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THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

#### LOGISTICS PLANNING

A Research Report

by

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#### FOREWORD

This report is the product of a research project conducted as a phase of the Advanced Logistics Course, Class 61-A, School of Logistics of the Institute of Technology. The purpose of the research is two-fold; first, to provide practical experience in problem analysis through participation in applied research; second, to attempt to produce improvement in, or solution to, a current logistics problem.

The subject of this research is Logistics Planning. This subject involves first an inquiry into the parameters and definitions of planning from an academic point of view. Against this perspective, logistics planning in the Air Force is viewed in terms of objectives, elements and principles, and its relationships with operations planning and the budget process. Application of logistics planning in the Air Force is examined to determine strengths and weaknesses and contributions that improved logistics planning can make to over-all logistics support.

The research group extends its appreciation to logistics planners in:

The J-4 Directorate, The Joint Staff
Office of the Deputy Chief of Staff, Plans & Programs,
 United States Air Force (USAF)
Office of the Director of Logistics Plans, USAF
Office of the Director of Budget, USAF
Directorate of Logistics Plans, Headquarters,
 Tactical Air Command (TAC)
Logistics Plans Division, Headquarters, Air Defense Command (ADC)
Logistics Division, Headquarters, Strategic Air Command (SAC)
Logistics Plans Division, Headquarters, Military Air Transport
 Service (MATS)
Plans Division, Headquarters, Air Force Logistics Command (AFIC).

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#### I. BRIEF

A "ballpark" for an academic inspection of planning, as a general subject, refuses to stay put, but "logistics planning" can be more closely looked at because logistics is composed of substantive activities and specific physical functions. As a mental process that produces a framework for the direction and control of action, planning should result in communication and a plan should be a communicative mechanism. Forecasting and research are not synonomous with planning, but good planning depends on both. Planning is the central function of command and management, and one of its key objectives is the discovery of alternative courses of action. Another objective of planning is to provide a focus of knowledge regarding goals, direction and expectations. The tendency of plans to be hierarchical in nature is frequently misunderstood and often unrecognized in the military services; this results in uncoordinated effort.

There are levels of logistics planning, and two major divisions of it. The first division, logistics planning, is concerned with the incorporation of logistics considerations in the formulation of strategy and tactics. The second, planning for logistics support, applies to the planning of details essential to accomplishment of a mission or operation that has been decided upon. Military logistics has become such a broad field of activity that logisticians themselves have difficulty agreeing what it is and what it is not. Most agree, however, that the three basics of logistics are: (1) determination of requirements, (2) acquisition, and (3) distribution. In so far as possible, judgment should not be the sole criteria of the worth of a plan; plans should be tested and scientific methods should be followed during the planning process. Current concepts of planning include integrated staff action, concurrency of planning on different levels, and relative intangibility of planning factors at different levels.

Logistics planning and operations planning should be fully integrated both by formal organizational procedures and by working relationships. Responses to the questionnaire indicate that only one-third of current logistics planning is integrated with operations planning. This lack of integrated planning activity is also apparent between the AFIC and operating commands. More advanced military education is needed for logistics planners; only two-thirds of today's planners who answered the questionnaire have had sufficient advanced, formal training. Major decisions are being made through pressures of the budget system that should be made in the logistics planning process. This is being caused by lack of clear guidance from higher authority, failure to identify alternative courses of action, and controversy over roles and missions. A budget cycle of one year poorly meets the needs of today's logistics planning and long lead-time considerations; many man-years of repetitive effort are being wasted.

The primary document developed within the Air Force as the basis for its logistics planning is the Mid-Range Wartime Requirements Plan (WPM). The object of this document is to project the objective or, as the title infers, the requirements of the USAF. However, an examination of its contents from a conceptual viewpoint reveals that the document is too budget-oriented to be classed as an objectives or requirements type of plan.

Planning, to be productive, must provide a schedule for attainment; otherwise it is done in a vacuum and is "planning for planning's sake". There are indications that much of the planning accomplished in the USAF results in a double standard of orientation and a requirement for implementation with less resources than are fully required. A top level planning document that rides the crest of the waves, representing each budget submission is required in the USAF. Apparently the Department of Defense (DOD) is attempting to bring about such a document in developing budget guidelines through use of the "Program Package" concept.

#### II. CONCLUSIONS

- A. There are wide differences of opinion among Air Force logistics planners as to what planning is and what logistics planning is not.
- B. Too many logistics planners lack appreciation of the planning process and cannot identify how their work contributes to the whole.
- C. More time and attention should be devoted to evaluation of the planning process and to the testing of plans before full acceptance and implementation.
- D. Concurrency of planning at different levels generally results in better plans and greater confidence in their successful execution.
- E. A better planning product will result from a more careful selection of planners, integration of logistics and operations planning groups, and the location of all planners working on the same problem in the same or adjacent offices.
- F. A course of instruction in Logistics Planning will improve the qualifications and appreciations of new logistics planners and of those who have not had advanced training for at least four years.
- G. If the Joint Strategic Objectives Plan (JSOP) were approved by the Secretary of Defense and the JCS, clearer guidance would be given logistics planners and controversy over roles and missions would be reduced.
- H. A basic logistics planning document containing a greater degree of futurity and stability is required for logistics planning in the USAF.

#### INTRODUCTION

Planning can be adequately described as that function of management or command which provides an objective and a schedule for change. In view of the rapidity with which changes are taking place in this hectic age of technological revolution, it was considered that a preliminary study into "logistics planning" was timely and appropriate. The study problem originated at an Air Force activity concerned with the support of a new weapon system introduced into the inventory without benefit of adequate logistics planning. The specific problem that was investigated was identified by the question, "Can the quality of logistics planning in the Air Force be improved?" A first reaction to this question is probably the same as the study team's - Yes, it can be. But is your observation objective?

Discussions on planning reviewed during the preliminary reading phase of this study were unanimous in the belief that planning must anticipate the future and provide for a capability to make selective decisions in the future. The formalized mid-range planning process of the Joint Chief's of Staff and of the Air Force, described in Air Force Manual (AFM) 55-7, was used as a background for exploring the futurity of the logistics planning process objectives of the USAF. Reasons for this were:

- 1. The mid-range plans of the Joint Chiefs of Staff (JCS) and the USAF serve as the basis for the development of all primary and supporting logistics plans.
- 2. If principles of planning could be identified outside the formal military planning process, they could be applied to logistics planning. Then there would be a valid means of measurement in the "real world" of planning as it is conducted today.

It was hoped that an investigation would lead to valid recommendations for improvement of the mid-range planning process. Hopefully, if the mid-range planning process (the basis for all logistics planning) could be improved, it would follow that the "quality of logistics planning would be improved".

In addition to limiting the scope of investigation to the mid-range planning process, time permitted an exploration of three levels of planning, the JCS, Headquarters USAF, and five major commands of the Air Force, AFLC, TAC, ADC, SAC and MATS.

In conducting the study, primary reliance was placed on the use of a comprehensive questionnaire. This questionnaire was submitted to key planners on each of the three levels who were considered most knowledgeable

in the area of logistics. In the light of qualifications of respondents to the questionnaire (Appendix II), it is considered that an objective insight into the area of logistics in the Air Force was obtained - across the whole spectrum.

- I. The concept of a "Master Plan of Logistics" (see Appendix III) offers a means for accomplishing improved logistics planning in the USAF.
- J. Logistics planning, as conducted in the USAF today, reflects too much of the "reasonably attainable" or budget oriented philosophy. As a result, too much of its logistics planning is subjected to constant ups and downs of the budget process.
- K. The USAF should develop a concept of logistics planning that would provide top management a "blueprint" of activity for long range uses. Such a concept is in consonance with a philosophy of planning being circulated in many areas of the government by the present administration.

#### III. RECOMMENDATIONS

- A. That the USAF establish a program directed toward requiring all logistics plans be tested before full acceptance and implementation, and that logistics planners be required to fully participate in test exercises and war games.
- B. That the Air University (AU), USAF, construct a curriculum for a course in Logistics Planning to be presented by the School of Logistics (SOL), Wright-Patterson Air Force Base (see Appendix II).
- C. That the USAF develop a concept of logistics planning that will furnish its top management a "blueprint" for logistics activities over the long range period (see Appendix III).
- D. That the USAF further analyze its present method of conducting logistics planning for the mid-range period against the DOD's budget guidelines for FY 1963, and determine whether such a concept can be applied to USAF logistics planning on a continuing basis.

TEXT OF THE REPORT

#### CHAPTER ONE

#### CAN THE PARAMETERS OF PLANNING BE IDENTIFIED?

#### I. Introduction

Planning is such a universal, everyday activity, engaged in by almost everyone in one way or another, that the average person gives little conscious thought to its importance. Individuals plan their day's activities; families plan for vacations, purchases of homes and for social activities; towns and cities have planning boards or planning commissions to advise their governing bodies on decisions that will best meet future requirements; and, of course, there is virtually no element in the Federal Government that is without a planning body, be it committee, board or staff. At these levels, away from the individual and family, planning becomes a more conscious process or activity. It may be said with some degree of accuracy that the larger or more complex the institution, the more ramified and complex will be its planning mechanism.

Besides being produced formally and informally, written and unwritten, publically and privately, published and unpublished, plans come in all sizes, shapes and descriptions. There are financial plans, budget plans, zoning plans, construction plans, conservancy district plans, personnel and manpower plans, operational plans, logistics plans, and most people these days have heard of planned families. In government, plans, other than current and operating ones, are classed as long range, mid range and short range. If not unclassified, they will be confidential, secret or top secret. The large number of kinds of plans that exist lead to the feeling that planning, like philosophy, can be given almost any definition a person engaged in it wishes to.

If planning, like philosophy, is hard to define it will be difficult to establish parameters for. By parameters is meant identifiable limits within which planning takes place or is confined. Indeed, the parameters of any plan will be precisely those which the planner himself decides to establish for his plan. While the "ballpark" for an academic inspection of planning refuses to stay put, there is no reason for believing that planning does not have aspects worth close examination. There are some good and usable definitions of planning. There are identifiable considerations every good plan should reflect, and the goals and objectives of planning can be made recognizable. Besides these worthwhile aspects of planning there are elements, principles, and possibly concepts of planning whose existence planners should be aware of.

#### II. What Is Planning

Planning is a mental process that results in a framework for the direction and control of action. It is the central function of management or command. One writer describes planning as an organized, continuous

process of making present, risk-taking decisions in the light of the best available knowledge of their futurity. He further adds that planning comprises decisions essential to systematic organization of efforts needed to carry out the planning decisions against expectations through organized feedback. Planning is that function of management or command that is involved with selection, from among alternatives, of objectives, policies, procedures and programs. It is decision making that affects the future course of the organization's action.<sup>2</sup>

Planning should be defined in context with its specific objective and with reference to the kind of planning one has in mind at the time of definition. In order to get a "real-world" reaction to the preceding statement, respondents to the questionnaire developed by the research team were asked to agree or disagree with the statement, "Planning as a mental process can be described and explained, but it cannot be defined." Of the responses, 42 disagreed, saying planning can be defined, while 25 agreed that it cannot be, and others either said "yes and no" or remained unresponsive. The disagreeing respondents were asked to furnish definitions of planning they follow, and a good representative set was received. These almost unanimously agreed planning must have an objective; many indicated the process as being a means of identifying alternative courses of action. One original thinker answered, "For the same reasons engineers and architects prepare blueprints - as a suitable means of communication with others for thinking, design, intent, correction and implementation." This was the only instance where planning was associated with a communicative process, and it is a worthy idea. A plan that cannot be communicated to others might as well have not been made in the first place. Among planners, then, it is generally believed that planning, as a conscious process, can be defined. Several acceptable definitions have been and will be presented in this paper, but there is no universally accepted definition of the process that can be used as a guide in widely different planning situations.

One way to know a thing is to know what it is not. In an effort to establish what planning is not, in the minds of logistics planners, a TRUE or FALSE response was asked for on the following statement. "Planning is not forecasting; it does not deal with future decisions. It does deal with the futurity of present decisions, and it does not eliminate risk."

Peter Drucker, "Long Range Planning", Management Science Quarterly, Vol. 5, No. 3, April 1959, pp. 238-249.

Koontz & O'Donnell, <u>Principles of Management</u>, 2nd Ed., McGraw-Hill, 1959, p. 453.

Peter Drucker, "Long Range Planning", Management Science Quarterly, Vol. 5, No. 3, April 1959, pp. 238-249.

Of a total of 67 respondents, 23 indicated the statement to be TRUE, 7 said FALSE, and 37 said it was both TRUE and FALSE. Since comment and reasons for positions taken were not asked for, it could not be determined why so few thought it FALSE. It would be more interesting to know why ambivalence was indicated by more than half the respondents. Semantics may be partly the answer, and hurry to get through a long, bothersome questionnaire may be the rest. However, there are differences between planning and forecasting. Additionally, planning has nothing to do with future decisions, though good planning now may make future decision making easier. Risk cannot be eliminated through planning; it can only be insured against.

Planning is neither research nor forecasting, but good planning depends on both. Research will not be discussed, but forecasting, on the other hand, is a process that results in an assertion as to what conditions will be like in the future. This is not planning. Predictions are made about the weather, election results, the stock market, economic growth and next season's fashions. Depending on the worth of the education and scientific procedure that goes into such "guessing", results may be good, bad or indifferent. Forecasts project a hypothetical image into the future. To the extent they accurately reflect future conditions the planner tries to visualize during the planning process - they are good. It is repeated, planning is not forecasting, but good forecasting can be a valuable aid during the planning process. Planning does not deal with future decisions because decisions can only be made in the present. Good planning, based on some sort of forecast and with a clear objective in mind, can give the decision maker a wider selection of choices and greater latitude for action in the future. To some extent planning does concern itself with future capabilities, but not with future decisions. If this is so, it is true that planning does "deal with the futurity of present decisions". Planning cannot eliminate risk because it cannot control the future. Nonetheless, if planning, based on a good forecast, has been good, it can produce a readiness or capability to deal with future risks and to counteract adversity.

Fundamentally, planning is choosing, and a planning problem arises when alternative courses of action are discovered. The question of alternatives is at the center of importance for the military commander. During the operational planning process the commander's staff will prepare an estimate of the situation, and each of his staff sections should prepare alternative courses of action for him to select from. These are furnished together with conclusions as to feasibility, suitability and acceptability of the alternate courses of action, and the conclusions are accompanied by recommendations on courses of action and statements of problems involved in each. The commander has the tough job of making the decisions - choosing, that is, from among the alternatives the ones he believes will most likely meet with success.

Billy E. Goetz, Management Planning and Control, McGraw-Hill, Inc., 1949, p. 2.

As a generality, each plan will have a next senior and a next junior plan; i.e., each plan will be based on a plan produced at a higher level, and each plan will be the basis for a plan at a lower level. Each planning level is required to evaluate quantities, times, places and values as well. A question was asked respondents as to whether or not alternative courses of action are identified prior to the publication of the Air Force's War Plan Basic (WPB) and the War Plan Mid-Range (WPM). The tabulation of responses showed 17 individuals answered YES, 19 said NO. 6 stated they did not know, and ll made no attempt to respond. It is indicated that more than a third of the planners who cooperated in this survey believe the WPB and the WPM are published without identification and evaluation of alternative courses of action. It also shows that more than 20% of those who responded either did not know or had insufficient facts on which to base a judgment. Since one of the functions of planning is to identify alternative courses of action, it appears reasonable that more military planners should be better aware of the function and its importance.

#### III. Why Do We Plan

It was indicated that planning is hard to define and that the parameters for it are elastic. Though its definition and parameters are relative, planning must have reason(s) for being done. In one instance the respondents were furnished two "for instances" as to why we plan, and were then bluntly asked, "Why do you think we plan?" -- It was observed that 58 of the respondents had positive and definite statements to make as to why they thought planning is done. By and large the responses indicated much appreciation for "accomplishment of objectives in an orderly, timely and economical manner". There was a considerable indication of the element of futurity in planning, and the favorite words and phrases such as effective, detailed objectives, scheduled attainment, translate policies and to determine the Who, What, When, Where, Why, and How, cropped up often. The range of responses was from one that dealt with the benefits derived from "mental gymnastics" to a three part reply quoted as "We plan to create a panoramic picture of the environment toward which current trends are moving. We plan to determine and document the interrelationships and effects on a total program of various actions. We plan to determine whether or rot, and how, current trends should be altered in order to achieve specified objectives." It was obvious that these logistics planners have good and definite ideas about why we plan.

Being a choosing process, planning is an intellectual process, a mental predisposition to do things in an orderly way, to think before acting, and to act in the light of facts rather than guesses. It is the antithesis of the gambling and speculative spirit. And no devices are any substitute to the hard think which it demands. If we have developed an appreciation for what planning is, then we again ask the question, "Why do we plan?"

