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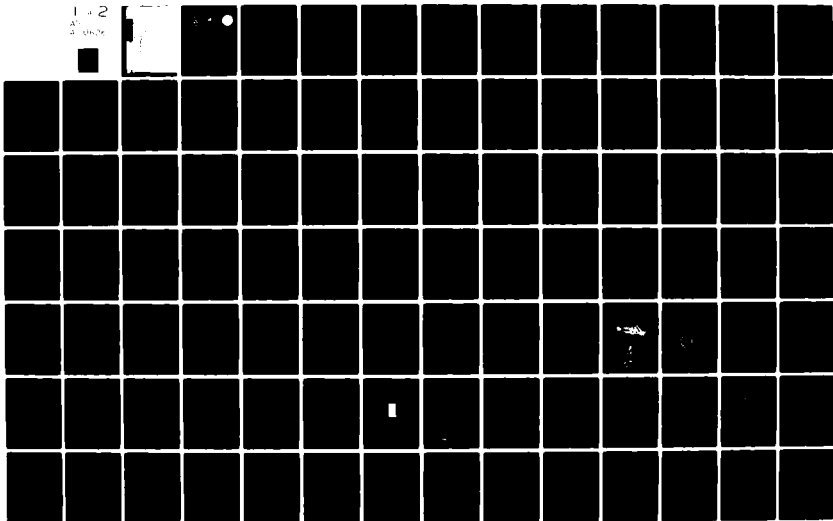
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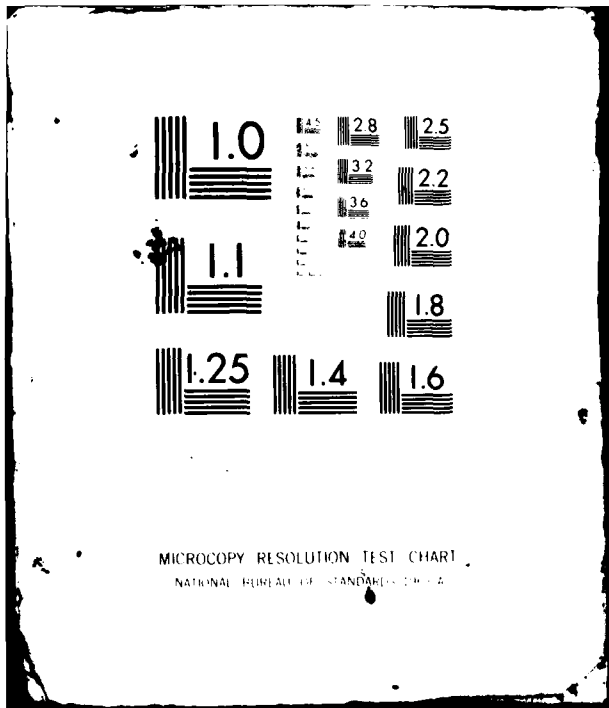
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FIFTH PACIFIC ARMIES MANAGEMENT SEMINAR



CO - HOSTED BY

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PACIFIC ARMIES MANAGEMENT SEMINAR V

16 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

TRAINING SYSTEMS MANAGEMENT IN THE INDONESIAN ARMY

COLONEL ABINOWO MUKMIN

INDONESIAN ARMY

TRAINING SYSTEMS MANAGEMENT IN THE INDONESIAN ARMY

INTRODUCTION

HISTORY/PHILOSOPHY

Throughout 36 years of service, the Indonesian Army has remained an Army of the people. Its allegiance is to the PANCASILA¹ and the 1945 Constitution². It has never failed our nation in time of need. We are guided by this heritage, which has evolved into a tradition of accomplishment and dedication. Today, as always, we are obligated to provide our country the kind of Army it needs, an alert and effective Army, always in tune with the desires of the Indonesian people.

The decade of the 1980's is a period of new challenges for our Army. We must continue to be responsive to the needs of our nation and continue the development and modernization of our Army. The degree of our success will influence the course of our nation's future. The Army must continue to work hand-in-hand with the people, must build upon the foundation of PANCASILA and the 1945 Constitution, must continue to support our society's tenacious struggle to establish a free, united, sovereign, just and prosperous nation, and we must continue in our firm desire not only to preserve the results already achieved, but also to continue in the progress of development of all sectors of our society.

From our struggle for independence and unity beginning in 1945, our Army has always been successful and responsive to new challenges. As a soldier in the Indonesian Army, I am confident we will meet the challenges of the 1980's, and that we will continue to build upon our national defense and security posture, in order to safeguard our nation. This will permit continued development of all sectors under conditions of stability and peace and will ensure our continued security from any threat.

STRATEGY

Because we are a large nation, geographically made up of thousands of resource rich islands, strategically located across major world trade lanes, our position is that we can never be totally free from threats to our security. Add to this the limited development resources available for our Army and it is

¹PANCASILA is the expression of the five basic principles of the Republic of Indonesia: Belief in God; National Consciousness; Humanism; Social Justice; Sovereignty of the People.

²The 1945 Constitution forms the basis of the Indonesian Government's principles, philosophy, organizational structure, and more importantly, stands as a symbol of unity and independence.

easy to understand why our only realistic option is implementation of a "Total People's Defense and Security System." In other words, our Armed Forces form the nucleus of a united and integrated force, comprised of all the Indonesian people. Thus, it is essential that the Armed Forces never detach themselves from the people, but always be in their midst. For the Armed Forces, the people will always be our source of inspiration and motivation. For the people, the Armed Forces will be a source of expertise and skills in defense and security, and in the developmental process. I have explained all of this so you can better understand the rationale for our organizational and functional structure.

ORGANIZATIONAL/FUNCTIONAL STRUCTURE

ORGANIZATION

The Indonesian Army is organized into two levels:

- A. Army Headquarters Level
 - B. Major Command Level
- A. The Army Headquarters Level consists of four echelons:
- 1. Command Echelon (Army Chief of Staff)
 - 2. Staff Echelon (Deputy Chief of Staff, Chiefs of INT, PER, OPS, LOG, etc.)
 - 3. Service Echelon (HQ DET, AGS, etc.)
 - 4. Center Executive Echelon (Miscellaneous support)
- B. The Major Command level consists of five parts:
- 1. Four Regional Commands (KOWILHAN)
 - 2. Sixteen Area Commands (KODAM)
 - 3. Special Forces Command
 - 4. Strategic Command
 - 5. Training Education and Development Command (KOBANGDIKLAT-AD)

The four Regional Commands are commanded by three-star generals. Major generals command the four Area Commands on Java, the Special Force Command, the Strategic Command, and the Training Education and Development Command. Each of the remaining Area Commands are commanded by a Brigadier General.

FUNCTIONAL RESPONSIBILITIES

A. Army General Staff

The principal Army General Staff elements involved with training are the Assistant Chief of Staff for Operations (ASOPS) and Personnel (ASPERS). Their functions are summarized below:

1. INDIVIDUAL TRAINING

- a. ASPERS exercises general staff supervision over:
 - individual training in institutions;
 - Military Occupational Specialty Training (MOS) in units.
- b. ASOPS exercises general staff supervision over:
 - all other individual training in units.

2. COLLECTIVE TRAINING

ASOPS exercises general staff supervision over training concepts, policies, and programs for collective training in units.

It is not surprising to find, that in some instances, the functional responsibilities of the ASOPS and ASPERS are intertwined, and require close and continuing coordination.

There are two key Army Staff elements which have an impact on training. The Assistant Chief of Staff for Logistics (ASLOG) has general staff responsibility for logistics readiness of all Army forces, to include supportability and maintainability of equipment in troop units. The Assistant Chief of Staff for Planning and Budgeting (ASRENA) formulates the Army budget, issues "rupiah" (monetary) guidance, distributes funds to commands, and monitors obligated expenditures and reprogramming actions.

B. Training Education and Development Command (KOBANGDIKLAT-AD)

The mission of KOBANGDIKLAT-AD is to conduct education and training in the Army and execute research and development of educational, training, and doctrinal concepts. To execute the above mission, KOBANGDIKLAT-AD issues education and training procedures to the Army. They formulate guidance on use of training facilities, patterns or concepts of training, and training procedures to be followed. They also establish guidelines for educational development systems, and research and development in education, training, and operational doctrine of the Army.

KOBANGDIKLAT-AD is organized into two levels, a Headquarters level and an Executive Command level.

1. Headquarters Level

- a. Command Echelon
 - Commanding General
 - Deputy Commanding General
- b. Staff Echelon
 - Directors for Doctrine, Curriculum, Education, Training, Administration, Planning and Budgeting, Inspector, Personal Staff

- c. HQ Service Echelon
 - Secretary
 - HQ Detachment
 - Finance Officer
- d. Education Echelon
 - Training Aids Depot
 - Transportation Detachment
 - Divisions of Personnel, Security, Finance, Logistics, Information, and Data Processing

2. Executive Command Level

- a. Combat/Combat Support Development Center
- b. Combat Service Support Development Center
- c. Intelligence Development Center
- d. Territorial Development Center
- e. Branch Peculiar Centers
- f. Education Center
- g. OCS

C. Military Area Commands (KODAM)

The primary mission of the KODAM is local security and defense within its geographic area. Organizationally, the structure of the KODAM is tailored to the situation of its particular area. The basic combat unit is the infantry battalion. In addition to battalions, companies, and the standard military staff organizations and missions familiar to all military forces, the organizational structure also contains supporting elements designed to perform the dual function mission of executing civilian developmental and security interests.

The KODAM is further organized, in descending order of size of the area covered, into Resort Military Commands (KOREM), District Military Commands (KODIM), Sub-district Military Commands (KORAMIL), and finally, into sub-units at the village levels.

The KODAM Commander organizes these assets on two levels. There is a Headquarters Level and an Executive Command Level comprised of the KOREMS and Infantry Brigades (some KODAMs have no brigade). In addition, at this level, is an Education and Training Command (KODIKLATDAM), whose mission is to conduct decentralized education and training, and implement the training policies dictated by the Army level Training Education and Development Command (KOBANGDIKLAT-AD). The KODAM Training Command is also responsible for basic individual training and recruitment in its area.

One highly successful program at the KODAM level has been one in which the KODAM Commander conducts voluntary training for students to permit them to gain a better understanding of the Army. These students receive representative training identical to that given regular Army soldiers and battalions, and

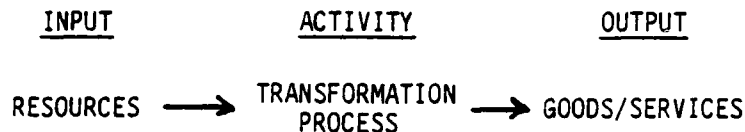
is a bid on our part to secure mutual understanding of key communicators within Indonesian society of the rigorous responsibilities of the military forces of their country. It also assists in preparing these students to perform a paramilitary role. The training includes basic infantry training, mountain and jungle training, swamp and riverine operations, and a 100 kilometer foot march. The final phase is amphibious (rubber boat) training. Altogether, it is a rigorous, effective, and realistic program. Those who complete all the programs are presented a "RAIDER" insignia by the KODAM Commander.

THE TRAINING SYSTEM

Now that you have a better understanding of our philosophy and organizational structure, I would like to discuss a brief systems approach to our views and then relate this to our training system.

SYSTEMS APPROACH

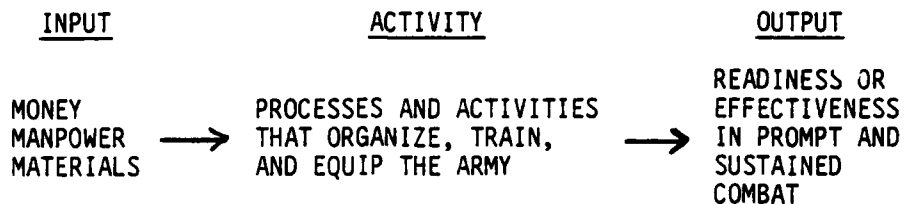
The Indonesian Army can be viewed as a transformational model. In a dynamic relationship with the environment, it receives various inputs, transforms them, and provides an output to those who perceive a need for its services. The basic system model is shown below.



BASIC SYSTEMS MODEL

This simple model can be a very useful way of thinking about managing the Army. Our Army has to be organized, trained, and equipped for a purpose (transformation process), primarily for prompt and sustained combat. While there may be numerous intermediate outputs, the ultimate output of the Army is still prompt and sustained combat. The Army determines its goals and objectives and its entire integrated task structure based on output considerations. The Army develops processes and activities which enable it to be properly organized, trained and equipped. The Army must be an open system that engages in activities to transform its resources into a unified command plan which develops the national security and defense strategy.

Our strategy is keyed to readiness (an output). We must be organized, trained, and equipped for that purpose (transformation process). We require money from Parliamentary appropriations to acquire other resources of manpower, industrial materials, and other requirements. At the risk of oversimplification, the Army's input-transformation-output model might appear as follows:



TRAINING MANAGEMENT

DOCTRINE

The Indonesian Army, in addition to fulfilling the traditional military roles of security and defense, is deeply involved in civil affairs actions. We have played a much more integrated role (closely woven into the fabric of society) in the national development of our country than is the case of most other military forces. This national doctrine of military-civil dual functions ("DWI-FUNGSI") is maintained and passed on to the younger generations. Soldiers must accept common principles of action. This "doctrine" is the basis of the subordination and interdependence of individual soldiers required in time of peace and battle. This guides our training management system and allows us to meet all of our training needs.

EFFICIENCY AND EFFECTIVENESS

The cost of military training in money, manpower, and material continues to rise sharply. The resources allocated to the Army are limited. Training must compete for funds with other requirements in a large force structure. Therefore, training managers throughout the Army must strive continually to improve the efficiency of training.

Weapons systems dominate the modern battlefield. But no weapon can be effective unless the man behind it is trained and motivated. These weapons systems, both technical and social, must be skillfully employed by competent tactical and social leaders. Ultimately, the Army's effectiveness in battle or peace will depend upon our ability to field powerful weapons in the hands of soldiers proficient in their use, under leaders skilled in employing them socially and tactically.

The attitude of soldiers toward their job is crucial to the Army. Job satisfaction is powerfully influenced by training. Those soldiers who understand the importance of their jobs, and are well trained to perform them, are more easily motivated and present fewer problems to their commanders.

TRAINING POLICY AND CONCEPT

A trainer prepares, conducts, and evaluates training. A training manager is a commander or staff officer who selects training objectives, provides support for training, and conducts evaluations of training effectiveness. All commanders are trainers. However, training management, the more complex,

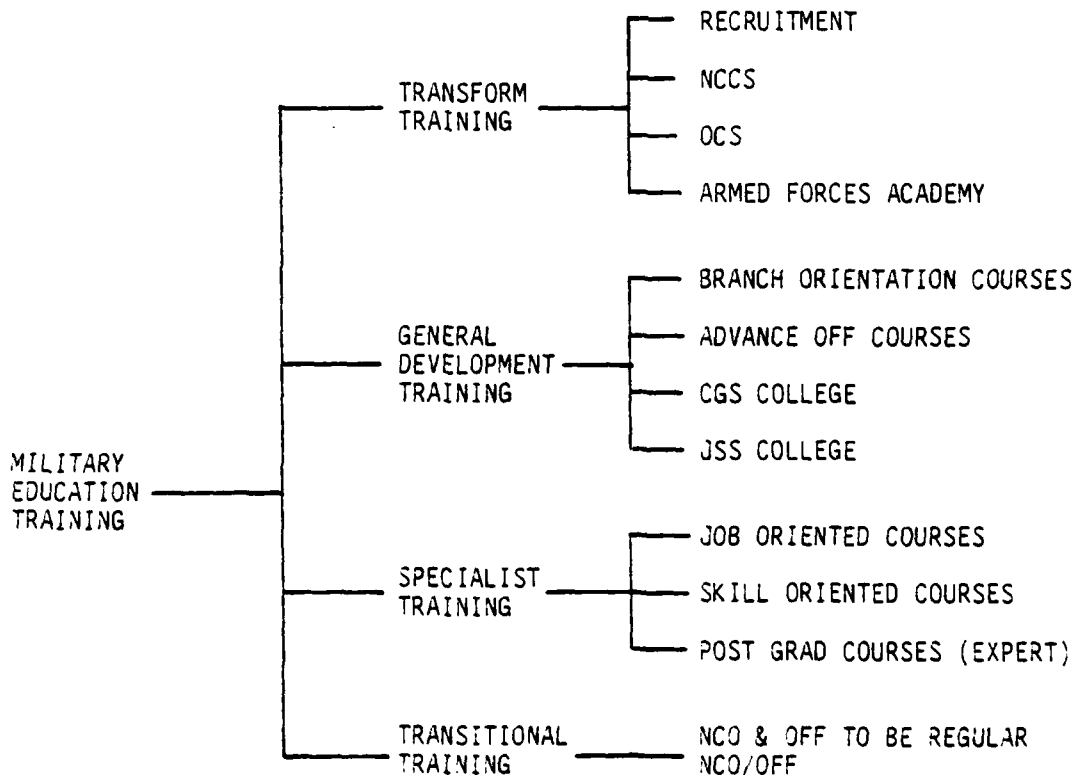
deliberate, and administratively burdensome function, is usually reserved for battalion echelon or higher, and service school or training center staff officers. Some commanders are both managers and trainers in our system.

ARMY TRAINING SYSTEM

The Army training system involves training both institutions and units, and is geared to provide the highest degree of training readiness using all available resources. Training in institutions and training in units are complementary to one another. We group training into continuous and progressive training, and noncontinuous and progressive training. Continuous and progressive training is geared to provide personnel an obligatory requirement to gain increasingly greater skills. Noncontinuous training is specialized training one might receive. Training phases include basic individual training, advanced individual training, basic unit training, advanced unit training, and then field exercises and maneuvers.

Training in units is the commander's responsibility. Training in institutions is primarily to train personnel to be qualified in a certain skill, the characteristics of which invite special tailoring to be done by the educational institutions.

ARMY EDUCATION SYSTEM

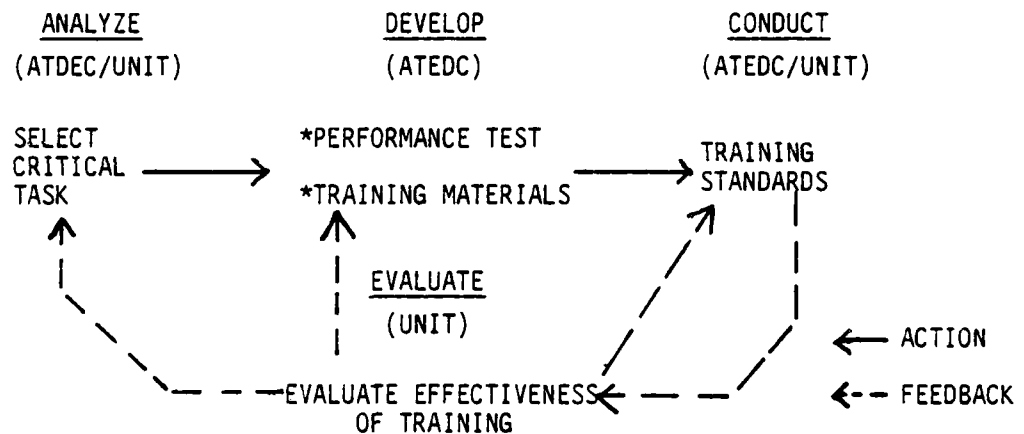


EXECUTION OF TRAINING MANAGEMENT

The preceding has been a generalized view on training management concepts. The execution of training management in our Army is initiated at the Army Staff level. The ASOPS establishes general objectives, policies, responsibilities and guidance for training management. The training objective (TASK) for the Army is to attain and maintain the operational readiness capability to accomplish its assigned mission in combat or other operations. Policies are promulgated which deal with command responsibility, individual or unit training, scheduling, prime time for training, evaluation methods, training records, etc.

The Army Training and Educational Development Command (ATEDC) is responsible for conducting institutional training, developing training doctrine, and providing support for unit training. These programs affect nearly every unit in the Army. This concept is depicted below.

CONCEPT OF TRAINING



CONCLUSION

Today we have looked at the training management system in the Indonesian Army, and presented a brief overview of our history, philosophy, and organization to assist you in understanding our system. In other words, "why we do things the way we do". I hope that the preceding discussion will be helpful to you and will generate comparative discussions, as members from other nations present their systems to the seminar.

It is in this spirit that we share our combined experiences, that we are able to learn from each other and find new and helpful ideas to help us all become better soldiers and, more importantly, that permit us to gain a better understanding of each other.

QUESTIONS AND ANSWERS FOLLOWING INDONESIAN PRESENTATION

Q. Do we understand correctly that in Indonesia the Army Commander has training management responsibility for Army forces, but lacks operational command?

A. That is correct. Operational command is vested in the area commands, which have dual military and civil jurisdictions, unique to the Indonesian Army. The civil responsibilities, which are normally heavier than the military ones, preclude the area commander from exercising effective training management control.

PACIFIC ARMIES MANAGEMENT SEMINAR V

17 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

CENTRALIZED VERSUS DECENTRALIZED TRAINING

LTC W. R. M. P. WIJEKOON AND MAJ W. M. P. FERNANDO

SRI LANKA ARMY

CENTRALIZED VERSUS DECENTRALIZED TRAINING

INTRODUCTION

The training of an officer or soldier, taken in its widest or narrowest sense, is a vital prerequisite to an Army. The reason for the formation of any Army in the world today is to fulfill a role. How successful this role can be performed will depend to a large extent on the efficiency of its training system and how effective its managers and trainers are in implementing it. With this awareness in mind, let us have a closer look at the various systems of training that can be implemented in an Army, and also let us look at the factors that can or should be considered when formulating one. My knowledge of national armies, other than my own, has been confined to stays in the US, UK, and India whilst undergoing military training courses of a short duration. I, therefore, cannot boast of an extensive knowledge of any Army other than my own. As such, I will make my presentation using the role, organization and system of training in the Sri Lanka Army as my reference.

BACKGROUND INFORMATION OF SRI LANKA AND ITS ARMY

In order that I may be better understood, I will first orient you on some aspects of my country and its Army. Sri Lanka, or Ceylon as it was known about 10 years ago, is an island with a land area of about 25,000 square miles and a population of 15 million of which about 12 million are Sinhalese and the balance belong to the Tamil and Muslim communities. The religion of the majority of the population is Buddhism followed by Hindu, Christian, and Muslim, in that order. We have a recorded history of over 2,500 years that begins with the arrival on our shores of a vagabond prince from India called Vijaya, along with some of his followers. Since then (until the year 1815), we have had our own social system and had our own Army to ensure the security of the island. In 1815, the complete sovereignty of the island was ceded to the British, who were the colonizing power until the year 1948 when independence was again restored to Sri Lanka. The present Sri Lanka Army is a result of the regaining of this independence. Throughout its pre-colonial or post-colonial periods, except on three occasions, the Sri Lanka Army has not been used on offensive missions outside the country, and even then its objectives were not for purposes of conquest. The post-colonial Army in Sri Lanka has come to the service of the nation at various stages, but it has always been for purposes of the prevention of smuggling, insurgency, terrorism, prevention of illicit immigration, maintenance of essential services, at times of communal disturbances, and national development but not for its classical or conventional role. We also do not see the possibility of our Army having to play this role in the near future, due to the absence of disputes with our immediate neighbors, and also due to the country not belonging to any power bloc.

Our regular Army, as it now stands, has an operational strength of 562 officers and 9,000 other ranks whilst another 320 officers and 7,800 other ranks are trained as volunteer soldiers and are available to be mobilized when there is a requirement in the country.

ROLE

The role that the government of Sri Lanka has assigned to its Army is as follows:

- a. To defend Sri Lanka against aggression by any external or internal forces.
- b. To assist civil authorities in the maintenance of peace and order and in the enforcement of law when called upon to do so by the legally constituted government.
- c. To participate in nonmilitary duties as ordered by the government, especially those connected with national development and maintenance of essential services.

ORGANIZATION

Apart from the arms and service units which play an important part in our training system, the main institutions available within the Army for training are:

- a. Sri Lanka Military Academy (SLMA) - trains officers graduating from the Kotelawala Defence Academy in the military aspects of their curriculum.
- b. Army Training Center (ATC) - carries out recruit training and drill and weapons training courses.
- c. Officers Study Center (OSC) - conducts tactics and allied courses.
- d. Combat Training School (CTS) - conducts junior leaders courses, commando training, and collective exercises.

It should be noted that the training of a soldier in a specialty is done within the unit to which a soldier is initially posted, and each unit has within its own organization a training element to carry out this function. The training of officers and soldiers in areas where training infrastructure is not available is filled by the use of overseas military establishments or by suitable civilian establishments available within the country.

Let us now look at the various categories of training that would normally be needed in an Army. Obviously this need would be related to the role that an Army has to play and the aims of the training directives set out by the commander of an Army. Using the role and the aims of the Sri Lanka Army as the norm one can expect the main categories of training in an Army to be the following if the doctrinaire training required by officers is excluded from the purview of my presentation. These are:

- a. Basic Army training
- b. Individual training of a routine nature
- c. Specialist training

- d. Collective training
- e. Collective training at joint services level
- f. Special operations

By special operations, I mean the broad spectrum of warfare situations that any modern Army is required to meet. To be more specific, terrorist activity, counterrevolutionary warfare, and internal security are some of the situations that I have in mind, which apart from the conventional role, today's Armies are often required to meet. Training for such situations is not the concern of a minor segment of the Army, at least not in my part of the world. At least in the training of the "teeth arm" soldier, the exclusion of this form of warfare training cannot be accepted. In fact, in the Sri Lanka Army, achievement of operational standards in Internal Security (IS) and Counter-revolutionary Warfare (CRW) operations takes precedence over conventional operations.

