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MANUAL OF ORGANIZATION AND METHODS PRACTICES

CONTENTS

PREFACE

This manual is the first step taken by the Economic Commission for Africa in making material generally available for Organization and Methods training in Africa. The function of Organization and Methods is becoming more widespread in Africa and the publication of a manual, at this time should provide the Governments with a training aid for the staff engaged in this important function. Other publications of a more specific nature will follow this one.

This first manual is also designed as a guide for the orientation of generalists during that period of development when a fairly large number of candidates will be seeking posts as O and M officers either in central offices or in Ministries or public corporations and when the setting up of O and M units and the application of O and M techniques are being developed. More than that, the manual should serve as a medium to explain what O and M is and indicate to senior government officials how they can use the services of O and M officers and units. It deals not only with the techniques as such but, throughout the text it gives illustrations of practical applications so that senior officials may obtain clear ideas on what they may expect from O and M and under what circumstances.

Senior officials are busy people who do not normally have time to deal with the mass of details that are involved in an O and M study. It is for this reason that specialists are trained to relieve the line officials and allow them more time to devote to matters of policy and co-ordination. The trained and experienced specialists will be able to give valuable advice objectively, impartially and efficiently.

It can be said that the manual is directed to four types of persons:

(1) Those who have the authority to do something about establishing an Organization and Method unit (either a central office or one at the Ministry level);

(2) those senior officials who might require, as clients, the services of O and M units or officers;

(3) those who aspire to become O and M officers or technicians;

(4) those who have problems and might themselves be able to solve them through the application of O and M techniques.

CHAPTER I

AN INTRODUCTION TO PUBLIC ADMINISTRATION

1. Public Administration may be defined in various manners but generally it is associated with the executive arm of government because its responsibility is to carry out the policies of the government. Administrative problems however exist in the judicial and legislative arms so well as for this reason the term public administration should extent itself to all aspects of the government machinery. Public Administration has a universal character; the activities of public enterprises or corporations, charged by statute to carry out certain aspects of the government policies, as well as decentralized areas of government such as provinces, states, districts or municipalities fall within the scope of public administration.

2. From a technical point of view, public administration is concerned with management of men, money and materials and therefore must consider such functions as organization and management, procedures and methods, personnel administration, fiscal and financial administration and public relations, which are common to all kinds of administrations. Its field goes from sea to sea and embraces health services, communications, education, agriculture, public works, national defence, foreign affairs, etc. It is concerned _inter alia_ with the task of improving the public service to further the aims of economic and social development. Without sound administrative structures and efficient practices and procedures these lofty aims will fall short of their mark.

3. Administration, whether in the public or private sectors, is a form of activity which takes place in a continuous manner and at all levels as the actions of individuals, who may be specialists in their own fields, or located far apart, need to be co-ordinated and this can only be effected by sound management. Sooner or later, students of administration are referred to Henri Fayol who delineated the principles of administration in his book: "General and Industrial Administration", written in 1925. Fayol outlined the following activities as part of the functions of manager: technical, commercial, financial, security, accountancy and administrative. All these activities can easily be associated with the task of a manager in any type of enterprise. The aspect in which we are particularly interested

at this stage is that of administration. Fayol further goes on to breakdown this latter function as follows: planning, organization, co-ordination, command and control. In other words, a manager, to do a good administrative job must master these five functions.

4. Since this book was written in 1925 much has been said on the human aspect of management. In government work, personnel is probably the most important resource and modern administration has come to realize this fact. The employee who may have been considered as only a cog in the wheel or just another clerk has another view about his job. To him it is a means of livelihood and he hopes it is a career that may lead to better things. If he has a family, he may regard his job as something essential to survival. The human element should always be foremost in the minds of officers charged with public responsibilities. Human relations takes into account the fact that individuals are not all alike, that they have ambitions, fears, frustrations, conflicts, loves and hates. The modern administrator must realize that an organization is composed of individuals and he must think and act bearing in mind that it is the individual who will make the organization function.

5. History gives us interesting bench-marks concerning the manner in which government was conducted in the past. References to King Solomon, the Greek, Roman and Inca Empires and even the Government of England under Henry VIII show clearly the simplicity, yet the efficiency, of ancient public offices. It is obvious that these systems of government worked well because they were adapted to the needs of the times. The variety, number and complexity of functions that are performed by a modern state would be fantastic and bewildering to a person like Henry VIII. The resources of his day would not have permitted the deployment of a public administration to handle such matters as social security, research, educational services, transportation and communications, foreign relations, etc. as we know them today. Furthermore, Henry himself and his staff hardly would have been trained to administer these modern functions.