There are many reasons why we plan. One writer stated we plan in order to establish controls and constraints on actions with respect to the accomplishment of designated objectives in accordance with a plan; control cannot exist without a plan. Another writer says that we plan and make decisions today in order to be ready for an uncertain tomorrow. Both of these statements are true, and other statements could be made that would be just as true. The following, culled from respondents questionnaires, are all good answers to the question and could be used separately or in combination, depending on the planning situation. We plan to:

- A. Translate policies and concepts, developed from national objectives, into usable form. (Military only.)
- B. Determine what we can achieve within reasonable bounds of resources with the least risk.
- C. Attain objectives in the future in an efficient, coordinated and economical manner.
- D. Determine our capability in terms of resources on hand as compared to resources required to achieve an objective.
- E. Establish an orderly and systematic schedule of progression for accomplishing specific events in an effort to arrive at pre-determined objectives.
- F. Attain previously identified objectives with a minimum of time, money, effort, manpower, and materiel.

Each of the above is a usable statement. Planning that would be required to satisfy (A) would be done on a strategic level, probably by the Joint Staff. The statement in (B) indicates a limitation of resources and a necessity to project how far we can go with what we have. And, at the same time, (D) implies that an objective has been established and that uncertainty exists as to our ability to achieve it because of a possible lack of required resources. The similarity between (B) and (D) will be apparent, but there is a difference that is harder to see. Finally, the statement in (E) approaches closest to having a universal application in non-military activity. It can be applied to everyday activities of the individual, a social group and to an institution's current and long range objectives. There are many reasons for planning, but about as much as can finally be said is that we plan in order to establish controls for the course of future action.

<sup>5</sup>Ralph C. Davis, The Fundamentals of Top Management, Harper & Bros., 1951, p. 82.

<sup>&</sup>lt;sup>6</sup>Peter Drucker, "Long Range Planning", <u>Management Science Quarterly</u>, Vol. 5, No. 3, April 1959, pp. 238-249.

# IV. What Are the Goals and Objectives of Planning

In a rudimentary sort of way the objective of planning can be thought of as being - to answer as many questions as possible. This is particularly so in operational planning. A goal of planning is to furnish the commander alternative courses of action to which he may apply the criteria of decision - suitability, feasibility and acceptability - in order to arrive at his decision. In a broader, more comprehensive sense, an objective of planning is to provide a needed focus of knowledge for the entire organization regarding its direction, goals and expectations. The plan should contain organized and analyzed information essential to further decisions. In this latter sense it can be inferred that a goal of planning is the establishment of a communicative mechanism, or a floor of basic understandings and a basis of departure for further communicating.

In an effort to determine the extent of appreciation for this communicative process in planning, respondents were asked to state their agreement or disagreement with this statement - "A function of planning is to supply information for subordinate action and decision". A majority of 47 respondents agreed with the statement; 17 said they did not agree with the statement, and 3 answered "yes and no". Those who responded in the negative were asked to state the basis of their disagreement. On closer examination the unequivocal NO's reflected more agreement than disagreement, and could, for the most part, have been tabulated as, "yes, but". A sampling of reasons given for disagreement follows:

- A. A plan embraces the action and decision for the level of command preparing the plan.
  - B. Not only for subordinates, but for all levels.
  - C. Subordinates should be required to implement decision.
- D. Planning is a process. A plan does supply information for action and decision.
- E. While decision should be made at the lowest level having the facts, decision is usually exercised above the planning level.

It is true, as far as it goes, that planning supplies information for subordinate action and decision, but this is only one function of planning.

<sup>7</sup> U. S. Naval War College Text, The Military Planning Process, May 1957.

Peter Drucker, "Long Range Planning", Management Science Quarterly, Vol. 5, No. 3, April 1959, pp. 238-249.

Next, the logistics planners were asked to evaluate this statement -"A function of planning is to state subordinate missions and objectives, and to specify their accomplishment in terms of quantity, quality, time and expense together with criteria for their satisfactory accomplishment". Tabulation of the evaluation showed 18 said GOOD, 34 said SATISFACTORY. 9 said INCOMPLETE, while 4 evaluated the statement as BAD. In view of the fact that more than 80% of all evaluations were either GOOD or SATIS-FACTORY, the statement is considered acceptable. Reasons given for INCOMPLETE and BAD evaluations ranged from: "may be for own level's analysis", "Don't agree with the word subordinate", to "Planning must consider collateral actions by other commands and agencies not subordinate to the planning agency". It is considered that this last statement, especially as it applies in the military services, is a good one. It does not conflict with the assertion that plans tend to be hierarchical, but it does emphasize the point that the existence of other plans and planners indicates the need for coordinated action in achieving planning objectives.

Planning divides into two general types: (1) administrative or policy making and guidance furnishing and, (2) operational or project type planning. A large majority of evaluators (54 out of a total of 66) agreed to this arbitrary categorization. Correspondingly, they agreed that "strategic and operational planning have the same ultimate goals and conduct of the two follows the same planning processes". There is a correlation between administrative and strategic planning as well as between operational and project planning, and they are complementary when directed toward the same objectives.

Sometimes the selection of alternatives is referred to as - the decision making process. It is necessary that planners know that the tests of suitability, feasibility and acceptability are applied to their plans. When a plan is accepted or rejected it is assumed they learn why. It is of lesser importance that planners know specifically who applies the tests, though this is desirable. When asked who applies these tests to the Air Force's WPB and WPM, 27 respondents made positive statements and 29 either made no response or admitted they did not know. The best reply was contained in the statement, "The tests are supplied through integrated staff action. In the Air Force, and its WPB, WPS, and WPM, all Air Force agencies apply the tests through operation of the Plans and Programs Documents". There were other good responses but one respondent said, "The National Security Council, based on inputs from its sources", and another brash individual stated, "No one. This is a basic deficiency of USAF planning". People engaged in military planning should be better indoctrinated or instructed in their planning system and how it functions. It is worth repeating that an objective of planning is to provide a needed focus of knowledge for the entire organization regarding its goals, direction and expectations. Planning aims at organizing and analyzing information essential to further decisions.

# V. Can the Elements of Planning be Identified

It is reasonable to state that it is easier to identify the elements of a plan than it is to identify the elements of planning. The essence of planning can be more easily understood through an appreciation of four fundamental principles. They are: (1) Contribution to Objective, (2) Primacy of Planning, (3) Pervasiveness of Planning and, (4) Efficiency of Plans.

Contribution to Objective: The plan and everything in it must contribute to the accomplishment of the objective. If a plan is assessed as making no contribution to its objective, it will inevitably be scrapped. This is especially so in the hierarchy of military plans; a subordinate or supporting plan that does not contribute to the objectives of its senior plan is worthless. Too frequently planners lose sight of the plan's objective or are not furnished sufficient guidance to discern it. Worse than unobjective planning is "planning for planning's sake". Unless this last is done as an exercise for instructional purposes, it is only mental gymnastics which produces nothing - achieves nothing.

Primacy of Planning: This means that planning is the central, most important activity of command. Planning, as a function of command, selects objectives and establishes policies and procedures for their accomplishment. Finally, command supervises the course of action followed in achieving the planning objectives. This element of control would be impossible to exercise in the absence of a plan. Planning is the prime and central activity of command.

Pervasiveness of Planning: This means that the primacy of planning exists at every level of authority and supervision. In every organization there are numerous levels of authority, and frequently within an echelon there will be equal authority over different activities. Where there is authority there is command or management, and at each of these points there will be a formal or informal planning responsibility.

Efficiency of Plans: By this it is meant that when put into effect the plan should achieve its objectives efficiently and with a minimum of unanticipated consequences and dislocations. The word efficiency is to be taken literally. A plan can be effective when put into effect, but it may be inefficient in that it calls for excessive cost, too much manpower or delicate, sophisticated equipment requiring excessive maintenance. To produce an efficient plan calls for a high degree of skill from the planner. Air Force logistics respondents demonstrated a good

<sup>9</sup>Kcontz & O'Donnell, Principles of Management, McGraw-Hill, 2nd Ed. p. 453-456.

appreciation of elements of a good plan. It is important that thought be given to fundamental principles as just discussed.

Another aspect of planning that can be identified is called - relative intangibility. Planning on the strategic and policy making levels must come to grips with immeasurable forces that are influential and have to be considered. Some of these, for example, are economic condition of the country, policies of the administration in office, the state and capability of technology and communist capabilities and intentions. As requirements for plans filter down in the organization the degree of intangibility decreases. Air Force log planners have a good appreciation for this characteristic. Out of a total of 65 who answered the question, 56 agreed that this factor of intangibility exists. This should indicate they have an understanding of higher echelon problems that must be solved before decisions for further action can be passed down to them.

Respondents were also in general agreement that the planning process should include consideration of standards for future action to be based on the plan. This idea was produced by a writer when he asserted that a plan establishes standards when it provides for an analysis and classification of actions. When asked about this, 54 respondents agreed, and 9 could not accept the statement; 4 did not respond. To some degree, it is true, plans should consider standards of future action to be taken pursuant to them. In operational planning, however, the standards of action are prescribed and exist outside of and independently of the process that produces the plan. In this light the well known Standard Operating Procedure (SOP) is a useful adjunct to planning because it eliminates necessity to redetermine standards of action when particular processes are repetitive.

Any plan, before it can be considered good, must contain certain characteristics in order to accomplish its purpose. That is to say, it must be something just as it must do something. A good plan should embody these eight characteristics: (1) Objectivity, (2) Logic, (3) Futurity, (4) Flexibility, (5) Stability, (6) Comprehensiveness, (7) Simplicity and, (8) Clarity. There are few military plans, and certainly not formal, written ones, that are simple. As a characteristic for plans in general, however, simplicity is desirable. It is possible that what military plans lack in simplicity they make up for in comprehensiveness.

Of 65 respondents, 54 agreed to acceptance of the above eight characteristics. However, 11 of them disagreed that a plan could be both stable and flexible. The reason one of these gave was that, "Stable indicates

<sup>10</sup>Ralph C. Davis, The Fundamentals of Top Management, Harper & Bros., 1951, pp. 48-49.

the plan should be without flaw, thus unrealistic". Another observed that, "Stability is not consistent with changing concepts of weapons, availability and usability". Still another frankly replied, "A plan must be flexible but not so broad-brush as to be weasel-worded and subject to several interpretations". Just what experiences prompted these responses can't be known. It is accepted, though, that most plans can be both stable and flexible. It is characteristic of a flexible plan that it can be easily and quickly adjusted in a changing situation without serious economic loss or weakened effectiveness. It is characteristic of a stable plan that changes in external constraints and the general trend of events will not cause the plan to be scrapped or abandoned. 11 The semantics of the words stable versus flexible may have clouded the responses, but they are attributes wanted in a good plan. Perhaps a combination of the two characteristics would result in a "tough plan". In its doing something, not as an end in itself, planning acts as a bridge to the future and should end by performing the following seven services for planners and executors of the plan. Planning should:

- A. Analyze the situation and determine what must be accomplished.
- B. Identify alternate courses of action and evaluate them.
- C. Develop policies and procedures to follow in implementing and executing the plan.
- D. Identify measurable, intermediate goals whose achievement will accomplish the planning action.
- E. Result in a plan that will implement the selected, best course of action.
- F. Establish criteria for use in evaluating subordinate plans, and for measuring progress toward achieving intermediate goals.
- G. Allow for and encourage creative innovation in subordinate planning and in execution of the planning process.

Planning cannot be automated and it should not be allowed to become a stereotyped process. Essentially, planning should be viewed as creative. It requires reflective and logical thinking as well as intelligence and experience and a sharpened ability to "appreciate the problem". It is probable the military services all have planning groups that could be considered equally experienced, equally talented and equally capable.

<sup>11</sup> Toid.

It would be a mistake to believe that the Navy planners could as easily and quickly do an Air Force planning job as the Air Force planners could, and it would be just as wrong to ask Army and Navy planners to swap jobs. Their careers have developed in them appreciations for different kinds of problems.

Among the elements of planning, then, must be the trained and experienced man. One Air Force officer is known to have said, "In Washington we have the finest group of 'firefighters' in the world, but very few planners." A respondent exercised editorial license in one of his remarks when he said, "There is a dearth of planners, but there are many procedural writers who think they are planners". As the central function of command, planning should be primary, pervasive, efficient and objective.

### VI. Are There Concepts of Planning

A concept is defined as: (1) a general notion, the predicate of a possible judgment, (2) a complex of characters. Several authors who have written about planning made statements and comments about "concepts and principles" of planning. There has been no clear identification, however, of what is meant by "concept of planning". This situation was presented to logistics planners, and they were asked if they could identify concepts of planning. More than half of the respondents made serious efforts to oblige. Some of the statements reflected cursory thought, but others showed time and good thought had been spent on them. Here is a cross section of what Air Force logistics planners believe concepts of planning to be.

- A. USAF planning is based on the concept of integrated staff action rather than on centralized authority.
  - B. I know of none in print that are concisely and clearly identified.
- C. Planning is nebulous in that it provides many forms of decisions, at many levels, based on different criteria and under different conditions. Concepts are sometimes generally accepted ideas.
- D. A basic concept of planning is to try to avoid taking action without first planning for that action.
- E. The genus of planning lies in abstract, philosophical approach of a group. Objectivity of planning is really non-existent because each individual is subjective to the sum of his experience and knowledge. Best planning is group activity.
- F. Specifying the degree to which the elements of a plan must be "quantified" at a specific level, would be a concept of planning.

G. Planning must pertain to two basic ideas, primary and pervasiveness. It is the beginning of any truly conscious effort. It pervades the organization vertically and horizontally.

A concept becomes a transient thing when it is considered as a generally accepted idea. In view of the fact we live in a rapidly changing world this is not bad nor wrong; what is generally accepted today may not be generally accepted tomorrow. One general idea that comes close to being a concept in USAF is that of 'integrated staff action'. It might be well that planning could be improved, if it were required that the process consciously follow a scientific method. If it did nothing else this would require testing the plan before its installation or use. In some respects planners are getting closer to the scientific method. More and more plans, and parts of plans, are being programmed for "check out" on computers. In the absence of some kind of a test, the plan may be no better than the judgment that approves or disapproves it. Integrated staff action does focus on a problem the greatest amount of skill, judgment and knowledge available; it goes far toward eliminating weaknesses inherent in the single mind, the single judgment.

#### SUMMARY

Can the parameters of planning be identified?

- A. Planning is a universal activity. It is hard to define and its parameters are flexible.
- B. Planning is a mental, decision making process which results in a framework for action in the future. It is the central function of command and management.
- C. A plan is a communicative mechanism. Military planning requires constant vertical and horizontal communication in the organization during the planning process.
- D. Planning is not forecasting, nor is it research, but good planning may depend on both.
- E. There is a tendency for plans and planning to become hierarchical, but such a chain in the military is frequently broken and often unrecognized. This results in a condition where plans are not contributing to coordinated goals.
- F. Planning provides a needed focus of knowledge for an organization regarding its goals, direction and expectations. It provides a floor of basic understandings and acts as a basis for further communication.

- G. Planning can be categorized as administrative and operational, and strategic and tactical planning may be correlated with these terms. Planning at higher levels tends to be more conceptual and reflective. As the process moves downward it becomes more concrete, less subject to misinterpretation.
- H. Four basic principles of planning can be identified as: (1) Contribution to Objective, (2) Primacy of Planning, (3) Pervasiveness of Planning and, (4) Efficiency of Plans.
- I. Planning should not become a stereotyped process. When this happens its creativity is destroyed.
- J. There are elements, functions and principles of planning, but planning itself is so mercurial that lasting concepts of it are hard to identify.

#### CHAPTER TWO

### CAN THE PARAMETERS OF LOGISTICS PLANNING BE IDENTIFIED?

#### I. Introduction

The term "logistics", despite the fact it has crept into the literature of business and industry since World War II, is predominantly a military term. It must be added that, as a military activity, the performance of logistics functions is getting more and closer attention because of the money and manpower involved. In emphasis of this it is pointed out that in the recent past the Air Materiel Command, now the Air Force Logistics Command, has supervised the expenditure of more than \$10 billion per year for the Air Force in its procurement and other logistics programs. This has approximated the sum of the Army's entire funds authorization. A major portion of the \$43 billion the President requests for the DOD in FY 1962 will be spent for the development, production, acquisition, shipment, storage, operation and maintenance of materiel and to pay the men who will perform or supervise these activities. Also, because we as a nation approach spending 10% of the gross national product on national defense, management and its central function of planning, grows in importance to the nation.

During World War I, and for a time between the Wars, logistics was sometimes described in Army manuals as "that part of military science that deals with the coordination of the movement of troops and their supplies and equipage". A logistician's job would be much easier, if this were all he had to deal with today.

In a comprehensive sense today, logistics has been defined by the JCS in terms of materiel, personnel, facilities and services, and the more functional aspects including design, development, transportation, evacuation, storage, movement, acquisition, construction, maintenance, operation and distribution. The JCS definition adds, "It (logistics) comprises both planning, including determination of requirements, and implementation". When asked if logistics comprises both planning and implementation, 51 of the 55 individuals answering the question posed by the research team agreed that it does; there were four who disagreed. With such a large portion of Air Force logistics planners in agreement on a term's definition, it is assumed that logistics planning, unlike planning in an academic sense, may have limiting, identifiable parameters.