We have now identified the broad categories of training that are required in an Army today. The questions that require answers by planners and managers in formulating its training system would then be:

- a. What are the specifics of military knowledge required to be imparted and their priorities?
- b. What category of soldier should receive this training?
- c. What operations or institutions are available within or outside the Army to impart this knowledge?
- d. How best can the resources available inside or outside the country be utilized to achieve its objective?

Finding the answer to these questions is what this presentation has set out to do.

Let us now look more closely at the categories of training I have mentioned earlier. In order that my terminology is not misunderstood, basic Army training means the initial skills such as weapon handling, arms and foot drill, map reading, fieldcraft, etc., that a recruit soldier in a "teeth arm" or service unit requires on initial enlistment. In Sri Lanka, this is done centrally and the finished product posted out for specialization to various "teeth arm" or service units, according to their aptitude or qualifications. The advantage in this system is that whilst a standard foundation can be given to all soldiers, maximum utilization can be made of resources such as trainers, equipment, etc. However, there can be constraints to such a system of centralized training, especially in large Armies. These constraints may range from the soldier replacement requirements being too large for one training establishment to handle, to others such as racial, regional, or religious differences.

By individual training, I mean the continuity training in the specialty that every soldier has been trained. I do not see much controversy here since the soldier's parent unit is best suited to impart this. In large Armies, separate institutions or depots can be formed or are available to handle the advanced training in their specialty.

In Sri Lanka, there is a training element or training wing included in the establishment of each unit. Infantry, support, and service specialization is carried out in the unit to which a recruit soldier is posted. Whilst centralized specialization in depots is cost effective in large Armies, decentralization is the only practical step that can be taken in a small Army, and moreover so, if it is beset with difficulties in getting standard arms and equipment in sufficient quantity for usage throughout the Army.

By collective training, I am referring to the training and exercising of formations, units, or subunits along with their support and service elements. In Sri Lanka, this phase of training is imparted at a combat training school. The rationale for this centralization is that the composition of our basic field formations or task forces is basically infantry, due to the nature of our immediate operational requirements. The support elements are attached only if there is a need for conventional operations. Thus, for the conduct of the conventional phase of collective training, the attachment of special troops is made at the combat training school for the required duration of the training. Although for better command and control the inclusion of its own support element in each task force is preferable, financial restraints do not permit this. What can then be concluded is that centralization may be a necessity but decentralization at formation level is preferable if finances permit.

Collective training at joint service level would obviously require centralized direction by a joint service organization.

Under the category of special operations is included operational readiness for internal security, counterrevolutionary warfare, terrorism, or even assistance to national development. Here I do not see any controversy as at what level that training should be controlled or imparted. Experience has shown that there is a lesser degree of support arms required by troops operating in an internal security or counterrevolutionary warfare role and, therefore, decentralized training at unit level can well meet this requirement. Terrorism and national development can throw up problems of an unpredictable nature and I do not see decentralized training at unit level without central direction as being able to meet this requirement.

We have now considered some of the factors that can influence the formulation of a training system and its implementation. We have seen that the aims and priorities of training as set out by the commander of the Army are dependent on the role that the Army is required to play. Once the broad training policy and directive are set out by a central authority, training may be conducted in two ways: centralized direction with decentralized conduct, or centrally conducted.

We can deduce that the advantages of centralized training are that it can bring closer supervision by a central authority, any changes can be directly introduced, and interest kept alive. Whilst the disadvantages would be that only a comparative few can benefit from it, and it is more suited when a high degree of specialization is required. The case for decentralization is that larger numbers can be trained at any one time and the training can be easily adapted to local conditions. The disadvantages are that standards may vary at training centers because of reasons such as the quality of training managers and lesser degree of supervision. We have also seen why centralization or decentralization should take place at different levels of command in relation to the category of training that is required to be imparted and that sometimes due to factors such as budgetary restrictions, operational commitments, etc., deviations from the ideal have to be accepted. We can also see that a correct blend of the systems would probably give us the desired goals.

Stemming from what has been said so far I would place the following as a desirable training system:

- a. Centralized training at the highest level
 - (1) Military doctrine
 - (2) Basic Army training
 - (3) Commando or anti-terrorist training
- b. Decentralized at unit level
 - (1) Individual training
 - (2) Internal security and counterrevolutionary warfare, but under the direction of the formation commander
- c. Decentralization at depot level, for specialist training and at formation level for collective training

Having said all this, I must make one final observation. Training in the Army is basically the transfer of military knowledge from the center to every member of the Army in the required proportions, or in other words, it is the communications process by which planners, managers, and trainers in an Army achieve their aims in the most effective manner. We have arrived at some conclusions on what we consider the most suitable process. But we are living in a world of rapid technological advances especially in the field of communications. The day may not be far away when TV can be used to far greater effect than today. The day may come when even the daily training program down at unit levels may be conducted by the center. There are no standard formulae that we can apply to the training processes. Today, we see varying categories of training being carried out at all command levels with balanced proportions of centralized and decentralized directions and management. But the day may not be far away when organizational demarcations may not be the impediments that they are today. Flexibility is a principle of war and it is flexibility that we must apply to this training process, and be prepared to innovate and adapt to the challenges of tomorrow.

PACIFIC ARMIES MANAGEMENT SEMINAR V

17 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

CENTRALIZED VERSUS DECENTRALIZED TRAINING MANAGEMENT

MAJOR FETU'UTOLU TUPOU AND LIEUTENANT SIOSAIA MA'AFU

TONGA DEFENCE SERVICES

CENTRALIZED VERSUS DECENTRALIZED TRAINING MANAGEMENT

It is a pleasure and privilege to be granted the opportunity to discuss training management with you. During this session, I will talk about some of the ways the Tonga Defence Services (TDS) conduct training focusing on the issue, "Centralized versus Decentralized Training Management."

Resources are becoming more costly and resource allocation problems are becoming more complex today. The utmost fundamental factor which dictates the size of a military force, when established, is the functional role. All of today's defence organizations are geared to be self-supported in order to conduct civil or military operations successfully, and to maintain the proficiencies of required operational capabilities.

Because of the size, financial constraints and economic situation of Tonga, the Tonga Defence Services uses centralized training management.

Tonga is an Island Kingdom with a population of approximately 100,000. The dry area of the Kingdom is 668 square kilometers and the sea area covered by the group is 362,500 square kilometers. The Tongan economy is based upon the land and sea and the majority of the population derive their living from subsistence farming and fisheries. Approximately half of the gross domestic product originates from the agricultural sector, which also employs about three-quarters of the work force. In view of the Kingdom's economic situation, she could be counted as an underdeveloped country.

The Tonga Defence Services were established at the outbreak of World War II, in 1939. The Tonga Defence Services are comprised of two major operational command components, the Land Force and Maritime Force Commands. In spite of the difference between the two commands, the functional roles of the two are interrelated and closely affiliated, except in a few specialized fields. The training objectives of the two commands are therefore similar and in most cases, the same training facilities are utilized.

As I have indicated earlier, the national economy of the Kingdom is very limited. The TDS logically maximizes the utilization of available resources.

To start with, the size of the overall force is small. The three different command components are dependent on one another because of the similarities among their basic soldiering skills. For instance, on ceremonial occasions one unit can supplement the other in terms of manpower requirements.

In view of the cost of establishing and maintaining new training facilities, we incorporated the existing training facilities in order to save money and to avoid the problems inherent in a complicated training establishment.

The impact of technology has greatly urged us to standardize our equipment, particularly weapons, communications equipment and vehicles. Centralization of training management has proven to be the most viable option, in terms of

using the minimum effort to maintain operational capabilities. Because equipment is standardized, training skills are shared by the different commands and are very handy especially in time of crisis.

The concept of the establishment of a military force in a country is to succeed in all operations. In order to succeed we must have logistic support, that is, to be self supported. However, in our country where the required resources are scarce, our only alternative is to make every soldier count, i.e., every individual service personnel should be a "jack of all trades." For instance, infantrymen could easily become sailors or vice versa. This overcomes the problems of manpower shortage and lack of tradesmen, and allows maintenance of operational capabilities to the maximum. In terms of training to achieve those standards, the concept of centralized training management is the most economical way of doing it.

Referring back to the major roles of the TDS, the socioeconomic role is one of them. The aim of this particular role is two fold. First, to be active and realistic about the successful implementation and survival of the national development plan based on the relationship between security and development. This relationship is a fundamental truth about social, political, and economic development. Secondly, to insure that the public is always in favor of the existence of the military and its maintenance, the Defence Services should make positive contributions to the national development plan from her existing infrastructure. When these purposes are achieved, they enhance the retention of the military in a peaceful and limited resources environment.

Anyway, in broader terms, I would like to illustrate how my government centralized training resources by allowing, for instance, other government departments and non-government sectors to have access to our training schemes, and vice versa.

In spite of the advantages of decentralization of responsibilities, promotion of incentives and allocation of resources, it is obvious that it is unwise to split the existing limited resources among elements of a small force. We tend to establish a short and simple command and control structure in order to do away with the implications of bureaucracy and complex systems.

We satisfy specialized training requirements by accepting the training offers from foreign countries under our mutual defence cooperation programs, as well as the utilization of available local civil resources.

In conclusion, our national economic situation, the small size of our forces, and last, but not the least, the functional roles envisioned compelled us to centralize our training management policy.

QUESTIONS AND ANSWERS FOLLOWING TONGA PRESENTATION

Q. How do you reconcile using soldiers as sailors and vice-versa?

A. It is proven that we can do it. One unique situation is that everyone is a born sailor, so we train the soldier and it works well.

Q. Do you start recruits as soldiers or sailors first?

A. We train soldiers first for 14 weeks. They must apply for maritime duty from there if they desire that, then have another 3-4 months of maritime training, if there is an opening and they are accepted.

Q. Do they stay in the initial force or can they interchange with the other force?

A. They can go to the other force if there is an opening, if they are accepted, and if they are released by their parent command.

Statement: Fiji is similarly organized. Now Fiji is committed to overseas service, so sailors must jump to shore but this is a simple process as they are already trained. As they progress in rank, however, training becomes more specialized and the transition more difficult. Fijian training comes from mutual assistance programs. Only limited training can be conducted locally. Officers and NCO's must be trained abroad.

Q. Does Tonga have both an active and a reserve force.

A. Yes.

PACIFIC ARMIES MANAGEMENT SEMINAR V

17 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

MALAYSIAN ARMY TRAINING MANAGEMENT SYSTEM

COLONEL MOHAMED BIN MUNIP

MALAYSIAN ARMY

MALAYSIAN ARMY TRAINING MANAGEMENT SYSTEM

Gentlemen, the Chief of the Malaysian Army, Gen Tan Sri Zain Hashim, sends his regards to the organizers and participants of this seminar. It is his wish that I should reiterate his continued support for this worthy cause in which, for a number of years now, we have been a participating country. It is an expression of this wish that I am able today to address the seminar, on his behalf, and meet you all in this beautiful country, the Philippines.

Malaysia, as it is today, is in an era of very active economic development. The revitalization of primary products such as tin, rubber, oil, palm oil, rice and cocoa, and the progressive development of light, medium, and, to a certain extent, heavy manufacturing activities are on a sound footing. At the same time the security environment in our sector of the globe is such that it is prudent and inescapable for us to maintain viable defense force in the country. Thus the army has had to be developed and expanded, both in size and sophistication of equipment, consistent with the threat envisaged and the country human and economic resources available.

A national environment of limited yet conflicting, competing and urgent demand for trained human resources, by both the civil and military sectors, prevails.

While we are blessed with a fairly solid foreign exchange stand internationally, time is a limiting factor which we cannot relegate to lesser importance. Thus the Army has to develop a system of recruitment and training that would ensure an acceptable level of manpower. Such manpower needs to be given the necessary military basic and progressive training, as well as other component skills, pertinent to a fairly modern army that has to master both conventional and counterinsurgency warfare. It should be borne in mind that Malaysia is a democratic country which has an army of volunteers and not conscripts. This leads to a requirement to ensure that the army has a fairly competitive, and not individually low, career prospect, when compared to the civil and public sectors of the nation.

My short presentation today, gentlemen, is to cover a broad perspective of the Malaysian Regular Army training management system within the environment thus far painted.

To understand the training management of the Malaysian Army, it is felt pertinent to identify, at this early juncture, the component corps that make up the army. This army is divided into the more traditional army corps organization identified as:

- a. The Infantry Corps.
- b. The Cavalry Corps.
- c. The Signal Corps.
- d. The Engineer Corps.

- e. The Artillery Corps.
- f. The Intelligence Corps.
- g. The Special Services Corps, i.e., the Commandos.
- h. The Military Police Corps.
- i. The Service Corps - supplies and transport.
- j. The Ordnance Corps.
- k. The Electrical and Mechanical Engineering Corps.
- l. The Medical and Dental Services Corps.
- m. The General Services Corps - pay, clerical education, etc.
- n. The Territorial Army - Within the Territorial Army components of the other corps are reflected.

Consistent with the number of corps that makes up the Army, each corps is headed by a director, or chief, who manages the technical aspects particular to the corps. To assist him a corps school, be it in its embryonic or fully established form, is provided. All corps directors are members of the Army Training Advisory Board which advises the Chief of the Army on training matters. A Director of Training, also a member of the board, at the Army Staff Division coordinates all training activities on behalf of the Chief of the Army. Some schools, which cater for general purpose basic training and career development courses, are directly controlled by the Chief of the Army. The corps schools are controlled by him via their corps directors.

Training of the Regular Army consists of officer training and other ranks training.

Initial basic training for recruits is conducted centrally at the various recruit training centers. On completion of their basic recruit training, these trained recruits are posted to the various corps for their further training. Allotments to corps are made based on academic achievements, aptitude and individual choice, subject to vacancies.

Individual corps training starts at corps units as invariably each recruit trained soldier's most suited role cannot be well ascertained immediately. For some corps, like the infantry, the soldier may be quickly immersed into infantry training within the units. For the others, they are more gradually introduced into their roles before they are sent to each corps school for specialization basic training. Subsequently further development training rotates from field posting and upgrading courses.

Career Development Training. Notwithstanding whatever corps a soldier belongs to, his basic performance in fundamental soldierly arts is stressed as a basis for advancement. Towards this end, common career and functional courses are provided. These are run either at the Chief of Army schools or the corps schools most suited for the task. At the same time elements of basic military skills are also injected into the individual corps training syllabus for basic, as well as corps upgrading courses. Promotions in ranks or in pay are tied in with the courses, with the length of service a soldier has undergone successfully, and with his continued maintenance of standards achieved.

Other Training Provided. All training requirements for other ranks are available within the army schools and training centers or the various public training institutions. However, we are maintaining contact and taking advantage of opportunities for specialization training overseas, even for our other ranks. Such training can be either in friendly nations' military institutions or foreign industries where equipment for the Malaysian Army are procured.

Basic Training. The officers of the Malaysian Army come mainly from the following sources:

a. The Officer Cadet Schools. These are secondary school leavers who are given a 9-month course leading to a combatant short service commission in the army. They comprise men and women of 18 to 23 years of age.

b. The Royal Military College (RMC). The RMC provides basic officer cadet training for the combatant regular officers. They consist of regular officer cadets who undergo 2-year full-time military science and preuniversity studies, and regular officer cadets who undergo a 3 or 4-year course at the local universities in the professional fields and carry out military training during their academic vacations. Among this latter group are included future technical officers of the Army, Navy, and the Air Forces, while, for the 2-year group, only Army and Air Force future officers are involved. Two year trained officers go to universities subsequent to being awarded their commissions, and subject to their satisfactory performance in units over a period of time.

c. Special Duties Officers. The Malaysian Army also takes in special duties officers. These are university graduates with professional qualifications. They are those who volunteer to join directly and those who are sent to overseas universities on the armed forces scholarships. Special basic commissioning courses are arranged when required. These officers serve for a specified period of time and those who want to continue with the Army as a full-time career shall then proceed with career development courses arranged as for the earlier regular officers.

Career Courses. All combatant officers will undertake defined career courses at the appropriate Chief of Army schools. To mention but a few, these are the Basic Young Officer, the Junior Staff Duties, and All Arms Tactics Courses. For promotions above the rank of major, officers must pass the Armed Forces Staff College Course, subsequent courses made available are the Joint Services Staff College, and the Defense College Courses at home and overseas.

Technical Specialization. Corps, like the Engineers, the Signals, the Service Corps, the Ordnance, and the Electrical and Mechanical Engineers, need to have a proportion of their officers with full academic professional qualifications. The Medical and Dental Corps need to have all their officers fully qualified professionally. These officers will undergo basic and advance training run by their respective corps schools. Further specialization is provided at civil institutions of higher learning and overseas military and civil training establishments. Career advancement for these officers entail their passing both the general career courses, as well as their special-to-arms technical courses.

Other Postgraduate Courses. The complexity of the military science today demands high technology and management experts. Towards meeting this demand, postgraduate courses at local and overseas universities are also given to selected qualified officers. Presently these are few; however, a substantial advancement towards achieving this goal is ensured through our own generous scholarship arrangement at the initial basic degree level and higher.

Decentralized Training. Thus far, the discussions have been centered on training and courses provided centrally at training establishments and on training carried out at corps units. Commanders on the ground are made responsible to the army chief for ensuring that their units and formations, which are made up of the various corps elements, function as a team. Towards this end, Commanders are tasked to carry out their own unit and formation training and exercises. Periodically, because of limitations in the training establishments, some aspects of corps training are also run at units and formations. In these instances, common standards and syllabi are used, leading to common tests and examinations by the appropriate training establishment's examiners. Depending on the training levels carried out these are coordinated at the next higher level of command. Overall coordination is in the hand of the Chief of the Army via his Director of Training and the Army Training Board, as appropriate.

Resettlement Training. The training of soldiers does not end with their satisfactory performance in service duties alone. The top retirement age for officers is 55 for colonels and above and, at the lowest, 45 for the junior officers. The other ranks can retire with full pension after 21 years service. Thus, an ex-serviceman returns to civil life when he is still young and still has useful residual potential.

All servicemen are, therefore, given a period of 1 year, maximum, for resettlement training. A veteran affairs division at the Ministry of Defense coordinates this training program. A veterans school is also set up for those who want to pursue trade training. Others are slotted into public and private schools. For those who prefer to return to till the land, state and federal authorities allocate a fair portion of their rural development plans for ex-servicemen. It is to be borne in mind that the period spent on resettlement training is fully at government expense, both in time and cost.

Special Recruitment. As earlier mentioned Malaysia has a volunteer army. Presently her period of development is such that a career in the armed forces is not the most attractive, since many more lucrative opportunities are available in the private and public sectors. However, a career in the army is still fairly competitive and not entirely too subservient in position. Thus, recruitment for army recruits and officer cadets only partially suffers from lack of applicants. Most hit is the area where fairly sound junior and upper secondary basic educational qualifications are required, i.e., for the potential tradesmen, technicians, and officer cadets respectively.

To meet this shortfall, the army has embarked on "boys service." In the RMC boys at age 12 are given scholarships to complete their secondary education. Subsequently, these boys are made to join as either officer cadets, university cadets or given scholarships to pursue professional degree courses at home and aboard. They become the core of the regular combatant officers and the special duty list officers.

Boys at the age of 15 to 15 1/2 are also enlisted in the "boys service." Among these, the better qualified academically are given basic military training and improved command of mathematics and science subjects, before they proceed to the appropriate government training institutions. Others are given a similar basic military course plus trades courses until a class I standard is achieved. Thus, by the young age of 18 to 18 1/2, trained technicians and tradesmen are ready to join the various technical corps as other ranks with good potential to be NCO's. In this manner a supplementation of any recruitment shortfall can be met.

Conclusion. The training of the Malaysian Army is basically aimed at producing a fairly competent and balanced defense ground force capable of its role in conventional and counterinsurgency operations. The political climate in our geographical area has made it necessary for this army to be rapidly expanded and re-equipped. At the same time simultaneous demands for appropriately trained manpower in other sectors also prevails in the country. Thus, the army has had to recruit and train its men in the manner thus far discussed, consistent with our national resources.

PACIFIC ARMIES MANAGEMENT SEMINAR V

17 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

TRAINING MANAGEMENT IN THE SINGAPORE ARMED FORCES

COLONEL HA WENG KONG, MAJOR TAN KHIN POH
AND MAJOR YONG CHOON KONG

SINGAPORE ARMED FORCES

TRAINING MANAGEMENT IN THE SINGAPORE ARMED FORCES (SAF)

INTRODUCTION

One of the more important functions of the SAF in peacetime is training. For training to be efficiently and effectively implemented, it goes without saying that a good training management programme is required. This applies more so in the SAF, a national service military force, where the time to train any unit is largely limited to the two-year full-time national service liability of able-bodied male citizens. Reserve liability, which is a continuation of full-time national service duty, carries with it a 40-day annual reserve in-camp training liability. Reserve training is largely confined to the maintenance of the unit proficiency standard achieved during active service rather than an emphasis on acquisition of new skills. But good training management is even more necessary during reserve training because the period of each in-camp training is short, and such time is taken away from those who would otherwise be more economically productive in civilian employment. The training management in the SAF is, therefore, concerned with the training management of personnel in national service as well as in the reserve service, and the allocation of resources to support such training. While this appears to be a simple statement of training management activities, the actual implementation of these activities is far more complex. We shall explain in the course of our presentation why this is so, and also how we manage these activities.

Our presentation will be covered in three parts; the first part on the management of national service manpower resource, the second part on the management of reserve training, and the last part on the management of training resources. The presentation will be confined to management of army training.

MANAGEMENT OF NATIONAL SERVICE RESOURCES

Optimal Utilization of Limited Manpower Resources. Faced with the limited manpower resources and the fact that the national service system would not allow for the long term development of skills (as in a regular army), there is, therefore, a need to optimize the utilization of available manpower, with the aim of matching every national service enlistee to a suitable SAF vocation. In the SAF, this is achieved with the aid of a Computerized Allocation of Manpower (CAM) System.

In the first phase of the CAM allocation process, the package programme is run as soon as the enlistees have been registered for national service. The enlistees are assigned a quality group depending on their educational and physical criteria, namely, highest Educational Standard passes, medical status, colour perception, height and eyesight. The CAM Model will then match the enlistees of various quality groups to the main vocations of Combat, Service and Technical. Once the enlistees are assigned their vocations, the computer will then post them to the relevant Basic Military Training Units which conduct basic training for the various vocations concerned.

Phase Two of the CAM System is run after the enlistees have been enlisted and are undergoing Basic Military Training. In this phase, the enlistees will be posted to their final vocations (such as Demolition Sapper, Mortarmen or Armoured Infantry Trooper, etc.) based on their vocational preferences, training results, and units' recommendations. This is to ensure that they are posted to vocations which best fit their aptitudes.

The CAM System was first introduced in 1977 and has since worked very well, but it has been continually refined to incorporate new allocation criteria. For example, one of the more important refinements is the inclusion of a new criterion for allocating infantry vocationalists to units by population centres. The aim of this new criterion is to enhance unit cohesion since soldiers originating from similar districts will inherently have greater rapport and camaraderie.

Development of Officers. As the national service officers are only required to serve 30 months full-time active service, there is a limit to which they can be groomed and developed. In this short time available, they can only be groomed through the essential courses and On-Job-Training. The courses attended by national service officers are:

a. Basic Officers' Course.

b. Advanced Officers' Courses -- only the top 10% of the national service officers are selected to attend this course just before they are phased into the reserve.

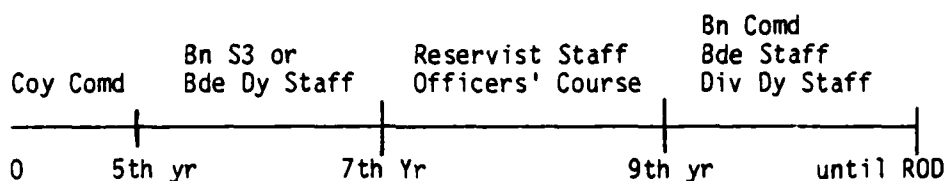
Except for a few of the better newly commissioned officers, who are selected as junior instructors, the rest are deployed as Platoon Commanders immediately on completion of the Basic Officers' Course. Most of the national service officers would serve out their active service liability in this appointment. However, a small number may be re-deployed to junior staff appointments such as quartermaster, Motor Transport Officers, Manpower Officers or Deputy Intelligence Officers, after completing six to eight months as platoon commanders and following attendance at the respective specialist courses. They are required to fill such junior staff appointments because these are actually national service appointments, and at the same time, these officers can also be groomed to hold such appointments in the reserve ORBAT.

In terms of rank advancement, the better of the national service officers would be promoted to the rank of T/LTA a few months before they are phased into the reserve, which is after 30 months of active service.

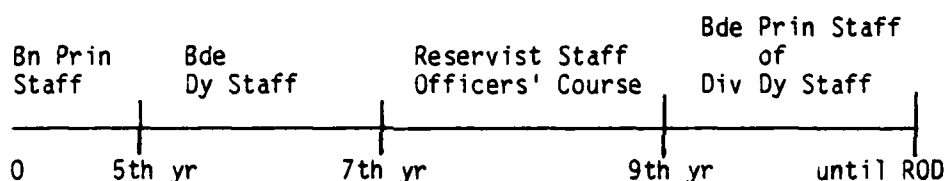
Development of NCOs. National service NCOs, like the officers, are required to serve 30 months. In this period, they are only required to attend the respective basic vocational NCO courses and thereafter to be appointed as Section Commanders for the rest of their active service. Due to the constraints of time and appointment, the national service NCOs remain as corporals throughout their entire active service. The better ones will be vocationally upgraded and promoted to high ranks commensurate with the appointments they are holding in the reserve.