6. In our day there is a serious imbalance between the progress of science and technology and the administrative skills needed to harmonize, co-ordinate and execute plans for development, programmes of social reform and other services designed to serve the public. To meet even a part of its growing responsibilities, the modern state must develop the capacity to implement its programmes of economic and social progress. Public administration is the machinery by which the state places itself in a position to make plans and programmes that can be carried out and to carry out the plans and programmes it has made. The O and M officer has a splendid opportunity to help establish the balance by improving organization structures, practices and procedures that will make the administrative processes simpler, more efficient and understandable to both civil servants and the public at large.

7. The organization of the structure of government is a very important feature of public administration considering the necessity to co-ordinate an intricate network of units and to establish channels of communication which will facilitate the determination of responsibility on the one hand and the delegation of authority on the other. The majority of problems encountered in organization work are the result of the division of labour which itself is caused by the complexity of modern technology and science. Division of labour is necessary because a man cannot be in two places at the same time, or do two things simultaneously and, even if he were willing, he could not become skilled in all aspects of government activities. In other words, he could be either an accountant, an engineer, a chemist, or a file clerk but he could not be all of them. Likewise, we have ministries of agriculture, mining, education, foreign affairs or national defence because each will have specialists to advise the ministers concerned and assist them in carrying out their respective policies. The problem then becomes one of chosing the most suitable structures for the ministries and the government as a whole to achieve a working team capable of reaching the objectives of the political, economic and social goals of the government.

8. The overall or general structures will be determined by the constitution of a country and this in turn reflects the traditions, culture and aspirations of the people. As public administration is concerned mainly with the executive arm of government which is headed either by a president or a prime minister, their offices bear an importance of the first priority. As the Chief Executive is concerned primarily with high policy, he delegates the executive and administrative functions of his office to a Permanent-Secretary, Secretary-General or Director-General (some countries use the terms Deputy-Minister or Vice-Minister). The function of this office is to assist the Chief Executive in carrying out his responsibilities and in no way does it constitute an additional level between the Chief Executive and the members of his Cabinet. The Office of the Chief Executive acts as the staff of the Chief Executive much in the same manner as the staff of other ministers act in relation to their respective chiefs.

9. The duties of a Chief Executive, apart from general co-ordination of government activities and presiding at the meeting of his Council of Ministers, may include some or all of the following functions: economic planning for development, budgets, establishments, the civil service and the information service. It must be pointed out that the determination of the location of these functions will depend a great deal on the urgency of and the interest in certain policies. Also, it is important to note that some units are set up to serve all ministries as service units (such as central purchasing department) and others to control certain of their features (treasury, budget, establishments). It is clear that if adjudications are made and priorities drawn up between ministries they would have a better chance of fulfillment if the decisions are made by an office that is under the Chief Executive than one attached to one of the ministries.

10. Ministries and departments are subject to the same principles of organization. The Minister is responsible for the policies delegated to his charge and their application is in turn delegated to the Permanent Secretary of his ministry (or Vice-Minister, etc.) who sees to it that the civil service machine carries out the policies in practice. Co-ordination and communication are essential within ministries and in departments and the process repeats itself all the way down the line.

11. The division of labour principle is applicable to the tasks and responsibilities assigned to ministries, departments and public corporations or other bodies whose function it is to administer an act, law or decree and thus carry out the government's policy in one field or another. As these policies are numerous, complex, and sometimes overlapping, it is sometimes a difficult problem to group in one ministry activities that have some relation with one another. For instance, plant protection, animal husbandry and agricultural extension seem to be straight-forward functions that belong to a ministry of agriculture. However, in some countries, animal production may be so important to the national economy that a separate ministry may be necessary. Questions of research and statistics present another problem for the administration. Are these activities related functionally to individual ministries, such as agriculture, mining, forestry, labour, education, etc. or is it a better administrative policy to concentrate research and statistics in a central agency to serve all branches of government? There is no standard answer to this question and there are strong arguments for both sides. The solution will invariably depend on circumstances peculiar to each case.

12. The establishment of "service" ministries or departments, i.e. departments whose purpose is to assist the functional units, must receive consideration when the organization structures of the government are set up. By definition these units are established to assist or facilitate the task of the regular functional units or to provide necessary services which would be uneconomical if they were to be organized individually. Examples of such service units are: ministries of public works, government printing offices, purchasing and supply offices, central pay offices, etc.

