance radars has provided an all-weather, 24-hour surveillance capability. The AN/PS-5 radar, organic to maneuver battalions, has not only effectively been employed as an intelligence acquisition device in a defensive role, but has proved equally effective in offensive employments in night ambushes. The AN/TPS-25 radar, organic to division artillery, provides a longer range surveillance capability to the commander and is effective in confirming detections made by the AN/PPS-5 radar. Ground surveillance radars, when properly tied in with other surveillance devices and intelligence collection means, provide commanders with definite enemy movement patterns, LOCs, and an indication of unit strengths in an area.

5. A major addition to our target acquisition and intelligence collection capability has been the increased employment by commanders of Long Range Reconnaissance Patrols (LRRPs). LRRPs are inserted into enemy controlled areas with a mission of area surveillance and not as an offensive unit. During a recent three-month period, Ranger Companies, performing LRRPs, within three corps areas, reported 425 enemy sightings, ample testimony of the tremendous value of LRRPs to the commander as an intelligence collection asset.

6. LEFT BANK, an airborne radio direction finding system, helicopter mounted, is a valuable addition to the intelligence collection community. With a proposed basis of issue of three per division, organic airborne radio direction finding will be an invaluable asset to commanders. Although only four systems are currently in country, approval has been received for an additional
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11 systems, which are programmed for USARV by March 1971.

7. With improved means for target acquisition and intelligence collection, the need for a system to effectively correlate, analyze, and react to intelligence became even more apparent. Target information centers, sometimes referred to as Target Destruction Centers, were established within division TOCs. All target oriented intelligence gathered in the division's TAOR is immediately relayed to the TOC. Sources include all sensor and surveillance devices, IPW reports, reports of contact with the enemy, LRRPs, and imagery. Not only does this centralized intelligence processing center allow for immediate reaction to appropriate targets, it provides a continuous monitoring of enemy patterns, movements and trends, aiding commanders to more effectively plan for and engage the enemy. The continued progress in the secure voice program will further enhance and speed processing and dissemination of intelligence information.

8. In August 1968, we initiated publication of the Combat Intelligence Lessons, a quarterly publication designed to furnish intelligence lessons learned to units within Vietnam and to CONUS service schools. Additionally, USARV continues to publish special studies covering areas such as NVA/VC Unit Histories, Sapper Tactics and Techniques, and terrorism, to mention only a few. These studies are designed to provide a base of factual information from which additional knowledge of the enemy can be drawn.

J. (C) EMPLOYING SECURE VOICE COMMUNICATIONS.

1. Our buildup of forces in Southeast Asia created an increased requirement for fixed secure voice communications which resulted in the 1968-69 emphasis on the completion of the Automatic Secure Voice Communications (AUTOSEVOCOM) network in Vietnam.

2. Through 1966, the interim TALK QUICK network provided secure voice service to a limited number of subscribers in the Saigon area and access to the PACOM secure voice system. AUTOSEVOCOM replaced TALK QUICK with the installation in
July 1967 of the automatic dial secure voice switch in Saigon greatly expanding the area's capability, although the service for the remainder of Vietnam was still limited. During 1968, the major portion of the AUTOSEVOCOM network was completed, expanding the fixed secure voice capability to most major units. The activation of ten of the network's thirteen switchboards (SECORDs) in 1968 and the remaining SECORDs in early 1969 completed the trunk and SECORD portion of the AUTOSEVOCOM system in Vietnam.

3. Changes in radio transmission volume and patterns, use of unauthorized codes, and transmitting urgent classified information in the clear have been just a few of the sources of information available to the enemy. With this information, the enemy was able to reduce his casualties and increase those of friendly forces. Tactical field commands recognized the urgency for developing and fielding secure radio equipment.

4. The Wideband Tactical Secure Voice, or NESTOR, program was introduced in Vietnam to deny the enemy access to our tactical FM radio transmissions. Army combat elements are now employing 80 percent of USARV's authorization of NESTOR equipment. Initially, the employment was hampered by the lack of installation kits, which were not provided with the NESTOR equipment. To make a complete NESTOR installation, the equipment required is requisitioned from, and is shipped by, two separate supply channels, USASTRATCOM and USAMC. As a result, the NESTOR equipment arrived through USASTRATCOM channels and the required vehicle and aircraft installation kits from USAMC did not keep pace.

5. Full implementation of NESTOR equipment was also hampered by the inherent limitation of not being able to automatically retransmit the secure voice transmission. In December of 1969, the HYL-3/TSEC Regenerative Repeater was introduced into Vietnam to solve this serious deficiency. Currently approximately 50 percent of our total requirement of HYL-3s has been satisfied.

6. With all the secure voice equipment, one would think we had solved our problem of denying classified information to the
enemy. Unfortunately, communication discipline is poor and the enemy is still "reading our mail."

K. (C) INTRODUCING NEW AVIATION ITEMS.

1. During my tenure in USARV, several new aircraft and aircraft systems have been introduced. In July 1969, the C model CH-47 Chinook helicopter arrived. This aircraft provided us with an increased payload capability--18,000 pounds versus 10,000 pounds for the earlier B model Chinooks. With the C model Chinook, we have provided the field commanders added flexibility. The primary use of the Chinook in USARV has been and continues to be field artillery transport. The C model, with a lift capability equal to that of the CH-54, can easily transport the 155 mm howitzer.

2. Also in July 1969, the 25th Infantry Division devised and fabricated a night aerial weapons system known as Nighthawk. A Nighthawk consists of a Xenon searchlight (the same one that's on a Sheridan), a night observation device (NOD) mounted coaxially with the searchlight on a manually controlled frame, and a separate, pintle mounted, 7.62mm minigun. The system is mounted on either side of a UH-1D/H helicopter, requires very little crew training, and is easy to construct, given the appropriate assets.

3. Based upon the 25th Infantry Division's success with their Nighthawk, II Field Force established a requirement for this weapon system. To ascertain the system's worth, I had ACTIV evaluate it. The results showed the system to have merit and to be an effective device for locating and destroying the enemy at night. Armed with this evaluation data, we canvassed tactical units for their requirements for the system. This gave us a figure which we used both in establishing a USARV basis of issue (BOI) and in presenting our total requirement for the Nighthawk.

4. In August 1969, a new light observation helicopter, the OH-58 Kiowa, began service here. The introduction of this turbine powered aircraft enabled us to go to an all-turbine light observation helicopter (LOH) fleet. Prior to the arrival of the
OH-58, we were using the OH-6, a turbine powered machine made by Hughes, and the OH-23, an older type helicopter having a reciprocating engine. Initial distribution of the OH-58 has been primarily to combat support and combat service support units which were equipped with both OH-6 and OH-23 aircraft. All OH-23s have been retrograded to CONUS; the OH-6 aircraft are being transferred to combat units where they perform well in the scout role. To determine the ability of the OH-58 to perform in a scout role, one combat unit, an air cavalry troop within the 1st Aviation Brigade, recently has been equipped with the OH-58. Aviator transition training is being conducted by the USARV OH-58 Training Team; maintenance personnel, trained in CONUS, are part of the rotation base. The introduction of the OH-58 has caused the USARV LOH operational-ready rate to improve significantly. This is the result of the retrograde of OH-23s and the excellent maintainability of the OH-58. Aircraft maintenance within combat support and combat service support units has been simplified because of having one kind of LOH instead of two. And with the OH-58 we've been able to fill combat service support units to 100 percent of their authorizations versus the previous 80 percent.

5. A night weapons system which arrived in USARV in November 1969 is the Iroquois Night Fighter and Night Tracker (INFANT). The INFANT is capable of both acquiring and attacking a target at night. There are two image intensifier tubes, one with a direct-viewing fiber optic bundle and one with a TV camera tube, mounted on the front of a UH-1M helicopter. Two remote TV sets are mounted inside the aircraft. Mounted on each side of the aircraft are a minigun and a seven-tube 2.75 inch rocket launcher. Mounted on top of each minigun is a xenon searchlight with a pink filter which can be used to supplement available ambient light when required. Three INFANT systems, developed under the ENSURE program, were deployed to USARV. These were used during a 90-day evaluation by ACTIV. The systems include a 16-man new equipment training team (NETT), were assigned to the 1st Cavalry Division for the evaluation period, which lasted until 28 February 1970. It has been concluded that INFANT is an effective, covert, night weapons system; however, I question its cost effectiveness when compared to the Nighthawk.
L. (C) INTRODUCING THE M551 ARAAV.