# II. What are the Goals and Objectives of Logistics Planning?

One thing is certain. All 55 respondents agree there is a correlation between success in war and successful logistics operations. However, there was a division of opinion among them when asked if all logistical effort (planning and operations) has as its objective attainment of sustained combat effectiveness in operating forces. Only 46 respondents

agreed when asked about this objective, while ll disagreed for reasons they gave. Their reasons for disagreeing are cogent in light of the fact much logistics effort does go into support of Military Aid and Assistance Group (MAAG) activity and into Mutual Defense Pact (MDP) agreements with foreign countries. These offshore, peacetime, foreign support activities are remote from "attaining and sustaining combat effectiveness". They allow the basic assertion to be at best - mostly correct.

Cliche that it is, there is basic truth in the saying that, "The objective of logistics is to have the right thing in the right place, at the right time". The harm this cliche tends to perpetuate is that superficial acceptance of it obscures the fact that a requirement had to be determined, acquisition had to be performed, and the item had to be transported - not to mention the services of identification and cataloguing and storage at several points along the way. All of these are logistics; all of them contribute to the What, When, Where, and all of them require planning.

One military writer has said that the function of planning answers the age old military questions of Who, What, When, Where, How, and Why. He holds that planning involves the exercise of creative thinking, and that these determinants (W-W-W-H-W) are expressed in terms of accomplishment. Most logistics planners, when asked if they agreed with this statement of a function of planning, responded affirmatively. Out of 54 responses, 39 agreed with the statement, 3 did not agree, and 12 felt the statement was not entirely true. Who and Why, some of them felt, are not considerations assigned to logisticians. A cross section of negative responses is shown:

- A. When and Why may remain as assumptions until something triggers the plan into becoming an order for action.
- $\ensuremath{\text{B.}}$  No, these are command questions. The How is principally logistic in nature.
- C. Not entirely. The Deputy Chief of Staff/Plans (DCS/Plans) often prepares a plan and turns it over to log plans for preparation of log annexes.
  - D. Yes, but Why doesn't always enter the problem.
  - E. Not entirely. Logistics and strategy are mutually interdependent.

<sup>&</sup>lt;sup>1</sup>J. R. Beishline, <u>Military Management for Defense</u>, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1959.

The response in (E) above is noteworthy. Logistics planners, for the most part, do not decide Who and Why, and they only need to be informed on Where and When. They are principally concerned with What and How. The J-4 directorate of the Joint Staff would probably not agree with the last statement. Part of the disagreement would be based on the fact that much logistics planning is devoted to determination of capabilities.

It must be recognized that there are levels of planning, and that there are levels of logistics planning. Each higher echelon of planning should establish goals and objectives, and the planning of each successively lower echelon should supplement and be coordinated with them. The major levels of planning and their agencies can be identified as follows:

LEVEL OF PLANNING	PLANNING AGENCY
National	National Security Council Office of the President
Department of Defense	The Joint Chiefs of Staff
Military Department	Varies with the Service; Several Deputy Chiefs charged with Planning
Operational	The several staff agencies of the operational element

It is a responsibility of each senior level to determine 'e objectives, and policies to be followed in reaching them, for each successively lower echelon. In view of the size and organizational ramifications of any one of the military services, it is not hard to understand why final and intermediate objectives are sometimes lost sight of.

One of the originators of a request to the School of Logistics for a study of logistics planning asked in his submission, "How do we recognize we have a planning problem?" The proper reaction to this, it seems, is that planners are assigned problems; they should not have to search for them. In the same submission the question was asked, "How do we go about implementing our solution?" The reaction here is that planners infrequently have responsibility for both planning and execution. Implementation is a responsibility of command, if the plan is approved and accepted. In pursuit of the same line of thought a final question was asked, "How do we control the implementation to insure that it complies with the plan?" -- Exercise of control is a function of command, and plans should allow for adjustment to control their flexibility and stability. It is a function of command, not of planning, to implement plans and to control the execution as rigidly or as flexibly as command believes necessary.

As there are many objectives of planning, there are several objectives of logistics planning. Without resorting to a partly meaningful cliche, the objectives of logistics planning cannot be defined so as to be meaningful in all conceivable situations. The primary concerns of logistics are with materiel, facilities and services, and different levels of concern will have different objectives. The objective of a logistics plan is to support a mission or operation by specifying the factors, forces, effects and relationships as they pertain to materiel, facilities and services essential to successful accomplishment of the mission.

## III. Elements of Logistics Planning

Planning in the general field of logistics can be broken out into two different kinds requiring specific considerations. They are: (1) logistics planning and, (2) planning for logistic support.

Logistics planning, as opposed to planning for logistic support, indicates the incorporation of logistic considerations in the formulation of strategic and tactical plans.

Planning for logistic support, a step down in the hierarchy of planning (from the policy to operational levels) applies to the detailed planning for logistic support of the force(s) which are to carry out the decision reached through an estimate of the situation.<sup>2</sup>

These are the two major divisions of logistics planning. The logistics planner-respondents were asked if they could agree with this division. Of those replying, 40 did, 6 did not agree, and 6 said they could not agree entirely. Additionally, they were asked if they could correlate strategy with logistic planning, and tactics with planning for logistic support. The correlations appear good. Of the 55 answering respondents, 48 said Yes, and the reamining 7 split among No, Not entirely, and I don't understand.

Logistics has become such a broad field of military activity that at times there is chance of losing sight of what it is and what it is not. While 41 respondents agreed the three basic functions are: (1) requirements determination, (2) acquisition and, (3) distribution, 13 of them disagreed for such reasons as follow:

- A. Would agree if applied to supplies only.
- B. Logistics also encompasses a fourth basic function maintenance.

Henry E. Eccles, R. Adm., USN, <u>Logistics In the National Defense</u>, The Stackpole Company, Harrisburg, Pa., 1959. p. 69.

- C. Facility requirements and construction are as important as supply requirements.
- D. Equal consideration should be given to the provision of services involving professional skills and utilization of manpower.
- E. The elements cited are not basic to all others; they are the areas of major concern. Research and development (R & D), reliability, availability and funding come before requirements determination.

While most logisticians will agree on the basic elements of logistics, the nearly 25% of respondents who did not compel a re-evaluation of the statement. In the matter of R & D, it is sometimes hard to determine whether it is being sponsored by support elements or operational elements. Now, with the new organizational establishment of the Aerospace Command, it is assumed R & D will be conducted independently of both support and operational elements. In terms of men and money, maintenance in the Air Force is conducted on such a large scale it has to be agreed that it is important. It is pointed out that the Air Materiel Areas (AMAs) which are largely concerned with maintenance occupy facilities have funding and manpower problems, and in order to perform their functions must determine requirements, acquire and distribute. Facilities, while they cannot be distributed, can be acquired through purchase or construction, and requirements for them have to be determined. At least two of the basic functions apply to them. Professional services and manpower utilization problems are certainly not reserved to the field of logistics, and it is not understood why a respondent would ask that equal consideration as basic logistics functions be given to them. Personnel and manpower are basic to the accomplishment of any task, mission or operation. Some do, however, go so far as to question the JCS's inclusion of "personnel" among the substantive factors in its definition of logistics.

A major terminal aspect of logistics planning revolves around the question, "How good is this plan?" Even with the quality producing aspects of integrated staff action, too often the worth or value of plans or parts of them depends on someone's judgment, and, in many instances, this cannot be avoided. In many others, though, there should be criteria or procedures to follow in determining the worth of a logistics plan. Respondents to the questionnaire were asked if they had knowledge of such criteria or procedures. Of them, 32 replied Yes, they had such knowledge, 20 answered No, and 3 made no response to this question. Individuals answering Yes were asked to identify the methods they had knowledge of, and the following is a sampling of statements made.

- A. Many, but different for all types at all levels.
- B. Play "logistics" realistically in operational exercises.

- C. (1) Follow-thru contact with implementing agencies.
  - (2) Progress reports from implementing agencies.
  - (3) Inspection and spot evaluation of implementing agencies.
  - (4) Final evaluation of results of the planned project.
- D. No specific yardsticks. However, evaluation is accomplished through experience, knowledge of factors and applied logic.
  - E. Exercises, maneuvers and deployment of the Air Strike Force.
  - F. War-game, inspect, implement the best test.
- G. Implication testing to determine validity. With this approach we can identify limitations and plan within them.

From the above responses, and the others not quoted, it is apparent that logistics planners and planning groups have given thought to the question, "How good is this plan?" Testing in the field under operational conditions is the best method. War-gaming and simulation have many applications, and more and more programming for computer check-out will be used for both operational and logistics plans. The 20 of 55 respondents who indicated they knew of no criteria or procedures for testing reflects weakness in the area of appreciation of the need and value of testing logistics plans.

# IV. Concepts and Principles of Logistics Planning

Though the AFM 55-7 states that in the USAF planning takes place at all levels, the quality of the plans is not assured nor is the continuity of the process guaranteed. Many planners in business and industry believe that plans should inherently contain methods or procedures for the evaluation of the plan as its construction progresses. One military thinker says there are three objectives of evaluation during the planning process. First is to evaluate the status of the plan. The second objective is to have the scheme of evaluation be an integral part of the plan. Third is to improve the planning skill of the planners. Questionnaire respondents were asked if they believed it generally feasible to evaluate the quality and progress of a plan as its construction went along. Of the respondents, 43 said Yes, they agreed, and 10 believed evaluation not feasible. The military writer referenced above proposed in his monograph a method for evaluating plans in progress.

<sup>3</sup>Harry R. Greer, Jr., Capt., USN, Evaluation in Planning, A Recommended Process for Military Planners, ICAF Monograph, M 54-86, 4 May 1954.

It may be considered a concept of planning that it increases in importance at the higher echelons, and that on the higher levels it tends to be broad and general, while at the lower levels planning becomes more concrete, requiring less conceptual, reflective thinking. When asked if they could agree with this idea, 49 of the respondents replied Yes, they could, while 6 answered No. It is concluded that as there are levels of planning, there are levels of importance in planning, and that logistics planners in the Air Force have an appreciation of this concept.

Concurrency of planning at different levels is another concept that most of the respondents had had experience with, and a majority of them held the belief that better plans were produced as a result. Of the 46 respondents who had had experience with concurrent planning, 27 expressed the belief better log plans resulted.

The principle value in concurrent planning results from the good communication that is established. As mentioned earlier, a plan can be considered a communicative mechanism, and it is true that planning depends on communication. During the planning process it is desirable that each echelon be in constant contact with its next senior and next junior echelons. Exchange of information is rapid, chance of misinterpretation is decreased, there is better and continuous orientation toward the same objectives, and there will be greater confidence that the plan will be executed as intended. Even though several of the respondents indicated their concurrent planning experiences were less than pleasant, they readily admitted better plans resulted. This is proof of the value of concurrent planning.

Time, the lack of it or the need for more, is often a critical element the logistician must cope with. It takes time to construct facilities and to build roads. It takes time to procure material and then more time to store it and to distribute it. It takes time to establish the wanted capability for an air strike force. The criticality of the time factor can be reduced through concurrent planning and as a result of the good communication it induces. Information and guidance are results of communication. Respondents were asked this question, "In the absence of specific guidance and needed information, how frequently has it been necessary for you to make estimates or assumptions in order to do your job?" Frequently, was the response of 23 of them, and 39 said, Sometimes. Only one (1) said. Hardly ever. It must be concluded that the pressure of time and the absence of guidance and information, force logisticians to make assumptions in their planning efforts. In reinforcement of conclusions on concurrency, communication and time, the following is quoted from a presentation made at the Industrial College of the Armed Forces.

The strategic planner who hesitates to provide information requested and needed until things have firmed up, thinking that thereby he is retaining flexibility in planning, is

actually shackling himself, for the logistician must plan well ahead, and if adequate strategic guidance is not given, he must perforce make necessary assumptions and estimates himself.

# V. What Generates Requirement for a Logistics Plan?

A number of things generate requirements for logistics plans. The only areas commonly accepted by most of the questionnaire respondents were strategic plans and tactical plans. There was one flat objection to all of the three "for instances" given to elicit replies. The one dissenter replied, "None of the above. Planning is required to determine: (1) Where are today's operating policies leading us? (2) What changes in today's policies are necessary to lead us to where we want to be in the future? (3) Are our objectives still current, or should they be revised. Planning in this headquarters is diluted with a mass of 'current projects' which cause the fundamental basis for all planning to be ineffective." This was an extreme position taken on what generates need for a plan. The respondent is a "planner's planner" who has a strong distaste for current projects and "fire fighting" that pass under the guise of planning.

It is reasonable to state that where there is a planned military activity, mission, operation, exercise or maneuver, there will be a requirement for a logistics plan or annex. It is suspected that a buying program in the AFLC requires a plan for items to be procured, and that the plan will be time-phased as to deliveries and funds committed. At the other end of the spectrum, plans for the deployment and testing of combat effectiveness of an air strike force would require another kind of logistics plan. Some of the military plans can be identified generically as plans for peacetime operations, contingency operations, emergencies, disasters, limited war and general war. They all require logistics plans. As one respondent put it, "Campaign plans, activity outlines and operational plans are all incomplete without a logistics input."

It has been asserted that planning and plans, in the military services tend to be hierarchical in nature. Three levels of logistics planners were asked a series of five questions designed to determine if plans of higher headquarters generated requirements for complementary plans at lower level headquarters, and whether good guidance was received. If a hierarchy of plans and planning exists in the Air Force, it cannot be traced from the responses received. The questions asked, and statements of findings follow.

Col. V. J. Esposito, USA, "The Interrelationship of Strategy and Logistics", Presentation to the Industrial College of the Armed Forces, 15 Nov. 1955.

A. Does the JSOP specify a requirement for development of any definitely identifiable logistics plans?

The respondents answered No four times to each Yes answer received. In continuation, this question is posed for the leader, if the JSOP does not indicate requirements for further logistics planning, as the majority of these responses indicate, how are its logistics objectives achieved, and if objectives are achieved how are they communicated, who measures the achievement?

B. Does USAF receive the JCS, plans or directives that specify requirements to develop specific logistics plans?

The answers were unanimously No. It must be asked, how does the USAF know that its logistics activities are directed toward the achievement of coordinated military goals?

C. To your knowledge, does your headquarters receive directives to prepare plans that require detailed preparation of logistics annexes?

No, was the answer of 10 respondents; Yes, only of one.

D. Does your headquarters use directive information, as contained in USAF's WPB and WPM, as a basis for contribution to the USAF's wartime quantitative material requirements?

Here the picture changes. Yes, was the answer of 27 respondents, and No of only four.

E. Are the parameters for your logistics planning, as received from higher authority within your headquarters, or from higher headquarters, definitive, specific, and, in your opinion, objective?

Only 23 of the respondents answered Yes, and by replying No the other 20 indicated they received less than definitive, specific and objective guidance from higher authority.

It must be concluded that definite, specific and objective parameters for logistics planning are received from higher headquarters or authority only a little more than half the time. If this is true, reinforcement is given to an earlier conclusion that too often logistics planners are required to make estimates and assumptions in order to do their jobs.

#### SUMMARY

Can the parameters of logistics planning be identified?

A. Parameters for logistics planning are identifiable because the field of logistics is composed of substantive activities and specific, physical functions.

- B. The importance of logistics in the military services is reflected in the billions of dollars spent each year in pursuit of logistics activities.
- C. Goals of logistics planning are numerous. Among them are determination of capability required to accomplish a mission, and determination of how that capability can be established.
- D. As there are levels of planning, there also are levels of logistics planning.
- E. Planning in the field of logistics can be categorized as: (1) logistics planning and, (2) planning for logistics support.
- F. Most logistics planners can agree that the three basic functions of logistics are: (1) determination of requirements, (2) acquisition and, (3) distribution.
- G. There are many methods available for use in testing plans, but too many logistics planners are unaware of such methods, procedures and criteria.
- H. Air Force logistics planners generally agree there should be means and methods of evaluating the status and progress of a plan during the planning process.
- I. Concurrency of planning, at different levels, at the same time, toward the same goals, is a concept of planning which experience shows has resulted in better plans.
- J. Too frequently logistics planners have had to make estimates and assumptions in order to do their jobs, because they were not furnished sufficient guidance and information.
- K. Planning is deliberate and objective; it is not "fire fighting", and crash deadlines usually produce poor plans.

#### CHAPTER THREE

# RELATIONSHIP BETWEEN OPERATIONS PLANNING AND LOGISTICS PLANNING

#### I. Introduction

Most literature on logistics researched for this study points up the interdependency of logistics, strategy and tactics. It is assumed that the reader is aware of this relationship and does not need to be told about the battles that were lost because logistics was neglected. A very good discourse on this relationship can be found in the discussion by the Assistant Dean for Research, School of Logistics, of the second principle of logistics, "Interdependency with Strategy and Tactics", if you desire to investigate this basic relationship further.

It is recognized that a finished plan contains both operational and logistical information, and that it is coordinated throughout the staff before being presented to the commander. The relationship being investigated here is the integration, coordination and feedback required at the working level to produce a coordinated plan. The following specific questions will be answered. How close should the offices of operations planners and logistics planners be? How soon are logistics planners brought into the planning cycle? Is all planning based on the same concepts, principles, policies, and background material? Are logistical and operational parts of a plan tested and evaluated together? Do all planners understand each others problems? Are logistics planners sufficiently trained?