13. A rapid growth has taken place in the number and variety of autonomous institutions such as public or mixed corporations. These institutions are usually managed by a form of collegial body on which are representatives from various interested fields or persons who, by their technical knowledge, can contribute to the management of the institution. Some areas of production are best served by this form of institution, especially where commercial practices should be substituted for the usual government methods

to transact business more urgently as in the case of buying or selling products that are perishable or subject to frequent and marked price fluctuations; another valid reason for the establishment of autonomous institutions is to have on their boards of management representation from various quarters who maintain a keen interest in their policies and activities. For example, employers and employees organizations, instruction in the policies and activities of workman's compensation scheme or other form of social security endeavour might be represented on the Board.

14. The danger to which the autonomous type of institution exposes the government, if used excessively, is the control (financial and otherwise) which the administration is likely to lose over an important sector of public activities. A reason that is all too frequently invoked for establishing such institutions is precisely to place them outside the control of the civil service and budgetary or treasury regulations. This might produce short-range gains but have serious long-range consequences.

15. In organizing government services one should consider the need for decentralization which varies according to a number of factors such as population, area, geographical features, ethnic groups, etc. Thus some countries have adopted the federation system while others have a more or less concentrated form of government. Where there is a pronounced form of decentralization, the question arises as to what functions should be allocated to the central government, the provincial or state governments, the county and municipal governments and how these functions should be administered and controlled. The central or federal government is largely concerned with problems of national importance such as foreign affairs, defence and financial policies, the regulation of commerce, etc. Functions having to do with local affairs, especially those in which the individual has a greater immediate interest such as police protection, the building of local roads, sanitary measures, local health clinics, water supply etc., could logically be located at the periphery. Having thus created a broad and general classification of functions to be allocated to the central and the local government respectively for purposes of illustration,

we must state that a great deal of flexibility would be advisable as the economic, social and geographical conditions will determine how far decentralization can and should be carried out and under what circumstances.

16. Almost every decision of the government has a financial implication. It is therefore fundamental for a government to develop a sound financial and fiscal administration to insure the stability of its currency, to enable it to pay its internal and external obligations and to have a clear idea of where it stands. The principal instrument the government has in this connexion is the national budget which is used for both anticipating and controlling revenues and expenditures. The budget thus becomes a comprehensive statement of the government's financial programme and a work plan for the year in question. The preparation and execution of the national budget are the responsibility of the executive. The legislative arm of government plays the important roles of review, criticism and final authorization. Budgets are more and more used as instruments of economic policy. They may be used to stimulate or reduce demand, adjust price levels by subsidies or taxes and guide the investment policy of the government in such a way as to stimulate national development.

17. Fiscal control figures among the most important functions of public administration. Stated briefly the following are its main elements:

(1) The examination and approval of proposed expenditures to ensure that they are necessary, may be legally incurred and that funds have been provided in the budget (pre-audit);

(2) the treasury action including the receipt or payment of monies and recording the transaction; and

(3) auditing or verifying the completed transaction (post-audit).

Division of labour has been observed here as a guarantee of good fiscal control: A. Authorizes the payment; B. makes it; and C. audits the account. The necessity for such controls is widely recognized but frequently governments mistakenly introduce new control points by having an exaggerated number of officials sign vouchers, invoices and other

documents. It should be remembered that it is not the number of signatures that makes for good fiscal control but the quality of the investigations made.

18. The taxation policy of a government should be related to its economic structure, its development plans and its need for revenue. Important also is the administrative capacity of the taxation machinery because it could very well happen that taxes cost the government more to assess and collect than they yield in revenue. Therefore, the problems of administrative structures and competent personnel, well trained and strategically deployed, enter into this picture to a large extent. This is particularly true for customs and excise administration and the collection of property and income taxes.

19. Decision-making in government work is an important administrative features because the determination of policy as well as all phases of its execution and control are formulated by or are the result of either a major or minor decision. To act or not to act is itself a policy matter which follows a decision. It is also a matter for decision when, how and by whom action is to be taken. Decisions are the daily content of an official's work and the procedure by which they are taken is almost as important as the decisions themselves, involving as they do the complex relationship between ministers and high-level officials and also the lower levels who have to assume their responsibilities and play their part in these matters. Delegation of authority and the fixing of responsibility are reciprocal actions which lie at the heart of decision-making. Officials must accept their responsibilities according to their administrative levels and make decisions when they have the authority to do so, the knowledge or information to assess the situation and the capacity to enforce their decisions.

20. It frequently happens that administrative decisions should be made after the gathering of more information than one person or one unit has at its disposal or that consultations are advisable between levels or with other units or persons. One possible way to achieve this is by the use of permanent or <u>ad hoc</u> committees where ideas may be exchanged, facts controlled

and opinions weighed and confirmed. The decisions which emanate from such meetings have the advantage of being broadly based and accepted by various parties who may have an interest in the policy or its execution.