1. An urgent requirement had been identified in reconnaissance units for a lightweight, highly maneuverable, amphibious assault vehicle with fire power equivalent to, or better than, the M48A3 tank and with trafficability equal to that of the M113 APC. The M551 Sheridan was designed to meet these criteria. It was, therefore, necessary to determine if the M551 should be deployed to Vietnam to fulfill our requirement.

2. In January 1969, sixty Sheridans were deployed to Vietnam for our evaluation. The Sheridans were issued 27 each to the 3d Squadron, 4th Cavalry, 25th Infantry Division and the 1st Squadron, 11th ACR. ACTIV completed a 90-day operational evaluation of the M551 on 8 May 1969. The recommendations of the evaluation were: modifications indicated as essential should be made before deploying additional vehicles to Vietnam; and sufficient M551's to equip all armored cavalry squadrons to Vietnam should be deployed.

3. Upon completion of the ACTIV evaluation we assessed the acceptability of the Sheridan in the Vietnam environment. This assessment considered the ACTIV evaluation, terrain, enemy situation, operational requirements of units, capabilities and limitations of the M551 compared to the vehicles it would replace, and the considered opinions of commanders scheduled to receive the Sheridan. We concluded that: the M551 is the best vehicle available for use in tank sections of nondivisional cavalry platoons; the M551 should be issued to certain divisional cavalry units; and eleven essential modifications must be applied to all future M551's before issue to using units.

4. Subsequently, deployment began and the Sheridan New Equipment Training Team (NETT) provided operator as well as maintenance training on the vehicles. The overall training mission was completed on 22 March 1970.

5. Initial provisioning for the M551 Sheridan was accomplished through the use of push packages to the units concerned, with approximately 2,000 line items on the ASL. Later, with more
demand experience these ASL's were reduced to only 374 line items. Throughout the deployment of the vehicle there were critical shortages of certain repair parts which contributed to a high deadline rate. The repair parts situation gradually improved during the first part of 1970.

6. Most of the maintenance problems centered around the Sheridan turret. Electrical turret components and recoil seals experienced a high failure rate. There were extensive communications and coordination between our personnel and the PM Sheridan, USATACOM, Sheridan NETT, and other AMC representatives, in order to iron out these problems.

7. On 5 February 1970, we were advised that USARV TOE strength for Sheridans was reduced from 270 to 216 vehicles. As a result of deployment of the vehicles to the 1/5th Mech Bde, we achieved our current deployment objectives.

8. The problem of repair parts shortages has improved daily and is not expected to remain a problem much longer. The quality of certain M551 components is still below par and will require continued improvements by the commodity commands. Leaking recoil seals have not been as much of a problem since new seals were introduced in January 1970. Problems encountered with sprockets, voltage regulators, compressors, and certain turret components continue.

M. (U) EMPLOYING CIVIL AFFAIRS AND PSYCHOLOGICAL OPERATIONS.

1. Since June 1968, our overall psychological operations (PSYOP) program has grown in terms of personnel, resources, and output. Although it is difficult to measure the effectiveness of PSYOP, certain "indicators" and "effects" lead me to believe that this "weapon" has taken a toll of the enemy.

2. A marked increase of Hoi Chans (ralliers) during 1969--more than two and a half times as many ralliers as in 1968--aggressive enemy countermeasures towards friendly PSYOP, and steady progress in pacification/development have resulted from various influences, to include PSYOP.
3. Our Army PSYOP units expanded from a battalion and four companies in 1968 to the present 4th PSYOP Group and its four organic battalions. As a result, PSYOP research, development, production, and field team operations in support of tactical units greatly increased. These organizations are OPCON to MACV and the Field Force/Corps Commanders.

4. As our PSYOP units were expanded, we also saw a need to improve the organic PSYOP capability of the tactical units. This was particularly true in the case of PSYOP equipment, since little equipment was on hand and no authorization was available to procure such items as airborne loudspeaker systems, bullhorns, tape recorders, and Polaroid cameras. Recent procurement/authorization of these items has relieved the situation, and tactical commanders now are better equipped to exploit psychological opportunities requiring a fast reaction.

5. Military civic action has been vigorously conducted by Army units. Over $3 million and 550,000 man-days were devoted to this aspect of civil military operations in 1969. However, as Vietnamization gained momentum, steps were taken to transfer more responsibilities for civic action to the GVN and RVNAF. Such transfer should assist the GVN in gaining support of the civilian population. US units rarely should conduct unilateral civic action, but rather support and assist Vietnamese governmental and military agencies in this area.

6. The importance of community relations, or the improvement of relations between US units and adjacent communities, cannot be understated. Without an active community relations program, existing economic, sociological, psychological and political stability may be endangered by a concentration of US troops. With this in mind, I encouraged the active use of friendship councils, consisting of local US/GVN military and civilian leaders, and community relations councils, consisting of US military representatives. These councils provided a means to discuss problems dealing with US/Vietnamese relations and determine coordinated and meaningful solutions to these problems. Although the great majority of our soldiers conduct themselves decorously in dealing with the Vietnamese citizens, there have been incidents
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which have reflected unfavorably on the command. Some of these incidents are the result of a lack of self-discipline and sub-standard supervision; others are the result of a lack of understanding of, or apathy for, the local Vietnamese, their customs, habits, and mores. Accordingly, we recently established a personal response program to help our soldiers understand how and why resentments are born and help them establish more effective and satisfactory mutual working relations with the Vietnamese. This program includes improved initial orientation of newly assigned personnel, unit training in cultural relations, expanded use of information media to improve understanding, and preparation of a handbook for unit commanders to use in identifying and correcting problems.

N. (C) DEVELOPING COUNTERMINE WARFARE.

1. Enemy mining and booby trapping is one of the most serious problems faced by friendly forces in Vietnam. Little progress has been made in the past thirty years in countermine development, unfortunately, and the outlook for the future is not encouraging.

2. The enemy has continued to use nuisance mining and indiscriminate booby trapping on a massive scale. His objective has been to inflict maximum casualties of personnel and damage to equipment with a minimum expenditure of his resources. He has been singularly successful. He gains the added benefit of slowing down allied operations and tactical movements by the mere presence of the threat. Our losses have been great. During CY 1969 alone, USARV suffered 923 KIA and 7,491 WIA due to mines and booby traps, 15 percent of all USARV combat casualties. The estimated value of key items of equipment lost to mines during the past two years is in excess of $100,000,000.

3. The Study and Evaluation of Countermine Activities (SECMA), dated 26 September 1968, conducted by ACTIV, was a major effort to analyze the mine environment and to identify and exploit potential countermeasures. Many of the actions recommended by the SECMA report have been completed; many other actions are continuing. This study, and the follow-on actions thereto, have accomplished a great deal in identifying the mine and booby trap threat and improving our countermine posture.
countermine equipment to detect, detonate, or otherwise neutralize enemy mines and booby traps is our most serious deficiency.

4. The most effective method of mine detection continues to be visual detection by a well-trained, alert soldier. Detection devices available include the P-153 portable metallic detector and the PRS-4 portable metallic, non-metallic detector. A remotely operated jeep-mounted metallic detector, tested in 1969, was unacceptable in use because it stopped on all metallic debris. Mine detecting dogs, Kit Carson Scouts, and the Volunteer Informant Program are being used with some success in mine detection. The various denial techniques in use have met with considerable success. These include the use of sensors in conjunction with selective artillery and gunship strikes, and sniper teams and ambushes along segments of road identified to have a high mining rate. Asphalt paving has reduced mining activity in previously heavily mined roads. Belly armor in APCs and the relocation of fuel lines have been extremely effective in reducing personnel casualties.