# II. Integration of Operations and Logistics Planning

One of the military logistics texts used in this research project makes a strong case for fully integrated operational and logistical planning both by means of formal procedures as well as close personal relations. Persons interviewed concurred with this requirement. Consequently, the first sub-objective for this phase of the research was to establish the degree of coordination, integration and close personal relationships that presently exists between logistics planning and operational planning elements in Headquarters USAF and the four major operational commands. Respondents were asked about personal relationships; of the 44 who answered this question, 31 indicated that sufficiently close personal relationships did exist between operations planners and logistics planners. Thirteen indicated that relations could be improved and submitted 11 specific suggestions for improving relations between operations and logistics planners. Of the 31 in the former group, 10

<sup>1</sup>R. M. Shoemaker, Lt. Col., <u>Principles of Logistics</u> (W-PAFB, Ohio, School of Logistics, 1960).

<sup>&</sup>lt;sup>2</sup>Henry E. Eccles, R. Adm., USN, <u>Logistics In the National Defense</u>, The Stackpole Company, Harrisburg, Pa., 1959, p. 79.

indicated that they were not brought together with operations planners until after the operation part of the plan was in draft form, 7 indicated they were brought in after the operational concept was developed, and only 14 were brought in at the very beginning. From the above it can be concluded that only one-third of the logistics respondents have both close personal relations and full formal integration with their counterparts in operations plans.

How can integration and close personal relationships between operations planners and logistics planners in the same headquarters be achieved? One respondent suggested moving logistic plans from DCS/ Materiel to DCS/Plans. This is a radical step which will not be considered in this study, because indications are that such reorganization would create more problems than it would solve. Four respondents indicated that proper motivation and education of both operations and logistics planners will improve logistics planning. Such phrases as aggressive, qualified, eager, mission oriented and understanding of each others problems were used. (Motivation and education of logistics planners are goals of the academic course for logistics planners described in Appendix II. Also, a description of today s logistics planner plus a list of prerequisites for new men entering the field will be found in the Appendix.) Three respondents expressed a need for closer integration between logistics planning and the material functions, and more support from the DCS/Materiel when logistics and operations are presenting a plan to the commander. These are "in house" problems which can be solved with good management practices by any DCS/Materiel once the problem is recognized. One respondent recommended periodic briefings on the status of programs. Nine respondents recommended moving logistics plans closer to operations plans. Three respondents suggested placing all planners (operations and logistics) working on the same plan in the same or adjacent offices. It is noteworthy that at least one command presently does this. The War Plans Branch of Logistics in this command is located in the underground command post adjacent to operations planners and the operational control division. As an additional duty this branch serves as the nucleus of the Directorate of Materiel command post. Its monitor and control functions during test exercises and emergency situations give it an excellent opportunity to evaluate the effectiveness of logistical planning in the entire command. In addition, Operations Plans and Logistics Plans each has one man as a full time member of the Documents Group in the Directorate of Plans. This group monitors, updates and disseminates information contained in the USAF War Plan and Program documents.

How would having logistics planners in the same or an adjacent office to operations planners affect their relations with the various logistics functions? Respondents were asked to assume that, because of physical limitations, the logistics plans office could not be close to both operations plans and the various logistics functions. Of 40 respondents, 12 said logistics plans should be closer to operations plans

and 28 said logistics plans should be closer to the logistics functions. An evaluation of the responses indicates that those logisticians planning support for current operations, emergency war or contingencies feel a need to be closer to operations planners in order to react more quickly to changing policies and concepts. Those logisticians planning the middle and long range build up for general war feel a need to be closer to the materiel functions because logistics provides guidance and leadership for all materiel functions. The number of contacts logistic planners make each week with both operations planners and the materiel functions indicate a real need for them to be near to both. Telephone communication is only a partial substitute because most planning information is classified.

III. Integration of Air Force Logistics Command Planning and Operational Command Planning

The next sub-objective of this phase was to determine how often AFIC (which is responsible for materiel support of all Air Force activities) is brought together with the planners from the operational commands and/or Headquarters USAF during the development of a plan. Respondents' comments varied from "once or twice" (5), "monthly" (7), and "frequently" (5), to "as often as necessary" (5). Although these are all rather vague statements they do reinforce impressions gained from interviews that logistical planning at AFIC is not fully integrated with logistical planning at Headquarters USAF and the major operational commands. Lack of integration can and does cause "fire fighting" which is inefficient and wasteful of resources. ("Fire fighting" at AFIC was one of the reasons a logistics planner requested this study.)

Because of the geographical distances involved, closer integration of planners at AFIC, Headquarters USAF and the Operational Commands is somewhat more difficult. But, it is noted here that there are scheduled courier flights and direct leased telephone lines between SAC and AFIC and between USAF and AFIC. The feasibility and desirability of the same or similar communications between AFIC and the other operational commands should be subjects for further research. During this study (1 April 1961) Air Materiel Command was redesignated Air Force Logistics Command, was relieved of its systems responsibilities and allowed to devote its full efforts to logistics support. Although this study was requested by a logistics planner at AMC, AFIC has been too preoccupied with the reorganization to give much help (only 5 out of 25 questionnaires were returned). It is too soon after the reorganization to make any further recommendations concerning AFIC.

<sup>3</sup>USAF, AFM 55-7, 8 March 1960. War Planning Manual, p. 27.

# IV. Joint Evaluation of Operations Plans and Logistics Plans

Operational and logistical plans are constantly being tested and evaluated. Methods of testing are War Games, test exercises, readiness inspections and emergency situations. Are logisticians taking full advantage of these opportunities to evaluate the results of their creativity? Are they beginning their planning from a firm foundation of test results? Only 24 of 45 respondents answering this question have observed War Games in the past 12 months, four had observed them in the past 18 months and the rest have never observed them. Twenty-five had observed real or simulated tests of plans they had helped prepare in the past year and the remainder had not observed such a test in longer than 18 months. Twelve respondents felt the War Games were excellent background for planning, 19 felt that they were excellent tests of a plan and 12 felt that they should be used both as background and as tests for plans. From the above it appears that some valuable tools have not been used to their fullest potential in the past. For those interested, several excellent studies by Rand Corporation4 investigate war gaming. These tell what War Games are and what they are not, what they can do and what they cannot do. Some of the points made about War Games are paraphrased as follows:

- A. On use of games as background for planning:
  - War Games pool knowledge.
  - They are better than pre-planning conferences because they stimulate thought and keep interest high until the situation has been fully explored.
  - They teach obvious ideas that people have resisted.
  - Players are taught to consider all of their resources.
    Each planner thus becomes familiar with the other planners' problems.
  - High Speed Computers allow the game to be played many times by changing the assumptions. This points up which factors are critical. Note: Computers only add speed; assumptions explain the result.
- B. On use of games as tests of plans:

Herman Kahn, Irwin Man, War Gaming (Rand P-1167, 30 July 1957).

Alexander M. Mood, War Gaming as a Technique of Analysis (Rand P-899, 3 September 1954). Robert D. Specht, War Games (Rand P-1041, 18 March 1957).

- A paper war before an air exercise makes the air exercise more effective.
- Questions raised by the game are as important as the reresults of the game.
- War Games are costly in time and manpower.
- Free competition (the spirit of War Gaming) can be used to evaluate a plan. "Now I wouldn't say a war game will tell you how to write a better plan, but the exercise of a plan against a free thinking opponent may bring to light a lot of foolish optimism, lazy thinking, and sheer lack of coordination that otherwise would go unnoticed."5 It should be noted that there appears to be an increase in the number of "paper wars" or command post exercises (CPX) and both unilateral and joint air exercises at all levels of command. One of the persons interviewed in this study indicated that both President Kennedy and Secretary of Defense McNammara participated in a recent CPX. The extremely sensitive nature of the findings of many of these tests and exercises put them in the security classification of BBRSC (burn before reading and shoot the courier). But, the information is available and should be used by logistics planners as well as operational planners. When teams from Headquarters USAF visit the commands to brief on War Games and test exercises conducted at national level, it is vital that not only the senior staff but also the journeyman planners from operations and logistics should attend. Attendance at this type briefing and at critiques of command operations should be mandatory. Also, logistics planners should work shifts in the command post during air operations at least once a year.

#### SUMMARY

Relationship between operations planning and logistics planning.

- A. The quality of logistics planning can be improved if it is completely integrated with operational planning, and there is a close personal relationship between planners.
- B. Logisticians writing the logistics portion of command plans should be located adjacent to the offices of operations planners. Logistical planners working with weapon systems, material requirements,

<sup>5&</sup>lt;sub>Ibid</sub>.

materiel guidance, war readiness materiel and base support agreements should be located adjacent to the offices of the separate logistics functions. This may require the physical separation of the various branches of Logistics Plans, but unity can be maintained through the office of the chief of logistics plans.

- C. The reorganization of AFIC should facilitate the closer integration of its logistical planning with planning in Headquarters USAF and the operational commands.
- D. Participation in and evaluation of the results of CPX's, air exercises and War Games by all logistics planners will improve the quality of logistical planning.
- E. There should be periodic briefings attended by all planners on the status of programs and projects and the results of recent exercises and inspections.
- ${\sf F.}$  An educational course for Logistics Planners (Appendix II) should be started.

### CHAPTER FOUR

## RELATIONSHIP BETWEEN LOGISTICS PLANNING AND THE BUDGET PROCESS

## I. Introduction

An aviation cadet climbing into an airplane for the first time is told by the instructor, "Either you fly the airplane, or the airplane will fly you". The same relationship exists between Logistics Planning and the Budget Process. The results of this research indicate that the budget process negates much logistics planning and becomes the controlling factor in logistic activity. One result of this is short range planning for logistics support that does not bear a direct relationship to the mid-range logistics planning that was done earlier. This type of short range planning generates "fire fighting". Another result of this relationship is that logistics planners spend many man-hours every year during the budget review defending, salvaging and re-working logistics plans. Finally, Congress is not pleased with the present relationship because it is not able to relate appropriated dollars directly to essential defense goals and missions. This phase of the study will investigate: (1) the effect the one-year budget cycle has on mid-range logistics planning and, (2) alternative systems which will enable logistics planning to control budgeting.

# II. The One-Year Budget Cycle and Mid-Range Logistics Planning

Several factors which affect the relationship between mid-range logistical planning and short range budgeting are: (1) actual costs which run far above estimates, (2) changes in the money market which affect a contractor's financing, (3) changes in the labor market and, (4) an over-all program that far exceeds a budget that is reasonably attainable. The first three of these factors are outside of the scope of this study. Reasons for the fourth factor will be apparent shortly. The Honorable Wilfred J. McNeil, Assistant Secretary of Defense (Comptroller), addressing the Industrial College of the Armed Forces in 1957, spoke of decisions which should have been made in the planning-programmingbudgeting cycle, but were not resolved until the final budget review. Logistics Planners in the Pentagon and in the major air commands were asked by the team if they knew why these decisions were delayed until the budget cycle. Fifty-six respondents answered these two questions. Thirty knew of instances where decisions were made in the budget cycle which should have been made in the mid-range plan. The remainder did not know

<sup>1</sup>W. J. McNeil, The Planning, Formulation, Execution and Management of the Defense Budget (ICAF, Washington, D. C., L-58-46, 30 October 1957).

such instances. Reasons for these instances given by the respondents were: (1) lack of clear guidance from higher authority (17), (2) failure to clearly identify alternative courses of action (14), and, (3) continuing controversy over roles and missions (20). All three of these reasons indicate weakness in the JSOP. For an explanation of these weaknesses one has only to note that JSOP has never been approved in its entirety. (JSOP-66 is up for approval at this time.) A look at the purpose and scope of JSOP reveals that it is guidance for Strategic Planning and Logistics Planning in the mid-range period. It is also one of the bases for the budgetary action of the Secretary of Defense. If JSOP is to accomplish its purpose, it must contain all of the attributes of a good plan listed in Chapter One. If, through lack of coordination, unification, firm decision and clearly identified alternative courses of action, JSOP fails to win JCS and Secretary of Defense approve als, then Congress will control logistics planning through the budget process. Logistics planning is an executive function that does not belong in the legislative branch of the government. (Though not a part of this study, it should also be noted that changes in political administration and technological breakthrough, both Russian and American, cause changes in the budget that cannot be anticipated in mid-range planning.)

- III. Alternative Systems Which Would Allow Mid-Range Planning to Control the Budget Process
  - A. An Increased Budget Cycle

The Honorable Percival R. Brundage, Director, Bureau of the Budget addressing ICAF in October 1956 was asked to comment on an increased budget cycle. He stated that he was strongly in favor of a four-year budget cycle, and he noted that most businesses have a ten-year forecast and a five-year forecast. 2 Respondents were asked in the questionnaire if they favored a four-year budget cycle. Of 54 respondents answering this question, 24 said Yes, 27 said No, and three said they favored a two-year cycle. Those who stated why they opposed a four-year cycle generally felt that it would set a plan in concrete and make it difficult to take advantage of technological breakthroughs. Many also felt that it would force one congress to abide by budget decisions made by an earlier congress. Those who favored a four-year cycle did so because it would reduce workload (9), it would help resolve issues (19), and it would simplify requirements determination (13). An examination of responses to the various questions indicated a definite need for an increased budget cycle and for a simple method of obtaining congressional approval for program decisions.

B. Congressional Approval of the JSOP

<sup>&</sup>lt;sup>2</sup>P. R. Brundage, The Federal Budget (ICAF, Washington, D. C., L-57-46, 15 October 1956).

Of all the questions asked on this subject, the one that asked if the respondent favored congressional approval of the JSOP got the loudest, most emphatic NO. Twenty-four out of 26 planners in the Pentagon said No while only seven out of 24 in the operational command said No. A re-examination of the problem indicates many reasons why this would not be an acceptable solution. (1) Authority for determining joint strategic objectives is delegated by the President, acting as Commander-in-Chief to the Department of Defense. Congress is a separate branch of the government and JSOP is not within its purview. (2) Briefing the entire congress so that their approval could be obtained would pose many security problems. (3) A large number of congressional actions are the results of compromise. We cannot afford to compromise our strategic objective. (4) Objectives change to meet changes in the threat. To keep the entire congress current on the many detailed changes would waste too much valuable congressional and JCS time. The President presently keeps key congressional leaders briefed on over-all objectives. (5) If the JSOP were limited to reasonably attainable objectives and was approved in its entirety by both the JCS and the Secretary of Defense. many of the present obstacles to good logistics planning would be overcome.

C. The "Program Package" Approach to the Armed Forces Budget

At an Armed Forces Management Association meeting recently the new Defense Comptroller, The Honorable Charles J. Hitch, cited weaknesses in the Pentagon budgeting-planning system and prescribed remedies. He enumerated various improvements which have been made to the budget program to promote efficiency and economy. But, he also noted that overall financial management had not kept pace with the technical complexity, development lead time, combat power and the enormous cost of modern weapons. He cited a need to relate cost to weapon systems, tasks and missions. He felt this would enable the defense establishment to make rational decisions based on adequate knowledge of the available alternatives, in terms of their military worth in relation to their cost. He called this ability "economic choice". He listed the elements of economic choice as the following:

- "1. A clear and accurate understanding of the Nation's national security objectives; that is, the aims which we are trying to accomplish with the forces, equipment, projects, or tactics that we are comparing.
- 2. An analysis of the effectiveness of the alternative forces, equipment, projects, and tactics by which the objectives may be accomplished.
- 3. The cost of each alternative method of accomplishing the objective.

<sup>3</sup>Charles J. Hitch, <u>Programmer to Bridge Defense Plans Gap</u> (Armed Forces Management, Washington, D. C., Vol. 7, No. 7, April 1961) pp. 46-50.

- 4. A model which traces the relations between inputs and outputs -- between resources and objectives -- for each of the alternatives to be compared so that we can predict the consequences of choosing any one alternative.
- 5. A criterion or test by which we can choose one alternative rather than another."4

It should be noted that his elements of economic choice are also elements that a good logistics plan should include in its considerations.

The lead article in the 29 April 1961 issue of Army-Nawy-Air Force Journal reports on Mr. Hitch's "Program Package" appreach to the next Armed Forces Budget. A program element is defined as "an integrated activity, a combination of men, equipment and installations, whose effectiveness can be related to our national security policy objectives". Examples are a B-52 Wing, an infantry batallion or a combat ship. A program element or package will be described in terms of both cost and capability. A Program Office has been established in the Comptroller's Office to create a planning and programming financial management system that is keyed to continuous program decision making and not just the budget cycle. The intent is that planning and programming decisions will become budget decisions. The cost implications of alternative programs will be projected for the life of the program or at least forward over a five-year period. Bench marks will be developed to give over-all budget implication of each decision. A "Big Board" is planned in the Office of Programming to reflect the total defense structure. It will be updated daily. A great deal of work must be done to put the "Program Package" approach to Armed Forces Budgeting into effect. But, once it becomes effective, logistical planning will control budgeting. All planning will be simplified and its quality will improve.

#### SUMMARY

Relationship between logistics planning and the budget process.

- A. Present Mid-Range Logistical Planning is limited by the oneyear budget cycle. This causes short range planning for logistics support which only vaguely resembles mid-range logistical planning.
- B. The budget process controls logistical planning because of:
  (1) lack of clear guidance from higher authority, (2) continuing controversy over roles and missions and, (3) failure to clearly identify financial implications of alternative courses of action.

<sup>4</sup>Tbid.