21. The need for adequate co-ordination among the component parts of a modern government is obvious and it is relatively easy to detect whether or not one exists. One will come to a conclusion after observing whether the policies of the administration are understood and applied down below and whether they are reasonably well synchronized; if there is duplication or overlapping in the functions of various parts of the unit; if work stoppages or oversupply of materials occur frequently; if the manpower is adequately distributed and kept occupied fairly evenly, if there is excessive waste; if instructions are regularly followed or not; whether the staff morale is good or bad. It will be more difficult, however, to determine the underlying causes and make the necessary corrections. Inadequate structures are a frequent cause of poor co-ordination because the proper flow of information from top to bottom or vice-versa is dependent on clear-cut channels. Also the stage cannot be set properly for committee meetings, etc., which are an important factor in co-ordination, when the structures are not clearly defined and the personnel of an organization do not understand its structural mechanism.

22. Other factors or elements also intervene in this process such as the means to provide information on policies, programmes and plans to ensure a complete understanding of the long-range and short-range objectives of the organization. Manuals, guides or handbooks are useful devices to circulate information to the staff about policies, regulations, instructions, standard procedures, production targets and time-schedules. If these are non-existent, insufficiently detailed or out-of-date, the co-ordination efforts of the administration may be seriously hampered. Linked with these devices is a system of reporting which will keep the organization

aware of the progress of its projects and the problems that may interfere with its immediate or future activities.

23. Co-ordination is also predicated on the need for horizontal exchange of views, information, plans and reports. Harmonization and synchronization of the activities of the various units or parts of a unit are needed for a successfully productive effort. In administration, the manner in which this objective is often reached is by having formal or informal meetings or other contacts between the interested parties and discussion of the plans, projects, problems and reports in common. Decisions may thus be arrived at on which there is understanding and agreement. Thus will the right hand know what the left is doing and both will work together towards a common objective rather than individually and usually by following different routes. Large organizations sometimes charge an officer of high rank such as a vice-president, deputy-director, etc. to perform the task of co-ordination. It then becomes one of his duties to assess the needs of co-ordination and through interviews, meetings, memoranda or circular letters to make the divisions aware of the facts of cases or problems so they may act as a well informed and effective group.

24. The O and M officer will frequently observe that lack of co-ordination is and obstacle to the progress of an enterprise and if he is knowledgeable in the art of management he should be able to suggest ways and means to improve the co-ordination effort of the administration and in some instances to stimulate its desire, for without the will and the spirit to do it, the mechanism will fall short of the objective.

25. Good co-ordination is dependent on adequate communications more than on any other factor. However, the two terms are not synonymous and they have a significance that goes beyond the areas of each. In other words, while one is very dependent on the other there is a scope for communication that is not related to co-ordination and vice-versa. For administrative purposes, communications may be divided into three categories:

(1) Internal communications which is the process of circulating information about policies, giving orders and instructions, exchanging information and opinions, making and receiving reports and requests, which is closely related to the co-ordination process;

(2) communications of a more informal nature between individuals such as a worker and a superior or between two persons of equal rank. These types of communications have a psychological flavour and play and important part in the good relations which should exist in a work unit. It is a recognized fact for instance that complaints or personal requests made, explanations asked or made, praise or admonitions etc., give rise to situations that may be more or less favourable depending on how well persons have been able to communicate with one another;

(3) communications to and from the public which touch the fields of public relations, publicity and the state or appreciation of public opinion.

26. The process of communication is so universal in its application that hardly an instance of daily routine can be found that is not related to it. It is not possible to imagine personnel administration, training, the issue of instructions, harmonizing plans and budgets or making and receiving reports without first insuring that an adequate system of communication exists as a pre-requisite. Semantics is described as the study of the meaning of words. It is extremely important in communication to use a common language and in doing so both the person who wishes to communicate in writing or verbally and the recipient must know the basic rules governing the use of that language. The reason we make such great efforts in school to learn one or more languages is precisely to be able to communicate with our fellows.

27. He who sends or receives a communication must have an open mind and be a willing partner, otherwise the significance of the message may be lost. If prejudices, fears and antagonisms exist on the part of one partner or the

other, there is a strong possibility that the message will be either exaggerated, distorted or even disregarded. It is therefore important that both parties be psychologically prepared to communicate with one another Without their mutual consent and active participation, communications can be entirely frustrated between two parties. Communications take place between individuals as a normal phenomenon; it is only in exceptional casesthat barriers arise. These may be more or less serious or may take place with greater or lesser intensity. It is useful to know the general types of communication barriers so that efforts may be made to remove them when one encounters them in practice.