Reserve Upgrading. Reservists are liable to be called up for a maximum of 40 days in each work year, up to the age of 40 years for other ranks and 50 years for officers. Most reserve officers would continue to hold the Platoon Commander or junior specialist staff appointments that they had held during their active service. However, there are about 10-15% of those who show good leadership qualities and performance, and they will be progressively upgraded professionally to assume higher appointments in the reserve. The development of reserve officers can be graphically explained, as follows:

a. Command Route

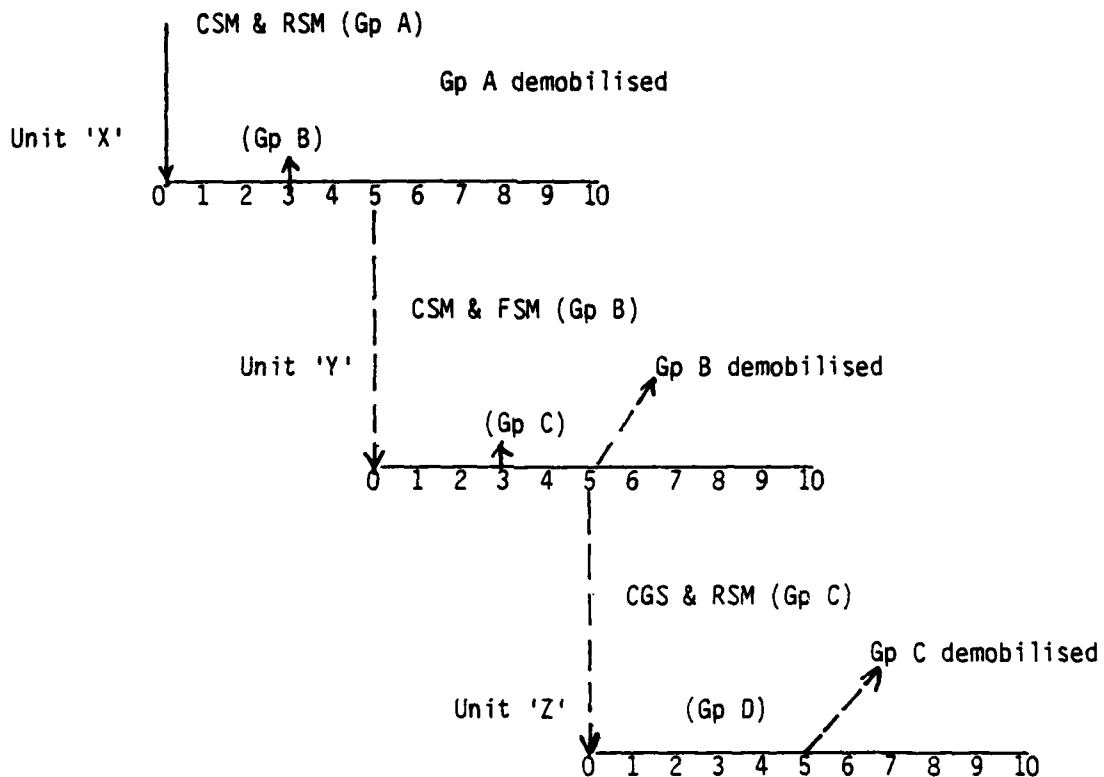


b. Service Route



It should be noted that these better reserve officers would have attended the various Advanced Courses just prior to their release into the reserve.

Most reserve NCOs would continue to hold the appointment of Section Commander that they had held during the active service. However, like the officers corps, there would be about 10-15% of the outstanding NCOs who could be groomed to assume higher appointments such as CSMs and RSMs. For this category, the NCOs are normally sent to attend the various Advanced NCO Courses after the 3rd year of reserve service. As an example, the route of advancement for the outstanding combat NCOs can be graphically explained as follows:



MANAGEMENT OF RESERVE TRAINING

Role of Reservists. The Republic of Singapore is a small nation with a tiny population of only 2,413,945 (based on the population census in 1980). It is, therefore, difficult to afford a large standing army simply because the limited population base does not permit laying aside manpower at the expense of economic and social development. Another reason is the high operating costs of maintaining a large regular army. The only choice, and a logical one, is to maintain an alert, well-disciplined and battle-ready citizen army.

The training machine of the SAF is aimed at making a soldier out of every able-bodied 18 year old Singapore male. After undergoing full-time national service for 2 to 2½ years, he is transferred into the reserve until he reaches the age of 40, for other ranks, or 50, for officers. Today in the SAF, there are already 15,000 regular soldiers, 30,000 full-time national servicemen and every year about 15,000 personnel are released into the reserve force. It is estimated that at a steady state, probably four out of five male workers in Singapore will be reservists. Viewed in this context, the reserves will form the backbone of our defence force.

Conflict of Reserve Liability and Civilian Employment. During his first 10 years of reserve service, a reservist can be called upon to serve up to 40 days for annual in-camp training to renew and improve his skills. As these

reservists have their life-long careers in the civilian sector, with many holding important positions in private organisations and government services, calling them up for in-camp training will inevitably create some disruption to the individuals concerned, as well as to the organisation where they come from. This conflict between reserve liability and civilian employment has always been the talking point amongst the Singaporean public. To minimise this disruption, each reservist is duly notified of the period of in-camp training six months to one year in advance through the serving of the official call-up notice, SAF 100. On receipt of this call-up notice, it is his duty to inform his employer who can then make the necessary adjustment to fill up the temporary vacancy. To ensure that ample warning can be given to the reservists and employers, the reserve training workplan is formulated 18 months ahead. This will thus give six months' grace to the respective units before implementation and one year advance notice for in-camp training. Hence, the system would imply that the training workplan is a rolling one.

Management of Deferred Cases. A reservist who wishes to be deferred from in-camp training has to submit his application for deferment 10 weeks before the commencement of the in-camp training. This gives his unit ample time to find a replacement. The SAF is very strict in granting deferment from in-camp training because it is necessary to maintain each reserve unit as a cohesive team. When a member of such a team is absent during in-camp training, the work of the team will be affected. Furthermore, when the reservist returns the next year for in-camp training, he will have to do two years' liability instead of one. This may add more burden and disruption to him as well as his employer. Nevertheless, the SAF is not inhuman or inconsiderate. A reservist can be deferred from his scheduled in-camp training under the following grounds:

- a. When he is pronounced medically unfit by the medical officer or medical board.
- b. When he has an urgent work commitment.
- c. When he is studying overseas or attending courses, training or assignment abroad as directed by his civilian employer.
- d. On compassionate grounds or when there are extenuating circumstances, such as serious family problems, etc.

A reservist applying for deferment is required to submit his application with documentary proof through his unit to the Formation Headquarters. This application will be processed and then sent to the Reservist Personnel Centre (RPC), a set-up in the Ministry of Defence which manages reservists' matters, for approval. A reservist who is granted deferment from reserve service for a period of 12 months or more will be posted to the Reserve Disruption List. He is required to resume training at the earliest possible period. A reservist seeking exemption from reserve service on medical reasons will be first referred to the unit medical officer. A medical board will be formed to review his case and upon whose recommendation, the necessary documentation will be prepared accordingly.

Conduct of In-Camp Training. Although the Enlistment Act 1970 provides for 40 days annual liability, our existing reserve training syllabi only cater for 14 to 21 days for annual in-camp to minimize the inconvenience to reservists and employers. Though this may be extended, even over and above the 40-day limit by legislative amendments if need be, a strong case must be put up. As a comparison, reserve training is about 21 days annually in Switzerland, 28 days once every four years in Sweden, and about 31 days yearly in Israel.

In the past, reserve training had been lengthy and monotonous. This has now been modified. Reserve training is now short and intensive. It is conducted in two phases: the Commander Training phase and the Main Body Training phase. Officers and key personnel will come in a few days earlier for the Commander Training phase. During this period, they are given lessons and exercises to refresh and update their military knowledge. The other ranks, who constitute the main body, will be called up later for approximately two weeks.

The main emphasis during the time in-camp is mission oriented exercises with lots of skills training. The training conducted over the years is progressive in nature, culminating in a series of company and battalion level exercises. By then, the reservists would have become thoroughly familiar with military procedures and operations. The syllabi have also been revised to tighten training schedules and cut down waiting time between exercises.

In-camp training for reservists is administered by various training centres according to the vocations and the arms (such as Artillery, Infantry, etc.) of the reservists. These training centres are self-sufficient in terms of planning, conduct, monitoring and evaluation of their respective in-camp training. There are altogether seven such training centres in the SAF (such as Reserve Commando Training Centre, Artillery Reserve Training Centre, etc.)

MANAGEMENT OF TRAINING RESOURCES

An army depends, among other things, on training areas to be able to conduct effective training for its units. Unfortunately we lack training areas because Singapore is a small country. Unit commanders in the SAF are therefore invariably faced with the problem of getting enough training areas for their units. This problem has increased over the years because, while the size of the SAF has grown, the size of the training areas, on the other hand, has been reduced because of urbanisation and national development projects. The total manoeuvring areas, for example, have over the last ten years shrunk by about 60% from 150 sq km in 1971 to 60 sq km in 1981. By itself 60 sq km is a substantial figure but this total is in fact broken up into about 10 separate manoeuvring areas, each being about 5 to 10 sq km in size. Such small and separate manoeuvring areas have actually very little use for large scale manoeuvre exercises at brigade level and above. It must be added that even when battalion exercises are conducted some flexibilities within the exercises are lost because of the lack of space for free manoeuvre.

Live firing areas for weapons training and combined arms exercises are also limited. Presently the total live firing areas are about 14 sq km. As the

fringes of our live firing areas are also densely populated areas, there is no room for error, and this has also limited our flexibility to exploit the live firing areas.

Given that the standing army of the SAF is a Division with supporting elements on training throughout the year, that there are about three to four battalions at any one time on reserve in-camp training, and that the schools also require training facilities, the demand for training areas is therefore a highly intensive one. The logical approach to solving the allocation of the scarce training resources to so many areas of demand has been to centralise the allocation system. We do this from the Training Means Branch in Training Department at the General Staff level. Allocation is based on the annual Training Workplan of the SAF where the major manoeuvre and live firing exercises are coordinated and scheduled throughout the year. Other minor exercises are coordinated at the brigade and division headquarters level and such training requirements are submitted to Training Department three months in advance. Such a centralised allocation system works well only if the Annual Training Workplan and other subordinate training workplans are accurately prepared. A lot of effort is put in to ensure accurate planning. There are, however, many inflexibilities inherent in a centralised allocation system. It reduces, for example, the ability of the units to conduct opportunity training whenever bonus time is available. However, the advantages outweigh the disadvantages.

Besides a centralised allocation system to ensure maximum utilisation of training areas, the following policies have been adopted, or are being considered, to reduce the problems caused by a lack of training areas:

a. Reduce Cyclical Demand Pattern. The obvious disadvantage of a cyclical demand pattern for training resources is that during peak periods all existing resources may not be able to support the requirements, while during lull periods training resources are underutilised. Until recently, we had been faced with such a cyclical demand schedule for training resources because our policy was to enlist a large group of national service liable 'A' level students immediately after their final examination in December each year. This had invariably led to high demand for training areas during December to March of each year which is the period of their Basic Military Training. While it is manifestly obvious that the solution to such a problem is to defer the enlistment of some of these students, this solution faced opposition from those affected because it meant that they would leave the army later and this would also delay their entry into universities. However, we have now implemented some policy measures which will ameliorate the disadvantages of being enlisted later.

b. Better Space Management. Another approach to a better utilisation of our limited training areas is through better space management. We have, for example, realigned the arcs of fire of the various weapon system in our live firing areas to reduce areas which are neutralised because of safety requirements. This enables more units to conduct live firing at any one time. New access routes into the live firing areas have also been constructed to exploit areas which previously have been inaccessible to vehicular mounted

weapon system. In manoeuvring areas where live firing is not conducted, better utilisation is achieved through landscaping and construction of facilities for circuit training. The construction of a permanent model defence position on a hill feature, for example, allows units to practise defence routine without having to spend long hours on the hill feature to construct a defence position from scratch. This allows more units to do the same training in the same area.

c. Better Time Management. This involves reduction of administrative activities in live firing areas and manoeuvring areas before and during exercises. Field exercises in the SAF are therefore short, intensive and continuous ones with little time for rest. Troops move into live firing areas fully prepared and ready to fire. They pull out quickly after completing their live firing activities as there will usually be another unit which is ready to take over the area. The activities in our live firing areas resemble an assembly line. There is hardly any pause. Units rotate and use the live firing areas for weeks on end. Night training is also emphasised. The use of dark hours for training activities has also increased the availability of training areas to the SAF. Night training for units is also advantageous for obvious reasons.

d. Simulation Training. We have identified that much of the training that we conduct using the actual equipment in the training areas may be transferred indoors using simulation training. Simulation training, however, does not replace the requirement for actual training with the equipment or weapon. Actual handling of a vehicle or an anti-tank gun, for example, is still necessary at the advanced stage of learning. But simulation training using, for example, an anti-tank gunnery simulator that enables the soldier to learn the basic operating skill which would otherwise have to be done in the firing range. More sophisticated simulators, like the artillery forward observation simulator, enables forward observers to develop a certain degree of the "sensing" ability before actual range practice. This would reduce the total training requirement of live firing practice and live firing areas. On a higher plane, is the simulation of situations, which is a method that is used to train a group of people collectively to make decisions based on simulated events and data. War gaming in an indoor tactical training centre is an example. Brigade and Division headquarters are able to train in staff coordination and operational staffwork using war games. This reduces the need to conduct field exercises.

CONCLUSION

Though we have managed within a relatively short time to build up a sizeable ORBAT in the face of severe constraints of manpower and training resources, this was not achieved without its attendant problems. We have tried our best to deal with these problems expeditiously as they arose, and in the process, many solutions have been found. Though many of our systems work with reasonable efficiency, we would be the last to say that we have resolved all problems.

As a young army, only 14 years old, we have little experience and tradition and, therefore, we cannot say with any certainty that our solutions are good

and would be of use to other armies. The Singapore Armed Forces still has much to learn, thus we are glad to be here, because it is in such meetings that we could learn from each other and find better solutions.

QUESTIONS AND ANSWERS FOLLOWING SINGAPORE PRESENTATION

Q. From our experience, it's very difficult to train soldiers who aren't willing to learn. How do you resolve that problem?

A. As I was going to say, the average Singaporean is as interested in upward mobility as the average American. In some respects, we are seen as thwarting early entry into college and business. Thirteen years ago, when national service was introduced, there was considerable resistance to the idea; now it has become an accepted part of Singaporean citizenship. We also offer some incentives such as early housing priority (housing is at a premium) and free medical and dental care, among others.

Q. But do the incentives really overcome the opposition?

A. 1. The other side of what we're doing is that we're developing, not a militaristic society, but a society which accepts the military as vital and necessary. We are building these values into the society -- that military duty is a part of every Singaporean's duty.

A. 2. Of course, the incentives themselves have some drawbacks; free medical care, with four out of every five Singaporeans eligible in several years, means that literally everyone will get free medical care. That's expensive and remains to be worked out.

Q. You mentioned that reservists report for duty with all of their equipment. What does that entail?

A. Just their personal things; uniforms, field gear, but no weapons.

PACIFIC ARMIES MANAGEMENT SEMINAR V

19 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

ARMY UNIT TRAINING

COLONEL KIM JONG KYONG AND MAJOR SHIN IL SOON

REPUBLIC OF KOREA ARMY

ARMY UNIT TRAINING

As a member of the Officers Corps of the Republic of Korea, I am pleased to have this opportunity to discuss with you military education and training in the Korean Army.

Along the 155 mile front, over one million regular armed forces are facing each other across the 4 km wide demilitarized zone. The situation on the Korean Peninsula is continually on the verge of crisis, and North Korea continues hostilities in violation of the armistice agreement. To counter such threats and hostilities, the Republic of Korea Army must conduct various levels of unit training while simultaneously performing combat security missions, with an "always combat ready" posture.

Our capital, Seoul, with approximately eight million people, is located only 40 km away from the DMZ. This means that the very heart of Korea is located within the range of enemy long-range weapons and that enemy armor units could conceivably cover such the distance within one hour. Considering this reality, it is imperative for the Republic of Korea to stop the enemy surprise attack at the present line of contact. This battlefield environment does not permit us to fall back even a single step.

Since the early 1960's, under the slogan of "four military lines," North Korea has been strengthening its armor units, with emphasis on improving strike capability, and organizing and training special forces for conducting strategic guerrilla warfare. Furthermore, the enemy maintains a strong reserve composed primarily of red guard units. The basic strategy of North Korea can be summarized as follows:

- a. First, the enemy will initiate a violent, sudden attack to destroy major elements of friendly field armies and gain battlefield initiative.
- b. Second, he will attempt a short and aggressive penetration to neutralize the heart of the peninsula. This would be accomplished by early seizure of the capital area, which is the center of our politics, economy and culture, accommodating more than 20% of the entire population.
- c. Third, the enemy will attempt to seize certain local areas of strategic importance, such as major islands in the western sea and the suburbs and northern areas of Seoul. These will be used for negotiation at the bargaining table after securing a military and political advantage. When political and/or economic confusion occurs, he will further attempt to accomplish his ultimate objective of seizing the entire peninsula.

In light of this strategy, the tactics of future battles can be analyzed as follows: The enemy will first attempt to launch a surprise attack under the cover of maximum air and artillery support, and employ blitzkrieg techniques to effect a deep penetration. Taking maximum advantage of armored shock effect, he will concentrate maximum combat power at the selected breakthrough points and conduct continuous offensive actions, day and night. At the same

time we will attempt to destroy friendly forces by conducting various types of secondary envelopments in rugged terrain areas. Furthermore, the enemy will attempt to impede our systematic resistance by harassing the friendly front and rear areas, simultaneously, through various special warfare tactics. He will also attempt to disrupt the overall battlefield environment through the use of electronic, chemical and biological warfare in an effort to paralyze our command and control functions.

To prepare for this kind of future battle, we must train in three key areas: strategy, tactics, and characteristics of terrain.

First, we must strengthen reconnaissance, surveillance and security training in preparation against surprise attack.

Second, in order to prepare for the enemy blitzkrieg, we must insure our survivability. This means that we must minimize injuries from concentrated enemy fire in the early stages; improve our capability of rapidly concentrating and diverting fire; improve our capability to conduct a coordinated combined arms operation against enemy tank units; and improve operational capabilities of self-protection and rear area security.

Third, in order to maintain an effective command and control system and demonstrate durable combat capability, greater countermeasures are required against electronic, chemical and biological warfare.

There is a requirement to develop local or independent combat capability fitted to specific terrain, as well as improve our capability to conduct anti-armor defense in depth along the major corridors, close combat in mountainous terrain, and defense in depth by multiple echelons. Furthermore, there is a need for counterinfiltration training with security forces and maneuverable striking forces, in order to block the enemy infiltrations into rough terrain and coastal areas.

Common training applicable to all units are: first, enhancement of combined arms operational capability, conduct of balanced training among the arms and services, and development of individual and unit capability to effectively use terrain and to fire accurately and effectively under enemy fire; second, development of military leaders capable of making quick decisions and utilizing troops and weapons to the maximum extent; and finally, instilling total self-confidence that ensures victory.

To support our training concept we have set forth the army education and training objectives under the proposition of "complete preparation to win the first battle." Spiritual combat power must be strengthened so that all forces can hold a firm belief in victory. In the field, realistic field combat training must be conducted to insure field combat capability for absolute superiority over the enemy. Complete combat readiness posture for victory must be further developed so that we can immediately convert to combat when the necessity arises.

During the early stages of our army's existence we used the American approach, but since then, we have gradually evolved a Korea system applicable to our own unique environment.

In the 1950's, a "quantity versus quality" concept was necessary to fulfill immediate mission requirements. Training applicable to newly activated units was conducted for the purpose of unit expansion. This training, which oriented primarily on individual skills, precluded the unit mission oriented approach.

In the 1960's, training authority reverted from the US Army to the Korean Army, and at that time, we were still using the American approach to training. As a result of continued efforts to evolve our own Koreanized system, we developed, at the end of 1970's, our own mission oriented education and training system. This is under the direction of the newly formed Training Command, which was responsible for education and training policy.

In regards to the unit training system, the old system was improved considerably, and this year we converted to a system based on mission oriented training.

The former system primarily served newly activated units with emphasis on each training step. Soldiers were to undergo individual training, up to and including regimental tactical training, until the moving out day was decided at the end of training. Thus, a series of systematic training modules could be completed step by step under the central control which was adaptable to a changing troop status during the training period. This type of training was very effective for rapid unit expansion.

However, the unique features of the Korean Peninsula required certain aspects to be considered in selecting the most effective type of training. While those units on the front line are required to perform the combat essential missions described in the operation plan, other units are involved with peacetime training missions. Thus, the training requirements differ depending on the assigned unit missions. A balanced readiness posture must be constantly maintained and adjusted on a yearly basis, based on suspected enemy courses of action. Yearly troop replacement of 40% on the average is another critical planning factor. At the same time, training objectives must be consistent with the unit status, such as the assigned frontage, terrain, etc. Considering all these aspects, we came up with an appropriate training system which allows flexibility and adaptability, according to the unit mission, by delegating the training authority to the unit commanders. This mission oriented training system further allows unit level commanders to develop appropriate techniques to fight the first battle, conduct joint and combined operations, and demonstrate their initiative commensurate with the characteristics of their units. Evaluation changed from relative (comparison of units) to absolute (combat ready).

Now let me cover briefly our concept for training. To begin with, subordinate commanders conduct mission analysis which leads to the establishment of training objectives. Then, the present level of training of the unit is determined to decide the type and amount of training required. Thereafter, soldiers conduct training, and the results are evaluated in every cycle. The evaluation will indicate the unit's capability for mission accomplishment. For those training areas less than the desired level, they will be required to go back to the previous stage. This overall concept is generally the same as

that used in the US Army; however, the prime difference is that the US Army considers the entire world in conducting mission analysis, while we are limited to the single thought of fighting the North Korean enemy within the specified battle scenarios and terrain.

Such a well-organized circulatory process provides a flexible training environment, allowing subordinate commanders to demonstrate their initiative and offset their vulnerabilities in the quickest and most efficient manner possible.

In order to overcome the weaknesses of unit training, the following three aspects are considered.

In the area of mission accomplishment, mission oriented training must be systematized, with priority on the development of techniques necessary for accomplishing local missions. A determined responsibility to hold the defensive position to the last moment must be inherent. This combat readiness training will be done by completing exercises of at least four consecutive training days in anticipation of various tactical situations; practical employment of supporting and attached units reflected in the OPLAN; and familiarization training in assigned areas. Weapons and equipment will be employed to the maximum extent, in order to improve the day and night firing techniques and tactical operational capability of the units. Maneuverability must be improved through regular foot marches on all types of terrain, by night maneuver exercises with tanks and air mobile operations, by making it second nature to conduct reconnaissance and security training in garrison, and by collecting information through employment of aggressor forces and various maneuver exercises. We are undergoing training through which we can develop experience and an aggressive will to win.

On the subject of area preparation, we must enhance our anti-armor capability, particularly with respect to the open terrain in the west, by conducting combined arms operations and strengthening antitank defense capabilities. These must be closely integrated with the obstacle plan and the air-ground joint operational plan. We will also improve killing zone blocking positions by preselecting firing positions, weapons employment, and field of fire. An enhanced command and control system will be developed to permit integration of fires from all available sources. For the eastern mountainous terrain, techniques are constantly being developed and improved for employing various types of howitzers, mortars, grenades, and claymores, as well as for conducting maneuverable defense training. Maneuverable defense training takes maximum advantage of terrain by organizing successive defense positions in depth, by improving communications capabilities where line of sight is the exception rather than the rule, and by conducting foot marches for several consecutive days through mountainous terrain. In addition, we are developing techniques to secure and defend defiles, and to conduct delaying operations taking advantage of such defiles, while denying the enemy the capability to infiltrate by either ground or air.

In the rear areas and along the extensive coast of the Korean Peninsula, we are placing training emphasis on the development of capabilities to apply METT. This is done by conducting self-defense training under the three-line

defense concept, and by conducting self-protection training, such as surveillance, ambush, reconnaissance and patrolling.

In the area of command and leadership, we are requiring the cadre members to become capable of initiating action before the enemy does. By understanding the science of battle through terrain analysis and situation management, we also require that commanders lead by example in all actions involving the unit. Commanders and cadre members are required to have an understanding of battlefield realism and psychology, which can be attained by studying significant campaigns conducted by small units.

Training evaluation is considered to be an extension of training and is conducted as follows for the purpose of enhancing training responsibilities: (1) an individual training test is conducted under the supervision of the company commander, in accordance with the contents of the soldier's manual and training and evaluation guidance for the soldiers; and (2) A unit training test is conducted by battalion commanders through corps commanders with the assistance of the "Army Training and Evaluation Program," and the results of the test are reflected in the officer's personal performance data, in order to promote the effectiveness of training and evaluation.

Our inspection methods for the past 30 years, up until 1980, were rigid and stereotyped, not always producing the desired results. Effective this year, the Republic of Korea Army has adopted a new, total systems approach to evaluation of field training which provides not only an evaluation of individual and unit combat readiness, but also the value of the training techniques themselves. This dynamic approach also provides feedback on doctrinal issues. By observing unit training in a realistic environment and isolating combat tasks that require further development, feedback is provided in terms of battle effectiveness, rather than sterile performance factors.