C. Methods of re-establishing control of logistical planning over the budget cycle include: (1) increasing the budget cycle to two years, (2) approval of the JSOP by both the JCS and the Secretary of Defense and, (3) the new "Program Package" approach to Armed Forces Budgeting which is being introduced by the new administration.

#### CHAPIEP FIVE

# THE CURRENT APPLICATION OF LOGISTICS PLANTING IN USAF

#### I. Introduction

bogistics planning in the USAF has its origin in the series of war plans developed under the provisions of AFM 55-7 War rianning Manual. In substance, there are three types of planning documents developed under the JCS-USAF formalized planning systems (1) long range to cover a period of 15 years in the future, (2) a mid-range plan which looks ahead to a war which might start three to five years in the future and, (3) snort range planning which contains guidance or actions to be taken in anticipation of war in the near future, normally within the current year of operation.

The USAF publishes the Air Force Objective Series Papers (AFOS Papers) which provide planning guidance for the long range time period 10 to 15 years into the future. By the use of these papers, the USAF provides support to and in turn implements the JCS requirement for the development of a Joint Long Range Strategic Estimate (JLRSE). Since the JLRSE in its basic purpose and scope does not specifically define a requirement for a logistics input, no further evaluation of any logistics planning for the long range (10 to 15 years into the factor) will be made in this study.

The three war plans which the Directorate of Plans, Meadquarters USAF, publishes are:

- A. The USAF Wartime Basic Plan (WPB)
- B. The USAF Mid-Range Wartime Requirements Plan (WPM)
- C. The USAF Short Range Wartime Requirements Plan (WPS)

Note: For the remainder of this discussion the short titles WPB, WPM and WPS will be used.

The WPB presents general information and task assignments applicable to both the WPM and WPS. For a more detailed discussion of the contents and use of the WPB refer to Section B. Chapter 4, AFM 55-7.

The basic premise of present day USAF logistics planning is to support the "Forces in Being" concept. To implement this concept, the attainment of forces in being prior to D-day is mandatory. This requires the build up prior to D-day and little or no requirement to continue to build up after D-day.

<sup>1</sup>USAF, AFM 55-7, 8 March 1960. War Planning Manual, p. 9.

To translate this concept into reality, the USAF utilizes the WPM as a means of providing a common basis for logistics planning and as a basis for developing budget estimates and buying programs. Additionally, the WPS is used to prepare tabulations for the pre-positioning and prestocking of materiel.

By basic content, the WPM is intended to establish the goals or objectives for attainment within the USAF three and four years in the future. The WPM is published annually. For example, WPM 62/63, published in 1959, has the D-dates of 1 January 1962 and 1 January 1963. The purpose of two separate D-dates is to provide a basis, through its most advanced D-date, for determining the bulk of lead time requirements far enough in advance to permit all activities to take appropriate implementing and budgetary actions. Because the WPS is used primarily to form the basis for the pre-positioning of that materiel conceptually provided for by the WPM and deals with current assets, no detailed evaluation of logistics planning associated with the WPS will be conducted in this study. As will be discussed later, the planning for the use of assets already in the system is really planning for "logistics support" and not "logistics planning".

As reflected in Chapters One and Two, any type of planning must reflect clearly defined objectives and must depict a guide to the future. In basic concept, scope and purpose, the Mid-Range Planning Process within the USAF appears to produce the plans required to provice for the logistics activities of the Air Force. If the logistics planning process within the USAF is adequate in providing a basis for logistics planning for the mid-range period, all other logistics planning will enjoy a high degree of success. If top level or administrative planning is good so that ultimate organizational objectives are clearly defined, it follows that operative or project type planning will attain a relatively higher degree of objectivity. To ascertain whether the current concept of logistics planning, as embodied in the Mid-Range Planning Process is in fact providing a firm basis of logistics planning in the USAF, a series of questions was developed for consideration by logistics planning elements at the JCS, Headquarters USAF and Major Command levels. These questions are reflected in Appendix I, and they are further identified and evaluated in Section II below.

# II. Evaluation of Findings Derived from Questionnaires

(Note: The two parenthetical expressions in each of the following lettered paragraphs refers first to the specific question originally asked in the questionnaire and the second refers to the summary of the tabulation of the total responses received for the question.

Finding A. The series of USAF Wartime Plans (WPB, WPM, WPS) adequately express the force requirements of the USAF (Question 55, page 73)

(Yes - 25, No - 9). Of those respondents that indicated No, one indicated that these plans are restrained by the "reasonably attainable" language of the JSOP, two indicated that these requirements are based on dollar ceilings and capability, one indicated that there is no attrition of resources, four indicated the lag in the revision of the documents, and one indicated the plans do not reflect the steps to longer range objectives.

Evaluation. The respondents replies to this question indicate that the force structure requirements of the USAF are adequately expressed in the WPM. However, the replies indicating the "reasonably attainable" and "dollar ceilings" connotations to the force requirements warrant a further insight. The question is raised as to whether these restraints were placed on the force structure in the formulative stage, when the requirement to have a given force structure to accomplish the USAF Mission was under consideration, or whether these restraints were placed when budgetary ceilings were established external to the control of the Air Force. In the first instance, one would see the play of "logistics planning" in its proper role - assisting in the determination of alternate courses of action with the least cost to accomplish the USAF Mission. In the next instance, one would see that the forces required to accomplish the USAF Mission on a given D-date are not realistic in the light of total mission requirements and thus the decision making process to effect the "Forces in Being" concept is really taken away from those required to execute the USAF Mission. Evaluation of the response concerned with the attrition of resources is not possible in this study due to its classified nature and the requirement to analyze the document itself. The response indicating the lag in the revision of the documents highlights a possible shortcoming in the Air Force logistics planning process. As reflected in Chapter One, all planning should possess some degree of stability. Frequent changes in the top planning documents will raise doubts in the minds of those concerned with implementing actions. Unconfirmed comments made by respondents to the effect that the WPM is amended quarterly does not lend to stability for a document that sets top planning goals and objectives for the next three to four years. The question is raised whether the WPM is changed by a real change in basic force structure, dictated by a changed strategy or tactic, or whether the WPM is changed because of a budget or funding implication reflected in a quarterly program or "P" document change. The last negative response, indicating that the plans do not represent the steps to longer range objectives, cannot be evaluated without a review of the basic documents.

<sup>&</sup>lt;sup>2</sup>Ralph Currier Davis, <u>The Fundamentals of Top Management</u>, Harper and Brothers, New York, 1951, p. 86.

Finding B. The WPM provides the specific goals or positions for the USAF (Question 56, page 73) (Yes - 27, No - 9). Of those respondents that indicated Yes, one qualified his response with the comment "despite JSOP indecisions and delays". Of those respondents that indicated No, one indicated that the plan is too restrictive, one indicated that the specific goals can be only an educated guess, one indicated that a good War Readiness Materiel (WRM) position is not established and that provision for the reconstitution of the force is not provided, and the remaining respondents had no opinion.

Evaluation. The specific goals for attainment of force positions are mandatory for the establishment of a basis for logistics planning. It would appear that the WPM provides for these criteria. The response relative to the JSOP indecisions and delays cannot be fully evaluated during this study. However, the comment does raise the thought that for the conduct of the activities of any large organization the planning must represent "decision". To plan from the lack of decision subjects all concerned to assumptions which forces individuals to accomplish planning for its own sake; but what about the over-all organizational objectives? An evaluation of the remaining negative responses would require the review of the specific documents.

Finding C. The WPM is used as the basis to compute resource requirements (Question 57, page 73) (Yes - 16, No - 3). Of those responding No, one indicated "not fully" with no further elaboration as to what his headquarters uses, one indicated the long range (10 years) type and size of force to be supported is used as the basis, and one indicated that he uses the "WPS for immediate requirements as the basis".

Evaluation. One of the important purposes of the WPM is to provide a basis for developing budget estimates and buying programs for the WRM. The consensus of respondents replying to the question feel that the WPM provides a sound basis to compute resource requirements. Those respondents replying negative to the question provide the widest extremes of reasons for their answers from a long range to a short range criteria. A possible explanation for this is the specific command from which the replies came, or the specific planning position occupied by the respondent. Some doubt is raised however as to the usefulness of the WPM in developing budget estimates and buying programs as further discussed in the next paragraph.

Finding D. The USAF Mid-Range Planning Process is marginally productive in providing a basis for the materiel resources (Question 58, page 73) (Yes - 15, No - 12). Those responding No to this question state that the mid-range planning merely provides a basis for the computation of the order of magnitude of requirements, such computation to never in fact relate to specific action to procure and pre-position materiel resources.

Evaluation. In the replies to this question there is an indication of the breakdown of the mid-range planning process. If the WPM is used only to determine the order of magnitude of requirements, the question is raised what decision document is used to pinpoint "so many of this and so many of that". Is it the Materiel Program Document or is it the "P" series documents? If other than the WPM is used is the AF not defeating the purpose that was setup for the WPM - namely, the establishment of a given force in being for a specific D-date in the future? Is the AF not permitting its planning to be dissipated into a myriad of documents, the goals, objectives and criteria of which may be interpreted by those not in the decision making positions? Is there a feed-back process from all of these ancillary documents? The answer to these many questions would reveal the true application of the WPM. An indication of the answers to some of these questions is reflected in the succeeding paragraph.

Finding E. Present day logistics planners are of the opinion that they can identify and measure the progress of their peacetime programs meeting the resource platform requirements of the WPM (Question 59, page 74) (Yes - 22, No - 6). Of those responding No, two gave as their reason vagueness in the WPM, three stated as their reason "the gradual diffusion of the objectives of the WPM into a myriad of objectives in the various program documents", three cited the lack of a specific requirement to provide "feedback" against the published WPM as goals are attained or are not attained, and one stated that the only performance requirements are in dollar statements measured against budget allocations (several respondents gave multiple reasons, thus the difference in the totals).

Evaluation. One important characteristic of any plan is that it must provide a means of measuring progress in attaining the objectives originally planned for. As previously mentioned in the introduction to this Chapter, war plans are developed to provide to the Air Force the capability to overcome an anticipated threat on a given assumed D-date sometime in the future. To transform the Air Force from its present structure and capability to that desired in the future as expressed in the war plan, the USAF Program is used. The consensus of respondents replying to this question indicates a proper relationship of the USAF Program to the WPM. Notwithstanding the replies to this question, several planners interviewed were of the opinion that logistics planning started when the programs were finalized. This concept of the "program" being all powerful appears to be in direct conflict with the provisions of AFM 55-7 and may stem from the requirement to develop a "logistics plan" in introducing a new weapon system into the inventory under the Weapon System Concept. This concept of the program being the all important document in effect relegates the logistics planning function to a mechanized "plan for logistics" type of function.

Finding F. The formalized JCS-USAF planning process (JSOP, WPB, WPM) as now conceptually constituted provides a basis for the accomplishment of its objectives over a period of time (Question 60, page 74) (Yes - 31, No - 5). Those responding No stated the following reasons, four attributed it to the budgetary process and the requirement for orienting on one year's operation, three stated that the documents are not definitive in specific planning objectives, two attributed it to the requirement to develop the JSOP and WPM on an annual basis, and one attributed it to the lack of flexibility in the plans (several respondents gave multiple reasons, thus the difference in the totals).

Evaluation. The real purpose of top level or administrative planning is to provide a basis for the accomplishment of the objective over an extended period of time. The requirement for this type of planning increases in importance in large and cumbersome organizations where the planning has to be projected far into the future. It appears that the present formalized JCS-USAF planning process fulfills the requirement for the top level planning document to guide the logistics planning effort of the USAF. However, the negative responses highlight weaknesses in the present system that may lead to problems in the logistics planning effort. The budgetary process and the requirement to develop a WPM on an annual basis will certainly thwart the intent of the WPM to guide the USAF much beyond one year of activity. The lack of clearly defined planning objectives will certainly not permit an orderly feed-back as the plan is implemented.

Finding G. The planned objectives of the WPB and the WPM should be the objectives against which a measurement of progress could be made (Question 61, page 75) (Yes - 19, No - 8). Of those responding No, three indicated the difficulty in identifying finite objectives in the WPB and WFM, three cited the diffusion of the objectives of the WPB and WPM, and four cited the fragmentation of the functions of logistics into the specialized staff sections and activities (several respondents gave multiple reasons, thus the difference in the totals).

Evaluation. The responses to this question tend to reinforce the thought expressed in the preceding paragraph that the USAF needs a top level planning document against which a measurement of progress for projecting the Air Force into the future can be accomplished. The first two reasons cited for the negative responses are repetitious to those cited and evaluated in paragraph F, however, the reason for "the fragmentation of the functions of logistics" into the specialized staff sections and activities raises a real problem in logistics planning. In most levels of command, logistics is functionalized into supply, transportation, maintenance, etc. As such, the development of plans is frequently delegated out to these various staff elements. Unless the responsible staff section is alert, the various inputs into the plan

will not be coordinated and, most importantly, the functionalized staff section will probably be quite hazy on the objective toward which it is planning.

Finding H. It is marginally agreed that the yearly publication of the WPM does not change the concept of the WPM from a logistics planning document to a budgetary "plan for logistics" type of document (Question 63, page 76) (Yes - 13, No - 19).

Evaluation. The WPM represents the best thinking of the USAF as to what its forces and capability should be three to four years in the future. As such, this infers that this document should remain relatively stable if it represents a three to four year projection. Several respondents on previous questions stated that it is difficult to keep this document current. The question then is raised as to why this is so. Unconfirmed comments were made by several respondents that the WPM changes only approximately 10 to 15 percent each year. This is unconfirmed because of the inability to minutely review the successive publications of the document, due to their classified nature. In contradiction to this comment reflecting the stability of the document is the comment contained in AFM 55-7 which states that the publication of the WPM is scheduled, time wise, so that it is in the hands of the computing agencies to permit them to submit budget estimates and buy requirements to Headquarters USAF, by established deadlines. This infers that the WFM is, in effect. geared to the budget cycle rather than a projection of the needs of the Air Force out beyond the budget cycle.

Finding I. It is marginally agreed that a basic planning document concerned with logistics could be published to serve as a companion "Master Plan" to the WPB rather than publishing a WPM on an annual basis (Question 64, page 77) (Yes - 17, No - 16). Of those responding No, 10 stated that the logistics factors change too frequently and too radically over any extended period of time, one stated that there would be no real advantage over the present system because the WPB has a logistics Appendix and the WPM is really a "Master Plan" kept current by quarterly changes, one stated that logistics planning as in the WPM rightfully should be married to and a part of the strategic plan, one stated that he cannot see any useful purpose - just another name for existing documents, and one stated that adequate guidance is now available in the "P" series documents. Of those responding yes, 12 stated that a USAF Master Logistics Plan to extend for a period of three to five years with finite objectives or goals could be developed to parallel the WPB, and eight stated that such a plan could be used as a means of performance or as a means of evaluating "Program Feed-Back" on an annual basis.

Evaluation. The bulk of the respondents not in favor of a companion Master Plan of Logistics state that the logistics factors change too frequently and too radically over any extended period of time. However,

this is not supportable by the comment made by respondents that the WPM changes only 10 to 15 percent annually. It is not agreed that the WPM is really a "Master Plan" kept current by quarterly changes. Previous comments on the use of the WPM as a budgetary type document raise doubts that the WPM is a "Master Plan". If, in fact, the WPM sets the goals for the USAF as a result of the best thinking of what the USAF Strategy and Tactics should be, it is not understood how the basic Air Force Strategy can change within a three months' period of time to require a basic change in the WPM. Further evaluation of the "Master Plan of Logistics" is reflected in Chapter Six and Appendix III.

Finding J. It is marginally agreed that the present formalized planning system affords to the USAF a system of determining the status of attainment of a D-date posture (Question 65, page 77) (Yes - 18, No - 11). Of those responding No, five stated it was because a new plan (WPM) for determining WRM requirements is developed annually, four cited a requirement to budget on an annual basis, one stated that the "plans as I know them do not include a provision for analysis or check of status" and one stated "a combination of reasons - my explanation would involve direct criticism of WPM, WRM, WPS, etc."

Evaluation. The requirement to develop the WPM on an annual basis and the existing requirement to budget on an annual basis continually has been identified as a weakness in the present logistics planning process.

## III. Overview of Findings

A. In accomplishing the planning function within the military, it is mandatory that recognition be given to the impact which the outlay for the national military establishment has on the economy and our way of life. When considering the logistics implications of the total national military strategy, we must be ever mindful of the fact that the Congress and the people have charged the military forces to obtain the greatest defense with the least dollars. Correspondingly, the military strategist and the logistician derive their military forces and materiel requirements on the basis of what their best judgment tells them they must have to accomplish their mission. In effect, these two basic conflicts establish a paradox. Does the Air Force develop an "objectives or requirements" plan (that which we would like to have), or does the Air Force develop an "attainable or budgetary type" plan (that which we expect we will be allowed to have)? The question logically follows then what is the type of conceptual logistics planning really being accomplished in the series of mid-range planning documents and what are the attitudes or opinions of those who insist in the preparation of such plans and those who utilize them?