5. New methods of detection being introduced include PRS-7 portable metallic, non-metallic detector, and ENSURE 202 mine clearing rollers. Two thermal imaging devices are undergoing evaluation and may have limited application for detection of road-emplaced mines.

6. Many ideas and concepts are under study by the R&D agencies, to include radio frequency detonation, use of lasers to neutralize mines, and fuel air explosives to create overpressures sufficient to detonate pressure-activated mines. I am not optimistic about an early technological breakthrough. For the foreseeable future, minimization of casualties and equipment damage will be primarily dependent, as it is now, upon small unit leadership, troop discipline, training and retraining, and the limited hardware presently available.

O. (C) SUPPORTING OTHER FREE WORLD MILITARY ASSISTANCE FORCES.

1. We have entered into formal agreements with each FWMAF nation to provide, within our capability, the specific support
which that nation required. The agreements and the requirements vary with each nation.

2. At the working level, we maintain close liaison to insure adequate support, and at a policy level we are represented on the Free World Military Assistance Committee to insure the command continually is aware of problems requiring special attention.

3. The special food program for the Republic of Korea Forces, Vietnam (ROKFV), is an example of the unusual support provided our allies. The ROKFV personnel found the US menu too rich and contained food items unpalatable by Korean standards. Through a series of meetings, a new menu was proposed which was more acceptable to Korean taste and still within cost limitations of the US forces ration, although special procurement of a Korean rice was required.

4. I foresee no difficulty in continued support to FWMAF so long as we maintain an adequate common service support structure to meet their needs.
V. REDEPLOYING MAJOR PORTIONS OF THE MILITARY FORCES

A. (U) GENERAL.

1. This section presents some insights into the problems surrounding redeployment and attendant restationing requirements.

2. In June 1969, we were charged with the task of initiating Phase I of the redeployment of three increments of USARV units, totaling approximately 58,000 personnel. Additionally, the redeployments had to be accomplished without impairing the combat capability of the forces remaining in Vietnam.

B. (C) EXECUTING THE KEYSTONE CONCEPT.

1. When the decision was made as to which units would be part of the redeployment package, we began coordination of schedules for the standdown and inactivation, or redeployment, of each unit. Our policy was to retain the combat units in the field until the latest possible date. At the same time, it was necessary to schedule maintenance and support units among the last to standdown because they had to be available to continue to support the combat units and, later, to process the equipment for transfer, turn-in, or retrograde. Further, the schedule had to be adjusted to preclude the support units from being deluged with equipment immediately at the end of the redeployment period. An additional consideration was to prevent personnel overload at the replacement centers and assure a smooth, steady flow of processing personnel.

2. Concurrent with planning the redeployment of a major unit, the disposition of its facilities had to be considered. Decisions had to be reached as to whether the facilities were required by other US or FWMAF, whether they should be turned over to the RVNAF, or whether they should be abandoned.

3. Also, during the planning stages, we had to develop various packages of support units recommended to accompany the major redeploying combat units at the same time retaining a balanced military force in Vietnam.

4. We found it useful to provide additional assistance to the units redeploying. A Planning and Operating Group was constituted and
functioned as an on-site assistance team for separate brigades or larger size units with base installation responsibilities. This group expedited property and equipment transfer actions and helped resolve problems germane to redeployment and disposition of facilities. A Redeployment Assistance Team visited smaller units to provide similar guidance and assistance. Contact teams from our headquarters and subordinate commands visited the redeploying units to assist in training, supervising, and conducting specialized activities. These activities included records processing, customs inspection, entomology, and classification and packaging of equipment.

5. When large units were redeployed at full strength, it was considered necessary to maintain a redeployment control center where all activities could be controlled and monitored throughout the redeployment.

6. Approximately 150,000 major items of equipment were returned to our supply system from redeploying units. At turn-in, this equipment was inspected and classified as a basis for determining or recommending disposition. From Keystone Eagle (Phase I), we learned that we did not have the time nor the manpower to make a complete technical inspection of the large quantities of equipment. We obtained approval for a simplified inspection and classification procedure to speed processing. These procedures, Selected Criteria for Retrograde of Army Materiel or SCRAM, were used in Keystone Cardinal (Phase II) and Keystone Bluejay (Phase III), and will be used in subsequent redeployments.

7. In each redeployment increment the period allotted for standdown was not sufficient for units to correct all organizational maintenance deficiencies before turn-in. Likewise, organic Direct Support elements did not have time to repair all DS deficiencies. Redeploying units only had time to clean, document, and pack equipment for turn-in. Therefore, the maintenance had to be performed by DS/GS units in the Support Commands prior to reissuing the equipment to US/FWMAF units or transferring the equipment to the RVNAF against the Improvement and Modernization Program requirements.

8. Despite the limited standdown period, we succeeded in meeting all inactivation or redeployment dates with completed turn-in. We employed the policy of accepting turn-in of excess property on a "no questions asked" basis at any time. This allowed units to turn-in excess items.
prior to standdown, thus reducing the workload at standdown. Not only did this policy assist in meeting redeployment dates, but it also insured excess items were returned to our supply system rather than abandoned or given to a remaining unit.

9. In addition to the support of redeployment and retrograde, combat service support units continued their normal missions in support of remaining US/FWMAF units. At the same time, logistical units were themselves being reduced by redeployments. Combat service support redeployments were carefully monitored to insure retention of a balanced logistical structure.

10. Although considerable experience was acquired in the process of redeploying the forces, each phase of the drawdown was somewhat different. There were new lessons to be learned and new techniques which had to be developed and applied with each phase. In this regard, valuable assistance was provided to units in the form of a "redeployment guide" which contained lessons learned during previous redeployments together with information gathered from after action reports.

C. (C) RESTATIONING PERSONNEL AND UNITS.

1. Attendant with the redeployment of forces it became apparent that the problem of restationing forces would have to be addressed. As facilities were vacated by redeploying units, consideration could be given to moving other units from populated areas and out of leased facilities.

2. Of particular importance has been our effort in the Saigon/Cholon area which has received our close attention for a long time. The MOOSE II Program, an acronym for Move Out Of Saigon Expeditiously, was initiated to identify those units whose missions did not require them to be in the Saigon complex and direct their relocation. If units were required in that area, then our effort was directed to moving them out of leased facilities and on to nearby military installations. This program has been successful in relocating a number of units from Saigon and reducing US presence in the area.

3. Selected US Army units have been directed to move out of the Vung Tau area, leaving there only a minimum size support force.

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Vung Tau is of special interest in view of the requirement for continuing support to other US and FWMAF, particularly the Australians. It was necessary, therefore, to thoroughly coordinate all our efforts in that area with other services and the FWMAF. Unit relocations from Vung Tau, however, are well underway.

4. As other bases were determined to be excess to the needs of US and FWMAF, our Planning and Operating Group assisted in their turnover to the RVNAF. Major bases such as Blackhorse, Dong Tam, Camp Enari, Camp Davies, Lai Khe, and Dau Tieng already have been turned over to the RVNAF either in whole or in part. Some of the lessons learned from these actions will be discussed later. In addition, numerous landing zones and fire support bases have either been turned over to the RVNAF or closed down.

D. (U) CONSOLIDATING HQ, USARV AND HQ, 1ST LOGISTICAL COMMAND

1. In September 1968, I directed the ACofS, Comptroller to develop a plan for consolidation of the two headquarters. A working committee developed an organization plan which was generally concurred in by the USAV staff. The plan was not approved because enemy activity had not decreased sufficiently to warrant the risk of possible disruption of support operations.