28. To accomplish the end of having an efficient public service, certain criteria must be established: First, it must have permanency, second it must be free of partial influences, thirdly it must be efficient and objective and fourthly it must be loyal and ethical. These cardinal points complement one another and are a form of insurance that the execution of government policy will be carried out as intended. The modern state will thus reach a point of development where the legislative concerns itself with the determination of policy, the executive with the establishment of ways and means of carrying out the policies and seeing to it that the policies are carried out and the civil service, with its network of administrators, specialists and technicians will, in the final analysis, apply the provisions of the laws, acts or decrees which correspond to the government's policy.

29. If we consider it imperative to give the civil service a sense of permanency, freedom from partiality, efficiency and loyalty to carry out its duties and responsibilities, we must find ways to achieve this. In the first place it is necessary to recognize merit as the guiding principle of civil service administration. Then a legal instrument must state what the responsibilities of civil servants are, their rights and privileges, the procedures governing the administration of personnel and what organization will be charged with its management. The final steps consist of setting up an adequate internal organization and training the staff to carry out the functions of personnel administration effectively.

30. The merit system is in fact simple. It means that the best available person should be selected for a post and advancement and promotion or salary increments should depend on the work performance of the person and his ability to undertake more important tasks. As there is no room for square pegs in round holes in an efficient organization it is the responsibility of the administration to recruit potential candidates very carefully and devise procedures, practices and standards to establish a career service that is rewarding enough to retain them and selective enough to ensure that the right man is always in the right job. In actual practice these procedures tend to be complex because the large number of civil servants required by modern governments and their high degree of specialization make personnel management dependent on arbitrary decisions, records and files, and communications from person to person are sometimes difficult to maintain in their circumstances. However, personnel administration is aware of the necessity to reduce the lines of communication and it is attempting as much as possible to broaden the base of decisions and ensure that human relations are always considered an important factor in the civil service.

31. An important aspect of personnel administration is training. One might say that the process of training is never finished. Training may take place in casual conversation between a supervisor and an employee, in a letter, in meetings and in many other ways which are more or less informal but nevertheless have their importance. One can also contribute to his own self-improvement by studying, reading or observing older and more skilled workers. In a more formal manner training may be divided into categories to meet certain objectives: induction training for new employees; supervisory training for the purpose of preparing employees to assume more important functions; executive or development training to enable employees take on posts of management; technical or special training to make certain employees capable of assuming functions related to a new policy, or duties concerned with a new or revised system or procedure; refresher courses to ensure that high standards are maintained or new

techniques are learned as they become known; finally there is on-the-job training through which a person learns the intricacies of his own job including the machines he will be required to operate. Training units or training institutes exist in most countries to carry out some of these functions on behalf of operating departments. These units however perform this task as a service to the ministries or departments; they can assist or advise them but cannot assume the ultimate responsibility which belongs to the administrator. O and M officers who, in the course of their assignments, will consider new or revised systems or procedures must also bear in mind the training factor which is always important in situations like these. On occasion they may be required to assist in the training of employees assuming new duties or accomplishing work under new conditions, with unfamiliar equipment, at a different rate of speed, or in a different sequence.

CHAPTER II

ORGANIZATION AND METHODS, ITS PAST, PRESENT AND FUTURE

Development of the O and M Function

32. The search for better ways of performing work is nothing new. With the growth of larger and more complex organizations, both in private enterprise and in the public service, however, the need to review organization structures and to look for better methods becomes more obvious. The development of an independent unit within the organization, specially charged with the deliberate and systematic searching for improvement probably had its origins, in private enterprise, which the work of F.W. Taylor around the beginning of the present century. This was further developed by Henri Fayol, H.N. Gantt, the Gilbreths and Mary Parker Follet to mention but a few.

33. In the United Kingdom, a small investigation section was set up in the Treasury in 1919. It consisted, to start with, of three officers, whose chief task was to advise departments on the use of new office machinery and how to improve their routine procedures. This section was still quite small in 1939, but the great expansion of Government business which took place during the 1939-45 War had its repercussion on O and M. The Treasury Division expanded and began carrying out a full programme of O and M work and O & M units were established in the larger Ministries. In 1945, the Estimates Committee of Parliament, reporting on "Organization and Methods and its effect on the Staffing of Government Departments", came to the conclusion that O & M was a valuable technique to increase efficiency in government; it recommended increasing the number of officers in this work. By 1950 there were 375 O & M officers in the British Civil Service, of whom 67 were in the central Treasury unit and 308 in 17 departmental O & M branches.