- B. On the assumption that the WPB, coupled with the WPM, are fully coordinated plans reflecting USAF conceptual, policy and strategic considerations and a fully evaluated logistics input, it would appear that the objectives of these two plans provide a criteria against which a measurement of progress can be made. This is substantiated in Section II by the findings from the questionnaires. The following key judgments were derived from these findings:
- 1. These plans adequately express the force requirements of the Air Force.
  - 2. They provide the specific goals or positions for the USAF.
  - 3. They are used as the basis to compute resource requirements.
- 4. They provide a means of measurement of those peacetime programs to meet the resource platform requirements of the WPM.
- 5. These plans as they are now conceptually constituted provide a basis for the accomplishment of their objectives over a period of time.
- C. The foregoing analysis tends to rightfully place the WPM in the category of an "objective or requirements" plan which is inferred by the term "requirements" in its title. However, some doubt is raised on the exact category of this type of plan. There is only marginal agreement that the yearly publication of the WPM does not change the concept of the WPM from a logistics planning document to a budgetary type of document. This is substantiated by the judgment derived from the questionnaires that it is only marginally agreed that the USAF Mid-Range Planning process is productive in providing a basis for determining the material resources needed. Evaluation of material obtained through interviews indicates that the basic purpose, scope and intent of the WPM to provide a common basis of logistics planning is thwarted by the following:
- 1. The WPM is intended to look ahead three to five years in the future. However, two persons interviewed stated that the WPM changes only 10 to 15 percent from one year to the next. This infers that the document is quite repetitive and, in effect, the various logistics factors and other considerations do not change too radically from one year to the next.
- 2. Quarterly changes are made in the document. If this is true, any changes made in any segment affecting specific budgetary or buying programs would have a pronounced effect on the logistics planning function within the USAF.

D. In an attempt to ascertain an objective evaluation of the overall war planning process with specific reference to material requirements, respondents were asked whether the present formalized planning system, as defined in AFM 55-7, affords a system for determining the progress toward attainment of a D-date posture. It will be recalled early in the introduction to this Chapter, the "Forces-in-Being" concept of the USAF was mentioned. Eighteen of 29 respondents agreed that the present formalized planning system affords to the USAF a system of determining the progress toward attainment of a D-date posture. On the other hand, 17 of 33 respondents favored a proposed concept for the use of a "Master Plan of Logistics" as a companion document to the Air Force Basic Plan (WPB). This proposed plan will be more fully discussed and evaluated in Chapter Six.

#### SUMMARY

The current application of logistics planning in USAF.

- A. The primary document utilized in Air Force logistics planning is the USAF Mid-Range Wartime Requirements Plan (WPM).
- B. The WPM by its basic title infers that the plan is a requirements plan and thus should reflect the stated and justified military requirements for the USAF.
- C. The WPM in its real-world role reflects too much of the "attainable or budgetary philosophy" and thus is not truly a requirements plan.
- D. The impact of the budgetary process on the logistics planning function makes the present mid-range logistics planning function difficult of attainment.
- E. The apparent "double-standard" category (use of the plan as both an "objectives" and "attainable" document) for the WPM may, in effect, negate any real mid-range planning being accomplished.
- F. If the WPM is a true requirements plan and the AF does not get all of the funds to support it, do we sow the seeds of "fire fighting" in that we try to do too much with too little?

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#### CHAPTER SIX

# A CONTRIBUTION TO IMPROVED LOGISTICS PLANNING

#### I. Introduction

- A. As reflected in Chapter Five, some doubt is raised as to the stability, futurity and goals of logistics planning stemming from the use of the WPM. These doubts are raised by the impact of the budgetary process on all of the plans of the military as more fully discussed in Chapter Four. AFM 55-7 states that the "WP" series of war plans covers the activity of USAF forces after hostilities have been started. To express the peacetime activity and goals, the Air Staff develops and publishes each year a series of documents known collectively as the USAF Program. These documents are kept current through quarterly revisions. The programs form the basis for the development of budgets, procurement of materiel, military construction and peacetime operations by the USAF Commands.
- B. A logical question to ask is Does a paradox exist which hinders logistics planning? On the one hand, doubts are raised that the WPM is a Mid-Range document and on the other hand yearly program documents, revised on a quarterly basis are used as a criteria for the development of budgets, procurement of materiel, military construction, etc. Will the current system provide for a "Force-in-Being" to be prepared for the D-date of the WPM? As one respondent put it "Under the Forces-in-Being' concept every day is a potential D-date". Can it be determined today what "force-in-being" was provided for in a given plan? When did we plan for it? To ascertain if there is a paradox in our planning concept and whether some new means of accomplishing logistics planning is required, a new concept of a "Master Plan of Logistics" was proposed by the team and submitted in the questionnaire for evaluation by the respondents. Appendix III more fully describes and evaluates the proposed new concept. In summary, it was visualized the proposed concept would have the following characteristics:
- 1. A complete evaluation of the various courses of action to support a planned war strategy for specific D-dates.
- 2. A recognition of budgetary constraints so that the over-all objectives, to be attained by a specific D-date, are translatable into finite intermediate objectives to be attained on a yearly basis.
- 3. A recognition that the basic intermediate materiel objectives, delineated in the "Master Plan of Logistics", will afford to the USAF a means of determining its combat capability when these objectives are attained. Such objectives afford to the USAF a means of war gaming its supporting "plan for logistics" type of plans (Command Plans).

# II. The Validity of the Proposed Concept

A. The respondents were asked whether the concept of planning, as visualized in the Master Plan of Logistics, could be utilized in USAF planning. Forty respondents answered this question; 27 stated Yes, and 13 stated No. Of the 13 responding No, one stated it would be too complicated, five stated it is the present USAF planning concept and the only thing different would be a title change, one stated it would require further study, one stated a Master Plan could not be kept any more current than the WPB and WPM, one stated that the Master Plan would be too inflexible to support changes in strategy or tactics, one stated it was an excellent concept but would be quite a job to keep current, and, the remaining three had no comment. Of those responding Yes, a total of 21 were of the opinion that the concept of a Master Plan, its goals and objectives, should be given to Congress, and if Congress were receptive, the implementation of the first intermediate objectives should be undertaken.

Evaluation. The findings on these two questions are further reinforced by the guidelines for the 1963 budget recently announced by the Assistant Secretary of Defense (Comptroller) and which are discussed in Chapter Four of this study. The guidelines are particularly appropriate for the following reasons:

- l. Mr. Hitch used the term "program package" to cover up to a five year program to reflect major weapon systems to include men, materiel, construction and operation. This, in effect, is planning for a much longer pull than the present "P" series documents and the entire package is oriented on the performance of a given mission in support of the basic National Security Policy.
- 2. Mr. Hitch on several occasions mentions "if Congress approves his approach". This infers that Mr. Hitch foresees a requirement to sell Congress on the idea of agreeing on a much longer element of time than heretofore exercised. This approach to the longer pull for the defense establishment appears to be consistent with the over-all planning philosophy of the new administration as reflected in Appendix III. The response to the idea of having Congress briefed on the Master Plan such that the Congress has a better appreciation of what the services are attempting to do may pay sizeable dividends in assuring the stability of plans.

With reference to those responses bearing on the strict administration of the plan - for example, "too complicated, could not be kept any more current than the WPB and WPM" - it is believed that these are details that can be covered in appropriate Standing Operations Instructions or Procedures. With reference to the responses indicating that the concept of a Master Plan of Logistics is, in effect, the current concept of planning within the USAF, it is agreed that this is the

concept basically delineated in AFM 55-7. However, the real-world application of logistics planning, recognizing as it must the impact of the budgetary process and the desires of Congress, appears to be different to that expressed in AFM 55-7. With reference to the comment made that the Master Plan would be inflexible to support changes in strategy and tactics, it is offered in rebuttal that the plan may, in effect, offer a better means of deriving the strategy and tactics. This would be so because the complete integration of strategy, tactics and logistics would be made within the responsible decision making element of the USAF.

- B. Additionally, in support of the validity of such a Master Plan of Logistics were those responses made in reply to the question as to whether the proposed concept will provide to the USAF a better means to justify, evaluate and defend its position to higher authority. Out of a total of 28 respondents, 23 stated Yes to such a question.
- III. Will the New Concept Provide a Basis for Improved Logistics
- A. Respondents were asked to rate the proposed concept of a Master Plan of Logistics. Out of a total of 33 responding, 24 stated the proposed system would be better, 9 stated about the same, and two said poorer than the present system. This rating is supported by the following additional findings derived from the questionnaire:
- 1. Respondents indicated that the Master Plan of Legistics would provide a means of placing the budgetary process in the right military perspective. Out of a total of 35 respondents, 25 said Yes and 10 responded No to such a question.
- 2. Respondents were asked whether a more effective evaluation of the logistics planning process could be developed by means of a Master Plan of Logistics rather than the publication of a Mid-Range Requirements Plan on an annual basis. Out of a total of 37 respondents, 22 stated more effective, 9 stated about the same and six stated that the proposed concept was less effective than the current system.
- 3. Respondents were asked whether the proposed concept would provide a basis for the reduction of "fire fighting" in that a firmer basis of marrying logistics with the strategic and tactical plans would result. It was marginally agreed by the respondents that a reduction in fire-fighting actions would result. Out of a total of 37 respondents, 20 stated Yes and 17 stated No.
- B. While it is agreed that a test of the effectiveness of planning in the military is difficult, short of war or emergency situations, it is concluded from the results of the foregoing findings that there is interest in devising some means of improving the basis of logistics planning within the USAF.

#### SUMMARY

A contribution to improved logistics planning -

- A. The present logistics planning process appears to present a paradox to the planner when he attempts to develop plans with futurity and stability realizing that the budgets and programs are all powerful.
  - B. The value of a new concept of logistics planning is established.
- C. The characteristics and evaluation of the proposed new concept of logistics planning are presented in Appendix III.
- D. Opportunities exist for an improvement in logistics support by means of an improved concept of logistics planning.

APPENDIX ONE
TEAM QUESTIONNAIRE

# A LOGISTICS RESEARCH PROJECT QUESTIONNAIRE OF THE ADVANCED LOGISTICS COURSE, 61-A

The School of Logistics Institute of Technology United States Air Force

# Research Project Team Members

Major Fred H. Jones, USAF
Major William R. Bigler, USA
Mr. Carl E. Trimble, CIA

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NOT	LATER '	THAN	

This	Questionnaire	Received
From		

#### QUESTIONNAIRE GUIDELINES

- 1. The student Research Team has attempted to develop questions by a synthesis of military and non-military writings on the subject of planning. With the benefit of approximately one month of concentrated study, it is hoped that a comprehensive treatment of planning and logistical planning areas has been developed. The team is aware that some of the questions may appear to be simple, fundamental or academic, but you are assured that your thoughtful response, coupled with others, will be most helpful in proving or invalidating certain key hypotheses.
- 2. An attempt has been made to construct all questions so that the responses will be unclassified. The Research Team has utilized the unclassified discussion of the formalized JCS and USAF War Planning Process in AFM 55-7 as a primary back-drop for its investigation. It was determined that some dynamic, officially recognized planning process was required to weave a thread of continuity through the study. The questions have been designed to elicit your thoughts on concepts, not the specific content of any given plan mentioned or discussed in the questionnaire. If you believe the answer you may give to any question will border on classified information, merely annotate the question—unanswerable classified information.
- 3. Many questions can be answered by indicating your response with a check-mark in the place provided. When you are asked to explain, describe or elaborate, space has been provided. In the event sufficient space has not been provided, utilize the reverse side of the questionnaire sheet and annotate your comments with the appropriate question code number. Please be generous in your comments, the team is earnestly soliciting your thoughts.
- 4. Do not become intrigued by the code of the questions - this is a means developed by the team to properly collate your responses. For example, a question coded I-A-e-l, means the question pertains to the first objective of the research effort (I), first sub-objective (A), the question is an evaluative type (e) and, it is the first question in the evaluative sequence of questions (1).
- 5. The questionnaire need not be signed but if you include your name, office symbol and telephone extension it will enable the team to contact you about any new ideas you have introduced.

Name	
Organization	
Phone	

hel	There is certain biographical information which the team feels will p in the evaluation of your response.
1.	Indicate at what level of logistics planning you are now working:
	JCS USAF COMMAND
2.	How many years of active military and civilian experience do you have?
	Less than 8 8 to 12 13 to 16 17 to 20
	Over 20
3.	Have you done log planning at other levels of Command?
	YES NO If YES, please indicate at what level
4.	Please indicate which of the following service schools you have attended:
	a. Air Command and Staff. In residence By Correspondence b. Advanced Logistics Course c. Armed Forces Staff College d. Air War College. In Residence By Correspondence e. National War College f. Industrial College of the Armed Forces g. Civilian Equivalent the above
5.	How long has it been since you last attended one of the above?
	1 Yr 2 Yrs 3 Yrs 4 Yrs Over 4 Yrs
woul tech as, comp	If it has been over three years since you attended one of the above, ld you be interested in a six week refresher course on the latest iniques of log planning? Assume the course would include such subjects probability, logic, research techniques, planning techniques, use of outers and would be taught by The Institute of Technology or by the istrial College of the Armed Forces.
	YES NO
7. repo	Do you feel that such a course would be of value to a new man orting into your shop who had been out of school for over three years?
	YES NO

Consider the planning process as a mental exercise in an academic sense, apart from any particular kind of planning, i.e., strategic, operational logistical, etc. Can you identify several theoretical elements that every good plan should contain? For instance: (1) Policy for guidance of subordinate elements, (2) Established measureable, intermediate goals.		
a	b	
c	d	
Can you agree with thi	is statement? YES	NO
		lefinition of planning do
objective; that planni How would you answer t might be that (1) we p future capability, or	ing for the sake of plan the question, "Why do we plan in order to determin (2) planning is performe	plan?" For instance it to the needs of a desired to minimize constraints
subordinate action and YESNO	d decision."	
	apart from any partic logistical, etc. Can every good plan should ance of subordinate eigoals.  a	apart from any particular kind of planning, illogistical, etc. Can you identify several the every good plan should contain? For instance of subordinate elements, (2) Established goals.  a

(5)	planning is to state subordinate missions and objectives, and to specif their accomplishment in terms of quantity, quality, time and expense together with criteria for their satisfactory accomplishment."
	GOODSATISFACTORYINCOMPLETEBAD
	a. If you answered INCOMPLETE to the question, just above, what should be added for the sake of completeness?
	b. If you indicated your reaction to question 5. above as BAD, why do you believe so.
I-A-f-3 (6)	Identification of alternative courses of action is one function of pre- liminary planning. To your knowledge, are such courses of action identified prior to publication of the War Plan Basic (WPB) and the War Plan Medium (WPM)?  YES NO
I-B-f-2 (7)	To your knowledge who, if any person or element does, applies the criteria of suitability, feasibility and acceptability to alternative courses of action prior to publication of the WPB and WPM?

I_B_e_2 (8)	It has been stated that, "An objective of planning is to provide a needed focus of knowledge for the entire organization regarding its direction, goals and expectations. The plan should contain organized and analysed information essential to further decisions." - Please indicate how you feel about this statement.  I AGREE I DISAGREE
	a. If your answer, just above, is I DISAGREE, will you please indicate why?
I-A-f-4 (9)	In your opinion is the following statement True or False? "Planning is not forecasting; it does not deal with future decisions. But, it does deal with the futurity of present decisions, and it does not eliminate risk."
	TRUE FALSE Both True & False

I-B-c-l (10)	Literature on the subject divides planning into two general types: (1) Administrative or policy making and guidance furnishing and (2) Opertional or type planning Can you agree, generally, with the division of "planning" into these two general kinds?
	YESNO
	If your answer is NO, to the question just above, please explain.
I-B-E-3 (11)	Do you consider that strategic planning and operational planning have the same ultimate goals, and that conduct of the two logically follow the same planning processes?
	YESNO
	If your answer is NO to the question, just above, please briefly explain
I-C-e-1 (12)	One author has listed and discussed what he considers to be the six (6) essential characteristics of a good plan. Among them he states, "It (the plan) will provide for an analysis and classification of actions, i.e., it establishes standards." Do you believe that the planning process should include consideration of standards for future action based on the plan?
	YESNO
I-C-c-1 (13)	In administrative or policy and guidance planning it might be said a large factor of intangibility exists, and that in operational planning the factor of intangibility decreases with each successive lower echelon Do you believe this statement generally applies to military planning as well?
	YESNO

I-C-f-2 One widely accepted academic authority has listed and discussed what he considers to be the eight essential characteristics of a good plan.

(14) They are: (1) Objective, (2) Logical and Sound, (3) Futurity, (4) Flexibility, (5) Stable, (6) Comprehensive, (7) Clear, (8) Simple. Do you believe these are characteristics a good military plan should contain?

YES \_\_\_\_ NO \_\_\_ OTHER \_\_\_\_

a. If your answer was OTHER, just above, would you briefly explain your feeling?

I-C-e-2 Several authors who have written about planning have included statements about "concepts and principles" of planning. However, there has been no clear identification of what is meant by "concepts" of planning. -- The research team feels that AFM 55-7 sets forth one Air Force concept where it states, "Planning in the USAF is accomplished at all levels of command, from Hq USAF level down to the lowest level." -- Can you help the research team in its effort to identify "concepts of planning"? Would you identify what you believe are one or more such concepts?