2. In June 1969, consideration again was given to combining the 1st Logistical Command Headquarters with HQ USARV. Reductions in troop strength appeared inevitable and as combat and combat support forces were withdrawn, some reduction in the administrative and logistical units servicing these forces appeared logical, along with a reduction in the number of command and control headquarters. A logical candidate for possible inactivation was the 1st Logistical Command Headquarters. It had been obvious for some time that a considerable amount of duplication existed between this headquarters and that of the 1st Logistical Command. After careful consideration of all the factors involved, I directed the Comptroller to examine the prior study, update and revise it as necessary, and submit a plan for consolidating HQ 1st Logistical Command with HQ USARV. I envisioned a combined headquarters organized along similar lines as the current USARV headquarters but at a substantial savings of personnel.
3. Several alternative organizational concepts were developed in coordination with other staff offices and the 1st Logistical Command. An organization was desired that was simple to understand and least disruptive to implement, one that would be equally effective throughout the redeployment phases, and one that recognized the major importance of the logistical mission of USARV. I concluded that the current USARV General and Special Staff organization with the Chief of Staff and the two Deputy Chiefs of Staff most nearly met these requirements. In order to reduce the number of commanders reporting directly to me when the 1st Logistical Command headquarters was inactivated, I established the position of Assistant Deputy Commanding General for Logistics. The establishment of this position also insures that the logistical mission will continue to receive the proper emphasis. On 4 February 1970, I approved an outline plan to consolidate the two headquarters with an effective date of 26 June 1970. The physical consolidation was accomplished between 16 April - 26 June 1970, and was closely monitored by an Ad Hoc Group under the USARV ACofS, G3.

4. The elimination of the 1st Logistical Command Headquarters has not caused a drastic change in command relationships. Those commands that reported directly to the 1st Logistical Command now report to USARV. Relationships with higher headquarters remain the same. I am confident that the elimination of the 1st Logistical Command Headquarters will in no way reduce the effectiveness of our logistics efforts. The direct lines of communication between the support commands and this headquarters facilitate our responsiveness. The combined, HQ USARV staff will be able to perform all assigned missions in an effective and efficient manner and do it with approximately 25 percent less people than the total of the two separate headquarters.
VI. ASSISTING THE INTERNAL DEVELOPMENT OF VIETNAM

A. (U) GENERAL.

1. The role of USARV in Vietnamization, which includes assisting in both the internal defense and internal development of the Republic of Vietnam, has been a significant one. We have contributed to this process both directly and indirectly. Our direct contribution has included such efforts as re-equipping and assisting in supplying the Vietnamese Armed Forces. Our informal training programs have materially contributed to the improvement of skill levels and our efforts in the area of civilian personnel have enhanced the labor market. Indirectly, we have been involved with internal development through our highway restoration program and our support of the Vietnamese railway system. Even our land clearing operations have had a beneficial side effect in this area.

2. Discussions in this section focus on USARV's impact on and support of, the internal development of the Republic of Vietnam.

B. (U) INCREASING LINES OF COMMUNICATION.

1. Upon my arrival, the US Army Engineer effort was committed to an extensive base development program which had established the major Army installations throughout Vietnam. As the base development program neared completion, the emphasis was changed to construction of MSR's. US Army Engineer effort was to construct over 2,500 KM of modern highway and over 400 bridges. The initial construction effort was directed toward those highways extending from the major logistical bases to inland installations. The immediate benefit of this program would be the provision of high speed, all weather roads for troop and supply transport. The later, more important benefit, would be a network of modern highways that would greatly aid the economic development of Vietnam.

2. The Lines of Communication program is essentially a construction operation and not a military operation. It was realized that more output per manhour could be obtained if commercial construction equipment supplemented the TOE construction equipment. As a result, we procured more than 15 million dollars worth of commercial construction equipment. In early 1969, the equipment began arriving.
in-country. An extensive operator training program was initiated and the new equipment placed in operation. On the assumption that the work force would consist of the equivalent of ten full strength construction battalions, the estimated date of program completion was established as 31 December 1971.

3. Three standards were developed for the LOC program. Major routes were assigned the highest standard - Class A. Less important routes and those in difficult construction areas were assigned Class B and C. Later, to expedite construction, two additional classes were approved - Class E and F. These classes are primarily used in the Delta where constructing a new alignment is difficult.

4. The LOC program has now reached the 40% completion mark. Projects of this magnitude require considerable planning and preparation before any progress is shown but the program has been holding close to our schedule.

5. A significant contribution to the LOC program has been the development and employment of a large scale land clearing capability. This tremendous engineer effort has removed over 531,000 acres of primary and secondary jungle growth adjacent to routes linking the villages and cities. By clearing potential enemy ambush sites, we have provided the Vietnamese with relatively secure routes upon which foodstuffs and other marketable products are transported to trading centers. The timber felled during the land clearing is being used by the lumber and charcoal industries and the cleared land is being cultivated by Vietnamese who have moved into the new areas to establish residence.

C. (U) EXPANDING THE RAIL SYSTEM.

1. The Vietnamese National Railway System (VNRS) has been reduced by 28 years of warfare to a fragmented organization in a state of chaos and near collapse. Of course, the railroad is easily interdicted but it has enormous recuperative powers and is the least expensive mode for movement of bulk cargo. Eventually, it could become a key factor in Vietnamization as well as the economic development of the entire coastal area. In light of this, we have encouraged and fostered the restoration and utilization of the VNRS by moving US military sponsored cargo and passengers by rail whenever possible.
2. In 1968, the railroad had been reduced to three small operational segments: Phu Cat to Try Hoa; Nha Trang to Thap Cham (near Phan Rang) to Dalat; and Xuan Loc to Saigon, for a total of 364 Kilometers (Km).

3. In December 1968, the Tuy Hoa to Nha Trang line (117 Km) was reopened and extended to 58 Km south of Phan Rang to the Song Long Song River. In January 1969, the Da Nanh to Hue Line (103 Km) was reopened. The Thap Cham to Song Pha to Dalat Line (84 Km) was closed in December 1968. The VNRS reopened this line in late March 1969, to Song Pha (40 Km) in order to haul rock for units of the 18th Engineer Brigade engaged in restoration of highway QL #11 (LOC Program). By 2 May restoration was completed through to Dalat. In December 1969, and March 1970, 37 Km of rail were reopened temporarily between Ho Nai and Xuan Loc. However, sporadic cargo availability and continuous interdiction on a 7 Km stretch cut traffic to work and patrol trains. By mid-May 1970, 629 Km of rail out of a total of 1240 Km were open and operational (this does not include 117 Km of rail between Di An and Loc Ninh).

4. During this period, the VNRS completed the construction of seven minor rail spurs: RMK Thu Duc Island; Saigon M&M Pier; Phu Bai; Camp Haskins; Da Nanh Bridge Ramp; and Rock spur at Phan Rang AFB. Jointly with the US Army, the VNRS commenced the construction of two major spurs: Long Binh spur (50% completed) and New Port spur (29% completed).

5. During the summer of 1968, passenger service resumed in the Tuy Hoa area and now averages 63,000 passengers monthly. February 1970, saw the restoration of passenger service in the Da Nanh - Hue region, which now averages 10,000 passengers monthly. In May 1969, passenger service began at Thu Duc Island and now averages 50,000 passengers each month. In June 1969, service was extended to Long Binh, Di An, Bien Hoa and Ho Nai. During the month of April 1970, 221,207 passengers were moved in the Saigon area. In March 1970, passenger service resumed between Cholon and Saigon and now moves 14,000 passengers monthly. During 1969, 2,220,971 passengers were moved by rail, making it the biggest rail passenger year since 1961 which approximated 2.3 million passengers.
6. During 1969, the VNRS moved 617,343 tons of cargo - the largest tonnage since 1955. The trend so far in 1970 indicates an even more productive year. Tonnages include hauling rock in support of LOC construction. In 1969, the Nha Trang Division moved 7,000 to 10,000 tons of rock weekly. In April 1970, the VNRS commenced hauling rock from Phan Rang AFB Quarry to Song Pha. Although several derailments and fire attacks occurred, the line nevertheless moved over 11,000 tons in the first month of operation.