34. In the United States, one of the functions given to the Bureau of the Budget, when it was established in 1921, was the encouragement of improved management practices. This function, however, developed slowly until the outbreak of the Second World War. The Hoover Commission of 1947 had as its terms of reference: "to study and investigate the present

organization and method of operation of all departments, bureaus, agencies, boards, committees, offices, independent establishments and instrumentalities of the Executive Branch of Government". The second Hoover Commission of 1953 was given wider powers, including that of questionning the wisdom of government policies. The reports of these Commissions had a great impact on government organization. Among other things, the prestige and role of the Bureau of the Budget in management improvement both grew.

35. In France, the first O & M unit was established in the 1940's; there were nine operating in 1954 and 23 by 1960.

36. It was not until after the Second World War that O & M units were developed in African countries, and the experience has been varied. In some countries, such as Ghana, the service has been developed and expanded and is now a mature, established unit of the public service. In other countries, such as Tanzania, the service has remained relatively small, though it has a significant impact on the administration. In yet other countries, young O & M services are still struggling for recognition or are in the process of being formed.

37. It may be useful to list the steps taken to introduce an O & M service in New Zealand, after the Second World War, when it was decided, in the light of experience of other countries, and particularly that of the United Kingdom,, that such a service should be introduced. Mr. J. H. Hann, a member of the New Zealand Public Service Commission, in a paper presented in March 1955, described the steps as follows:

"First: (1948) to bring O & M to notice.
This was done by introducing the subject at a conference of departmental inspectors, by issuing a descriptive circular to all departments and by publishing a quarterly digest called "O & M Review" - a compound of exhortation and examples.

"Next: to get O and M launched.
The expedient adopted was the formation of O & M Committees in most Departments - a transitory phase to involve and convert many key people (but never the ideal way of doing the job itself).

"Then: to implant the idea permanently in Departments.

Full-time O & M specialists were appointed to one or two Departments on trial (Agriculture and Inland Revenue being first in the field); an O & M Officer was established on the Commission's staff to foster the movement throughout the Service; in 1950 an Accounting Methods and Machines Section was formed in the Treasury to advise Departments on those subjects; in 1951 the Public Service Commission nucleus was expanded into an O & M Section to provide a central advisory service to 'client' departments and to tackle projects of Service-wide application such as records systems, copying methods, etc.

"Naturally enough, all Departments have been quietly and critically observing the results of these endeavours, and so far 25 of them have invoked the aid of the central advisory service, while others again have asked for full-time O & M officers in the Public Service, and the tax-payer may be assured that they, at least, earn their keep. The prospective return from those in the Public Service Commission Office itself is over £12 for every £1 invested in their salaries".

Location of the Central O & M Unit

38. Where should a Central O & M Unit be located? How far should O & M functions be delegated and exercised by individual Ministries? These are questions to which no answer of general application can be given. In each country's administration, the existing units in the Central Machinery of Government must be considered; their powers and functions (actual as well as formal) and their relationships to one another must be considered.

39. It is, however, possible to indicate within a fairly narrow range the possible locations of a central O & M unit. In any given set of circumstances, the advantages and disadvantages of locating it in any one of these must be carefully weighed. As the function of the central O & M unit should be defined widely enough to include investigating and making recommendations regarding the central machinery of government

itself, it should obviously be located somewhere near the centre. In a country which has a Treasury established on the United Kingdom pattern, combining the Office of the Prime Minister with the ministry responsible for finance and personnel matters, as well as economic co-ordination, it is almost inevitable that the function should devolve on the Treasury. Where these functions are distributed over several Ministries or Government Agencies, the most appropriate one to fit the circumstances must be chosen. The President's (or Vice-President's or Prime Minister's) Office, the Planning Board (if its functions are wide enough), the Central Personnel Agency (or Civil Service Commission) and the Ministry of Finance are all locations that might almost naturally suggest themselves in certain circumstances. What must not be done is to place it in a certain ministry (e.g. Justice, Agriculture or Post Office) simply because the present minister happens to be interested in the function of O and M. These ministries might introduce O and M functions and establish O and M units within their organization but they cannot be regarded as central units whose services would extend to other branches of the government. One danger to be avoided is the attachment of the central O & M Unit to the Department which is generally regarded as the budget-cutting Department. The O & M Unit in this case soon becomes identified as merely an agent used to justify budget cuts and much of its potential value can thus be sacrificed.