II-B-e-1 (16)	Logistics in its comprehensive sense, has been defined by the JCS in terms of materiel, personnel, facilities and services and the more functional aspects including design, development, transportation, evacuation storage, movement, acquistion, construction, maintenance, operation and dispostion. The JCS definition further states, "It (logistics) comprises both planning, including determination of requirements, and implementation." Do you agree with this last statement?	
	YES NO OTHER  a. If your answer, just above, is OTHER, would you please explain?	
II-A-f-l (17)	In your opinion, is it reasonable to state that all logistical effort (both planning and operations) has as its objective "attainment of sustained combat effectiveness in operating forces?"	
	YESNO	
II-A-e-l (18)	In your opinion, does logistical planning answer the age old military questions of who, what, when, where, how and why?	
(10)	YESNONOT_ENTIRELY	
	a. If your answer, just above, was NOT ENTIRELY, would you please clarify.	
II-A-c-l (19)	Gustavus Adolphus, King of Sweden, 1611-1632, is accredited by many as an originator of thinking for modern warfare. Many of his greatest victories were directly attributable to his logistical talents. In your opinion, is there a correlation between victory in war and successful logistical operations?  YES NO	
	TEONO	

	II-A-c-2 (20)	One authority makes a distinction between "logistic planning" and "planning for logistic support". He states, "the term logistic planning can be used to indicate the incorporation of logistic considerations into the formulation of strategic and tactical plans." On the other hand, he states, "The term planning for logistic support can be applied to the detailed planning for the logistic support of the force(s) which are carrying out the decision reached through the estimate of the situation." Ir your opinion is there a correlation between these statements and strategy and tactics?  YES NO
	II-A-c-3 (21)	Do you believe that this distinction adequately subdivides logistical planning into its two major, separate areas?
		a. If your answer, just above, was NOT ENTIRELY, what other, or different distinctions would you make?
	II-B-c-l (22)	Some logisticians feel there may be as many as 12 separate and identifiable functions of logistics. Of these there are three that may be considered basic or elemental to all the others. They are: (1) Determination of Requirements, (2) Procurement, and (3) Distribution
-		Can you gnerally agree with this?  GENERALLY AGREE DISAGREE  a. If your answer, just above, is DISAGREE, would you please briefly clarify?

(23)	Many planners in business and industry believe that plans should in- herently contain a method for evaluation of the plan as its construction progresses from concept to completion. One military thinker has stated "Evaluation during the process of planning has three objectives. First to evaluate the status of the plan. Second, to serve as an integral part of the plan. Third, to improve the planning skill of the personne involved. Satisfaction of these objectives is bound to result in better planning." With respect to plans to which you have made contribu- tions, or from other knowledge, do you believe it to be generally feasible to evaluate progress and quality of a plan as its construction progresses?
	YESNOUNCERTAIN
	a. If you answered UNCERTAIN in the question, just above, what mis- givings do you have regarding measurement of the planning process?
TT 0 6 1	
II-C-f-1 (24)	To your knowledge are there methods, criteria or procedures that can be used to determine how good a logistics plan may be?
(24)	YESNO
	a. If you answered YES in the question, just above, would you please explain or identify the methods you have in mind?
II-C-c-l	In connection with planning for logistics can you accept the concept that planning increases in importance at the higher echelons, and that
(25)	at the higher levels it tends to be broad and general, and at the lower echelons it tends to be narrow and specific?
	YESNO
	a. If you answered YES in the question, just above, can you generally agree that higher level planning requires a greater degree of conceptual, reflective thinking, and that at lower levels planning becomes more concrete and requires less conceptual, interpretive thinking?
	YESNO64

II-C-f-2 (26)	Concurrency of planning appears to apply to simultaneous planning by staff sections at two or more command levels and toward a common objective Have you had experience in participating in concurrent logistics planning with levels other than your own?
	YES NO a. If you answered YES in the question, just above, did the concurrency
	of your planning result in better log plans for the two or more levels, or was there a better general quality of log plans produced?
	YESNO
II-D-f-1 (27)	Does the JSOP specify a requirement for development of any definitely identifiable logistics plans?
(27)	YES NO
	a. If you answered YES in the question, just above, would you please identify such plans?
II-D-f-2 (28)	Does USAF receive from the JCS plans or directives that specify requirements to develop specific logistics plans?  YES NO
	a. If you answered YES in the question, just above, would you please identify such plan (s)?
II-D-f-3 (29)	To your knowledge, does your headquarters receive directives to prepare plans that require preparation of detailed logistics annexes?  YES NO
	a. If you answered YES in the question, just above, would you please identify such plan (s)?

II-D-e-1 (30)	Are the parameters for your logistic planning, as received from higher authority within your headquarters, or from higher headquarters, difinitive, specific and, in your opinion, objective?
	YESNO
II-D-f-5 (31)	AFM 55-7 states, "The responsibility for logistics planning is vested in the Director of Logistics Plans, DCS/M, who in turn redelegates responsibility to other Directorates in DCS/M" Does this mean that the Director, Log Plans, DCS/M, only coordinates the logistics planning in the USAF? Or, does he do some planning and all of the coordinating of USAF's logistics planning?
	ONLY COORDINATES PLANS AND COORDINATES
II-D-f-6 (32)	One military writer and thinker has stated, "The integration of strate- gies, logistic and tactical planning by officers working in close physical proximity to each other is an essential factor in increasing the flexibility of command." Do strategic, logistic and tactical planners have good communication with one another in your headquarters?
	YESNO
II-C-e-1 (33)	A speaker, in a presentation to the ICAF in 1959, states, "The strategic planner who hesitates to provide information requested and needed until things have firmed up, thinking that there by he is retaining flexibility in planning, is actually shackling himself, for the logistician must plan well ahead, and if adequate strategic guidance is not given, he must perforce make necessary assumptions and estimates himself." In the absence of specific guidance and needed information, how frequently has it been necessary for you to make estimates or assumptions in order to do your job?
	FREQUENTLY SOMETIMES HARDLY EVER
II-D-f-7 (34)	As you see it, please state what it is that causes generation of a requirement to produce a logistics plan? For instance: Is it a strategic or tactical plan? Or is it a buying program? Has it been a commander's estimate of the situation? What has your experience been?

ļ		Identify by office symbol your counterparts in each of the following areas:
	(35)	a. Operations Plans
1		b. Supply
		c. Transportation
7		d. Maintenance
		e. Procurement and Production
Í	III-A-f-2	Estimate the average frequency of your contacts both formal (conferences
I	(36)	meetings) and informal (visits, phone calls, coffee breaks) with your counterparts in the above areas:
1		Ops Planner Supply, Maint., Trans., Procure.
		More than 3 a week
r		More than 1 a week
		More than 1 a month
		Less than 1 a month
1	III-A-f-3	How far in minutes is your office from the offices of your counterparts?
	(37)	Ops Planners Supply, Maint., Trans., Procure.
Ī		Less than 5 minutes
1		5 to 20 minutes
		More than 20 minutes
ſ		
	III-A-c-l (38)	Do you feel that it would facilitate your planning if your office were located closer to operations plans?
	()0/	YES NO
Ţ		DON'T KNOW

IJI-A <b>-f-</b> 4 (39)	In developing a plan, when during the process are the log planners brought together with the ops planners?
(27)	a. At the very beginning
	b. After the operational concept is developed
	c. After the operational part of the plan is in draft form
III-A-f-5 (40)	AFM 55-7 states "The responsibility for logistical planning is vested in the Director of Log Plans, DCS/M, who in turn redelegates the responsibility to other directorates in DCS/M." How much of the finished Log Plan is written in the log plans shop?
	a. Less than 25%
	b. 25 to 50%
	c. 50 to 75%
	d. More than 75%
III-A-f-6 (41)	If more than 25% of the plan is written in other directorates of DCS/M, how often do you bring the people from Supply, Transportation, Maintenance, Procurement and Production together with the ops planners during the development?
	a. At least once a week
	b. At least twice a month
	c. At least once a month
	d. At least once during the development of the plan
5	e. Not at all
III-A-f-7 (42)	In your contacts with ops planners who initiate the contact?
(4~)	a. Log Planners most of the time
	b. Ops Planners most of the time
	c. About fifty fifty
III <b>-A-f</b> -8 (43)	AFM 55-7 states that AMC is responsible for material support for all Air Force activities. How often during the development of a plan do planners from your headquarters meet with planners from AMC?

(44)	Assuming that because of physical limitation your office cannot be clos to both materiel divisions and to ops plans.
	Where should it be?
	a. Closer to ops plans?
	b. Closer to materiel?
	Please elaborate
III-A-c-3 (45)	In developing a plan do you feel that you need to contact ops planners more than, less than or about the same amount as you contact the planners from the other Materiel Divisions?
	a. More frequent contact with ops plans
	b. More frequent contact with material divisions
	c. About the same
III-A-c-1 (46)	Rear Admiral Eccles has said, "If our strategic and logistics plans are to be brought into timely harmony they must be fully 'integrated' from inception through their final execution. This process of integration requires certain formal planning procedures and also the organization of systems of 'information' and 'programming'. However, these are all of limited value unless they are accompanied by close personal relations among the people involved."
	Do you feel that sufficient close personal relations exist between the operations planners and logistics planners at your level?
	a. YES
	b. NO
	If no have you any suggestions for bringing closer relations?
	Please elaborate.

a. In the past 12 months \_\_\_\_\_.

b. In the past 18 months

c. Longer than 18 months

(49)

IV-A-f-1 (50)	It has been said, "The Public Printer is an inflexible tyrant and budget deadlines must be met. All of the issues which are sloughed over in the earlier stages of our planning-programming-budgeting cycle must be decided for better or worse in the final budget review."
	Do you know of issues which should have been resolved in the midrange plan but which were not resolved until the budget cycle?
	a. YES
	b. NO
IV-A-e-1 (51)	If your naswer to the above question was YES, was the reason they were not resolved because:
·•	a. Lack of clear guidance from higher authority
	b. Failure to clearly identify financial implications of alternative courses of action
	c. Continuing controversy over roles and missions
	d. Other (explain)
IV-A-e-2 (52)	At least one public official has come out in favor of a four year budget cycle.
	Do you favor a four year budget cycle?
	a. YES
	b. NO
IV-A-e-3 (53)	If you favor the four year budget cycle, is it because you feel that it would reduce the work load, help resolve issues and/or simplify requirements determination?
	a. It would reduce the workload
	b. It would help resolve issues
,	c. It would simplify requirements determination
	d. Other (Explain)

Another alternative to the four year budget would be to have Congress approve the Joint Strategic Objectives Plan (JSOP). The assumption here is that if, for example, Congress approved JSOP - 65 this year, four years later the Joint Chiefs would only have to brief Congress on any minor changes that had been made to JSOP - 65 in order to get the military portion of the FY-65 budget approved.

Would you favor having the JSOP approved by Congress?

A.	YES	A.C S

b. NO \_\_\_\_.

If NO please elaborate.

materiel resources?

1 ± C	
V=-A=1=3 (59)	AFM 55-7 provides that General War Plans generate a base to be attained prior to D-day as a resource platform to support the planned strategy for a general war. They include related programs which work toward D-day "forces in being" and the procurement and pre-positioning of war readiness material (WRM) prior to D-day. In your present logistical planning function can you identify and measure your progress in your peacetime programs meeting the resource platform requirements of the WPM?
	YES COLUMN TO CARDADATE PROPERTY.
	If NO, is it because of:
	a. Vagueness in the WPM
	b. The gradual diffusion of the objectives of the WPM into a myriad of objectives in the various program documents
	c. Lack of a specific requirement to provide "feed-back" against the published WPM as goals are attained or are not attained
	d. The only measurement of performance requirements are in dollar statements measured against budget allocations
	e. Other (Explain)
V-A-e-4 (60)	It has been stated that the work of "Top Management" is largely administrative and that it involves a greater degree of futurity than operative planning. Additionally, administrative management is concerned primarily with the work of planning, organizing and controlling the activities of an organization for the accomplishment of its objectives over a period of time. Do you believe that the formalized planning documents JSOP, WPB and WPM as now conceptually constituted provide a basis for the accomplishment of its objectives over a period of time?
	YES NO MARKET ALLEGATION AND AND ADDRESS A
	If NO, is it because of:
	a. The budgetary process and the requirement for orienting on one year of operation
	b. Documents are not definitive in specific clanning objectives

The requirement to develop the JSOP and WPM of an annual basis \_\_\_\_\_.

d. Other \_\_\_\_ (Explain).

AFM 55-7 states that the objectives to which the USAF builds its peace-V-A-0-3 time force structure are developed from an analysis of the forces (61)required by the mid-range and long range war planning considerations. These objectives are in turn tempered by analyses of many limiting factors, for example, expected fund availability, production capabilities, manpower capabilities, etc. Where realistic application of these factors results in program objectives different from those indicated by the war plan, adjustments must be made in the war plan or a means developed to meet this difference by a change to the peacetime objectives. On the assumption that the WPB, coupled with the WPM, are fully coordinated plans, reflecting USAF conceptual, policy and strategic considerations and a fully evaluated logistical input, do you believe that the objectives of these two plans should be the overriding criteria against which a measurement of progress could be made?

YES _	NO
If NO	, is it because of:
a	The difficulty in identifying finite objectives in the WPB and WPM
b	The diffusion of the objectives of the WPB and WPM
c.	The fragmentation of the functions of logistics into the specialized staff sections and activities
d.	Other(Explain)

Ç	
√-A-e-5 (62)	Logistics as a military activity has been categorized as "producer logistics" and "consumer logistics". The distinction being that in "producer logistics" you accomplish those actions to place material into the military system and then in "consumer logistics you accomplish those actions to efficiently utilize that material already in the military system."
	YES NO MODELLE NO
	If NO, is it because:
	a. You feel that there is no distinction between "top level" planning and "operational planning"
	b. You feel that "producer logistics" for the military has no bearing on national objectives, over-all strategy, economic and political implications
	Other (Explain)
	If you believe that "producer logistics" is the overriding consideration in "logistical planning" do you also believe that the concept of planning as now embodied in the JSOP, WPB and WPM is consistent with your concept of logistical planning?
	YES NO MONTH AND MANUAL PROPERTY AND ADDRESS OF THE PROPERTY A
	If NO, will you explain why?
0.	
V-A-e-6	The USAF Mid-Range wartime Requirements Plan (WPM) is the major war
(63)	planning document used as the basis for the computation of wartime quantitative material requirements for rulest estimates and buying programs (War Readiness Material). Publication of the WPM is scheduled, time-wise, so that it is in the hands of the computing agencies to permit them to submit budget and buy requirements to Hq USAF, by established deadlines. In your opinion does this concept of four years in the future in reality, change the concept of the WPM from a logistical planning document to a budgetary, operational (plan for logistics) type of document?

YES

NO

V-A-e-7 (64)	AFM 55-7 states that, upon examination, it is apparent that the USAF basic wartime mission will remain relatively unchanged for the periods covered by the short range and mid-range time periods; while the opposite is true for the dynamic concepts, strategy and forces. The necessity for portrayal of basic Air Force planning in a concise document, susceptible to continuing evolution and improvement, resulted in the publication of this information in the WPB separate from the short range (WPS) and mid-range (WPM) plans to which it pertains. Do you believe that such a basic planning document concerned with logistics could be published to serve as a companion "Master Plan" rather than publishing a WPM on an annual basis?
	YESNO
	If NO, is it because:
	a. You feel that measurement of performance of logistical activities will be difficult of attainment
	b. The logistical factors change too frequently and too radically over any extended period of time
	If YES, do you also agree that:
	a. A USAF Master Logistics Plan to extend for a period of three to five years with finite objectives or goals could be developed to parallel the WPB
	b. Such a master plan to be used as a means of measurement of performance or as a means of evaluating "Program Feed-back" on an annual basis
V-A-e-8 (65)	Do you feel that the present formalized planning system, utilized in the USAF (that system defined in AFM 55-7), affords a system of determining the status of attainment of a D-date posture?
	YESNO
	If NO, is it because:
	a. A new plan (WPM) for determining WRM requirements is developed annually
	b. A requirement to budget on an annual basis
	c. Other (Explain)

VI-A-e-l	In the event that a concept of war planning could be developed to provide
	a "Master Plan of Logistics", it is visualized that it could have the
(66)	following characteristics:

- A complete evaluation of the various courses of action to support a planned war strategy for specific D-dates.
- b. A recognition of budgetary constraints so that the overall objectives to be attained by a specific D-date are translatable into finite intermediate objectives to be attained on a yearly basis.
- c. A recognition that the basic material intermediate objectives delineated in the "Master Plan of Logistics" will afford to the USAF a means of ascertaining its combat capability when these objectives are attained and such objectives afford to the USAF a means of war gaming its supporting "plan for logistics" types of plans (Command Plans).

Do you believe that the concept of planning as visualized above could be atilized in USAF planning?
ÆSNO
If YES, do you also believe that if such "Master Plan" was concurred in by the JCS that a full and complete briefing on its concept, goals and objectives could be given to appropriate committees of Congress to ascertain their reaction and if receptive to commence the implementation of the first intermediate objectives?
MESNO
If you do not agree to the foregoing premise, is it because of:
a. The changing membership of the various committees of the Congres: and the resultant thinking of such committees
b. The difficulty in developing the overall objectives intermediate objectives and goals for such a plan
c. The difficulty in coordinating such a plan within the USAF to establish the firm objectives, intermediate objectives and goals
d. Other (Explain)
If you believe in the validity of such a plan do you foresee that a

better means will accrue for the USAF to justify, evaluate and defend its position to higher authority such that definite implications of intervening constraints can be pinpointed and rebutted?