Training inspections are also conducted for the purpose of standardizing training results and developing an understanding of the new training system. This ultimately contributes to improving the "always combat ready" posture. It further maintains a cohesive interrelationship between schools and units. The Army Chief of Staff normally selects the divisions from which battalions will be selected for a "no-notice" exercise. The evaluated unit is then subjected to a series of continuous combat realistic situations, around the clock, for several consecutive days. The evaluation is directed toward observing and coaching the unit by a qualified team composed of 40 to 80 personnel under the control of the training command. The effects of such inspections contribute to converting soldier oriented training into unit combat effectiveness, to familiarize junior commanders without combat experience with realistic training methods, and to accomplish mission oriented goals desired by the army headquarters.

In conclusion, unit training in the Korean Army is oriented toward development of an aggressive and stubborn defensive spirit, maximization of the use of the weapons and equipment, improvement of maneuverability commensurate with the characteristics of modern battlefield, and enhancement of leadership at all levels. Through this approach, we intend to assure victory in battle.

Lastly, I would like to extend my personal appreciation for your thoughtful attention. I will be glad to answer any questions you may have during the discussion period.

Again, thank you very much.

QUESTIONS AND ANSWERS

- Q Do you have a point of contact or a method of integration with the United States, since developing the structure to fight as a team?
- A Koreans have studied American tactics and are current with American counterparts. We are capable of conducting combined operations, now and in the future. The Combined Field Army provides the coordinating point between the two forces.
- Q What are your defenses against a nuclear threat? And with the great North Korean capability, how long can South Korea maintain its posture?
- A The Korean Army is dependent upon the US Army regarding electronics, chemical, biological and nuclear warfare. With respect to the second question, we do have an operations plan which is geared to maintain our defensive posture until we can determine the main axis of attack; however, we don't know how long we can maintain our positions for our 21 Division and 31 Brigades and the one US Division. That depends upon the enemy attack.

PACIFIC ARMIES MANAGEMENT SEMINAR V

18 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

BATTLEFIELD SIMULATIONS

COLONEL JOHN G. FOWLER

U.S. ARMY

BATTLEFIELD SIMULATIONS

My organization, the Combined Arms Training Development Activity (CATRADA), Battle Development Directorate, at Fort Leavenworth, Kansas, is responsible for the design and development of battle simulations for maneuver units in the field; the production and fielding of simulations; enhancement and updating based upon new equipment, organization and doctrine; and finally the support of their use, through mobile training teams and controller courses. This is a world-wide mission that currently requires over 70 personnel and has a budget in excess of 1.5 million dollars.

Why is such an effort expended on what is, essentially, a war game? Simply because my army believes that these simulations are considerably more than just a game, that they are, in fact, one of our most effective tools in preparing leaders and staff officers for war.

War games have been around for several hundred years. Two of the most famous are Chess and Go. These games, which are now played for pleasure or recreation, were once used by military leaders in an attempt to predict the outcome of battles. As the complexity and intensity of warfare have grown so has the nature of our simulations. The US Army traces its present day efforts at wargaming to the Prussian Army, where in the early 19th century a game called "Kriegspiel" was developed and used for leader and staff training.

Throughout the remainder of the 19th century and early 20th century, extensive use of war games was made by the major military powers, both for their predictive and training values. It wasn't until the 1950's, with significant developments in mathematics and systems analysis, that we saw a divergence between games designed for combat developments and those designed for training developments. Since then, significant differences in the design and modeling of these two types have occurred. The remainder of the briefing will deal with efforts in the area of wargames whose primary purpose is staff and leader training, at platoon through corps level of my army.

The thinking behind this type of battle simulation is that they are used for training, and as such they attempt to "fight" the battle, in as close to real time as possible, as opposed to combat development simulations, some of which require weeks in order to play a single hour of combat.

It was in the mid 1970's that the possibilities of effectively using training simulations became apparent. This occurred for two reasons: First, greater sophistication in how to train soldiers, leaders, and units, and; second, a significant rise in the cost of training and a corresponding decrease in the amount of time available to train. Additional trends pointed out the need to search for alternate training methods. Among them were rising energy costs, diminishing resources, and restrictive maneuver areas.

These training simulations emphasize cost-effective training designed to simultaneously train soldiers at all levels to a specific, measurable standard of performance. In other words, armies can no longer afford to take an entire battalion to the field simply to provide training to the leaders and staff.

Battle simulations are not just an effective alternative. Economics and training philosophy mandate their use as an effective tool for preparation for war. Battle simulations give us an inexpensive, yet valid, way to test tactical procedures, contingency missions, and standing operating procedures, before using them in field training or combat.

Our analysis has shown that battle simulations can increase command and staff effectiveness without the high cost of the more traditional field training exercises or command post exercises. The principle behind these simulations is that they will allow trainers to make maximum use of available staff training time and avoid the waste of time and costs of moving troops and equipment into the field to check a tactical concept or to verify an SOP. Obviously, battle simulations are not intended or designed to replace field training in the traditional sense. Rather, the simulations allow commanders to better prepare for the exercise by planning and working out the most effective procedures, before the actual field training takes place.

A valid analogy exists between the concept of battle simulations and the simulators used in other learning situations. The airplane pilot learning the characteristics of a new plane will practice his job requirements in a simulation trainer. If he "crashes" in the trainer, he has a chance to review his procedures and techniques and try again until he does it right. Battle simulations offers the same sort of "pre-flight" rehearsal and a chance to iron out the rough spots in military operations. Just as the flight simulator offers valuable experience without the cost of lives and equipment; battle simulations provide leaders and staff "combat" experiences without war.

Currently fielded battle simulations are divided into three categories: manual, computer assisted, and computer driven. Each category has unique advantages. The manual simulations are inexpensive and are not dependent on computer equipment to function, while the computer assisted or computer driven simulations offer heightened realism and more closely approximate real time. The target groups for these simulations are the maneuver unit leaders, commanders and staff officers.

Manual simulations were our first generation of battle simulations. They've been exported to allied nations in Europe and Asia. The four manual simulations are Dunn-Kempf, Pegasus, First Battle, and War Eagle.

The Dunn-Kempf battle simulations uses a scaled three dimensional terrain board with miniature models of US and threat force tanks, armoured personnel carriers, and other weapons systems. The combination of the scaled terrain and the miniature weapons systems allows for play at company and platoon levels with a high degree of resolution. Rules allow the maximum amount of flexibility to opposing players. It is a relatively free-play exercise in which many of the realities of the next battlefield are incorporated by the use of gaming techniques that place the players close to the battlefield they are trying to simulate.

Dunn-Kempf is particularly appropriate at company level and below, for training in small unit tactics, weapons systems capabilities, the proper employment of weapon systems, and the relationship of the terrain to such weapons. This simulation requires a minimal amount of administrative support. One controller acts as umpire for up to eight players. Training the controller takes no more than 2 hours. The optimum playing time is 8 hours. This equates to about 16 to 20 minutes of combat. Developed in association with appropriate service schools, as are all battle simulations, Dunn-Kempf is currently being used by regular army and reserve component units. Suggestions from the field are continually evaluated for improvement to the production model.

The second of the four manual battle simulations is called Pegasus. This simulation is a command post exercise that uses a free play technique as the exercise control medium. Pegasus exercises brigade or battalion commanders and their staffs in a combined arms operation. It can be used by a single battalion command group, or with simultaneous play of up to three battalion command groups and a brigade command group. For example, the battalion commander is separated from his company commanders who simulate the battle by executing operations on control boards shown here. The battlefield results of the companies are then transmitted to the battalion commander who must then decide further action for the battalion. A hexagonal grid is superimposed over the map to control movement rates. Normal communication equipment and command post facilities are used in either a field or garrison setting.

The number of controllers and player controllers required for Pegasus will vary with the scope of the exercise. Battalion exercises can be conducted with as few as four controllers and thirteen player controllers. Brigade exercises will require a proportionately greater number of these control personnel. Training time for controllers and player controllers is 8 to 12 hours and optimum playing time is 12 to 24 hours per scenario.

The two other manual simulations, First Battle and War Eagle, are designed for division and corps level respectively. Both are geared towards a European, midintensity conflict. Both drive problem solving situations for the command staffs. Other purposes are to train division and corps commanders and staffs in the coordination of combined arms operations, and to allow units to examine tactical standing operating procedures.

There is another important element of manual battle simulations that should be discussed at this time. That element is the availability of "add-on" modules. We call them "add-on" modules because they may be chosen as optional supplements to most of the games. I will briefly describe the two "add-ons" currently available so that you will have an idea of their benefits.

The Logistics module, or "Log Mod" is designed to be used by a maneuver battalion supply officer, support platoon, and company personnel. It can be used at battalion and brigade levels by itself, or as an add-on module to the simulations. Unlike other simulations, Log Mod does not have rules or tables. Rather, it acts as a tool to enable a battalion supply officer to keep track of, and manage, the equipment and supplies for which he is responsible.

The administration module, or "Admin Mod", is designed to enhance the training of battalion and brigade personnel officers, and company level personnel, by simulating the demands to better manage personnel in combat. To assure realism, the Admin Mod operates with the unit's combat personnel standard operating procedures, and with the battalion personnel administration center (PAC) in their combat configuration. This allows the personnel officer at battalion level and the company executive officer and first sergeant to exercise their combat procedures, and affords the battalion commander the opportunity to evaluate his unit's ability to solve personnel problems under the stress of simulated combat.

Next, I will describe the Computer Assisted Battle Simulation. CAMMS, the computer assisted, map maneuver simulation, exercises commanders and staffs at brigade and battalion level, in the CPX mode. CAMMS is capable of accommodating any exercise consisting of armor, mechanized infantry, infantry and cavalry maneuver brigades and battalions, with normal combat support and combat service support units against an appropriate enemy force.

CAMMS uses a computer program, specifically designed to support military and logistical problems. It greatly reduces map maneuver time, provides faster and more accurate results, insures objectivity, and provides data for analysis and critique. The program was designed specifically for a large capacity computer that the army leases in a time sharing mode. Because of the unique software program, CAMMS is not easily exportable. Significant modifications would be required to adapt the program to other computer systems.

The program can be used to play any unit from platoon and section level up to full maneuver brigade, in any combination. It is a highly complex program, yet simple in its operation. CAMMS provides weapons effectiveness in a timely manner. An error in judgement by a player will be realized quickly in the form of a mission failure. If he overlooks any details in preparing his plans, he will be confronted with devastating results. He must execute timely, accurate, and coordinated decisions, if he expects to succeed. Players are still required to follow the normal sequence for command and staff actions. The computer tabulates battle data and provides feedback to controllers. In turn, the controllers provide this information to players for subsequent command and staff actions. Players do not actively interact with the computer. In the CAMMS system, there are no "canned" or prefabricated messages. The success of a player unit depends on the soundness of the plans, and the decisions and orders of the commanders and staffs.

The final category of battle simulations I will discuss is the computer driven category. The combined arms tactical training simulator, or CATTs, is another battalion level computer-supported simulation, specifically designed to train mechanized, light infantry, armored cavalry, airmobile, airborne, and armor battalion commanders in coordinating combined arms operations. The CATTs system simulates a large number of variables: actions of units in combat, inter-visibility, weapon to target ranges, and the effects of all weapons employment. The CATTs simulation is conducted in realtime, free-play mode on either Mideast or European terrain.

The staff uses the communication equipment normally found in a maneuver battalion. The tactical command post is arranged to simulate a combat environment with the sound usually found there, such as engine and generator noises, battle sounds, and communicators. Because CATTs is a free-play exercise, the only constraints are the assets available to the battalion commander, and the actions of the enemy commander. The U.S. commander can employ his assets in any manner he feels appropriate within the prescribed tactical situation. The outcome is determined by the skill of the participants, rather than through the use of a "canned scenario."

Unlike other battle simulations, CATTs use controller personnel who are assigned for the specific duty. However, battalion command groups who participate in the CATTs exercise are required to furnish additional player controllers from their units. These persons assume the roles of company commanders, forward observers, and the support platoon leader, during the exercise. The first and only prototype model of CATTs is located at the Combined Arms Center at Fort Leavenworth, Kansas. It is the most realistic of all the simulations available today.

You have now had a capsule look at present day battle simulations in the Army from manual through computer-assisted to computer-driven simulations, for platoon to corps level, with scenarios for Europe, the Middle East or any terrain. But what does the future hold?

A manually played simulation under development is Blockbuster. This simulation teaches military operations on urbanized terrain. Blockbuster is a company level, leader trainer using a scaled three dimensional terrain board with miniature models of U.S. and threat forces. Blockbuster has many of the training characteristics of Dunn-Kempf and stresses planning and execution, either offensively or defensively, at the company and platoon level, in built-up areas. This simulation uses three controllers and fourteen players and requires about 3 hours to train these individuals to play an exercise, which is conducted for approximately 8 hours. It is expected to be fielded within the next year.

Another battle simulation under development at the Combined Arms Center is CAMMS II, a divisional-level, computer-assisted simulation that will be ready for field testing in the Fall of 1982. The design is based on the success of CAMMS. CAMMS II will be similar to CAMMS in appearance and methodology but will offer increased play at all levels, including all aspects of the integrated battlefield. When completed, this simulation will offer division commanders the best features of the state of-the-art in computerized battle simulations, to train his staff in these functional areas.

The final battle simulation I'd like to discuss is ARTBASS, or Army training battle simulation system. It will eventually replace CATTs, starting in 1984. ARTBASS will be a mobile, van-mounted, completely self-supporting version of CATTs. It is designed for use at the battalion level. Current plans call for ten systems to be fielded, with two scheduled for Europe, one for the Pacific and the remainder to be located around the United States.

The use of battle simulations has a long history in the art and science of war. There are many advantages using these devices as training tools, tactical evaluators, and resource savers. The benefit to the leaders and staffs from active involvement in simulations cannot be over emphasized. The primary task of any army, in peacetime, is to train for war. Battle simulations do just that. They effectively and efficiently train commanders and staffs for war.

PACIFIC ARMIES MANAGEMENT SEMINAR V

18 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

MANAGEMENT OF SHOOTING IN THE NEW ZEALAND ARMY

LTC EDWARD T. FINNIMORE AND MAJ BRIAN E. HALL

NEW ZEALAND ARMY

THE MANAGEMENT OF SHOOTING IN THE NEW ZEALAND ARMY

Thirty years ago, New Zealand became involved in counterinsurgency operations in Southeast Asia and we, therefore, had a requirement to train our soldiers to effectively engage short range, opportunity targets. As a result the NZ Army introduced, in the mid 60's, a controlled movement of shooting. To fit the operational environment, emphasis was placed upon shooting from the standing unsupported position at targets within 100 meters. This system was obviously designed for the jungles of Malaya and Borneo and was carried over to NZ involvement in Vietnam. In Vietnam, the scale of operations and the variety of terrain presented a wider spectrum of target sizes and reactions. Ranges tended to increase and the application of fire was different. The controlled shooting system became less relevant. In the last few years, the range of likely operational scenarios has been expanded to include mid to high intensity conventional operations. So the NZ Army has once again revised its shooting system taking into account the following factors:

- a. Firing positions
- b. Size and behavior of targets
- c. Engagement ranges
- d. Rates of fire and
- e. The soldiers' equipment on the battlefield

As the result of seminars, research developments in other armies (these included US Army, US Marines, Canadian, British, Australian and Indian Armies), and trials conducted by the NZ School of Infantry, management of shooting was collectivized into a doctrinal pamphlet entitled: "Small Arms Training for the New Zealand Army," coded, and therefore, commonly referred to as the NZ P99. The aim of the NZ presentation is to present concepts on the management of basic shooting skills, as they have been developed and published in the NZ P99. The pamphlet has developed into a publication that puts all aspects of shooting in one booklet. It combines:

- a. Range and weapon safety
- b. The conduct of range practices for all small arms, including the LAW and light mortar
- c. Field firing practices
- d. Sniper training

Basic shooting training is taught by fully explaining to the recruit the principles of marksmanship, and then having him proceed through a series of practices. Each practice is progressively harder and the recruit is required to qualify on each practice prior to commencing to the next. At the conclusion, he is

engaging small targets that are exposed only for a short duration. Basic marksmanship principles do not change, rather varying emphasis is placed on one or more of these principles. Having mastered the application of marksmanship principles, the firer is then progressively prepared for battle shooting. This is achieved by gradually introducing further variables to shooting practices. These include firing from positions other than prone, timed shooting, changes in target size and behavior, night firing, and gradually increasing simulated battle stress on the firer. Eventually, shooting training culminates in field firing practices.

Riflemen in the New Zealand Army are equipped with the 7.62mm self loading rifle. The M16 is used by infantry junior leaders and certain specialists; it is also the personal defensive weapon in many other branches. However, for shoot training, all personnel use the M16 initially. It is easier to handle and helps to develop confidence in the firer. He also finds it easier to master the marksmanship principles.

Targets used as part of the shooting system are shown at Annex A. The round targets are used for initial grouping and zeroing practices. The other targets are used depending on the degree of difficulty of the practice. The running man is used for moving targets. All targets are constructed of laminated cardboard. This is durable and inexpensive.

The first task of a new shooter is to learn how to group. This is done by firing five rounds at the same point of aim. The extreme spread of four of the five rounds is measured and, in order to qualify, the shooter must achieve no more than the extreme spread which, for the M16 at 100 meters, is 150mm. These practices are conducted at ranges between 25 meters to 200 meters and then confirmed at 300 meters. The majority of grouping is conducted at 100 meters in preference to 25. This is to stop the recruit from focusing on the foresight and, thus, make him form a true sight picture. This completes Practice 1 which is fired with the M16. Practice 1 has a total of 7 separate serials, the last row being conducted at 300 meters.

Practice 2 is similar to Practice 1, however, the 7.62mm self loading rifle (SLR) is employed. The acceptable extreme spread being 200mm at 100 meters. From this practice on, male soldiers continue to use the SLR.

Practice 3 is the Elementary Application of Fire at ranges 100 to 300m using a variety of supported and unsupported positions. The practice has 10 serials, each with a minimum acceptable score. A firer failing to obtain a minimum acceptable score for a serial, repeats that serial.

Practice 4 consists of six serials of moving or snap targets engaged between 100 to 300 meters with a time limit on exposures for each serial. It includes engaging walking targets at 300 meters from the standing supported position.

Practice 5 is day and night rapid alignment shooting from 50m, engaging moving and snap targets. There is a total minimum acceptable score of 50% for this practice.

Practice 6 commences at 300m with firers moving forward between serials so that at the 12th and final serial, the range is 50m. A variety of positions are adopted and a variety of targets are presented. This is where a Reserve soldier completes his basic training at this practice. The Reserve soldier should qualify annually at this level.

Practice 7 is similar to Practice 6, however, the qualification standards are higher and there are a total of eleven different serials. This is the standard a Regular Force Recruit must reach and, other than infantry and Special Forces, will requalify every six months at this level. This practice has been selected to be presented in detail and is listed in detail at Annex B. An overview of Practice 7 is given in the following paragraphs.

The initial serial is 300m with each shot being marked on the target. This is followed by a deliberate practice at the same range, with a time constraint, and the targets reacting when they are hit. For the next serial at this range, the target is walking. The NZ P99, for the first time, makes the firer engage moving targets at ranges greater than 100 meters. The last serial is a snap practice, having five 3-second exposures, with the target reaction. The firer then moves forward to the 200 meter mound.

He then must engage three serials, each in a different position, with target reaction in all cases. Two practices at 100m then follow: one sitting unsupported, the other standing. The firer is only permitted to fire one round from the standing position. The second round must be fired from the kneeling or squatting position. Two targets are presented each time, one round to be fired at each target.

The next serial is fired from varying ranges commencing at 100 and finishing at 30 meters. Two targets will appear for five 4-second exposures while the firer is moving forward. He must fire the first round from the standing position, then second from the kneeling position, one shot on each target.

For the last serial, the target is running, 12 meters in four seconds. Two rounds are required to be fired at each four second exposure.

At the commencement of Practice 7, a firer has 75 rounds. The SLR has a magazine that holds 20 rounds. It is the firer's responsibility to maintain his rifle in the loaded condition at all times, including when moving forward. The firer is given the command "load" at the start of the practice and "unload" at the end of the last serial. He is therefore moving forward between serials with a loaded weapon. If the firer does not count his rounds, he may find himself commencing a serial with an empty magazine. It has been found that when a recruit has difficulty with a particular practice, he may be allowed to attempt the next harder practice. Often he will be capable of returning and qualifying on the original practice.

Practice 8 is similar to Practice 7 in detail except that the targets are smaller and the exposure timings are less. Practice 8 is in effect the minimum level of shooting skill that trained infantry and Special Forces soldiers

must maintain. To do this, those soldiers must qualify every six months on this practice.

Practice 9 is rapid alignment shooting from the unsupported position, primarily at stationary targets. Practice 10, however, involves firing from the standing unsupported position, but in all cases the target is walking or running.

Management of the Range. For recruit training, the first seven rifle practices are run based on the 30 man platoon sized group. This facilitates easier management in controlling each shooting practice as the normal complement of platoon junior NCO's is sufficient to run each activity. At Recruit Training Depots, with groups of 30 (certainly no more than 40), our organization usually is 14 firers and 15 workers in a butt party. Therefore, the six NCO instructors assigned to the group or platoon can satisfactorily coach two or three men each, which is the ideal for Practices 1 to 3. Larger groups take longer to shoot and thus, qualify, but they also receive less personal attention. Instructor staff and junior NCO's such as Lance Corporals are used as coaches. Each NCO must qualify on a Shooting Coaches Course run by our School of Infantry.

Effectiveness. The new system was introduced this calendar year and is still currently on trial. Nevertheless, it has proved to be quite effective to date. To justify this broad statement, shooting results indicate that previous to the introduction of the new system, the NZ Army was experiencing a 53% pass rate in the shooting standards of its recruit platoons. Records being maintained for each recruit platoon during the trial of the new system this year are showing a qualification of between 75% to 90%, one recruit course achieved a 100% pass rate. This is being achieved in spite of the fact that the shooting practices are more difficult than the old system which involved essentially shorter ranges. However, once a recruit finishes his training, he must be made to practice regularly. Failure to do this will result in a deterioration of both shooting standards and weapon handling skills.

Training Instructors. It is important to involve all junior NCO's in the management of shooting. To do this effectively, the junior NCO must be taught coaching techniques. The importance of this cannot be overemphasized. For the shooting system to be successful, the junior NCO must be a committed, trained and dedicated coach.

Managing the System. To manage the system, the NZ Army has a Small Arms Wing located at the School of Infantry. This wing is responsible for sponsoring the new system, overseeing the trial, writing the practices, and sponsoring subsequent shooting competitions. The Wing's detailed tasks are:

- a. Conducting Shooting Coaches Courses for the NZ Army. Five of these two week courses are conducted in the training year, each with 20 students. It is noticeable that those formations which have sent the most instructors to these courses are achieving superior results.

- b. Also conducted are several courses per year on the Disappearing Automatic Retaliatory Target System (DART). These DART courses give NCO's

the knowledge to operate equipment which can greatly improve the field firing practices that they all conduct. The course is only 8 days long. Effective use of DART improves field firing practices, giving the firer, in any phase of war being practiced, a target that not only reacts, but will appear to return fire as well.

c. Sniper Instructions are also trained by this organization. These are five week courses. These courses culminate in an exercise which confirms the sniper's aptitude for his role, and then terminates with Sniper Badge Testing. Testing incorporates stalking, personal camouflage, concealment, observation, and judging distances, as well as shooting. This course is currently training snipers who are capable of consistently obtaining first round kills at ranges up to 900 meters.

d. Other activities conducted include:

(1) A Small Arms Trainers update which is conducted for one week annually. It is basically a seminar for selected Senior Warrant Officers on the shooting concept and its implementation.

(2) Snipers Badge Retests twice a year. It is proposed that a sniper should requalify annually.

e. Equipment and ammunition trials are conducted as required.

The School of Infantry also conducts the NZ Army's annual shooting competition, The Queen's Medal.

That concludes a conceptual overview of managing shooting within the NZ Army. There is nothing new in this concept; in fact, many of the techniques employed have changed little in the last 80 years. What NZ has attempted is to develop a system that is easily managed, easy to understand, and produces results. In summary, the main concepts behind the new system are as follows:

a. To first give the soldier an understanding of the theory of small arms fire, basic marksmanship principles, and the techniques of engaging targets.

b. The M16 is used for the initial practice as it is lighter, has less recoil, and a finer sight than the basic infantry weapon, the 7.62mm Self Loading Rifle.

c. Realistic targets that vary in size are presented in different ways. They react when hit, giving the firer instant feedback as well as a sense of achievement.

d. An attempt is made to incorporate realism by stipulating the firer's position, rates of fire, and by varying the length of target exposure.

e. The soldier's military occupation specialty is taken into account when detailing the practices to be shot. These are:

(1) The Reserve Recruit terminates his shooting at Practice 6.

(2) The Regular Recruit shoots to Practice 7. All regulars except infantry and Special Forces are required to qualify every six months on Practice 7.

(3) Regular infantry and Special Forces are required to qualify on Practice 8 and 9 every six months.

(4) Those infantry on combat service should qualify on Practice 8 and 10, prior to being committed to battle.

f. Each firer uses his personal weapon in the semiannual qualification shoots. Those firers of specialist small arms weapons, e.g., MG, qualify on that weapon.

The School of Infantry would welcome visitors who are interested in observing at first hand, and in detail, the practical application of the shooting system that has been outlined. The School is located at the following address:

Small Arms Wing
The School of Infantry
Army Training Center
Waiouru, New Zealand

QUESTIONS AND ANSWERS ON THE NEW ZEALAND PRESENTATION

Q. What types of night firing do you do?

A. Some illumination; some moving targets. A moving tin can with a candle in it is sufficient.

Q. How much training ammunition is available to support your program?

A. 650 rounds per recruit for small arms and machine gun. This is expensive but by doing it every 6 months, some savings are made. Of course, some recruits cannot shoot in any event, and some take longer. That makes their training a bit more expensive on an individual basis.