D. (U) DEVELOPING COMMUNICATIONS.

1. One of the major projects of the last two years has been the installation of an integrated direct distance dialing system in support of combat operations in Southeast Asia. Initially, communications in support of military operations in Vietnam consisted of a conglomeration of all sizes of tactical switchboards with poorly planned interconnections. This evolved into the Long Distance manual switchboard system which utilized large mobile switchboards. The tandem switch program which came to fruition in the 68 - 70 time frame was an engineered system based on commercial telephone practices.

2. With the majority of the communications systems in active operation the source of communications-electronics efforts shifts to the training of the Army of the Republic of Vietnam signal men for eventual interface with American personnel and equipment. The training and capabilities of the RVNAF personnel must be improved to enable them to assume full operations, maintenance and management responsibilities for selected portions of the Integrated Communications System and the Dial Telephone Exchange.

3. In February 1969, command direction was given to develop a training program which would provide for training for Vietnamese personnel who will assume responsibility for the selected ICS and DTE facilities. The goal is to accelerate the development of a Vietnamese operated, maintained, and managed single integrated telecommunications system. Selected Vietnamese soldiers were also sent to Fixed Communications Courses at U.S. Army schools in CONUS. Some of
the students upon their return to Vietnam will assume instructor duties at a contractor operated training facility at Vung Tau, while others will be assigned to direct operational jobs at ICS sites or DTE's.

4. The ICS is a highly sophisticated electronics system. The Vietnamese require a lengthy technical training program to enable them to acquire the skills necessary to operate and maintain the equipment and systems. Classroom instruction must be conducted in English since the system language is English. Southeast Asia Signal School Number One at Long Binh has conducted extensive training classes for the ARVN. In 1969 the school trained 351 Vietnamese in various radio, cable splicing and systems control courses, and 230 Vietnamese completed the switchboard operator and pole lineman courses.

5. Currently the Vietnamese Armed Forces structure is not organized to assume a management role in the operation and maintenance of a single integrated telecommunication system. An aggressive management training program must be developed to assist the Vietnamese in assuming full responsibility, not only for operation and maintenance of this system, but also for its management and command control.

6. As redeployment and withdrawal actions progress, the most effective use of in-country and logistical resources will continue to require flexible, rapid communications for efficient utilization. This means the build-up of the Vietnamese armed forces communications capability is of paramount importance as an objective of our Vietnamization efforts. Having established the most extensive and effective communications system ever to become operational in a combat zone, our emphasis must now turn to training the South Vietnamese to operate and maintain the system for which they have a valid requirement.

E. (C) TRANSFERRING EQUIPMENT TO THE RVNAF.

1. The Republic of Vietnam Armed Forces Improvement and Modernization (I&M) Program was developed to facilitate the organization and equipping of RVNAF units to assume missions
of phased-out U.S. forces and to make the RVNAF self-sufficient, the original intent was to ship equipment for the I&M Program directly from CONUS. However, due to the imminent requirement by RVNAF units and the simultaneous availability of in-country assets generated by USARV redeployments and inactivations, it was possible to accelerate the program in 1969 at considerable savings to our government by transferring USARV assets to equip designated RVNAF units, where the tactical and logistical situation permitted.

2. Equipment requirements are established by MACV, and USARV screens available assets from designated units to select those required items meeting the life expectancy criteria for acceptance by RVNAF. The equipment selected is then reconditioned to correct maintenance deficiencies before being offered to RVNAF at a joint inspection. The transfer includes Basic Issue Items (BII) and Prescribed Load List (PLL) items as well as major items. MACV is responsible to obtain major items and PLL in excess of USARV’s asset availability.

3. To date we have equipped or are in the process of equipping 4 Artillery battalions, 3 Engineer battalions and 3 separate companies, 4 company sized helicopter squadrons, 4 Ordnance companies, and 3 company sized transportation groups equipped with medium boats.

4. The bulk of equipment transfers are now made with assets being returned to the USARV supply system, repaired by a designated maintenance unit, and then transferred to the RVNAF depot. The reconditioning effort consumes a sizeable portion of our maintenance capability and has further validated our high percentage of combat service support troops.

5. RVNAF has not been able to assume full maintenance responsibility for all equipment transferred, particularly specialized items, because of supply and skill deficiencies. In such instances, USARV retains maintenance responsibility for a limited time to permit further development of RVNAF maintenance skills and supply system responsiveness.

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F. (G) TRANSFERRING REAL AND RELATED PROPERTY TO RVNAF

1. Initial experience in transfer of real property to the RVNAF was gained during July and August 1969 while disposing of Dong Tam, the former home of the 9th Infantry Division. Procedures for transfer of real property had not been developed, thus a hastily planned approach was required. In the course of transferring Dong Tam, numerous problems were encountered and solved. The transfer was accomplished "piecemeal," and neither the ARVN nor we had developed the controls necessary to insure a well coordinated transfer. Major problems encountered included stripping and vandalism of buildings by both USARV and ARVN personnel and misunderstandings as to the exact property to be transferred. Failure to clearly establish what property was to be transferred resulted in some "hard feelings" when required items were withdrawn by USARV to meet other requirements. Problems encountered at Dong Tam were successfully resolved, and the experience gained provided the basis for improved procedures for both the RVNAF and USARV. We now have controls, as do the RVNAF, to prevent recurrence of the problems encountered at Dong Tam.

2. In August 1969, the decision was made to relocate the 11th ACR from Blackhorse to Bien Hoa Army Base and to transfer Blackhorse to the ARVN. In order to preclude recurrence of the problems encountered at Dong Tam, we formed a USARV Planning and Operating Group early, composed of representatives from principal staff sections, to control all transfer activities. A detailed plan for the transfer of Blackhorse was developed and published. Facilities and pre-engineered buildings required to meet urgent USARV requirements at other locations were identified and removed from the installation. Upon establishing a firm list of property available for transfer, coordination was effected with the ARVN. Arrangements were made to provide OJT to ARVN facilities Engineering personnel prior to the transfer. Joint inventory of the property to be transferred was accomplished prior to the official transfer date. The transfer culminated with an official ceremony at which a legal transfer agreement was signed formally passing title of the property to the RVNAF. There were no significant problems encountered during the transfer of Blackhorse and procedures developed have proven invaluable at subsequent transfers.
3. In order to assist the RVNAF in assuming responsibility for maintenance and operation of bases transferred, the USARV Engineer developed an OJT-type program to be conducted by the Facilities Engineering Contractor at each major base to be transferred. RVNAF personnel are given formalized OJT courses in operation of these bases at a level commensurate with their requirements and capabilities.

4. Funding problems and administrative "red tape" prevent the RVNAF from immediately assuming full responsibility for a logistic support transferred installation. Accordingly, I directed that a package of material and supplies be transferred with each base sufficient to operate the base for a period of 180 days at a reduced standard appropriate to the RVNAF's proposed use of the installation. Provision of these items gives the RVNAF more time to expand their support capability.

5. Since the beginning of our phased redeployments, twenty-four USARV base transfers, with an acquisition cost in excess of $34 million, have been completed. Transfer of these installations has enhanced the overall process of Vietnamization and eliminated the requirement for costly new construction.

6. High voltage power plants represent a degree of sophistication not common to the RVNAF system. Several of the major bases already transferred or to be transferred have high voltage systems. Removal of these systems and replacement with low voltage is extremely costly. In addition, the cost of operating a low voltage system is two to three times greater than for a high voltage system of the same capacity. The high voltage power system at Dong Tam has been retained by USARV and is operated as an OJT facility by PA&E. Approximately 100 ARVN personnel have been trained in the operation and maintenance of a high voltage system. Individual training received at the Dong Tam course coupled with additional OJT on each system transferred is required.

7. Prevention of vandalism and stripping presents a significant problem to commanders at all levels. Experience has shown that stripping can be controlled by strong command emphasis. External security will become a problem as additional bases become excess.
The RVNAF has begun to reach the saturation point in many areas of the country and transfer of additional facilities will severely tax their ability to provide security forces. Delays in transferring an installation result in the requirement for U.S. forces to devote tactical units to a non-productive security role. This problem will become more severe as redeployments continue and may result in the requirement to abandon a substantial amount of real property.