YES	NO	

∫ <b>–</b> UC	
/I-B-c-1 (67)	It has been alleged that the test of how effective the planning has been in the military is really quite difficult short of a war-time or emergency situation. However, there are techniques available today, such as, simulation, war-gaming and field exercises which can be used to evaluate, to an acceptable degree, the effectiveness of planning. In comparison to the present concept of war planning in the USAF, do you believe that a more effective evaluation of the logistical planning process could be developed in using a "Master Plan of Logistics" rather than the publication of a Mid-Range Requirements Plan (WPM) on an annual basis?  More Effective  Less Effective  If you answered about the same or less effective will you explain why?

Considerable opinion today holds the view that a sizeable amount of time VI-A-e-2 and effort of planning personnel is dissipated in "fire-fighting" activi-(68)ties attempting to revemp or replan to control current operations. In the event that a Master Plan of Logistics to serve as a companion document to the Air Force Basic Plan (WPB) could be developed and implemented do you believe that the nemesis of logistical planning, namely, "firefighting", could be minimized and the real efforts of logistical planners devoted to planning?

NO \_\_\_\_\_

If NO, will you explain why?

VI-B-c=2	The Assistant Secretary of Defense (Comptroller) recently stated that
(69)	a more effective way has to be found to provide financial date to evaluate alternatives upon which the real crucial decisions must be
	made. In comparison to the present concept of planning wherein the annual publication of the WPM is timed to form the basis of budgeting and buying programs, do you believe that a "Master Plan of
	Logistics" will provide a means of placing the budgetary process in the right military perspective?

YES NO

If NO, will you explain your reasons?

VI-B-e-l The "Master Plan of Logistics", as contemplated by the team, is not considered to be a one-time document but a dynamic document subject to amendments as new break-throughs occur. When a major revision is force structure, or a changed strategy occurs, then new intermediate objectives for accomplishment over the required interval of time will be developed. Such new intermediate objectives will reflect the funding implications when they are established. In comparison to the present day use of the WPM, Materiel Guidance and Budgetary Programs, how would you rate the proposed concept of a "Master Plan of Logistics" in providing a basis for improving logistical support?

The new concept of a "Master Plan of Logistics" is:

Botter

About the Same

Poorer

If about the same or poorer, please describe what you consider to be the strong points of the present war planning process?

APPENDIX TWO

THE LOGISTICS PLANNER

#### APPENDIX TWO

#### THE LOGISTICS PLANNER

#### I. Introduction

Logistics Planning is done by men. What type of men? How much formal training, how much on-the-job training and how much total military experience do they have? What qualities and what training does a new man entering the logistics field need? The answers to these questions have been gleaned from the questionnaire and from interviews with some of today's top logistics planners. The qualifications of logistics Planners have a direct bearing on the quality of logistics Plans. Therefore, this Appendix is presented as a means toward improving the quality of logistics planners.

## II. Today's Logistics Planner

The 68 logisticians who answered the biographical part of the questionnaire are a good cross section of today's top logistics planners. They represent JCS (7), USAF (22), TAC (8), SAC (8), MATS (8), ADC (10), and AFLC (5). Their ranks run from Major through Colonel or the equivalent GS ratings and include both workers and chiefs of planning branches, divisions and directorates. Five have less then 17 years experience, 31 have 17 to 25 years experience and 32 have over 20 years experience. Their military schooling is varied; Command and Staff School (34), Advanced Logistics Course (7), Armed Forces Staff College (5), and Air War College (4). Three have gone through Industrial College of the Armed Forces, Eight have had the civilian equivalent of one of the above and 20 have not had any type of advanced military schooling. This indicated that they have had no formal training in planning. Of the 48 who have attended formal advanced military schools or their equivalent, 24 have been out of school more than four years. As for previous planning experience, 34 have done planning at other levels of command and 34 have not. Forty-three would like to attend a course similar to the one outlined in Tab A of this Appendix, and 55 would like to see a man just coming into Logistics Planning attend such a course.

# III. The Ideal Logistics Planner

# A. Experience and Education

A thesis by the Dean, School of Logistics, was used to determine the experience and education qualifications for the ideal logistics planner. For planning at Command level, the logistician should have

<sup>&</sup>lt;sup>1</sup>D. J. Green, Col., USAF, <u>The Development of a Logistics Career</u> Management Program (Ohio State University, Columbus, 1960).

approximately 17 to 20 years service. (Today's planners compare favorably with this requirement.) His background should include experience in several of the logistics functions, Squadron Officers Course, civilian college degrees (Bachelors Degree mandatory and an MA, MS or MBA desired), and either Air Command and Staff School, Air War College or the School of Logistics. (On the important schools requirement, respondent planners are only two-thirds qualified.) For planning at Department or JCS level add Industrial College of the Armed Forces or National War College and four to eight years of planning at numbered Air Force, Air Materiel Area or Command level. (One logistician interviewed pointed out emphatically that a Senior Officer planning in the Pentagon is more than twice as effective if he has served a previous tour in the Pentagon.)

## B. Personal Qualifications

Logisticians in the Pentagon and in the major commands were asked in the interviews to enumerate the personal qualifications a logistics planner should have. Following is a consensus of their opinions: The logistics planner must be practical. He must be an imaginative, conceptive, idealist who is also practical. He must be able to analyze a problem and present clear, logical alternative courses to the commander. Finally, he must be self-effacing because his only reward usually will be the knowledge that his job is well done. Since most logistics planners are hand-picked from the wealth of resources in the logistics functions, there is probably little difference between the personal qualifications of the ideal and of today's logistics planner.

# C. Developing Logistics Planners

Just as large corporations use university short courses (one to nine months) and executive development programs, so can the Air Force develop logistics planners through identification and education. The Advanced Logistics Course and the Logistics Officers Career Field are both excellent steps in this direction and should eventually solve the problem. But there will be a gap for several years between the number trained and the number required. To fill this gap a six weeks Short Course in Logistics Planning (Tab A) is proposed. When followed by a period of on-the-job training, this Course should greatly improve the qualifications of tomorrow's logistics planners.

#### A COURSE FOR LOGISTICS PLANNERS

#### I. Introduction

The statistics in the body of Appendix Two indicate that a large number of today's logistics planners have, for one reason or another, been unable to attend the formal field grade and senior officer courses of Air University and Department of Defense. This indicates that they have had to learn logistics planning on the job. Unguided, on-the-job training is largely limited to the experience of the superior supervising this training. It tends to emphasize "fire fighting", because to the new man "fire fighting" seems to be the most important thing going on in the office. Also, it takes longer to train a man this way. But, a short intensive formal training course, followed by on-the-job training, will overcome most of the disadvantages of informal on-the-job training. Such a course would also serve as an excellent refresher and a method of introducing the latest philosophies and techniques to those logistics planners who have been out of school for over four years. The School of Logistics presently offers 22 executive development type courses covering almost every phase of logistics except logistics planning. The addition of such a course to the curricula is long over due.

#### II. Course Purpose

The purpose of this Course would be to help the student develop a philosophy of Logistics with emphasis on planning, and to acquaint him with some of the tools and techniques available to today's logistics planners.

#### III. Course Duration and Timing

It is recommended that the Course run six weeks and be scheduled between the Fourth of July and Labor Day, six weeks, because this is the minimum amount of time in which the necessary material can be covered. Midsummer, because most replacements report to Logistics Plans Offices in June, and the six or eight weeks just after the new fiscal year (when most plans go into effect), are the calmest in the hectic planning year. If more than one course a year is needed, midwinter is the next best time. Spring and Fall should be avoided because of increased planning activity.

#### IV. Course Content

#### A. Introduction

1. Personal Skills. To aid the student, both in the course and in his new logistics planning assignment, the Course will open with

principles of improved listening, learning, questioning, creating and reading. His reading speed will more than double, and he will learn to identify and avoid common thought fallacies.

- 2. Group Dynamics. Much of Logistics planning is done in conferences and meetings. The student will be taught to get the most out of groups, either as a leader or a member.
- 3. Logic. This phase will include concepts and terms, judgments and propositions, deductive reasoning, inductive reasoning and fallacies.
- 4. Economics. The basic principles of economics will be reviewed. Then the relationship between economics, politics, international relationships, strategy and logistics will be investigated.

## B. Tools and Techniques

- 1. Data Systems. This phase will cover a brief history of Electronic Data Processing Equipment (EDPE), character representation, characteristics of current EDPE hardware, programming and uses of EDPE in Logistics planning.
- 2. Mathematics. This phase will be given one hour daily all during the Goorse to acquaint the student with essential mathematics available to him and to operations researchers. It will include probability, distribution, "monte carlo" method, waiting lines and use of sampling information.
- 3. Operations Research. This phase will deal with methods of problem solving. It will include: (a) trial and error, (b) models and matrices, (c) hueristic approach to long range planning, (d) waiting line analysis, (e) linear programming and, (f) Pert and Pep. Each of these methods will be related to Logistics Planning Problems of today.
- 4. Log-Man-X. This is a Logistics Management Exercise developed at the School of Logistics. It does an excellent job of teaching the interdependency of planning in the logistics functions.
- 5. War Gaming. This is an introduction to War Gaming as a tool for Logistics Planning. A brief War Game will be played and it is hoped that the trainees can be briefed on the results of a recent War Game conducted at national level.
  - C. Theory, Methods and Philosophy of Logistics Planning
- 1. Planning the primary function of command. This phase will include why we plan, goals and objectives, elements of planning and use of the tools and techniques listed above.

- 2. Methodology. This phase will include an explanation of the USAF planning and programming cycle. Command Logistics Plans will be related to USAF "P" and "WP" documents and to JCS documents. Use of Planning Factors, Planning Manuals and standard formats will be discussed.
- 3. Planning Exercises. Student teams will be given an inventory of controllable resources, a forecast of variables and a set of objectives. From these each team will write a plan. Situation factors will be injected as the plans develop. Students will brief their plans to senior Air Force logisticians.
- 4. Philosophy. Each trainee will develop a philosophy of logistics giving special emphasis to Logistics Planning. These will be both written and oral.

### V. Lectures and Guest Speakers

It is anticipated that the same outstanding military, academic and business speakers who visit the Advanced Logistics Course will be available for this planning course.

#### VI. Prerequisites

Students coming to this course should:

- A. Have at least 15 years active service.
- B. Be assigned to a logistics planning position.
- C. Take a by-pass test in mathematics to include algebra.
- D. Review a good management and a good economics text before reporting to school.

Note: Historical and background material on the subjects being presented will be mailed to the student in advance. This will enable him to concentrate full class time on the essence of the course.

### APPENDIX THREE

A PROPOSED CONCEPT OF A MASTER PLAN OF LOGISTICS

#### APPENDIX THREE

## A PROPOSED CONCEPT OF A MASTER PLAN OF LOGISTICS

#### I. Introduction

- A. Defense outlays today are tremendous. Decisions made about new weapon systems, to include the primary weapon itself, supporting materiel, men and supporting facilities, commit the service to a given costly venture. A means has to be found to compare or weigh the relative advantages of accomplishing the Air Force mission in a given manner contrasted to some alternative manner. Military professionals, early in their careers, are taught the principles of making an estimate of the situation and the technique of analyzing the various courses of action available to accomplish the organization's mission be it a squadron or a major command. At any given point in time, those in responsible positions should be able to say to themselves "this is where we said we were going, this is where we are now and this is where we hope to be next year".
- B. There are definite indications that the new administration is taking a good strong look at the type and validity of longer range planning being conducted in the various governmental departments. President Kennedy has stated that a means has to be found to improve our foreign aid procedures. He is concerned that we cannot get recipient countries to respond whole-heartedly to our efforts in boosting their programs if we can only assure them that a given number of dollars will be available in any one given year. He has stated that we must think of a plan covering at least five years. As this report is being written, the President has submitted a special message to Congress requesting a five year plan for combating juvenile delinquency.
- C. High level studies in process within DOD emphasize a longer range approach to planning for example, a 10 year plan for the modernization of the fleet of the Navy is under development. Discussion of these studies reveals that solutions are being sought with the full realization that Congress, through the budgetary and appropriations process, provides the funds for the operations of the military. The shortcomings of the present budgetary system have been recognized by the new Assistant Secretary of Defense (Comptroller). His budget guidelines for FY 1963, recently issued (see Chapter Four), direct the military services to plan for and to provide cost estimates of major weapon systems, their operation and maintenance for a five year period.

# II. Characteristics of Proposed New Concept

A. Chapter Five depicts possible deficiencies of the present concept of logistics planning in the USAF. Of particular significance are the following:

- 1. The drastic impact of the budget and appropriation cycles.
- 2. The diffusion of top level planning objectives by the use of a myriad of ancillary planning documents.
- 3. The apparent use of Program, or "P", series documents as primary documents in conducting logistics planning rather than the use of documents that reflect the basic strategic, tactical and logistic inputs as the blueprint for the over-all direction of the USAF.
- B. To overcome the apparent deficiencies listed above, it is visualized that a concept of logistics planning containing the following characteristics can be developed:
- 1. A complete evaluation of all courses of action to support a planned war strategy for specific D-dates. Such initial D-dates and succeeding D-days should be established for three to five years in the future. This period of time affords an ample phase-in for the dates and period of time presently used in the Mid-Range Planning Process.
- 2. A recognition of budgetary constraints so that the over-all objectives to be attained by a specific D-date are translatable into finite intermediate objectives to be attained on a yearly basis. The total requirement for a weapon system to provide a given military capability by a given date can be determined from the over-all strategy and tactics to be employed. For example, for a given D-date it could be determined that a force structure capable of deploying two Army Air-Borne divisions to any point in the world within a period of 72 hours is needed. This translates into "so many aircraft, so many personnel, so many bases and so many spare parts". The total cost to provide such a capability is then assessed. At this point in time, when the basic policy and strategy determinations are being made, little, if any, consideration should be given to monetary constraints. This judgment is made with the firm conviction that if a threat exists, or the best judgment indicates that a given threat exists, the AF should face up to the fact and state a firm, valid military requirement at this point. If a decision at the highest levels is made that the AF must possess the stated capability, we should plan to provide for it in incremental stages and establish intermediate objectives. For example, assume that for the first year of the plan the AF will provide for a capability of moving one of the Air-Borne Divisions, within 72 hours, to any point in the world. The next year the AF should provide for the capability of moving one and a half divisions to any trouble spot in the world. This process would continue so that as we approach the given D-date originally set as a goal will have been attained. The AF then will have provided for a "Forces-in-Being" capability.

- 3. A recognition that the basic materiel, intermediate objectives delineated in the "Master Plan of Logistics" will afford to the USAF a means of ascertaining its combat capability when these objectives are attained. This infers that a full communication process is involved to transmit to higher authority, collateral agencies and major elements the fact that the Air Force as of that time has a certain capability to perform its mission. This is the intermediate goal toward which the USAF had planned and any new missions must be accepted with full realization of their impact on the force structure.
- 4. Planning will be dynamic and subject to continuous review and evaluation. Any major change in strategy or tactics would necessitate establishment of new intermediate objectives.

## III. Advantages of Proposed Concept

- A. It will provide a sound basis for the conduct of all logistics planning. The "objectives or requirements" planning will, in fact, exist and ancillary programming, budgetary type documents will be place in the right perspective. This comment is buttressed by the comment of the Assistant Secretary of Defense (Comptroller) when he stated that for the FY 1963 budget, the budget development would be divided into two phases the "program package" development phase and the budget development phase". In his opinion, the detailed development of a valid budget is somewhat of a mechanical process after the real crucial decisions in the total "program package" are made. His use of the term "program package", to include a weapon system and the costs of the men, materiel and operations for a period of five years, goes far beyond the present definition of programs as depicted in AFM 55-7.
- B. A means of measuring the plan's accomplishment against previously established goals or objectives will be established. The delineation of intermediate objectives in the plan will certainly assist in this effort.
- C. It will provide an increased ability to present a forthright, factual account of the present state of the USAF and a good summary of what its capabilities are in the light of what had originally been planned for.
- D. The decision making process will rest with the responsible individuals.

## IV. Disadvantages of the Proposed Concept

A. Unless forceful leadership is exercised the plan could stagnate and place the Air Force in too stable a position. Continuing policing of the plan would be required. However, with the announcement of the

"program package" concept of DOD for the FY 1963 budget, it would appear that the services will have to account to DOD with some sort of longer range plan as envisioned here. This intent of the leadership at DOD level to move into a longer range planning posture will provide the type of forceful leadership required.

B. It will be difficult to change to the new concept. However, announcement of guidelines for the FY 1963 budget indicates that considerable work in this area will be in process in the USAF very shortly, in order to develop the "program packages" to run for a period of five years.

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These students have considerable experience in various areas of the logistics field. Consequently, the opportunity, during this course, for them to concentrate this experience on the study of certain Air Force problems offers a potential not readily found elsewhere in the Air Force. The conclusions, and any recommendations, reached by the students may well be of significance throughout the Air Force logistics mission. It is with this thought in mind that the individual studies are published.

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