Q. How do your moving targets work and what effect do you get from them?

A. As to moving targets: Both parties in concrete bunkers have a target on top with a soldier on the bottom. They walk through the trenches and thus move the target. The soldier in the bunker feels the strike of the round and drops the target. In our experience, soldiers enjoy moving targets more than stationary ones. In every case, however, the firer is stationary except when he is in those serials from 30-100m from the target.

Q. Comment as to regularity of practice. You qualify every 6 months but when do you practice?

A. All soldiers should practice within the 6 months -- it's like a golf handicap -- if you don't do it, it deteriorates. If their proficiency deteriorates, they go back to practice 4 even though they should start with practice 8 to requalify. Also, in our method, ranges are increased in size and people requirements are increased.

Q. As this is more extensive than previous methods, what do you do with those that don't qualify?

A. You simply have to move them to an adjacent range as you can't afford the luxury of them creating a bottleneck on your primary range.

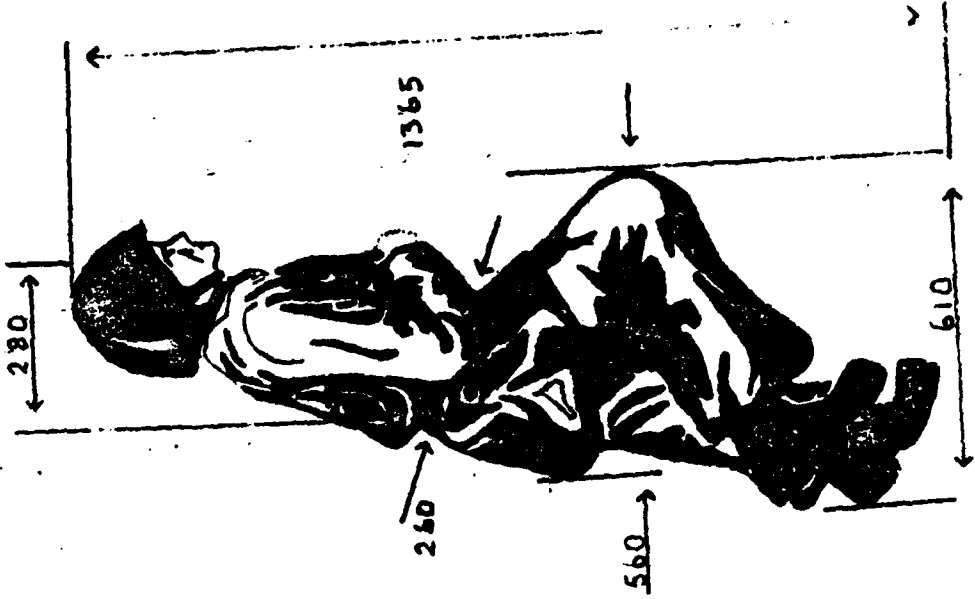


FIG 20 RUNNING MAN TARGET
REF PAM 22 PLATE R-145



FIGURE 11 1145x455



FIGURE 12 560x455



FIGURE 13 405x325

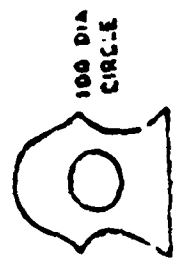
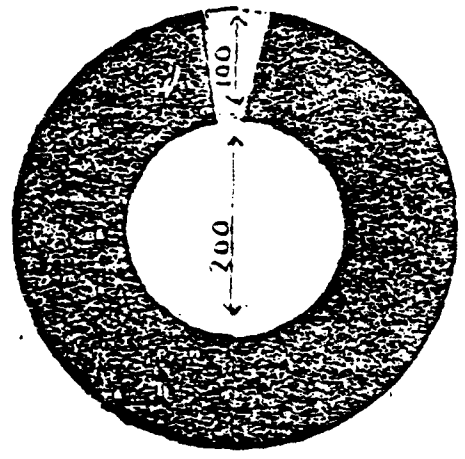
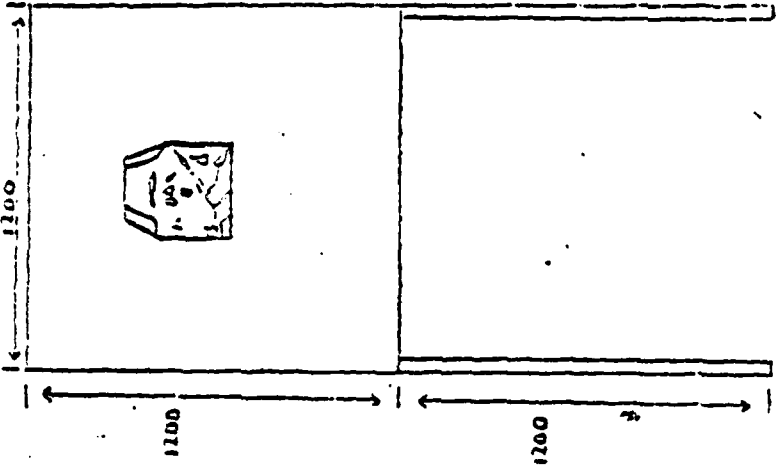


FIGURE 14 235x235

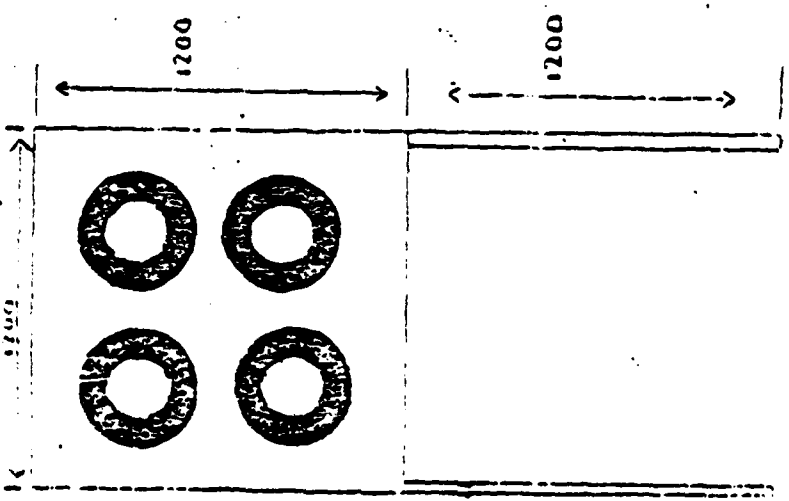
100 DIA
CIRCLE

ALL MEASUREMENTS IN MILLIMETERS

FIG 12 SUPERIMPOSED



GROUPING SCREEN



ADVANCED LEVEL

PRACTICE SEVEN

Range	Type	Targets	Firers Posn	Time Limit	Rounds	Remarks
(b)	(c)	(d)	(e)	(f)	(g)	(h)
300	Confirmation of MPI	1.2m screen with 1 x Fig 12 super-imposed.	Prone Spt	Nil	5	a. Sighters, each hit to be marked. Not to be scored.
300	Deliberate	Fig 12	Prone Spt	2 min	10	a. Tgt to turn sideways when hit then reappear
300	Walking	Fig 11	Stand Spt in a fire trench.	5 x 4 secs	5	a. Tgt to turn sideways when hit b. Tgt to move 6m per 4 secs.
300	Snap	Fig 11	Stand Spt	5 x 3 secs	5	a. Tgt to spin and fall when hit.
200	Deliberate	Fig 12	Sitting Spt	1 min	5	a. As for Serial 49.
200	Walking	Fig 11	Sitting Spt	5 x 4 sec	5	a. Target to turn sideways when hit.
200	Snap	Fig 11	Kneel Spt	5 x 3 sec	5	a. As for Serial 51.
100	Snap	Fig 12	Sitting Unspt	5 x 3 sec	5	a. As for Serial 51.
100	Reaction	Fig 12	Stand/Kneel Unspt	5 x 4 sec	10	a. 2 rds per exposure, 1st rd standing, 2nd rd kneeling.
100-30	Reaction	2 x Fig 11	Stand/Kneel Unspt	5 x 4 sec	10	a. 5 exposures between 100 30 metres. Firer to move between exposures b. 2 rds per exposure, 1st rd standing, 2nd rd kneeling. c. Hits not to be indicated

- | | | | | | | |
|-----|---------|--------|-------------|-----------|-----|---|
| (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| 30 | Rushing | Fig 20 | Stand Unspt | 5 x 4 sec | 10 | d. 1 hit per target, per exposure to count. |
| | | | | | | a. 2 x rds per exposure. |
| | | | | | | b. Tgts to appear consecutively. |
| | | | | | | c. Target to move 12 m per 4 secs. |
| | | | | | | d. Hits not to be indicated. |

PRACTICE SEVEN - 1 Pt per hit

Minimum Acceptable Score	Serials	49-51	= 15
		52-54	= 9
		55-56	= 10
Total Rounds	-	57	= 7
HPS	-	58	= 7

PACIFIC ARMIES MANAGEMENT SEMINAR - V

18 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

CIVIL RELATIONS TRAINING

COLONEL HERMINIO SALAS

PHILIPPINE ARMY

CIVIL RELATIONS TRAINING

This presentation proceeds from the basic assumption that Civil Relations is basically a communication process.

Training personnel for Civil Relations work in the Philippine Army is one aspect of the broad training spectrum that one can consider unique for purposes of this Seminar. Its areas of concern and the approaches used are wide and varied so that one's creativity and vision are the only limits.

Civil Relations encompasses the related fields of: (1) strategic psychological operations; (2) consolidation psychological operations, and (3) public information; and (4) public assistance (civic action); but is not necessarily limited to them. It also touches on the other aspects of Home Defense considered by us to consist of seven pillars.

Civil Relations has the goal of winning the hearts and minds of the people, gaining their willing cooperation and support, and inducing their active participation in the attainment of military objectives and national goals. Specifically:

- a. Effect the consolidation of certain groups, specific publics, and the community at large; and win their confidence, commitment, participation in projects, activities, or programs sponsored by or of interest to the Armed Forces of the Philippines (AFP).
- b. Build a favorable image of the AFP and enhance the credibility of the government.
- c. Discredit the enemies of the Republic.

The implementation of the Civil Relations Program follows some specific policies established by higher headquarters and doctrines developed through time:

- a. Civil Relations is a command responsibility.
- b. Civil Relations should contribute to the attainment of the primary mission of the command.
- c. Civil Relations should be relevant to a changing operational environment.
- d. Approaches to Civil Relations must be total in consideration and execution.

A Model for Civil Relations Training and Analysis

As an aid for the planning, conduct and analysis of the Philippine Army Civil Relations program, two models can be considered useful. They are: (1) An Input-Output Systems Model (Figure 1 - Attached), and (2) An Attitudinal - Change Model or A Communications Strategy Model. (Figure 2 - Attached) A cursory examination of these models will show the relevant components or considerations that are vital in the determination of the training processes. They are: The Target Desired Responses or Goal, Medium Used, the Message, the Articulator, and the Feed Back.

The type of training that the articulator will undergo will be determined primarily by the desired objective or goal, the target audience, the medium used, the message, the response, and also the feedback.

The Motivation Enlightenment (ME TANGLAW Program)

With the belief that a properly motivated soldier will also develop into a well disciplined soldier, the Philippine Army has endeavored to come up with a continuing information, education and motivation program for every soldier. This, more than anything else, aims to improve the individual soldier in his role as a protector of the community; define for him a more creative role as initiator of reforms; and identify him as a progressive partner in nation-building. The army considers it vital to inculcate in the heart and mind of every soldier a sense of security and development orientation. It is important to consider the internalization and arousal of a strong sense of commitment to the government reform-programs and the ideals of the New Republic and to assist in the formation of new values that would help bring about a more cohesive community.

The Philippine Army Civil Relations and Information Service (PACRIS) and the Philippine Army Training Command (TRACOM) are two of the Philippine Army units primarily charged with the training of articulators in all units of the Philippine Army.

The unit training of the core of key communicators is handled by PACRIS, and the training of individual officers and enlisted men is undertaken by TRACOM in its regular career courses as one of its must-modules.

To insure that the motivation and enlightenment process will take root in the heart and mind of every individual armyman, the program is conducted continuously at all levels. It is given emphasis in our revitalization program so as to inculcate a sense of discipline, loyalty, unity, commitment, and service in every soldier.

The Army Literacy Patrol System (ALPS)

A special project known as The Army Literacy Patrol System (ALPS) has been launched in all divisional levels of the Philippine Army to achieve a long-range counterforce against hostile propaganda in the villages. This is done through a literacy program involving out-of-school youths and adults who, because of the uncertain situation, could not avail themselves of the formal education offered by the Ministry of Education and Culture.

From among selected enlisted men, and in cooperation with the Ministry of Education and Culture, a three-month course of soldier-teachers training is presented on subjects such as: The Three Rs, Techniques of Classroom Instruction, and Citizenship Training required of first grade students. Also offered are military subjects necessary for the soldier-teachers to fulfill their role as articulators.

What better medium is there to intimately reach the heart and mind of the family in the village than through the education of their children, who would otherwise remain in the dark, or the elders who would at last receive the opportunity of writing their names and casting a vote in an election? This program has touched hearts and minds to the extent that some rebels have been known to attend adult teaching classes or have sent their children to become beneficiaries of this program. To this date, in spite of the program being conducted in the far flung and unsecured communities, and without firearms, not one soldier-teacher has been harmed by the enemies of the state.

The Mass Communication Program

Public information is one of the principal aspects of Civil Relations. Through it, is carried the message of the military command or the government designed to serve a particular target audience.

The use of modern mass communication media is usually made available to the units (Divisions and Brigades) in their respective areas of operation. To enhance effectiveness, it is very important that the utility and operation of these highly technical means be made known. To accomplish this, PACRIS conducts three-week courses in mass communication for our news correspondents and radio and TV announcers. To date, several seminars have been conducted for key Division and Brigade personnel charged with the development and dissemination of news for various audiences, including their own troops, in cooperation with the locally available resource persons.

Programs have taken the form of entertainment, and broadcasts over the radio, face-to-face communication on TV discussing relevant issues, public services and assistance programs. Local and metropolitan dailies are also used extensively to disseminate information.

The Security Guard Training Course

A training program is conducted prior to termination of active service that responds to the Army's morale and welfare program. It's designed to harness the potential of former trainees and draftees who have served the Army for a period of three years under rigorous and severe conditions, but whose services with the Army cannot be made permanent. This program will enable them to pursue a livelihood consistent with their individual aptitudes and skills.

One such program, out of the many vocational courses conducted is the security guard course. Due to the familiarity of an ex-draftee with the requirements of a security guard, the transition is easy for him. This course is conducted in cooperation with the Philippine Constabulary and uses the facilities of the Fort Andres Bonifacio College to give the graduate Ministry of Education recognition. Many graduates of this course are now gainfully employed and earning even higher salaries than their contemporaries in the Army, due to the high demand for such graduates among security agencies.

Other Specialized Seminars

The Army, like the entire AFP, had seen within the decade a changing role that has swung from one side of the spectrum to the opposite end.

Leaving the traditional military security role performed during the early seventies, the AFP was called upon as an instrumentality of Martial Law to spearhead the reforms and programs of the New Society. After eight years in this dominant role, Martial Law rule was lifted, and the Army found itself returned to security chores, but with a new and added emphasis on developmental roles. These changing roles have to be explained in order to enable the military man to fulfill his mission in accordance with law, specific guidelines, and with greater awareness, especially during the period of transition from Martial Law to No-martial Law.

With the lifting of Martial Law in the country, some sectors regained privileges previously voluntarily withheld, e.g., criticism by the press. This has the potential for becoming unbearable to some men in uniform. This can in turn lead to abuses and violations of civil rights of individuals. For this reason, the Judge Advocate General Services has been at the forefront developing training information programs to satisfy special requirements such as knowledge of law, operation of civil agencies, etc.

Another unique civil relations function accomplished by the seminar forum is that of effecting a close liaison between the military and the church sectors. The conduct of such military-church relations seminars has been useful in soothing ruffled feeling between the community and military units, thereby forging symbiotic relationships in communities where church leaders discharging the role of "opinion leaders" had become critical of military behavior.

Measuring Outcomes/Output

As in any human endeavor where the outcome of any activity is measured by the goals and standards expected, and in consideration of the time and resources put into it, the analysis of the Civil Relations training is gauged by several means. These means are as follows:

a. In the selection and training of articulators, success can be measured by the intensity and frequency with which TANGLAW lectures and activities are conducted by TANGLAW Officers and Enlisted personnel, especially in remote outposts.

b. Just how well our motivation and enlightenment program has been received is reflected by the disciplinary indicators of the command. Special emphasis is given on just rewards and punishments as it pertains to soldier-community relationship.

c. Just how many rebels have returned to the folds of the law is one such indicator of how well the programs of government are being received by the community and being properly implemented by unit commanders.

d. How well and how soon communities, after being displaced, can recover and rejoin the mainstreams of society is part of Civil Relations.

As we in Civil Relations put it, the success of any unit in its assignment to a particular community can be measured by the amount of tears that fall and the number of petitions for retention when it leaves for another post; by the number of lasses that have joined the unit's growing families; and the amount of labor and resources that the community has extended for free.

In a nutshell, I have just presented the practical approaches and theoretical bases of our Civil Relations effort in the Philippine Army, and some corresponding training programs necessary to achieve them.

In Normative Terms:

a. The Philippine Army tries to imbue every individual soldier with a sense of desired values and the knowledge that will guide his behavior, consistent with his role and the community's expectation.

b. The Philippine Army conducts Civil Relations to facilitate the achievement of military and government objectives.

c. The conduct of Civil Relations, if it is to succeed at all, must consider the totality of the operational environment.

d. Civil Relations deals primarily with the humanness of man. These and many more . . .

Thank you!

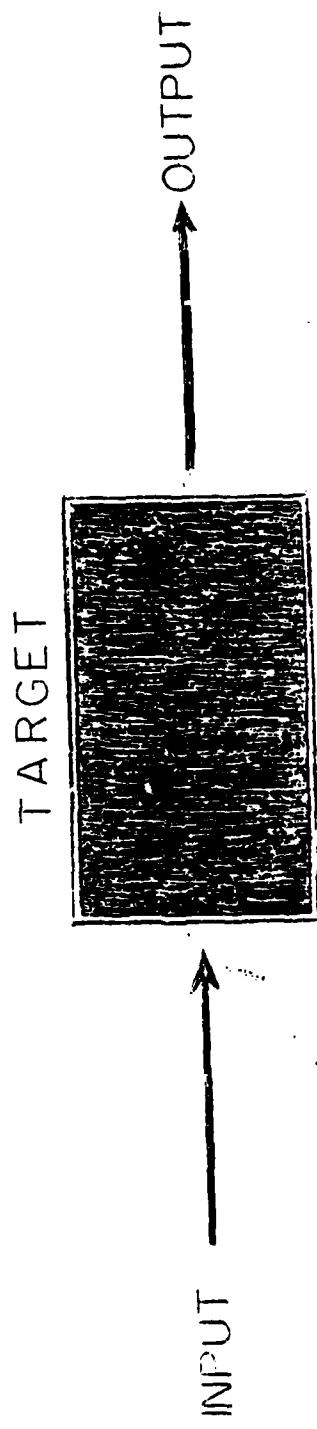


FIG.1 INPUT-OUTPUT MODEL

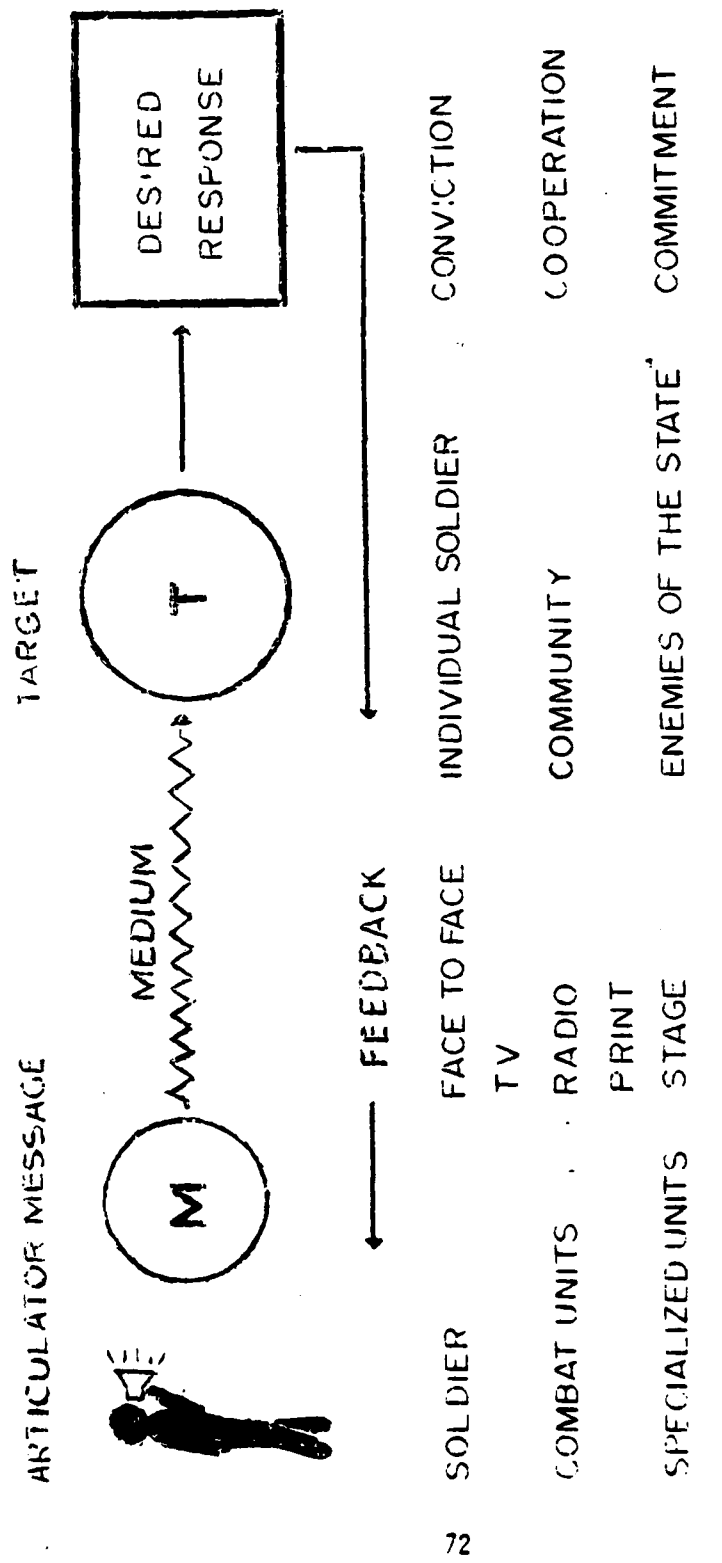


FIG. 2 ATTITUDINAL-CHANGE MODEL* / COMMUNICATIONS STRATEGY MODEL

*Inspired by Freedman, et al, Social Psychology p. 279

PACIFIC ARMIES MANAGEMENT SEMINAR V

19 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

TRAINING, PLANS, AND PROGRAMS

LIEUTENANT COLONEL MOHAMMED MOHSIN

BANGLADESH ARMY

TRAINING, PLANS, AND PROGRAMS

I would like to express my thanks and gratefulness to the Chief of Staff of the Armed Forces of Philippines and to the Commander, US Army WESTCOM, for extending the invitation to attend this seminar, which in turn, has afforded this great opportunity to present our modest effort in front of this august gathering. Gentlemen, today we shall try to make a humble presentation on the methods and techniques of "Training, Plans, and Programs" followed in our Army.

Due to shortage of time we shall discuss the subject in outline, escaping common details and stressing aspects peculiar to Bangladesh. Topographic peculiarities play a vital role in formulating our operational concepts, doctrines, and essentially, the training objective. A little description about Bangladesh would help us in discussing the subject.

Bangladesh is a South Asian country bordering India and Burma with the Bay of Bengal washing her southern shores. It has an area of 55,000 square miles to support 90 million people. The temperature varies between 45 degrees to 105 degrees Fahrenheit, with an average 85 to 120 inches yearly rainfall. However, at places, the yearly rainfall reaches 365 inches. At least two-thirds of the country remains submerged under water for 5 months, from mid May to mid October. Topographically, Bangladesh's terrain can be divided into four categories: deltaic plain, offshore jungles, hilly jungles, and haor land (marshes). The entire land mass is criss-crossed by mighty rivers. Dacca, the capitol city, is located almost in the geometric centre of the country.

Training Aim and Objective. The technological advancement in the field of military hardware causes the requirement for a wider range of training that a member of the armed forces needs to undergo, at least for protective and defensive measures. At the same time the universal trend toward the welfare state demands intimate participation of the armed forces in nation building activities. Considering all aspects of likely employment, the Chief of Army Staff formulates his yearly training objectives within the overall training aim.

Aspects of Training. To achieve our aim, we mainly stress two aspects of training for an optimum balance in team work. Recognizing that even the smallest contingent will have two things, a leader and his men, basically, we divide training into leadership training and individual training.

a. Leadership Training. In addition to normal professional training, particular attention is paid to develop the following leadership qualities: courage, willpower, initiative, knowledge, unselfishness, and instructionability.

b. Individual Training. This is imparted in stages in a progressive manner for Junior Commissioned Officers, Noncommissioned Officers, and soldiers. We mainly try to inculcate and develop the following character qualities in each individual: courage, loyalty, discipline, patience, physical fitness, endurance, adaptability, self-respect, and esprit-de-corps.

Division of Training. Training is broadly divided into "Officers Training" and "Soldiers Training."

a. Officers Training.