40. To be effective, the O & M unit must be regarded as a staff unit of the highest importance, and its chief must be directly responsible to as high an official in the hierarchy as practicable and he must obviously have the confidence of the Minister and all other senior officials.

Centralization vs. Decentralization of O & M Work

41. The question is often raised as to whether all O & M work is a country's administration should be concentrated in a Central O & M unit or whether separate O & M Units should be established in several or all Ministries and Government Agencies. It is obvious that a well-designed O & M service must envisage a considerable volume of work being done in

some of the larger Ministries and it would be quite natural to assign O & M specialists to work more or less continously in such Ministries. The real crux of the problem, therefore, is whether such O & M specialists should be regarded as staff members of the Ministry, reporting through the hierarchy to the Minister or whether they should be regarded as "out-stationed" members of the staff of the Central O & M Unit.

42. Factors relevant to deciding whether the O & M service should be centralized or decentralized are the availability of sufficiently trained staff, funds, premises, the encouragement that is likely to be given to O & M units in the various Ministries and Agencies concerned and the co-ordination machinery that could be brought into operation if decentralized units were set up.

43. On the whole, it would seem preferable, in developing countries, to establish a Central O & M Unit in the first place, leaving the question of establishing decentralized units to the time when the O & M function is thoroughly accepted and an adequate number of trained O & M specialists is available.

The Internal Organization of the O & M Office

44. An O & M Office sometimes consists of one or two O & M specialists and then the question of its subdivision and specialization scarcely arises. As the unit grows, however, subdivision soon becomes an issue and the question is often raised as to whether the subdivisions should cater to particular functions e.g. registration and filing; machine utilization; stores and supply, etc. or whether the subdivisions should be more general. Different cases will call for different solutions, but the medium-sized O & M Office should normally be composed of generalist units, though this would not preclude the gradual development of specialists within these units. Where regular planned reviews are undertaken by the service, there should be one or more planned-review units which should normally concentrate on this work, though not specializing in particular functions.

45. A form of organization favoured by some large units is to have a number of generalist sections who deal with the bulk of the assignments and some full-time specialists in such fields as automation, accounting systems, registry, purchasing methods, etc. The specialists should be prepared to assist and advise the personnel of the generalist sections and participate in their assignments when called upon to do so. It would also be convenient to charge a specialist with a particular assignment if this assignment falls squarely within his sphere of competence.

The Nature of O & M Work

46. The operation of an Organization and Methods Unit introduces two new ideas, namely, systematic studies and full-time trained staff, into the search for better ways of doing work.

47. The idea of systematic study means that planning, reviewing, and revising organization and methods is a continuing activity and not just putting out "bush fires". The doctor, so to speak, is not only called where there is an illness - though that remains an important part of his task - but he also conducts regular or periodic examinations for the purpose of detecting or preventing incipient ills.

48. The use of O and M staff to review the activities of operating departments calls for a close examination of their objectives and their methods of work. Normally, administrators are busy people, overloaded with work and responsibilities and who are constantly required to concentrate on planning and co-ordination in order to keep their organization going. While these officials have the ultimate responsibility for the efficient operation of their units it is almost impossible for them to devote the time to making the detailed analyses needed as a preliminary step to correcting the situation they know is wrong or deficient; furthermore they lack the time and frequently the skill to elaborate the details of a new procedure especially when it involves the use of specialized equipment. The answer to this administrative problem is to call in O and M specialists because they can concentrate on this particular problem, take an objective and overall, rather than sectional view, and apply a more intensive experience to the solution of the problem.

49. Ordinarily, the organization and methods staff have no direct experience of the work they are reviewing but their study of the purpose of the organization and the activities undertaken to achieve that purpose frequently turns this disadvantage into a benefit. It obliges the operating staff from whom information is sought to pause, reconsider, and define the purpose of their work as well as to examine critically the activities they are engaged in. This leads to more specific understanding of responsibility, to a greater sense of participation in a complex and important task and to the elimination of frustrations of many kinds, all of which tend to make employees more satisfied with their jobs.

50. The O & M service is advisory and a special responsibility is placed on the O & M staff to convince people who are responsible for the activities under study, that their proposals are reasonable and practicable and involve no sacrifice of essentials. The ultimate test of the O & M service is that it should be acceptable to the operating or line staff.

51. This advisory character of O & M service stems partly from the principle that responsibility for management should not be divided. If this is recognized, no O & M office can be armed with authority. Moreover, experience has shown that persuasion, which is the main tool of an advisory service, contributes substantially to greater satisfaction among government employees and produces better results. Because there is no diminution of the line's authority, status, and prestige, its advisory nature is in fact a selling point for the O & M service.