G. (U) TRANSFERRING PORTS AND ASPs TO THE VIETNAMESE.

1. In June 1969, COMUSMACV approved the concept for turning over responsibility to the RVNAF for the operation of those ports in Vietnam not considered essential to support US military operations. In August 1969, a central committee for ARVNization of ports was created. USARV was represented on the committee along with MACV, the RVNAF Director of Transportation and the Saigon Transportation Terminal Command. Local committees were also formed in each of the ARVN area Logistics Commands with representation provided by the ALC Commanders, the ARVN post commanders, the US Advisors to the ARVN ALC transportation effort, and the US port commanders. These local committees were to study all the ports within the ALC area and determine which ones ARVN could take over.

2. The first port to be considered for ARVNization was Can Tho/Binh Thuy. The local committee began its work in August and subsequently forwarded a draft agreement through US and ARVN command channels. On 19 March 1970, the ribbon was cut between the US and ARVN portion of the port and ARVN forklift operators drove through the gate and immediately went to work discharging US LST and Mark-8 boats.

3. In August 1969, the 4th Transportation Command and the Saigon Transportation Command began negotiations for the joint utilization for the M&M pier area with the objective of complete takeover by the ARVN. In addition to the turnover of the M&M pier area, K-12 pier and Camp Davies were turned over to the ARVN on 29 Apr 70. The release of K-12 provides the ARVN more pier flexibility and it is
expected they will open an LST site in the vicinity of K-12, thus negating their present requirement to transship by LST out of Newport.

4. The final aspect of the Saigon area concerns itself with the Saigon/Cat Lai Ammunition System. The ARVN recently opened their ammunition depot at Long Binh and their ammunition is coming across the barge pier at Cogido.

5. Nha Trang offered an excellent opportunity for ARVNization. The ARVN port operators have the capability to handle the shallow draft operations. The deep draft requirements have decreased significantly with the closing of the USAF Base at Nha Trang coupled with the withdrawal of some US Army support elements in the vicinity. The ARVN port operators took over the shallow draft ARVN cargo mission from the US port operators effective 1 December 1969. To date, the operation has proceeded smoothly and the ARVN has been gaining in expertise.

6. At Qui Nhon, the ARVNization process has included the introduction of ARVN trucks into port clearance operations. Heretofore ARVN cargo was taken to an intransit storage area by US trucks and the ARVN then would clear from its area. Now the ARVN takes the cargo from the hook and clears it directly to the depot. The ARVN is also clearing its shallow draft cargo.

7. On 3 September 1969, we opened an ammunition supply point at Ban Me Thuot to support US Forces in that area. This ASP was located in the vicinity of an ARVN ASP which provides ammunition supply to the ARVN 2d Corps Troops in that area. Security for both ASP's was provided by infantry troops from the ARVN 2d Corps. After coordination with IFFV and Cam Ranh Bay Support Command, the Commanding General, 2d ARVN Corps, obtained approval to assume responsibility for all ammunition supply in the Ban Me Thuot area. A formal bi-lingual agreement was written and signed which specified that US stocks would be integrated with the ARVN stocks and the ARVN would make all future issues to US Forces. A liaison team of two US personnel would be assigned to the ARVN ASP to control the issue of allocated items and to arrange for replacement.
from the Cam Ranh Bay Ammunition Supply Depot of all ammunition issued to US Forces. On 5 February 1970, the 1st Logistical Command ASP closed and the ARVN ASP assumed full ammunition supply responsibility. To date, ARVN has displayed the ability to supply US Forces.

8. The ARVN has assumed responsibility for ammunition supply to all US units in the Can Tho/Binh Thuy area. The ARVN accepted this responsibility for all units other than the 164th CAG in September 1969, permitting closure of the US ASP at Can Tho in December 1969. Support of the 164th CAG was accepted in April 1970. Plans for this support are to be extended eventually to all US Forces in IV CTZ.

H. (U) TRAINING THE VIETNAMESE.

1. The goal of our RVNAF OJT Program has been to provide informal support for the expansion of the RVNAF training base in the functional areas of combat support and combat service support.

2. The 1st Logistical Command's "Project Skills" and "Operation Buddy," designed to upgrade the technical capabilities of Vietnamese civilians and ARVN logistic Soldiers respectively, were the forerunners of our present OJT Program. The success of this program has resulted in the initiation of training programs for RVNAF pilots, nurses, doctors, logistical personnel and heavy equipment operators, just to mention a few.

3. While some of the training programs are a result of MACV direction, the majority are due to cooperative arrangements between the local commanders and MACV advisors. These programs have been well received and have been highly beneficial to all concerned. A contributing factor to their success has been the informal manner in which they have been conducted.

4. Commencing in October 1969, units were requested to report the type, frequency, and extent of training conducted for the Vietnamese military and civilian populace. The purpose was to determine the extent to which the Vietnamization efforts had been emphasized and to gain greater insight into what had actually been and would be
accomplished. As of May 1970, reports indicate that approximately 26,000 military and 7,000 civilian personnel have completed training. We believe these figures to be conservative and that we have and are doing much more than they indicate.

5. In the area of local nationals, we have developed and maintained training programs for our Vietnamese civilian employees to provide skills in combat support and combat service support functions.

6. To provide assistance in recruitment and retention efforts, as well as increase the effectiveness of the retained workforce, the curriculum of the Central Training Institute, Office of the Civilian Personnel Director, was revised to provide higher level skills training with overall emphasis on upgrading Vietnamese civilian skills and their degree of utilization. The new courses of formal instruction established included: Medical Assistants, Telephone Pole-Lineman, Telephone Switchboard Operators, ADP Computer Operator/Programmer, and Supply. Training facilities have been established in each of the seven area civilian personnel offices located outside the Saigon area.

7. Emphasis was placed on providing assistance to commanders and supervisors in establishing and maintaining on-the-job training programs to further improve job performance and effect increased utilization and worth to the employing unit. To increase the utilization of local national employees as well as contribute to the Vietnamization effort, intern career programs have been established in ten areas. Occupational categories that were selected for these programs included: Logistical Management, Automatic Data Processing, Civilian Personnel Administration, Financial and Fiscal Management, Maintenance Management, Medical and Dental, Safety, Special Services, and Education.
VII. CONCLUSIONS AND OBSERVATIONS

A. (U) GENERAL. The conclusions and personal observations contained in this section are based upon preceding discussions in this report. Additionally, a chronological sequence of events beginning in June 1968 is included as Inclosure 1.

B. (C) FORCE MANAGEMENT.

1. We have made great strides in the area of automation over the past two years, but there are still several significant problems which remain. One problem is that of correlating the requirements and importance of automatic data processing with available financial resources, which includes allocating funds to pay for the rent and maintenance of essential equipment. A second problem arises from our dependence on the major computer equipment manufacturers to perform maintenance on not only leased but, in many cases, government-owned data processing equipment. The desirability of an Army developed capability to provide direct and general support maintenance for automatic data processing equipment is worthy of close examination.

2. The fluidity of the tactical situation, together with the extended employment of units, highly mobile and frequently widely separated, has required us to often tailor our combat support and combat service support organizations. This has occasionally caused some difficulties in the light of lead times required for formal organizational modifications. It would facilitate operations in this kind of environment if approval authority for MTOE/TDA changes was delegated to major component commanders with the Department of the Army exercising veto powers.

3. Our Club and Open Mess System was a source of many headaches. During the force buildup of Army troops and the heavy fighting against the NVA and VC, commanders naturally were occupied with combat functions and allied areas of interest. In this environment there was insufficient supervision of the messes and clubs. Consequently, some contractors overcharged and provided submarginal service and goods, some entertainment agents overcharged and made "kickbacks"
to managers, and some managers participated in outright fraud. The establishment of the Vietnam Open Mess Agency and the Central Procurement Agency, both under control of USARV, placed the necessary controls over our club operations. As the Open Mess System contracts, it is conceivable for the Vietnam Open Mess Agency to absorb the functions of central purchasing, accounting, and other common administrative and fiscal activities. Open mess operation could ultimately be coordinated by an agency similar to the organization of the overseas Army and Air Force Exchange Service.