- (1) Initial training in the Bangladesh Military Academy.
- (2) Basic Arms and Services Training in respective schools.
- (3) Advance Arms and Services Training in respective schools and abroad.
- (4) All arms training courses at Army schools.
- (5) Higher education in medical and engineering universities at home and abroad.
- (6) Higher professional training in Defence Services Command and Staff College.
- (7) Higher training abroad.

b. Soldiers Training.

- (1) Basic training in training centres.
- (2) Young soldiers training in the unit. Subjects covered are: drill, physical training, weapon training, field craft, map reading, education, health training, character training, adventure training, and combat survival.
- (3) Specialist to Arms training in the units.
- (4) Upgraded training in the unit and respective centres.
- (5) Specialist courses.
- (6) Unit cadres.
- (7) Promotion efficiency cadres in units and respective centres.
- (8) Specialized training abroad.

Training Institutions.

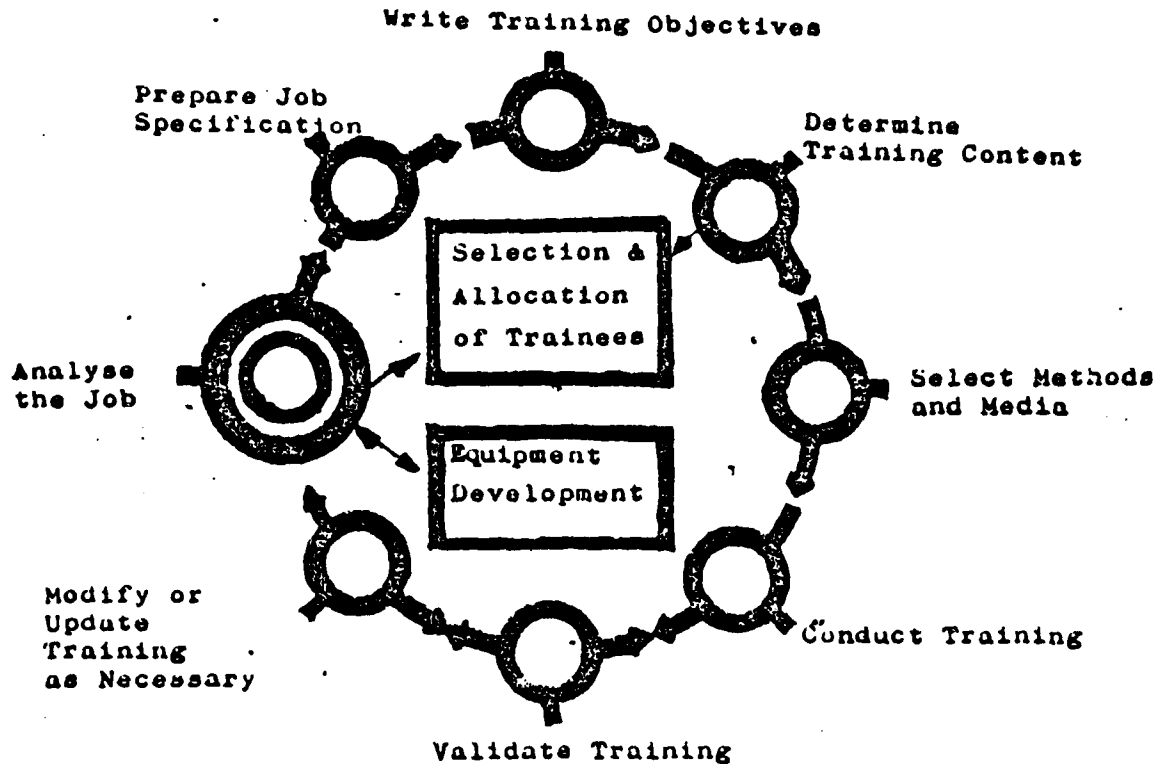
- a. Defence Forces Command Staff College.
- b. Armed Forces Medical Institute.
- c. Bangladesh Military Academy.
- d. School of Infantry and Tactics.

- e. Army School of Education and Administration.
- f. Special Warfare School
- g. Army School of Physical Training and Sports.
- h. School of Military Intelligence.
- i. East Bengal Regimental Centre.
- j. Armour Centre and School.
- k. Artillery Centre and School.
- l. Engineers Centre and School of Military Engineering.
- m. Signal's Centre and School.
- n. Army Services Corps Centres and School.
- o. Army Medical Corps Centre.
- p. Ordnance Centre and School.
- q. Electrical and Mechanical Engineers Centre.

The Chief of Army Staff's Training Directive is a complete paper, issued yearly from Army Headquarters. It is issued well in time, allowing the lower commanders to plan their training, prior to start of the training year. This directive very clearly specifies the yearly training objectives for the whole Army. Although detailed planning and conduct of the training is done at the lower levels, this directive provides complete guidance in all aspects of training. The Chief of Army Staff's Training Directive specifies the following detail, to ensure standardized training throughout the Army: time schedule, i.e., training cycles; collective and corrective training; degree of professional proficiency to be achieved; physical endurance objectives; courses and cadres at formation level; training courses for training institutions; training exercises; training competitions; outline of officers training, night training objective; outline of Annual Classification Firing; outline of Unconventional Training; outline of Inclement Weather Training; Leave Policy; and Games and Sports Competition.

The Chief of Army Staff's Training Directive is prepared based on what is called the "System Approach to Training." This system provides a complete and continuous method of analyzing, defining, conducting, validating, and updating training. It continuously gets corrected and adjusted towards the yearly training objective. The diagram on the screen depicts as to how the Chief of Army Staff goes about so far as the planning of training is concerned.

THE TRAINING SYSTEM



a. Job Analysis. Based on the given task and role the Chief of Army Staff analyses the job required to be performed. This is a critical examination for the satisfactory performance of the job after the training.

b. Training Objective. The Chief of Army Staff specifies the yearly training objective in the training directive. The desired level of performance, method of test, and acceptable standard are spelled out in clear terms.

c. Determine the Training Content. The Chief of Army Staff, being aware of the capability, limitations, and other associated matters pertaining to training, tries to make the best use of all available resources to reach the optimum result.

d. Selection of Method and Media. This is better done at lower level. However, the Chief of Army Staff influences it by specifying the extent of outdoor activities and duration of training exercises, etc.

e. The Conduct of Training and its Validation. The Chief of Army Staff ensures the conduct of training and its validation through various attainment tests as follows: training visits by Chief of Army Staff and his staff officers, test exercises at all level, Chief of Army Staff's Annual Inspection for the fitness for war, Arms and Services Directors Technical Inspection, Formation Annual Technical Inspection Report, Result of Annual Classification Firing, and Result of Field Firing and Course Shooting.

f. Modifying and Updating Training. Based on the feedback received through different tests the training is modified and updated to achieve the training objective through continuous adjustment.

Although the Chief of Army Staff's Training Directive specifies and spells out almost every aspect of training, the lower commanders are left with wide scope for detailed planning and conduct of the training, to suit their respective local requirements.

Arms and Services Directors Training Directive. Based on Chief of Army Staff's Training Directive, the Directors of Arms and Services at Army Headquarters issue their training directives. These directives cover the technical aspects of respective arms and services.

Formation Commander's Training Instructions. Based on the Chief of Army Staff's Training Directive, Formation Commanders issue their yearly Training Instructions. A Formation Commander only defines his training policy, sets his training priorities, and indicates areas for special attention. He leaves detailed planning to the lower formation and unit commanders. Formation Training Instructions may specify subjects like: Training Competitions, Formation Cadres, Training Exercises, Model Discussions, Officers Study Period, Firing Competitions, Detail Training Cycle and Leave Cycle, Up-classification of Noncommissioned Officers, and Games and Sports Competitions.

Unit Commanders Training Instructions. Although most of the things are specified by Chief of Army Staff's Training Directive and the Formation Commander's Training Instructions, a unit commander is left with lots of initiative to prepare a training instruction, accommodating all the requirements peculiar to his unit. Unit Commanders have enough scope to plan training in accordance with the problems and requirements of the unit. Detailed training planning for each and every individual of the unit is done for the entire training year. Unit Commander's Training Instructions will clearly specify what training each and every individual of the unit will carry out throughout the training year. The pivot of unit training is the training cycle. Fifty-two weeks of the year is normally utilized as follows:

a. 3 x Individual Training Cycles	- 36 weeks
b. Cushion periods for changing over from one cycle to another	- 2 weeks
c. Annual Inspection	- 2 weeks
d. Collective/Corrective Training	- 8 weeks
e. Unit Commanders Directive	- 2 weeks
f. Preparation for next training year	- 2 weeks
Total	- 52 weeks

When it comes to planning future training at the unit level, certain common factors are taken into account for unhindered and smooth conduct of the training.

a. Time Factor. When planning one year's training at a time, all essential information is sought as far as possible in advance. But unforeseen emergency commitments may jeopardize training schedules, if the eventualities are not catered for in the initial plan. For unavoidable changes in the time schedule, an alternative plan should ensure adequate time for preparation.

b. Assessment of Commitment and Training Requirement. This is a complicated task since hardly any unit commander is in a position to meet both ends. Various commitments eat up most of the manpower and time, even though a unit commander would always like to utilize maximum time and put maximum numbers of men in training. While assessing training requirements, the unit commander normally includes the following considerations: training objectives fixed by Army Headquarters; training required to overcome weaknesses observed during the previous year; specialist cadre to make good deficiencies and build unit reserves; up-classification training; training for newly introduced equipment, tactics, skills, and procedures; training required for any unusual commitment; and preparing all ranks for promotion examinations.

c. Establishing Priorities. When the extent and nature of all commitments have been ascertained, the time required to accomplish each commitment has to be assessed. Invariably there will be insufficient time to do everything. When this occurs, the unit commanders put the commitments in order of priority.

d. Assessment of Limiting Factors and Assistance Required. The unit commander must take into account all limiting factors prior to planning his training or else these will create serious hindrances at the eleventh hour. Moreover, he must have a clear idea as to how he would get the training assistance required from outside his unit resources.

Army Training Institutions. These institutions play a vital role in training the officers and men of the Army. Although the training schedule is specified and controlled by Army Headquarters, they enjoy complete freedom for the planning and conduct of the training.

The basis for programing training is a logical cycle designed to enable all levels of training to be covered in a logical and progressive sequence. Training programs are prepared by units and training institutes. Since training institutes deal only with training, they can always program their training as per the training plan. They have standard syllabi and time schedules. Since the units have to carry out all operational and administrative commitments, in addition to conducting training, there arises the necessity for fool proof programing wherein all likely eventualities are considered. When programing a unit's training, the training is normally divided under the following categories:

a. Individual Training. Refresher training in basic skill (young soldiers), further training in basic skill, upgrading training, specialist cadres,

noncommissioned officers cadres, minor tactics and team work at section or detachment level, study periods, and officer training.

b. Unit Training. This is broken down into subunit training conducted at troop/platoon and squadron/battery/company level in the form of TEWT, and exercises with troops.

c. Formation Training. Yearly training culminates in a formation level exercise during collective training period. The formation also organizes MD, TD, TEWT, demonstrations and officers study periods the details of which are given in the Formation Commander's Training Directive.

To put the programs together, the following process is normally used: operational commitments and related training are considered first; formation commitments are catered to next; all other commitments originating outside the unit are accounted for; remaining time is divided between individual and unit training according to the priorities fixed earlier; and detailed planning takes place. Throughout the period of detailed planning and the conduct of training, considerable coordination is done and adjustments made to overcome unavoidable problems such as a shortage of instructors, the nonavailability of ranges, and the nonavailability of other facilities.

Training programs are prepared on a weekly basis. For each set of training the following are prepared: a block syllabus, a detail syllabus, a check sheet, and a weekly training program.

Rarely can all the problems be overcome in spite of all the meticulous efforts put into the planning and programming of training, but problems can be minimized by planning and consulting well ahead of time.

Conclusion

There always remains a big gap between what training we would like to do and what we are able to do. Training plans and programs are mere paperwork and can only serve as guideline. Achievements will mostly depend upon close personal supervision by responsible officers. Training requirements shall have to be assessed and reassessed continuously and adjustments made. In a country like ours, we have to plan and conduct training with many constraints. With technological advancements modern warfare envisages a wider range of employment. Conversely, the members of the armed forces in a poor country like ours are required to assist in the maintenance of internal security, to aid the civil power, to fight natural calamities, and to take part in development activities. What we aim to attain is a group of motivated individuals with the best of physical fitness and mental endurance. We believe firmly that what really matters is the MAN behind the gun. Our training motto is "Train hard, fight easy" and in the process each and every member of the Army is made to believe "Sweat saves blood!" Gentlemen, many, many thanks for your patient attention.

PACIFIC ARMIES MANAGEMENT SEMINAR V

19 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

CONCEPT OF SMALL UNIT TRAINING

SPECIAL COLONEL THAWAN SAWAENGAN

ROYAL THAI ARMY

CONCEPT OF SMALL UNIT TRAINING

For the next 20 minutes I will try to explain to you the small unit training program in the Royal Thai Army, what it is, why it is necessary, and how it is managed.

At present, Thailand is faced with both internal and external threats. We tend to consider our fight against the Communist Party of Thailand to be most pressing. Although we have gained many big advances lately, we are determined to overcome this threat as soon as possible. Our actions to vanquish the Communist Party of Thailand, in general, consist of two major efforts, political and military.

We undertake political measures to prevent and eliminate all conditions susceptible to exploitation by the enemy. Through political measures, we aim to insure effective provision of essential government services to the population in all areas of the country. This is to win the hearts and minds of the people, gain their support, and to create an atmosphere conducive to overall national development and improvement. By military actions our aim is the suppression and destruction of organized armed members of the insurgency movement, who refuse to give up and turn themselves in to the government.

It is in this category of military measures that our subject of small unit training comes into play. Among the government's military measures, especially in the field of military preparation for operational requirements, we undertake two major concentrated unit training programs, small unit training and counter-insurgency or CI training.

I will elaborate first on CI training, which represents the primary concentrated unit training conducted at specialized training camps or centers, centrally operated by all Army Areas around the country. The CI training is designed to better prepare designated units for their proposed operations in our annual program of unit employment. Because CI training camps have limited capacities and cannot accommodate training of all units for this particular purpose, we supplement the CI training camps with small unit training that is conducted in unit training areas or in areas close to their unit locations.

These two types of training relate to other major training activities of the Royal Thai Army (RTA). Basically, our annual training cycle consists of both individual and collective training, as well as training exercises and certain specialized training, starting from new soldiers' training to command post exercises by battalion and larger size units.

Now then, what is small unit training? To explain its meaning I would like to define it as that training of company size units of infantry, cavalry, and artillery battalions in preparation for their operations in the oncoming annual programs of employment. It is a supplementary type of unit training, designed mainly for operations against organized armed members of the Communist Party of Thailand. To be more specific, the objective of small unit training is to prepare designated units for a minimum of one week's independent operations

in a realistic environment without additional outside logistical support. In small unit training, as well as in counterinsurgency training, the main emphasis is on mobile small unit tactics and procedures in a counterinsurgency environment.

During any yearly training cycle, small unit training is conducted after the completion of basic unit conventional training, usually during February to June of each year, and preceding the oncoming annual planned employment. The training course of four week's duration features both instruction and practical exercises ranging from the review of basic military subjects and weapons training, to tactics on counterinsurgency operations. During this four week period, the units being trained will conduct a one week field exercise involving operations in a training scenario that requires them to operate without additional (outside) logistical support. During the field exercises, requests for fire support will be emphasized and actual artillery fires will be delivered. In addition, night operations and operations in difficult areas are stressed in the field training exercise phase of the small unit training program.

In small unit training, the RTA has designated the Army Training Command as the project agency responsible for overall planning, programing, direction, and supervision of training. The planning is centralized at higher echelons and the actual execution is carried out by various regiments and separate battalions. The maneuver battalions tasked with deploying organic companies to counterinsurgency operations conduct unit training during the in-camp training phase. During the field training exercise phase, the parent regiments or separate battalions organize exercise headquarters to administer and evaluate the performance of companies which are under their command or within their areas of responsibility. The Army Area and division commanders are offered great flexibility as regards small unit training for combat companies under their command, especially in programing and assigning priorities for training, so that the training suits their local operational requirements.

The Royal Thai Army has specifically stressed certain areas for all small unit training programs. These areas for special emphasis includes: (1) ambush and counterambush; (2) patrolling and raids against limited targets; (3) night firing and night operation; (4) unit security; (5) use of individual weapons and immediate action type engagement; and (6) request and adjustment of fires by members of maneuver companies.

I would like to summarize by saying that small unit training is one of two major unit training programs that support employment in operations against organized armed elements of the Communist Party of Thailand. The conduct of training is decentralized to maneuver battalions in order to insure compatibility with actual, local unit operational requirements. Finally, its main objective is to prepare units for a minimum of one week mobile independent operations in a realistic counterinsurgency environment, without requiring additional outside logistical support.

This concludes my presentation. On behalf of all the participants from Thailand, I would like to thank you for your attention.

PACIFIC ARMIES MANAGEMENT SEMINAR V

19 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

NCO DEVELOPMENT

LTC PAUL SOMA AND LTC DAVID N. JOSIAH
PAPUA NEW GUINEA DEFENCE FORCE

NCO DEVELOPMENT

Armies through the ages have proven that the noncommissioned officer (NCO) is the backbone of the Army. The Papua New Guinea (PNG) Defence Force sees this as the case in our Defence Force. We maintain that the NCO is an important component in the Defence Force because he is the vital link between the officers and the enlisted men (ORS). His training and development should, therefore, be complete and up to date so that he will be able to assist the officers and other ranks in the daily functions of the Defence Force.

The NCO, as the backbone of the Defence Force, will be the theme of our presentation. Considerable thought was taken into account when choosing this theme. The theme was indeed not chosen at random. Our Defence Force has a substantial background derived from our culture and traditions, our experiences as a nation and in one world war, and a terrorist situation in the Republic of Vanuatu, so it is with great pride that we are using this theme.

Traditionally, Papua New Guineans are warlike people. For centuries before the white man set foot on our soil and long before the beginning of our Defence Force some 41 years ago, our tribes were always at war against each other, over women, land and pigs. During these tribal skirmishes the leadership qualities in each individual tribesman became more obvious and pronounced. Eventually, these men were selected by the paramount chief to be the fighting party leaders when these positions were left vacant leaders died in battle. The traditional method of selecting leaders was and has been extremely easy in the sense that if a tribesman proves himself a worthy warrior, he is quickly groomed to become a leader.

In World War II, in the New Guinea campaign, it was obvious that the traditional method was quite acceptable to the Australians and their ally, the United States of America. This is indicated by the number of Papua New Guinea warrant officers, sergeants and section commanders who were decorated for gallantry.

Forty years after World War II, in 1980, on the island of Espiritu Santo, Republic of Vanuatu, the PNG Defence Force was again able to use the same method in appointing new section commanders. It was during our "Operation Wantok Durua" in Vanuatu that we were able to identify the real leaders of men from the ones whom we thought had the necessary qualities.

However, we live in a region of relative peace and tranquility and therefore our selection of potential leaders for development as NCOs may lack in one very important area - a battlefield experience, but we will not sacrifice peace for anything else. Our selection criteria and training, therefore, has to make certain allowances for this lack of battlefield experience.

The aim of this presentation is to provide an insight of the PNGDF toward NCO development. Our aim is to develop a balanced NCO. Our meaning of a balanced NCO is one who is a specialist in his own field and, at the same time, possesses other knowledge of a general nature in order to carry out his job effectively. In order to produce this type of NCO, the PNG Defence Force with assistance from Australia, NZ, and the USA provides a variety of training both in-country and overseas. It must be remembered that unlike the US, Philippines and others where formal training of NCOs is conducted at NCO academies, we do not have this system.

The period immediately before PNG gained her independence from Australia in 1975 saw much of the emphasis placed on training the officer rather than the NCO. The PNG Defence Force was going through a phase in the development during which the localization of the officer level positions took precedence over the NCO. Today, the situation is the complete reverse, and the emphasis is now on NCO development.

Before 1962, there were no Papua New Guinean nationals as officers. The platoon, company and battalion commanders were all Australians. But, within the NCO rank, there were both Australians and Papua New Guineans. The Papua New Guinean NCOs therefore played an important role in the maintenance of discipline, morale, welfare and the overall efficient running of the force.

In this presentation we will discuss the following topics: enlistment and basic recruit training, specialist training -- by elements, basic NCO training, various stages of NCO training, in-country training, overseas training, problems encountered, corrective measures, summary, and conclusions.

At this point in the presentation, we consider that it is necessary for us to give a brief history of the PNG Defence Force in order that our commonality concept of NCO development training can be understood. The PNG Defence Force is a joint force consisting of what used to be the Australian Army, Navy and Air Force. The three Australian services have been renamed Land (Army), Maritime (Navy), and Air (Air Force). We use the term "element" as opposed to force or service, hence we have land, maritime, and air elements. The Commander PNG Defence Force commands all three (3) elements. For this reason, there is a requirement for common training by all the elements in order to enable the defence organization to function.

The value of people as a resource must be recognized by top management. Commitment to career development will then naturally follow. This policy will need to be translated into action by words and deeds in the form of communication and programs aimed at every individual in the organization. Each individual must be made aware that there is a place for him in the organization where he will find an even balance between contributing with all his skills and being extended beyond his level of competence. The process should commence at the recruitment stage, continue right through early identification of his potential, followed by regular assessment, review, counseling, and planning of a long term career path. Successions to position can best be provided for by the on going delegation of meaningful tasks and responsibility. The individual's unique needs, values and aspirations must be recognized.

In an era where uncertainty and change are increasingly becoming the norm and where occupations and professions will not be permanent, training emphasis must be focused on ensuring that the individual is acquiring a right balance and appropriate mix of skills and ability for the future. Career planning should not be confused with rigid compartmentalization of people into predestined "boxes" in the organization.

Equal opportunity issues must be regarded as an opportunity for the organization to take the initiative. By leading the field, the organization can tap a new source of manpower, have the first pick of the available talents, gain greater identity and commitment from the persons concerned, as well as providing the organization with more lead time for adjustment to the changing values of society at large.

Finally, career development must be treated as a personal issue by the individual himself. Initiatives and self-improvement are paramount. Formal training is only one aspect of the total package. The organization can only provide the environment and resources, the individual must provide the effort.

To be eligible for enlistment in the PNG Defence Force, an individual must meet the following qualifications: age between 18 and 30 years; grade 10 education or 4 years of high school; PNG national citizenship either natural born or citizen by naturalization, have passed the psychology test, have passed the medical board; and not have a police record (criminal record).

When the recruiting team is satisfied that an applicant has met all the above requirements, he is finally enlisted into the PNG Defence Force for an initial engagement period of six years. Basic recruit training is conducted at the PNG Defence Force Training Depot commanded by LTC Paul Soma, at Goldie River, approximately 22 kilometres outside of Port Moresby.

The basic recruit training is for a six month period. The course content is very much land element orientated. The six month stint provides an ideal opportunity for the directing staff to identify NCO potentials in each individual. There is also time available to test those selected as recruit section commanders or 2ICs, during their training period. By the end of the six month basic recruit training, the directing staff should already have compiled a list of potential NCOs for the Defence Force. However, to be eligible for selection and training as an NCO, an individual must undergo further scrutiny. But this time, by officers in the element that he has chosen to serve in, that is, Land, Maritime, or Air.

We see our unit commanders as very important people in the selection of potential NCOs. They initiate the first move in the whole training and development process of the NCO by identifying his potential. We, therefore, encourage our unit commanders to provide as much information as possible on individuals who show promise. Every year, unit commanders submit an annual evaluation report on all NCOs. This report is an extremely important document to HQ PNG Defence Force because it provides the Commander PNG Defence Force an idea of the performances of each individual NCO.

After the six month basic recruit training at Goldie River, the recruits pass out as trained servicemen to the three elements of the PNG Defence Force. They undergo specialist training in a field of their choice, for example: infantryman (Land element), driver, cook, signaller/radio operator, clerk, tradesman fitter, mechanic, carpenter, shipwright, plumber, etc.

Usually when an individual serviceman is identified as possessing certain NCO qualities, he is gradually groomed for taking up positions of responsibility at the level of organization he is in. Because much of the common subjects taught at these courses are Land element orientated, it is necessary for the Maritime and Air elements to conduct their own courses on subjects relevant to them.

Some of the common subjects that are taught in our basic NCO training courses are: administration, staff duties, drill and ceremonial, leadership, and management education courses.

Subjects relevant to our Maritime element would be: administration of ships, gunnery, and navigation. Those elements to the Air element would be loadmaster, air dispatcher, and air movement.

Further training to the next higher level will depend very much on the individual's performance as a junior NCO. If he shows capabilities for wider responsibility, he finds himself on another course to qualify him. The process continues until he reaches the highest rank within the NCO level and that is Chief Warrant Officer (CWO). But, to be eligible for consideration for further promotion, an NCO must have the following qualifications:

Lance Corporal (LCPL): Qualified at the appropriate employment qualifying course and administration course for promotion; obtain the minimum educational standard, in the case of a LCPL, grade 8 (2 years of high schooling); have been passed medically fit to the standard required for promotion within his employment; and be recommended by his commanding officer.

Corporal (CPL), Sergeant (SGT), Warrant Officer (WO), Chief Warrant Officer (CWO): As above, except educational standard gets higher as the NCO moves up the rank structure.

There are two (2) levels of NCO training: Junior and Senior. The Junior level is aimed at the Section Commander and Section 2IC, whereas the senior NCO level deals with the sergeants and warrant officers.

Most, if not, all our in-country NCO training is conducted at the Goldie River Training Depot. There are times when courses are conducted at units. Courses conducted at units would be the Maritime and Air element orientated courses. Every now and then, major Land element units, for instance, the infantry battalions, may wish to conduct their own NCO qualifying courses. NCO training and qualifying courses are conducted all year-around. The duration of the courses range from 4 to 8 weeks.

The PNG Defence Force has a defence cooperation program with Australia. The PNG Defence Force is quite fortunate in having this program, because capital equipment and training are both extremely expensive areas in anyone's defence or armed force. We also have a "Memorandum of Understanding" with the following countries: New Zealand, USA, Indonesia, and Malaysia. Indonesia and Malaysia, at this stage, also train our officers at their staff colleges.

Much of our overseas NCO training is carried out in Australia, some in NZ and at present there is only a study tour of the US, mainly in Hawaii. The PNG Defence Force is keen on sending our NCOs to courses and study tours in Australia, NZ, and the United States for these main reasons:

(1) It provides a wider scope of outlook for the individual and allows him to gain personal experiences of the world around him and, more specifically, on how other armies and/or defence forces do things;

(2) The availability of experts in these countries from whom he can obtain additional and/or new knowledge to improve his understanding.

(3) The availability of training facilities for advanced level training. Some of the training courses that are undertaken by our NCOs in Australia and New Zealand are: (Land Element) Physical Training Instructor (PTI) Course; Infantry Regimental Sergeant Major Course, Mortar Section Commander Course; Refrigeration Repair Course, Parachute Jumpmaster Course (NZ); Shooting Coaching Course (NZ); (Maritime Element) PTF Gunner Familiarization Course, PTF/LCH ETP Acquaint Course, Advanced Diving; and (Air Element) Air Dispatcher, Loadmaster, and Movement Clerk-Air.

In the United States, on the Pacific Bond exchange, we were able to send a couple of our NCOs to observe and familiarize themselves with the American organization. It was indeed a big jump for them, insofar as experiences were concerned. Particularly when you consider going from one extreme to another, that is from a small force to an extremely huge one.

The PNG Defence Force faces several major problems with regards to in-country training:

(1) Lack of funds. Insufficient training funds has had a detrimental effect on the overall training program and consequently, to a certain degree, has affected the morale of the force;

(2) Lack of facilities. As a result of the lack of funds, the construction and development of essential training facilities have not been forthcoming for the past six (6) years;

(3) Limited expertise. Further development and maintenance of expertise for the Defence Force is limited by the very lack of facilities for continuation and advanced level training.

(4) Lack of properly trained instructors. The three problems have either directly or indirectly created the fourth problem, that of lack of properly trained instructors.

Some of the problems encountered by our NCOs on overseas training are:

(1) Unfamiliar Environment. This used to be a problem in Australia and it used to affect the individual psychologically. But as more and more PNG Defence Force people attend training in Australia, this situation is becoming less and less of a problem. It may still be the case in NZ and USA.

(2) Medium of Instruction. English is a second language to our NCOs and Australian English (Straing) would be a third language to the NCOs. There is a certain degree of difficulty in understanding.

(3) Training Facilities. The training facilities are at times extremely advanced and this makes assimilation of instruction difficult, for example, missile systems of ships, the use of computers in operation planning, or the use of computers in command post exercises, and so on.

Before we can discuss the corrective measures needed to improve the capabilities of our NCOs, we have to determine their level of achievement. We think that over the post independence period, we have seen sufficient progress within the NCO ranks. One of the major contributing factors is that the present NCOs are better educated academically and, therefore, are able to comprehend and retain much of the instruction provided at NCO training. Furthermore, many of the new generation of Papua New Guineans are more ambitious and are always looking out for opportunities to improve their positions. This is quite obvious in our Defence Force, where we find more and more NCOs applying for commissioned rank.

After having said that the expertise we have at present is sufficient and relevant to the Defence Force at this point in time, but reflecting back to the four major problems that were mentioned earlier, it can very well be concluded that the Defence Force will suffer in the long run if funds, facilities, expertise, and trainers are not forthcoming. The corrective measures we are taking to rectify these problems are to approach Australia under the defence cooperation program to provide the necessary funds for facilities, the training and development of experts who in turn will train our own men.

An annual evaluation report is completed on each individual NCO (as stated earlier) and this report, in a way, becomes the source of information for feedback. This information becomes the basis for course redesign, where applicable. Much of the information we get indicates that NCOs have forgotten what they were taught and so we conduct refresher training. The course content itself changes as new concepts of training are introduced.

The situation in overseas countries is becoming less and less of a problem as more and more NCOs attend training, particularly in Australia. The environment, the beer, Australian English (Straining) and the Australian women are no longer foreign, but a welcome sight. The modern training facilities do not bewilder the stone axe wielding tribesman.

We want to reiterate our main points of discussion:

- a. Identification of NCO potentials at the earlier stages of training;
 - b. Further scrutiny before selection for NCO training;
 - c. Specialization in his own field first before consideration for NCO training;
 - d. Common NCO training for all elements;
 - e. Maritime and Air elements conduct their own specialized training in their own respective bases;
 - f. Overseas training is welcomed for three reasons: It widens scope, demonstrates other ways of doing things; and provides expertise to learn from and training facilities for advanced level training;
 - g. Problems encountered in-country are lack of funds, lack of facilities, limited expertise, and lack of properly trained instructors;
 - h. Problems encountered overseas are unfamiliar environment, unfamiliar language, and too advanced training facilities;
 - i. Corrective measures include improving our own training manpower and facilities;
 - j. Situation overseas (Australia) is becoming more and more familiar.
- We want to mention that what we have offered may be insignificant to the more developed Armed/Defence Forces present here, but what little we have provided may one day be useful, for example, for the training of a small but effective defence force.

PACIFIC ARMIES MANAGEMENT SEMINAR V

20 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

TRAINING ASPECTS OF FORCE MOBILIZATION AND EXPANSION

COLONEL JOHN B. HEALY

AUSTRALIAN ARMY

AD-A110 626

ARMY WESTERN COMMAND FORT SHAFTER HI
PACIFIC ARMIES MANAGEMENT SEMINAR (5TH) HELD AT MANILA, REPUBLI--ETC(U)
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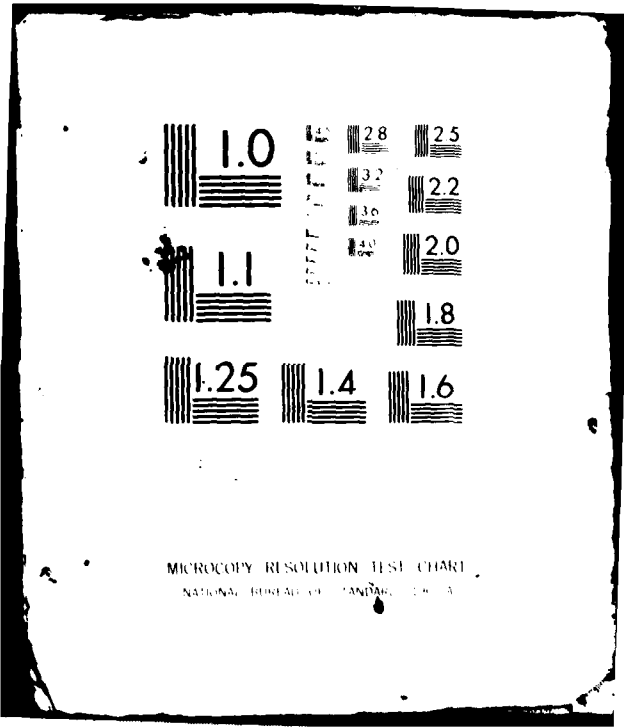
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TRAINING ASPECTS OF FORCE MOBILIZATION AND EXPANSION

The Australian Army has a current strength of 32,000 regulars and 30,000 reservists. While it is capable of providing a regular force to deal with small contingencies, a commitment of any significance would necessitate expansion, including calling out the Army Reserve and possibly mobilization. The training problems we face in expanding the Army are not unique to Australia, and we believe that an examination of these problems may be of interest to other armies. A great general once said: "In no other profession are the penalties for employing untrained personnel so appalling or so irrevocable as the military."

Training in the Army embraces a comprehensive, complex and proven military education system. It consists of individual and collective training, from induction to staff colleges, and from basic subunit to large-scale international exercises.

Confucius, that wise philosopher, recognized the importance of training some two and a half thousand years ago when he wrote: "To lead an untrained people to war is to throw them away."

In preparing this presentation, we have found historically, that at least so far as Australia is concerned, the preparation of a force for duty overseas has required longer than circumstances have permitted. In most cases, more time would have been desirable. Although the first world war began in August 1914, it was not until almost 9 months later that Australian troops were committed at Gallipoli. In the second world war, the 6th Division had 13 months between the time it was formed to when it received its baptism of fire in the Middle East. Any Australian expansion or mobilization in the future will need a better training plan than those used in previous wars. It seems unlikely that we will have the same time in the future as we had in the past.

How do we train now? Our training command employs about 10 percent of the Regular Army manpower. Its schools trained about 32,000 regular and reserve students last financial year. An important asset for training during expansion is the Army Reserve training groups formed in each state. In most of the groups, there are two major areas of training. Other ranks training, which embraces both recruit and NCO training, and officer training, which includes an officer cadet training unit and the reserve command and staff college wing.

Why emphasize the organization of an Army Reserve training group? The individual training base is the area which is going to have to expand quickly and the Army Reserve training groups will be a vital element. Some individual training is also conducted in the field force--in the main, this is junior NCO training, some specialist training and on-the-job training. However, collective training is the primary function of field force command.

That's our training organization at the present. What is it going to look like during expansion? How are we going to fill an enlarged Army with personnel of the required rank and the required skill? How are our units, units and formations going to be trained?

To present the magnitude of the training problem, we must use the Army development model. Please bear in mind that this model is a guide, it is not accurate, it cannot be. The aim is only to give you an idea of the magnitude of the training task.

The basis of the model alluded to an objective force which consists of five divisions, three infantry, one armored and one mechanized. Let me stress that it is only an empirical statement of a force of all arms and services. It is not derived from any particular scenario or contingency, but it is a good vehicle for discussion and it's not unrealistic, historically.

The proposed expansion of the Army is in two stages. The first stage, called the intermediate force, is the simultaneous expansion of both the Regular Army and the Army Reserve. The Regular Army expands to 60,000, sufficient to provide a fully manned division with its slice of corps troops and logistic elements. The Army Reserve expands to 50,000, but is not called out.

The second state, called objective force, is the call out of the Army Reserve and the further expansion of the Australian Army to 250,000. Each of these men has to be trained to fill a job in a unit. The first step is recruit training, where a man is introduced to the Army. This is the role of the Regular Army recruit training battalion.

Looking at our proposed expansion to the intermediate force, the Regular Army, will require an additional four recruit training battalions. In terms of resources, an additional 2,000 instructional and support staff will be required. Many of these are NCOs. And we have to provide the buildings, the ranges, and all the other facilities.

The Army Reserve will require, for recruit training sections alone, a total of 500 additional staff members, mostly NCOs.

Let us now look at achieving the objective force. The recruit training bill rises to some 75,000 a year. The equivalent of 16 recruit training battalions is required, and that is a further 5,000 men tied up training recruits.

That seems like a lot. Perhaps we could cut down the time spent in recruit training since it could even be done in units or on the job. We could increase the output of recruit training battalions, which would reduce the number of them we will need. The most difficult problem to overcome will be the availability of instructors.

We could reexamine the recruit training objectives and strip them to the bare essentials. The staff to student ratio could be decreased. Training standards may have to be sacrificed because it is unlikely that we will be able to maintain high peacetime levels. We will also have to accept a lower standard of training support and facilities.

The next phase in the individual training pipeline is Initial Employment Training (IET). IET provides the individual with skills related to a specific employment area. The policy for IET varies between corps, some have a broad

base requirement for specialization, others demand a single entry IET. Infantry, for example, specifies a single entry IET. Every infantry soldier, whether a driver, or a mortarman, must be trained as a rifleman first.

The major problem here is that further training will usually be required. All the Infantry Center has done is fill infantry battalions with trained riflemen. What about the mortar platoon? Let's look at a basic mortarman. He currently does a recruit course which takes 12 weeks, then his IET, which is a rifleman's course which takes 11 weeks, then his 18 months on-the-job training as a rifleman, then he can do a basic mortarman's course, probably in his unit, but maybe at the Infantry Center. Our current system, in part due to single entry IET, says that it takes a minimum of 2 years before a man can join the mortar platoon. We need a better system for expansion.

For contrast, let us look at a corps which has a requirement for high technology specialization such as signals. Communicators are trained on the basis of their likely employment such as operations keyboard, operators radio, electronic technicians and linesmen. Operators radio are currently trained in a 16-week course at the School of Signals. The current training capacity for operators radio must increase by 500 percent for the intermediate force and 1100 percent for the objective force.

It is difficult, even with a model as simple as this, to be accurate on the size of the training base. However, it gives you an idea of the expansion that corps schools will be required to undergo if there is no change to their present role. There are a variety of alternative training methods and systems which can be used.

In the early days of the second world war, it was not uncommon for platoons to be trained singlehandedly by an NCO or an officer. Hopefully, we will not have to resort to such drastic action in the future. Recruit training could be done centrally and IET done in units. Perhaps units could be formed by appointing a Commanding Officer and a cadre, and then be progressively enlarged. Collective training could then commence as subunits become viable. Corps schools could concentrate on officer, NCO, and specialist training.

On-the-job training would become a common method of training. Storemen and clerks could be trained on the job if they are properly supervised. With some reservations, we can make military drivers out of those with civilian driving licenses. Maybe there are other civilian skills which can be adapted to a military application.

Certainly, reduced training time becomes a serious consideration, but each time another option is suggested for reducing the training overhead, the standard demanded under present peacetime conditions is likely to suffer. It is worth recalling the words of one of the great generals in World War II when he said: "Train in difficult, trackless, wooded terrain. War makes extremely heavy demands on the soldier's strength and nerves. For this reason, make heavy demands on your men in peacetime."

One of the major challenges we face in any expansion is in what has been traditionally regarded as the backbone of the Army, the NCOs. There are a number of factors which influence the requirements for NCOs during expansion.

Much of our training in 1914 and 1939 was possible only because there was a pool of war veterans who were still relatively young and available. While we do not have such a large pool today, we possess a modern, well trained, but small Regular Army which we did not have before. The problem is that the Regular Army may have to fight as well as assist in the expansion. The requirements for NCOs during an expansion or mobilization have been commonly estimated at 15 percent of any net increase. The objective force of 250,000 will require 28,000 NCOs. This is almost the size of the present Regular Army.

Our current NCO promotion system is lengthy and generally centralized, especially above the rank of corporal. Depending on the particular corps, trade and level of education of an NCO, the time spent doing up to four promotion subjects in the worst case can be considerable. This is an example of the time spent on courses: (1) Corporal RAAC, 16 weeks; (2) Sergeant RAE, 28 weeks; and (3) Warrant Officer RAA, 26 weeks.

What sort of options are available for producing NCOs? Direct entry NCO rank can be granted to selected personnel. For example, a commercial transport supervisor could very quickly be made a transport sergeant. He may well have been one already. The corps schools could become the focal point for specialist NCO training, where courses are conducted to meet the requirements of specific appointments. Mobile teams may provide an alternative, going from unit to unit and training potential specialist NCOs. Formations and units will have to accept the fundamental responsibility for most NCO training, in other words, a decentralized system. Of course, the Regular Army has the potential to produce a large number of junior leaders. The assumption here is that every NCO and soldier should be prepared to be promoted at short notice to a position of higher responsibility.

Australia's only field marshal, Sir Thomas Blamey, highlighted the requirement for officer training when he said: "The paramount need of an Army in war is leadership. The vast majority of officers, who are the leaders have to be taught their jobs."

The problems of providing officers are similar to those associated with NCOs. A reasonable estimate is that officer requirements will be about 7 1/2 percent of the total increase, so the objective force would demand an additional 14,000 officers. The Army commissions some 500 new officers each year so the shortfall, in terms of the intermediate expansion of the Army, is considerable. Even if the officer training course was shortened to 6 months, it would be necessary to triple the output. Obviously, measures such as increased direct entry, increased commissioning from the ranks, and reduced training time are options.

There is also a requirement for continuation training of officers. Much of this will be the responsibility of Commanding Officers. However, staff appointments in headquarters and units have to be filled. Officers must be trained to command companies, batteries, and squadrons, and we need commanders for battalions, brigades, and divisions who can do their job. Career progression training, therefore, requires a good look. There will be a requirement for various levels of training. For example, the Junior Staff Course conducted at Land Warfare Center, Canungra, trains 240 officers a year for staff

appointments in the rank of Captain. During expansion, we will still require the skill, but it will not be universal. We will also need a system of selecting those who should be trained.

Wang Ling, a Chinese military philosopher, not the bloke who invented the word processor, said: "If officers are unaccustomed to rigorous drilling, they will be worried and hesitant in battle. If generals are not thoroughly trained, they will inwardly quail when they face the enemy."

There is a pressing requirement, during expansion, for the training of our division commanders, corps commanders, and principal staff officers.

Gentlemen, it's been fairly easy to outline the challenges in a simple structured Army expansion. The magnitude of the individual training task is readily apparent. However, expansions are unlikely to occur this way and are subject to a variety of unknowns. "We may have to commit forces to operations during the expansion, government policy can change, less time may be available for individual training."

The individual training plan may have to be based not on how much training is needed, but on how much training can be done. This is, in fact, how our Army Reserve operates now. Their training is limited to subunit level with the greatest emphasis placed on individual skills training.

Let us turn now to the problems of collective training, which ranges from section and platoon level, to unit and formation level. Collective training is the molding of individuals and their skills into a cohesive functioning unit. Experience has shown that this kind of training is essential for success. "A perfected modern battleplan is like nothing so much as a score for an orchestral composition ... every individual unit must make its entry precisely at the proper moment and play its phrase in the general harmony."

One of the major problem areas with collective training is that the level which is potentially attainable, may not be achievable because of weaknesses in individual training. This is the link between individual and collective training.

From a training philosophy viewpoint, there should not be a problem. The Army Training and Evaluation Program (ARTEP) provides feedback on the individual training objectives established by the Army training system. As the basis of collective training, what benefits do the ARTEP approach give the Army? It indicates to all Commanders their priority training tasks; it provides an effective guide for organizing training; it provides a common training base; and, most importantly, it will become the primary tool for training and evaluation of units to satisfactory operational standards upon mobilization.

How does the ARTEP do this? Briefly, it prescribes, for various levels, a standard of performance of tasks which are to be conducted under specific sets of conditions. It does not provide a complete training statement for a unit. The commander has to establish priorities and program his unit's training activities to ensure that it is ready for war. It is not a yardstick against which the performance of commanders is to be measured, it is a tool which specifies the important and frequently performed operational tasks done in a unit.

What sort of limitations or factors are likely to affect a commander's ability to train the unit or formation for war? The first one is time. The Australian experience in Vietnam suggests that up to 9 months intensive collective training is required to reach a reasonable level of efficiency. Of course, this is only at unit level, we need to go to task force and then divisional level. The time obviously could be shortened, it might have to be shortened, but a reduced standard of combat performance would have to be expected.

Collective training is not the only activity for which a unit commander has to plan. He may be required to conduct a substantial amount of individual training in his unit. There are, as alluded to earlier in the presentation, a variety of methods of conducting individual training. Just for a moment, assume that it is to be conducted in units.

Troops who have been together during their individual training phase will have developed a degree of teamwork. They will have a good idea of each other's ability. This also applies to command relationships between officers, NCOs, and soldiers. The transition to collective training should be quick and easy. Less time may, therefore, be required to reach the necessary levels of proficiency.

The method of expansion may affect the amount of collective training that is necessary. For example, individual units could be split and reinforced to become infantry battalions. This approach could reduce the amount of collective training required. It may be the best way of implementing an expansion.

The level at which collective training is conducted in the Army Reserve in peacetime will be a key issue in determining the amount of training to be done in time of expansion. In practice, it is rare for an Army Reserve unit to conduct training at unit level. It is, therefore, likely that a period of full-time duty will be required before a reserve unit can achieve unit level proficiency. The lack of unit level training in the Army Reserve also inhibits commanders and staff from developing the necessary command and control skills. Some possible solutions are: (1) more continuous training and fewer weeknight parades; (2) integration of regular and reserve units; or (3) concentrating on only the most important tasks and deferring the rest.

Unit and formation commanders have many things to do. Training their immediate subordinates and training their headquarters are two of the most important ones. The speed with which headquarters can be trained will have a major effect on collective training during expansion and mobilization. Historically, the most effective method of training headquarters has been by actual experience, or, failing that, large scale exercises with troops. Such exercises are expensive and generally restricted to task force level and below. More important, however, is the fact that soldiers on them can become bored stiff.

One alternative that is receiving increased attention is the possibility of using simulation to train commanders and their staffs. Wargaming is one element of simulation in which the Army, over recent years, has gained some

experience. Without doubt, wargaming offers a method of reducing collective training time by getting headquarters trained more efficiently and more effectively.

Of the training areas currently used by the Army, few are suitable for exercises at battalion level and above. We also need more real estate for live firing of weapons because increases in the range of weapons has had a dramatic effect on the area of land required to fire them. Provision of training areas and unit camps is only the tip of the iceberg in terms of training support and facilities. Let's talk about ammunition for a moment. In the early stages of an expansion, it is likely that there will be a shortage of ammunition. It is costly and there is the lead time problem. For example, an armored regiment with only 75 percent of its main battle tanks uses 1.7 million dollars worth a year. An infantry battalion is entitled to about \$900,000 worth. A two battery artillery regiment fires, at 1981 prices, more than \$2 million worth in training each year. The likely availability and cost of ammunition for complex weapon systems require that alternative methods be used for training operators. Clearly, simulation has a place here, not just to reduce cost, but to reduce wear and tear on equipment. Only when a high degree of competence in system operation has been acquired should live firing be allowed.

Another way of overcoming the availability problem is to include in war reserves an element which is specifically the training reserve. Gentlemen, all this collective training has one purpose, preparing units and formations to win the land battle. But who determines when they are ready? Operational readiness involves the measurement of a variety of components. They are: (1) unit manning level; (2) number of soldiers who are DPl, (completed all training, medically and dentally fit, full clothing and equipment issue, of appropriate age); (3) availability and serviceability of equipment; (4) holding of stocks, both first and second line; (5) degree of preparation of the unit to move; and (6) standard of collective training.

The ability of a unit to do its job, whilst certainly depending on all of these things, is most particularly influenced by the last one. Although we said earlier that the ARTEP would not be used for evaluating commanders, it seems an appropriate tool for measuring the standard of units. But the ARTEP is rather mechanical--are we not attempting to find out how good the unit is as a whole?

Collective training is, for the most part, nonquantifiable. A variety of factors affect a commander's ability to train his unit and he is unlikely to be able to influence many of them. In times of expansion and mobilization, it will be necessary to reduce the time it takes to produce well trained units and formations. Any action which reduces the adverse effects of these factors will be beneficial.

Gentlemen, historical evidence suggests that the success in training indicates the success or otherwise in war. The circumstances we face in the future appear to be different from those we faced in the past. There no longer exists in the Australian community, a large pool of experienced officers and men who will rapidly increase the expansion base of the Army. The approach to training expanding forces in the future will have to be different. The somewhat unstructured approach early in the two world wars will not do.

Our Army Reserve provides a significant training resource as the basis of the individual training base. The training base is of course only one part of the expansion base, the logistic elements provide the other significant and, maybe, most constraining input.

In conclusion, allow me to suggest some of the more important training issues of force expansion:

- What standards of training are acceptable?
- How efficient is decentralized training?
- How much of the training load can and should be shifted to units?
- How is the Army Reserve to be employed?
- How can Army Reserve units achieve greater operational readiness?

Gentlemen, we'll take questions that may have been generated by this presentation.

QUESTIONS AND ANSWERS FOLLOWING AUSTRALIAN PRESENTATION

Q. In the past two world wars, the Australians fought alongside the allies in Europe. Obviously, you are not oriented in that direction now. What is driving your expansion force?

A. We are fortunate that there is no immediate threat, so there is not quite the urgency, but it is more immediate than previous wars. If it comes rapidly, we will have trouble.

Q. Are you a volunteer or conscript Army?

A. We have gone to conscription only several times since WWII, the last in Vietnam. But the mechanism is not in place and would take time to effect.

Q. How do you intend to expand the volunteer reserve force?

A. Reserve forces are locally oriented, but we seem to have an upward limit and a quick turnover--reservists get bored. That makes it difficult to conduct unit training.

Q. Do discharged regulars constitute part of the reserves?

A. There is no compulsion to do this, but we encourage them to come in with their rank and seniority. We have an open-ended invitation on this.

Q. Do you have a reserve officer training system paralleling civilian education (ROTC)?

A. Several universities have student regiments which do input reserve officers who are of high quality. They do not generally follow into the Regular Army.

PACIFIC ARMIES MANAGEMENT SEMINAR V

20 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

U.S. ARMY RESERVE COMPONENTS AND TRAINING

MANAGEMENT

COLONEL EMORY W. BUSH

U.S. ARMY

MANAGEMENT

The main theme of this address is readiness and training; however, to set the stage, I want to talk about the challenge. Then I'm going to briefly cover the structure, the strength, and some of the programs so that you'll get the proper perspective of U.S. Army Reserve affairs before I discuss training. The training challenge is very fundamental, it is going to war, it always has been going to war. But in our case, a significant event happened in 1973. Before 1973, we had a draft, and our policy, in event of an emergency was to mobilize the Reserves and the National Guard, bring them into installations, train them and commit them to follow the active components.

However, we saw the advent of a volunteer army in 1973 when President Nixon pronounced a new policy. That policy will apply to the future if we go to war. Therefore, we are going to war with the Reserve Components early and that is precisely the challenge that we are faced with today. Our Reservists, in the event of a war in Europe or a major contingency, would be deployed, in many cases, directly from their home armory. In the case of the Western Command, the first units to be deployed in the event of a conventional war in Europe, would be the Reserve Component units. That is a significant challenge and one that we have faced the last eight years.