4. I am convinced that the above-ground POL pipelines of the "invasion type" (victaulic coupled combat pipe) are a tremendous waste of time and money in this Vietnam war environment. Not only did we lose astronomical amounts of POL due to enemy action and pilferage, but we tied up many combat troops in an attempt to prevent the loss. Finally, when we decided to spend the necessary funds to install welded steel pipe and to bury it, our losses were negligible and troop protection was reduced considerably.

C. (C) SUSTAINING THE FORCES.

1. The necessity for flexibility of the logistical support structure will continue as our forces are withdrawn from Vietnam. Support for remaining forces will have to be consolidated and provided from the minimum number of installations in order to conserve manpower and operating funds while still retaining a viable logistical support structure.

2. There is a need to develop a logistics base for rapid deployment into counterinsurgency areas of operation to include: Forward Floating Depots; logistics command/control modules; and maintenance and other service cells on which to tailor particular organizations.

3. A general lack of experience is prevalent in the junior officer and warrant officer grades in all aviation units in Vietnam. Currently, only 18 percent of assigned aviators are in Vietnam on their second tour. Since practically all field grade aviators are included in the second tour group, a much lower experience level exists among the company grade officers and warrant officer aviators assigned to aviation companies and troops. The experience level in these two groups is less than desired; however, the situation becomes acceptable if school trained second-tour aviators are increased to 24 percent of the total USARV authorized warrant officer strength.
4. In the area of law and order, specifically, curbing the marihuana and currency control problems, we have begun working with the Vietnamese National Police on combined patrols. However, we need greater cooperation from the National Police and other Vietnamese authorities in order to realistically hope to completely solve the problems.

D. (C) SUPPORTING TACTICAL OPERATIONS.

1. It is essential to maintain continuing command emphasis on the importance of inventory control procedures and the necessity for cyclic inventories and location surveys.

2. As redeployment continues, the 1st Aviation Brigade will continue to provide the necessary aviation support to the Free World Military Assistance Forces throughout Vietnam. In so doing, necessary realignments in force structure may have to be made to maintain an adequate balance of support to the various geographical areas. Likewise, the brigade's units will continue to consolidate at residual bases as Vietnamization continues. There may be a temporary, but significant, degradation in the availability of aviation assets as assault helicopter companies are turned over to VNAF unless supporting technical advisory assistance is carefully programmed.

3. As a result of our improved target acquisition devices and the emphasis that has been placed on timely processing of, and immediate responsiveness to, intelligence information, we have decidedly restricted the movement of enemy personnel and his logistical supplies. With the employment of our ground surveillance sensors, radars, and an increasing number of night observation devices, the night has indeed been taken away from the enemy.

4. Although the Army has provided secure voice radio communications to all tactical units in Vietnam, the enemy continues to monitor our nets and to take effective counteraction. Obviously, personnel fail to use the secure mode and many continue to devise their own codes. This serious situation is one that should receive priority attention in our schools.

E. (C) REDEPLOYING THE FORCES.

1. We will be able to continue an orderly, responsive program of redeployments, provided the present pace of the drawdowns is not
significantly increased. It is also considered most desirable to include a reasonable period of time between each redeployment in order to assimilate the effects and to allow time for processing and disposing equipment turned in by redeploying units.

2. Stand-down periods in future redeployments should allow adequate time for units to correct all organizational maintenance deficiencies and direct support deficiencies when applicable. This will facilitate acceleration of item availability for transfer to the RVNAF or reissue to US or FWMAF units.

3. Redeployment of combat service support units must be carefully planned and controlled in order to maintain an adequate, balanced capability to perform continued support to remaining forces, as well as to perform redeployment support and roll-up functions.

F. (C) ASSISTING VIETNAMIZATION.

1. The capability of the RVNAF to assume full responsibility for operation and maintenance of bases transferred remains questionable. If not properly maintained, the transferred facilities rapidly deteriorate. The RVNAF have experienced difficulty in providing personnel to staff Facilities Engineering Teams. Provision of the 180-day package of material and supplies has been a partial solution to the problem. But the lack of funds and personnel to staff the Facilities Engineering Teams is a problem that must be solved by the RVNAF.

2. The RVNAF Improvement and Modernization Program requirements must continue to receive major emphasis and support by USARV as available assets decrease with redeployments. As time progresses, the age of our assets increases, therefore fewer items will meet the life expectancy criteria and more maintenance will be required for those items meeting the criteria. It may become desirable to consider less stringent standards of life expectancy for equipment transferred to the RVNAF.

3. With the gradual expansion of the ARVN Transportation Corps and the broadening of its training base, ARVN will be able to assume a more active role in support of combat operations. As they advance in skills and training, they will become a tremendous asset to the overall logistical picture. We must avoid the tendency, however, to overcommit the ARVN by having them assume too many US missions too rapidly.
No report would be complete without a comment on the caliber of soldier serving here in the Vietnam combat areas. There is no doubt in my mind that our soldiers in the US Army Vietnam are better trained, more knowledgeable and better motivated than those with whom I worked in World War II and in Korea. This is puzzling when one learns from the news media that our nation's youth are rioting, dissenting and creating all kinds of disturbances. However, it is apparent that when these young men arrive in Vietnam, there is little evidence of this background. No doubt many combat troopers would rather not serve in Vietnam, but while here they demonstrate a dedication to the task at hand and perform admirably. These fine young soldiers, combined with the relative high caliber of officers and NCOs who lead them, convince me that our Army in Vietnam is the best combat force we have produced.
CHRONOLOGY OF SIGNIFICANT EVENTS