The "total force" phrase was coined about eight years ago to represent the total army, numbering about a million and a half. Reserve Components make up 47% of that structure. The Reserve and National Guard include what we call troop program units -- no individual Reservists. The active army totals 780,000. In 1973 after the Vietnam war, General Abrams went to the Congress and said, "Gentlemen, if you will stabilize the Army's strength at 785,000, I will give you three more divisions." At that time, we had 13 divisions. The Congress stabilized the Army at 785,000, we cut some of the so-called fat from the support structure, formed 16 active divisions, and this structure has been stabilized for eight years. So now we have the 16 active divisions plus 8 combat divisions in the National Guard to form a 24 division total force. This 24 division force, according to our planners in Washington, is that prudent force required to execute the military strategy of 1½ ground conventional wars simultaneously.

The National Guard force structure is a very formidable force, very heavily combat oriented, and the eighth largest standing army in the world. It has about 22 brigade size units and 8 combat divisions.

The Army Reserve, on the other hand, is primarily support oriented. I cannot give you any rationale as to why all the combat units are in the Guard and very few are in the Reserve. Actually, we only have 3 infantry brigades in the Reserve. The 19 army commands are those two star billets that operate as a command and control headquarters in a geographic area. At the present time, they have no wartime mission. Maneuver area commands are two star commands which, in the event of mobilization, plan and execute the division and above exercises. The 12 training divisions are the divisions that General Becton mentioned the other day. Their wartime mission is to move into an

inactive post such as Ft Chaffee, Arkansas, and start conducting basic and advanced individual training. The Guard and Reserve contribute to the total army with over 50% of the combat battalions and over 60% of the combat service support elements. So, that's why we call it the total army and that's what we're going to war with tomorrow, should the need arise.

What is the strength of this big conglomerate? We have made great progress in the last two years, but as you can see, we still have some problems. Now, let's take a look at strength trends. Before 1973 we had a draft. We also had a war in Vietnam. If you joined the Reserve Components, you would not be drafted. Consequently, we were in great shape both in the Reserve and the Guard. We discontinued the draft and left Vietnam, we cut the army in half, we pronounced a new policy and guess what happened? For about six years, the decline in Reserve Component manpower was straight down. It got the attention of the Defense establishment, the attention of the Congress, and the attention of the President. The encouraging upward swing in 1979 was a direct result of a large increase in resources. The same trend was true for the National Guard. In the past two years, we have had a net gain of about 85,000 in the Reserve Components.

We have a rather large force now and we are going to deploy these units early in the event of a conflict. How much time do they have to train? According to the mandate of law, they have 38 days. Normally, our units conduct 12 weekend drills, 16 hours during each weekend, plus one annual training period of 14 days. For those 38 days, our Reservists and Guard get 62 days pay. Weekend drill earns one day's pay for each four hours. That's not very much time but the pay is considerable. We had a 14.3% raise this year and a 11.7% raise last year. For those 62 days now, a full colonel is making over \$8,000 a year.

Why do people join this rather large structure of 650,000? There are many reasons and I will not discount those up at the top. The National Guard and militia goes back to the founding of our nation. Job training and travel are also reasons. We had individual Reservists and Guardsmen in Hawaii who trained all over the world in the last year; but, being pragmatic, I can assure you that that security is paramount. The average American does not perceive a threat to his way of life. If he did, I am sure that he would march to the drumbeat. You hear the argument of service versus bread. The financial benefits are significant. That's one of the prime reasons that our strength is where it is now, and it is increasing. I'll quickly go over some of the benefits. Drill pay for a private is \$68 for a weekend; for a Sergeant First Class is \$148; and for a Captain it is \$220. PX privileges are equivalent to the number of days trained during the month and commissary privileges are given for any training that exceeds three days active duty. What does that mean in Hawaii? A 41% savings in the commissary prices compared to the supermarket. There is also free medical care if you get injured on active duty, plus bonuses, and a life insurance policy for \$3,000 a month that all the active army enjoys. The most significant thing that keeps our Reservists and Guardsmen in our units and our Reserve Components is an outstanding retirement program. It may be one of the best in the world. Unfortunately, you cannot articulate this program to an 18 year-old soldier because he's not thinking about age 60. But, if he completes 20 good years in our Reserve Components when he

reaches age 60, he gets free medical care, plus full commissary privileges. That's in addition to monthly retired pay. That pay will depend on the amount of active duty and the number of points accrued during each year in service. The maximum in Reserves is 60 points; however, the mix of active and reserve service has a significant effect on pay. Once we get a Reservist or Guardsman past the 6-7-8 year mark, he's going to seek 20 years service because there is something at the "end of the rainbow." But, when he reaches 20 years service as a Lieutenant Colonel, he can't say, "I'm going to stay in until I'm 55;" he must be picked up by selective retention board on two year increments. Why? Because, if we kept everyone, there would be no upward mobility. Therefore, we have stringent tenure laws and statutes mandated by the Congress. For example, a Brigadier General with five years in grade and 30 years service, whichever comes first, goes to the standby Reserves. The only way he can stay in the active Reserves is to get promoted to Major General. The same applies to a full colonel.

I have talked about the total force. What are the command relationships? I'm going to get into something now that probably appears complicated to those unfamiliar with our command structure for reservists and guardsmen. The Army Reserve is a federal force, totally funded, totally controlled and commanded through the active army channels. This is the responsibility of the U.S. Army Forces Command, a four-star headquarters in Atlanta, Georgia. The Commanding General of Forces Command is the executive agent charged with command of the entire U.S. Army Reserve. This includes the mission of providing advice, assistance, and evaluating the training readiness of the National Guard in 50 states and 4 territories. With National Guard Bureau in the Pentagon providing resources, the governor in each state and territory commands his state's National Guard through an Adjutant General of two star rank. However, this is not a state force per se. It is 99.9% federally funded. The only thing the state pays is 25% of the armory fee, maintenance of the armories and, if the governor calls out the National Guard unit for natural disaster or civil disturbance, the state rather than the federal government must pay. The President, with one stroke of the pen, can federalize the force. The reason for that would be to go to war.

What is the active army support organization for this large reserve component force? We have three continental armies, each headed up by a three-star general. Superimposed through those three continental army areas, are nine army readiness and mobilization regions, each commanded by a Major General. There are 26 readiness groups that come under those regions. One such group is the United States Army Readiness Element in Hawaii.

In our Guard and the Reserve, a unit is not programmed to come into the structure unless the equipment is available. Each unit has its own equipment, so equipment is not passed around for training. However, in some cases, the active army supplements it. There has been a tremendous influx of new equipment in the past two or three years. In the past, the Guard and Reserve received hand-me-downs and antiquated equipment. Now, in many cases, they are receiving new equipment directly from the assembly line. And that has posed quite a dilemma for units. In most cases, we have more equipment than we need to train with, but we don't have enough to go to war

with, so a lot of equipment in the Guard and Reserve is in administrative storage. In the environment in which we are operating, units cannot pick up equipment on their way to Europe or other conflict site. They go to war with the equipment on hand. Therefore, when the 25th Infantry Division received its tow missile and dragon missiles, for example, the Guard and the Reserve battalions rounding out the division received them at the same time.

The Reserve Components also has a program called full-time management of people. This is an example. Prior to the advent of full time manning in fiscal year 1981, the 100th Bn, 442nd Inf had 14 people who worked full time, eight hours a day, five days a week. Under full time manning, this battalion gained 18 additional people. The battalion commander also had some say so in the type people he wanted.

Bonuses have been the most popular incentive. Although it has cost a lot of money, it has also paid a lot of dividends in attracting non-prior service personnel for the Guard or Reserve for a six year commitment. You turn a lot of people off just trying to get them involved at age 18 for six years; however, if you have a combat arms MOS (infantry, artillery, armor) or a technical MOS, you can enlist for six years, and get \$2,000. If you belong to a certain category of early deploying units, you get \$1,500 parceled out, \$750 the first year, \$350 the second year, and the remainder in the third year. For 3-year reenlistments the bonus is \$900, and for six years the bonus is \$1,800. You can opt for either the \$2,000 bonus (which is cash) or \$4,000 in educational assistance. Some states and localities have incentives to add to this. Hawaii is particularly unique. Any individual who joins the Guard or Reserve in Hawaii is guaranteed a free education consisting of four years, tuition free, at the University of Hawaii. This is on top of the \$2,000 bonus. If this individual goes to the University of Hawaii and joins the ROTC program called simultaneous membership, he can stay in the Reserve unit while he is in the ROTC. He then picks up the \$2,000 bonus, draws drill pay, and also gets \$30 a month for ROTC.

CAPSTONE is probably the most effective program that we have implemented in a long time. CAPSTONE is not an acronym but a program taken to positively identify a wartime mission for every Reserve Component unit whether it be in the CONUS sustaining base or in the list associated contingency plans. General Shoemaker, of Forces Command, was the architect of this program. Three years ago, people didn't believe it, but it has now reached fruition. What CAPSTONE does is take geographically oriented active army, Guard and Reserve units and lump them together into a wartime chain of command based on the European war scenario. The idea is that if they exchange SOPs and train together, then the whole structure could go to war and move easily. Everything that Reserve Component units do in the future, should be conducted under the CAPSTONE umbrella. It has not been an easy task of passing out these wartime missions to the commanders, but if you ask them what their wartime mission is, he can tell you what his primary wartime mission is in Europe, that his equipment has a surface date ready to load at D+17, that troops have an air date ready to load at D+27, that equipment arrives in Antwerp, Belgium, with troops arriving at Rhine Main Air Base with station in Ramstein area, and that the first mission is to upgrade an existing

airfield. If a commander can't tell you that, he's demonstrating incompetence. OCONUS deployment is a program that takes ten-man cells from early deploying units and sends them to Europe and Korea to participate in a wartime chain of command for 10 to 14 days either in exercises or some special training event. This year we have 216 units going to Europe, but before units can go, they must enjoy a high priority and have achieved certain readiness criteria such as C2 in training, etc. It is a very effective program and it really excites the units to be able to go to Europe and Korea to work with a wartime chain of command.

The Affiliation Program is nothing more than affiliating active army units formally with Reserve Components' units. To give you an example, one-third of the combat power of the 25th Infantry Division is in the Guard and Reserve. We have four divisions that we call "bobtails." They are only 2/3ds manned and are supported by the roundout program. It is very effective, and of course, that Division commander has a lot of influence on the training of the units which round out the division.

What General Becton said the other day about our training system applies directly to the Reserve Components. Everybody joining the Guard or Reserve must go to basic combat training and advanced individual training, the same as in the Active Army. All of our schools use the same system. We have the same SQT policy and the same training management policies apply. However, Forces Command does amplify that training policy somewhat. That's what I'm going to speak on for the next couple of minutes. The Commanding General of FORSCOM is responsible for providing training policy in addition to that prescribed by DA. We had an old system prior to last year that consisted of 88 pages of training guidance published by Forces Command. We threw it out last year and replaced it with 8 pages. Basically, it states that there is no difference in the Guard or Reserve. They use the same training system as the regular forces and the battalion commander must maintain his focus on wartime missions.

Although the Reserve Components use the same schools that the active army uses, in each geographic area, there is also a USAR school. For example, the Commandant of the school in Hawaii is a Ph.D. at the University of Hawaii. This school teaches primary noncommissioned officers' courses, basic non-commissioned officers' courses, refresher, advanced, MOS training, etc. Each of the 50 states has a military academy wherein they conduct an Officers Candidate School that takes one year, consisting of 12 weekend drills, and two 14-day training periods, concluding when an individual is commissioned. In Hawaii, the Reserve school trains all the basic and primary NCOs, while the Hawaii Military Academy trains the advanced and senior NCOs. It is an effective system, supplementing the existing school system in the active army.

With all these programs and with all this training, what kind of checks and balances do we have? First, there is an inactive duty training evaluation, which is an evaluation of that unit during its weekend drill. Every unit must be checked at least one time during the fiscal year. An active army team will stay with that unit the entire weekend. It will validate the attendance, check

the training, and prepare a formal report that is rendered to the chain of command. Each year during summer training, each unit is evaluated by an active army evaluator, who is either commanding a like unit or has commanded a like unit. This is considered by the Reservists as the graduation period of their training year, and they look at this annual training evaluation as a "report card." Of course, it is a part of the permanent record of a unit. Using a four-page form called the One-R, a unit is evaluated on a scale from 1 to 5. One being unsatisfactory, 5 being outstanding, 4 excellent, etc.

The unit is evaluated against maintenance operations, command and staff, tactical operations, training realism, camouflage concealment, etc. There are written narratives from the evaluator, the site chief evaluator, and, in our case, WESTCOM headquarters. That goes onto a computer base and becomes a permanent part of that unit's records.

We have talked about going to war and early deploying missions. What kind of mechanism do we have to evaluate or keep up with the readiness of our Reserve Component units to accomplish these missions? We have the unit status report which is a readiness report rendered through the Reserve Component chain of command to Washington. The National Guard renders this report on a quarterly basis, the Army Reserve on a six-month basis. This is a "snapshot" in time. The status of that unit in terms of personnel, logistics and training. We also have a quarterly Force Readiness Report that is rendered by the active army on early deploying Reserve Component units. It measures the Army's ability to mobilize, provide the resources, and get that unit to its wartime mission. If a unit deploys, that unit is associated with a contingency plan. If, after ready reserve personnel and equipment are assigned, it still does not meet the criteria for deployment, it is reported as "net required." At Forces Command, they can take that unit and integrate it into another like unit which is more combat ready. What happens to the deleted unit? It loses its bonus incentive and its full time management.

I would not want to miss the opportunity here to give you a snapshot on what the Reserve Components have in the Pacific. We have an authorized strength in our Reserve Component of 7,000 personnel. Consisting of 4,000 in the Hawaii Army National Guard, 500 in the Guam Army National Guard, and 2500 in the US Army Reserve. We're located on five of the Hawaiian Islands, American Samoa, and Guam, and we're activating a Reserve unit in Saipan on the 13th of December of this year. In the Expanded Relations Program, we have a Reserve platoon exchange with Australia, a squad exchange with New Zealand, and a lot of observers and individuals exchanging visits. We also have a domestic action support program in the Trust Territories that we're just starting. I would like to end this portion by saying that any of the Pacific nations here that are interested in starting a dialogue on some type of exchange program will be welcomed at WESTCOM. We would certainly be happy to entertain each proposal(s), and by next year, might develop some type of exchange that would be mutually beneficial.

The future outlook for Reserve Components is good. Our planners in the Defense Department and the Committees and the Congressman are really excited about Reserve Components. I wonder why? As compared with the Active Army,

it takes 20% of the money to put a Reserve Component on the ground. What's the big differential? 63¢ out of every dollar goes for pay. The big differential is pay, but it is popular and I would venture a guess that there will be more emphasis on that in the future. The Reserve Components are funded through different accounts in the Active Army. Now, it is much easier to get money to support the Reserve and Guard than the Active Army.

I hope I have not painted too rosy a picture because I can tell you we have some real problems in the Reserve Components combat arms units. In Hawaii, our support units are at 95% strength, while our combat arms units are at 75% strength. We also still have a lot of equipment problems, although we've had a bonanza in our fill of equipment in the past two or three years. In many cases, Reserve Component equipment is incompatible with regular unit's equipment.

I think our young commanders do a magnificent job. It's just a helluva challenge to be heading up an 800-man infantry battalion with a 100% of the equipment, 32 full time people and a mission to deploy out of your armory at D+14. One tremendous challenge.

Thank you, gentlemen, for your kind attention.

PACIFIC ARMIES MANAGEMENT SEMINAR V

19 NOVEMBER 1981

MANILA, REPUBLIC OF THE PHILIPPINES

INTEROPERABILITY OF THE PACIFIC ARMIES COMMUNICATIONS SYSTEMS

COLONEL ROBERT BOTTS

US ARMY

INTEROPERABILITY OF THE PACIFIC ARMIES COMMUNICATIONS SYSTEMS

I consider it to be a distinct privilege to have the opportunity today to address such an august group on a subject that I consider to be very critical. If you noticed in your programs yesterday, I was scheduled to immediately follow the presentation by Admiral Long. Due to the dynamic nature of this conference, that had to be changed. I think that was fortunate because for a lowly colonel to follow a four-star, that's a tough act to follow.

However, what I want to discuss with you will be somewhat aligned with what the CINC had to say, in that I think that it addresses itself to collective security. I might summarize my entire presentation with this statement: "If you ain't got commo, you ain't got nothing." That's a quote by LTG Sink, a former Commander of the 18th Airborne Corps, during the late fifties. It is not grammatically correct as you can detect, however, it is a very succinct statement that packs a big punch. It really says a lot and when we are talking about communications, we are talking about its relationship to all of the functions that we concern ourselves with on a daily approach to our business.

We have a very mighty chain, but that chain is only as strong as the weakest link in the chain. If Communications and Electronics (CE) happens to be that weakest link, then the other parameters that you see in functional areas are really only as strong as is the weakest link. These areas are combat, logistics, admin, C-E, intelligence, personnel, and ADP.

Of course, when addressing communications, we like to consider compatibility, interoperability, survivability, and responsiveness as being paramount, with emphasis on interoperability. There are ways of achieving interoperability besides having, for example, the same piece of equipment.

I would like to define survivability as being transportable and redundant within our systems. If we have transportability and redundancy, then we have some degree of survivability.

Being aware that communications is so critical, WESTCOM has initiated two efforts under the single broad contract heading of Pacific Command Communications Support Requirements, Echelon Above Corps, 1988 (PACOM COMSREAC-88). These two subject areas, minimal essential circuits and communications interoperability, will be handled by the same contractor, but each of the subjects will have its own final report which is due in September of next year. The first subject area is a unilateral, US Army effort. The second area is a bilateral effort between the US and other selected nations within PACOM. The first final report (deliverable) that we will get from the US Army effort will be a listing for the Pacific theater of the minimum essential communications requirements of the various organizations operating within the PACOM.

Now, to have a keener appreciation of what we hope to accomplish with our first deliverable from this contractual effort, our objective is stated here. It is to conduct a survey of Minimum Essential Circuit Requirements (MECR) for in-theater and Time Phased, Force Deployment List (TPFDL) units in the Pacific during the transition from peacetime to a protracted 6-month conflict.

You will note that we are talking about the entire Pacific theater as it relates to the Army. The Air Force and Navy will be consulted during the survey and we may develop some joint requirements, but the emphasis will be on the Army requirements.

We will be addressing the problem to those units currently deployed within the Pacific theater and to those who, under certain conditions and operations plans, would have a contingency mission to come to the Pacific theater. If need be, units which have not been specifically identified will be represented by notional units or type units that enable us to determine what the minimum essential communication requirements are. Since we're talking principally about Echelons Above Corps (EAC), we are specifically addressing the COMMZ, or that portion of the battlefield that is to the rear of the corps rear boundary. The rear of that area can represent the water's edge for a particular country or the COMMZ rear could extend all the way back to the mainland of the United States, as it did in the case of Vietnam.

We will be analyzing four types of potential contingency situations and determining requirements for them. Those situations are identified here as: Type I, combined operations in an established theater; Type II, combined operations in a location where US forces are not stationed in peacetime; Type III, contingency operations where US Army forces greater in size than one corps fight jointly with other US services, but without major assistance from an ally; and Type IV, contingency operations involving one corps or less of US Army forces fighting jointly with other US forces. Our emphasis ultimately will be on Type II and Type IV.

There are many factors which the contractor must be conscious of and take into consideration, as he plows his way through this rather significant effort. We understand that it will be a maturing theater and that we will look at the period from D Day and D+30, all the way through D+90, in a phased manner as the theater builds up.

FM 100-16 is our field manual dealing with EAC operations doctrine and is in draft form now, but it is available to the contract personnel. EAC doctrine is, unfortunately, principally tailored to fit a European scenario. Not as much work as I would have hoped has been accomplished, in terms of taking this doctrinal umbrella and developing a specific approach to the implementation of the doctrine. So that is what we are going to do in this particular case. We are switching the spotlight away from Europe and to the Pacific.

The first deliverable will be the listing of minimum essential communications requirements. However, as we build on this initial survey during the next year, or possibly two, we will try to "size the pipe," in other words, the communication system, in order to accommodate all of the user needs.

Then we will translate that requirement into terms of the CE or signal force structure which is required to implement a system of the required size. The force structure will, of course, be related to OPLANS, our TPFDL organizations, and notional units during operations.

We want to concern ourselves with that area of the theater which includes the divisions and the corps in terms of tactical system interoperability. Just as important, we want to ascertain the logistics that are required to sustain that signal force structure in order to provide the communications.

In a more simplified manner, the contractual approach will utilize the input from the communications support requirements. Missions will be developed early on from the Army's EAC doctrinal concepts and from the 1988 Army force structure. All of these inputs will pull together to produce a portion of COMSREAC-88.

We have a statement of work that went out to the contractor containing specific tasks which the contractor must perform in order to get his money. He will review and analyze the published Army doctrine, scenarios, and studies and apply them to the Pacific area of operations. The contractor is going to make visits to various organizations within the Pacific theater and discuss with those organizations his analysis interpretation and then refine the requirements that those organizations need using the type scenarios that we mentioned.

We will have an audit trail, which we consider to be very important, so that we can go back and verify how we arrived at any particular requirement; where it came from; how it was established; and what is it based on?

Finally, in addition to the other volumes, we will publish an executive summary. Hopefully, the executive summary will be an unclassified version of the whole study. The visits which the contractual people will make will be to such organizations as: CINCPAC, WESTCOM, USARJ, USACC-WESTCOM, USACC-JAPAN, 1st Signal Brigade, and the mainland proponents, such as the Log Center, and any of the other TRADOC centers.

Ultimately, we hope to have the contractor develop the requirements, coordinate those requirements, and verify them in terms of the voice record data facsimile for all of the Army units within the Pacific theater. Then we will follow through with the sizing of the force and so forth.

In order to insure that the contractual people stay on the right path, we have a study advisory group (SAG) that has been established consisting of representatives from the following organizations: USACC, C4 DCSOPS, USAWESTCOM, USACC-WESTCOM, 1ST Signal Brigade, USACC-JAPAN, and TRADOC. It will also have observers from CINCPAC, COMUSK, USFJ, PACAF, and CINCPACFLT. This group will meet monthly, or if we feel that the effort is on track, less frequently.

These are the folks in the military who give the guidance to the contractors. The C4, DCSOPS, was newly created on 1 October of this year. It used to be the Assistant Chief of Staff for Communications and Electronics (ACSAC) and is now an assistant DCSOPS for Command Control Communications and Computers. I think it is important to notice that TRADOC will be a member of this organization, with the observers coming from CINCPAC and the other sub-unified commands within the Pacific theater.

Ultimately, we will end up with the following outputs: The unique data base that has been transcribed to the Pacific theater; enhanced doctrinal concepts reflecting the Pacific theater's unique operating environment; the necessary theater force structure; the implementation plans which contractors will be required to provide. This will be the cornerstone of planning for various contingencies, because as we said in the very beginning, "If you ain't got commo, you ain't got nothing."

The second effort that we have undertaken is of a bilateral nature. We want to concern ourselves with interoperability. We would like to know specifically what today's problems may be, so that we have the time in peacetime to do some orderly planning and assessment. When hostilities have erupted, things are hectic enough, and we would hope to have some of this planning already accomplished.

The objective of this particular portion of COMSREAC-88 is to provide an assessment of the interoperability of a selected nation, the Defense Communications System (DCS), and the Army communications systems in the 1986-1990 time frame. The data will be used to refine the Army portion of the Pacific DCS, the development of Joint Multichannel Trunking and Switching System (JMTSS) plans for the Pacific, and the formulation of inputs to the Army C-E support annexes to appropriate PACOM plans.

The DCS is our long-haul capability in order to communicate throughout the Pacific theater and back to the Pentagon Command and Control Circuitry, which can be carried on the DCS. The JMTSS is the extension of the defense communications system. It is used, for example, if we are asked to go into an area where there are no US forces and we have to extend our long-haul communications system to that area.

The effort will have several aspects. We will look at the communications management structure as it exists today. We will look at the topologies and capabilities of existing military and civilian communication systems in selected nations. By looking at the whole network, we would like to get some indication of where the Pacific area countries may be going in the future with communications, in terms of the state of the art. We want to take the data, determine which interoperability problems exist and then make some further assessments.

Again, these are certain tasks in the statement of work which the contractor must specifically address, as a minimum, such as a parameter-by-parameter comparison; the consideration of both the current and future characteristics of these systems; the consideration of two different interoperability situations, not just one approach to problem resolutions. Then we can look at the system in terms of cost effectiveness. Is it desirable to try to interoperate? Cost, I think, is a big factor in making that determination.

If we know what the deficiencies are, and the contractor has recommended solutions to correct those deficiencies, then I think that we will, from a collective security point of view, be much better off in the event that there is a requirement for US forces to go to a particular country. The thing that

is significant about these two efforts is the fact that much of this information already exists in various documents. It simply has to be adapted to Pacific theater requirements and collectively analyzed and centralized into a one-source document.

The plan is for the contractor to produce reports on nineteen nations, although we have not firmed up the entire listing of the countries. As I said in the beginning, this is a bilateral effort. It will be between the US contractor and a particular nation who we are attempting to analyze in the hopes that we will be able to interoperate, if and when required, with our communications systems.

This effort will not necessarily solve all our interoperability problems, but if we identify them, some may be able to be solved in the near term. Others may never be solved.

Gentlemen, that concludes my discussion. I will be glad to entertain any questions if you have them. Thank you very much for this opportunity.