<table>
<thead>
<tr>
<th>DATES</th>
<th>DESCRIPTION OF EVENT</th>
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<tbody>
<tr>
<td>22 June 1968</td>
<td>General Mildren assumed position of Deputy Commanding General, USARV</td>
</tr>
<tr>
<td>23 July 1968</td>
<td>Base Camp Consolidation Plan approved</td>
</tr>
<tr>
<td>July 1968</td>
<td>1st Brigade, 5th Infantry Division (MECH) arrived in RVN</td>
</tr>
<tr>
<td>July 1968</td>
<td>Reorganization of Combat Service Support in RVN approved</td>
</tr>
<tr>
<td>July 1968</td>
<td>USARV Gold Flow Reduction Program initiated</td>
</tr>
<tr>
<td>1 August 1968</td>
<td>USARV Data Service Center assumed responsibility for USARV personnel data files from USARPAC</td>
</tr>
<tr>
<td>21 August 1968</td>
<td>Central Issue Facilities established</td>
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<tr>
<td>August 1968</td>
<td>Increments of RTAVF arrived to replace the Queen's Cobra Regiment</td>
</tr>
<tr>
<td>August 1968</td>
<td>Project &quot;Count&quot; initiated; Wall to Wall inventory</td>
</tr>
<tr>
<td>1 September 1968</td>
<td>Operation Gold Sword initiated; exchange of Brigades between 101st Airborne Division and 82d Airborne Division</td>
</tr>
<tr>
<td>22 September 1968</td>
<td>An Khe-Pleiku POL pipeline completed</td>
</tr>
<tr>
<td>September 1968</td>
<td>Project &quot;See&quot; initiated; cancellation of requisitions resulted in savings of 35 million dollars</td>
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<tr>
<td>September 1968</td>
<td>USARV PBAC established for control of OMA funds</td>
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<tr>
<td>14 October 1968</td>
<td>Project &quot;Strip&quot; initiated; identified excesses</td>
</tr>
<tr>
<td>21 October 1968</td>
<td>C-Day; MPC converted</td>
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<tr>
<td>October 1968</td>
<td>97th Artillery Group redeployed</td>
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<tr>
<th>DATES</th>
<th>DESCRIPTION OF EVENT</th>
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<tbody>
<tr>
<td>22 November 1968</td>
<td>Began standardized reorganization of 65 aviation companies</td>
</tr>
<tr>
<td>November 1968</td>
<td>Kit Carson Scout Program initiated; funded by USARV</td>
</tr>
<tr>
<td>19 December 1968</td>
<td>Tan My-Hue-Quang Tri POL pipeline completed</td>
</tr>
<tr>
<td>December 1968</td>
<td>Cam Ranh Bay and Vung Tau tank farms completed</td>
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<tr>
<td>December 1968</td>
<td>Concept approved for Base Camp TDA</td>
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<tr>
<td>December 1968</td>
<td>Began reorganization of Americal Division</td>
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<tr>
<td>December 1968</td>
<td>Artillery R &amp; R Program initiated</td>
</tr>
<tr>
<td>11 January 1969</td>
<td>First shipment of 31 M551 ARAAVs arrived RVN</td>
</tr>
<tr>
<td>29 January 1969</td>
<td>Infusion Policy revised</td>
</tr>
<tr>
<td>January 1969</td>
<td>Joint Aviation Operations Group formed</td>
</tr>
<tr>
<td>January 1969</td>
<td>Mine Warfare Center organized for Countermine research</td>
</tr>
<tr>
<td>January 1969</td>
<td>HQ USARV assumed responsibility for procurement inspection of all petroleum products</td>
</tr>
<tr>
<td>3 February 1969</td>
<td>Underground AOC completed and became operational</td>
</tr>
<tr>
<td>23 February 1969</td>
<td>Enemy post-Tet offensive began</td>
</tr>
<tr>
<td>March 1969</td>
<td>101st Airborne Division converted to Air Mobile Division</td>
</tr>
<tr>
<td>March 1969</td>
<td>Assumed responsibility for fiscal management of the MCA Program in RVN</td>
</tr>
<tr>
<td>15 March 1969</td>
<td>RVNAF Physician's Training Program initiated</td>
</tr>
<tr>
<td>17 March 1969</td>
<td>Reorganization of Military Intelligence Detachments approved</td>
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<td>DATE</td>
<td>DESCRIPTION OF EVENT</td>
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<tr>
<td>22 March</td>
<td>Completed NVA/VC Small Unit Tactics and Techniques Study published</td>
</tr>
<tr>
<td>30 March</td>
<td><em>Quick Reaction Lessons Learned</em> published for the first time</td>
</tr>
<tr>
<td>1 April</td>
<td>1st Cavalry Division rear began relocation from An Khe to Bien Hoa</td>
</tr>
<tr>
<td>1 April</td>
<td>ACoS, CORDS redesignated ACoS, G5</td>
</tr>
<tr>
<td>May</td>
<td>1st Logistical Command and Support Commands at Qui Nhon, Saigon, and Cam Ranh Bay reorganized</td>
</tr>
<tr>
<td>8 June</td>
<td>President announced Phase I redeployment of 25,000 US forces from RVN; involved 14,376 Army personnel and 52 units</td>
</tr>
<tr>
<td>20 July</td>
<td>3d Brigade, 9th Infantry Division reorganized as a Light Infantry Brigade</td>
</tr>
<tr>
<td>30 July</td>
<td>Army redeployment completed (Phase I - Keystone Eagle)</td>
</tr>
<tr>
<td>11 August</td>
<td>Enemy activity high point; country-wide</td>
</tr>
<tr>
<td>12 August</td>
<td>Vietnam Open Mess Agency established</td>
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<tr>
<td>6 September</td>
<td>Vietnam Open Mess Agency established</td>
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<tr>
<td>15 September</td>
<td>ACoS, MIDS established</td>
</tr>
<tr>
<td>17 September</td>
<td>President announced Phase II redeployment of US forces from RVN; involved 14,082 Army personnel and 93 units</td>
</tr>
<tr>
<td>19 September</td>
<td>USARV published Redeployment Guide for Units</td>
</tr>
<tr>
<td>September</td>
<td>USARV Facilities Review Board reconstituted</td>
</tr>
<tr>
<td>13 October</td>
<td>RVNAF OJT Program initiated</td>
</tr>
<tr>
<td>18 October</td>
<td>Central Purchasing Agency established</td>
</tr>
<tr>
<td>24 October</td>
<td>Black Horse Base Camp turned over to RVN</td>
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<tr>
<td>Dates</td>
<td>Event Description</td>
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<tr>
<td>31 October 1969</td>
<td>Transfer of engineer equipment to 2 ARVN Construction Battalions and 1 Heavy Equipment Company completed</td>
</tr>
<tr>
<td>23 November 1969</td>
<td>Agreement reached to move Army units from Long Van area to Nha Trang Air Force Base</td>
</tr>
<tr>
<td>15 December 1969</td>
<td>Army redeployment completed (Phase II - Keystone Cardinal)</td>
</tr>
<tr>
<td>15 December 1969</td>
<td>President announced Phase III redeployment of US Forces; involved 29,443 Army personnel</td>
</tr>
<tr>
<td>17 December 1969</td>
<td>Vietnam Asset Reconciliation Program initiated; identified excesses in units</td>
</tr>
<tr>
<td>1 January 1970</td>
<td>ARVN land clearing training initiated</td>
</tr>
<tr>
<td>January 1970</td>
<td>Planning initiated for closing and turn-over of Dau Tieng, Lai Khe, and Camp Enari to RVNAF</td>
</tr>
<tr>
<td>1 February 1970</td>
<td>US Army Engineer Command, Vietnam (PROV) organized</td>
</tr>
<tr>
<td>2 February 1970</td>
<td>Dustoff Compound turned over to RVNAF</td>
</tr>
<tr>
<td>27 February 1970</td>
<td>Vung Tau, North and South cantonment areas, turned over to RVNAF</td>
</tr>
<tr>
<td>28 February 1970</td>
<td>Dau Tieng (partial) turned over to RVNAF</td>
</tr>
<tr>
<td>1 March 1970</td>
<td>US Army Medical Command, Vietnam organized</td>
</tr>
<tr>
<td>13 March 1970</td>
<td>Vung Tau, ASP turned over to RVNAF</td>
</tr>
<tr>
<td>18 March 1970</td>
<td>Camp Viking turned over to RVNAF</td>
</tr>
<tr>
<td>19 March 1970</td>
<td>Binh Thuy Port and Lai Khe (partial) turned over to RVNAF</td>
</tr>
<tr>
<td>30 March 1970</td>
<td>Camp Sally turned over to RVNAF</td>
</tr>
<tr>
<td>31 March 1970</td>
<td>Enemy Spring offensive initiated</td>
</tr>
<tr>
<td>DATES</td>
<td>DESCRIPTION OF EVENT</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11 April</td>
<td>Fire Support Base GATOR turned over to RVNAF</td>
</tr>
<tr>
<td>14 April</td>
<td>Fire Support Base Fat City and LZ Bayonet (partial) turned over to RVNAF</td>
</tr>
<tr>
<td>15 April</td>
<td>Camp Enari turned over to RVNAF</td>
</tr>
<tr>
<td>15 April</td>
<td>Army redeployment completed (Phase III - Keystone Bluejay)</td>
</tr>
<tr>
<td>20 April</td>
<td>President announced Phase IV redeployment of 150,000 US Forces</td>
</tr>
<tr>
<td>29 April</td>
<td>President announced US Forces would sweep enemy sanctuaries in Cambodia</td>
</tr>
<tr>
<td>1 May</td>
<td>Camp Swan, Camp Davies, Can Dock - Qui Nhon, and Saigon Port turned over to RVNAF</td>
</tr>
<tr>
<td>26 June</td>
<td>Consolidation of HQ USARV and HQ 1st Logistical Command completed</td>
</tr>
</tbody>
</table>
**Senior Officer Debriefing Report: LTG Frank T. Mildren**

**Descriptive Notes:**
- Senior Officer Debriefing Report, 22 June 68 to 1 July 70.

**LTG Frank T. Mildren**

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