52. The service of O & M should be confidential between the organization under study and the O & M staff. This simply means that only the organization may decide when and what facts or information about its activity may be divulged. Since no one likes "to wash his dirty linen in public", this aspect of O & M service helps to break down resistance and confidence in it will grow as a result. The O & M service does not

look for faults - it seeks and sells ideas, ways and means of doing a better job at less cost. Hence, it applies the "problem-solving" approach.

53. Essentially, the Central O & M Unit exists to find ways and means by which the Government, or any part thereof, can do its business in a more simple manner and at less cost and to aid the Chief Executive (whether Prime Minister or President) in carrying out his responsibility for seeing to it that, at all times, the Government is well organized and provided with adequate means of achieving that objective. These may involve the following assignments:

(1) Review of a particular office, branch or department with complete examination of purpose, organization, management, procedures and methods. A large review may be divided into sub-assignments;
(2) examination of particular activities or processes designed to solve a special problem or difficulty;
(3) planning of an entirely new activity or procedure;
(4) short-term "immediate-need" advice on particular problems;
(5) general advisory services on management.

54. Before he starts an assignment, the O and M officer must have specific instructions concerning the work he is to undertake. He must know his terms of reference which will be contained in the original request. The request, preferably in writing, will indicate what is expected (improving the organic structure, simplifying procedures, speeding-up operations, introduction of a new system or equipment, etc.). The authorization should be clearly indicated so that no question of jurisdication may arise subsequently. It should also be clear who the liaison officers are and how interim reports are to be made as well as the disposition of the final report. The general approach and steps followed in solving a problem include:

(1) Planning the assignment;
(2) preliminary survey;
(3) fact-finding;
(4) analysis of the facts;
(5) development of solutions and recommendations;
(6) preparation of report and selling recommendations to management and operating personnel;
(7) installation and follow-up of recommendations.

A brief description of each step follows.

Planning the Assignment

55. A sound plan is essential to the orderly conduct of an assignment. It may be prepared before or after the terms of reference are discussed and agreed upon. In either case, participation of the organization's personnel in its development is highly desirable. If this is not feasible, they should be asked to give the plan a thorough review and their concurrence secured.

56. The plan should include the following:

(1) Purpose of the assignment, including a list, in order of priority, of any intermediate objectives to be accomplished to make possible the attaintment of the major purpose;
(2) breakdown and description of the phases of the work;
(3) time schedule for the start and completion of each phase;
(4) assignment of responsibility for each phase, and man-hours required;
(5) working plan for fact-finding (including data to be acquired, sources of data, personnel to be interviewed, activities to be observed);
(6) overall responsibility for the assignment (an official or a committee).

57. The plan should make possible the best use of the time and convenience of the O & M unit and of the organization under study. The plan should include instructions, when needed, for such matters as security, space allocation, stenographic, clerical, drafting, and reproduction services, files, transportation and supplies. Provision for co-operation between the team and personnel of the units to be studied should also be clearly defined.

Preliminary survey

58. A preliminary survey is a problem-identification device normally resorted at the beginning of an O & M assignment. It is a view of the situation on a reconnaissance basis, to take a quick but accurate look so that the O & M officer might:

(1) Become generally acquainted with the organization, its overall mission, its plans, programs, policies, and people;

(2) identify and isolate separate management problems needing attention and determine the nature of each; determine the scope of enquiries necessary on different subjects and the order in which each section of work should be undertaken;

(3) develop and recommend projects (problem-solving surveys) or courses of action for dealing effectively with these problems, including their order of priority;

(4) be adequately informed or prepared to deal with each aspect of the assignment in an effective way with the minimum use of staff time.

59. The O & M officer or team conducting the preliminary survey will do well to read whatever material is available on the organization to be studied, such as the law or administrative order creating it, organization charts, manuals, budget estimates, working papers and reports of previous surveys, correspondence pertinent to current problems as well as relevant professional or technical standards.

60. At the very first meeting with the organization's officials the projected assignment should be explained and recognized for what it is: a work improvement study, not a fault-finding expedition; that the organization asked the O and M officer or team to give technical advice and assistance to obtain such improvement. Before the start of the work proper, the presence of the O and M team as well as the nature and objectives of the assignment should be made known and circularized to all concerned and their co-operation enlisted.

61. On the basis of the facts gathered, the O and M team should evolve a plan of action which would eventually constitute a schedule of work or time-table for the assignment. The plan of action should provide the order of priority for the study of sections and the tackling of problems according to the importance attached to them by management.

62. Once the details of the plan of action have been agreed upon, the team should obtain the active participation of the organization's staff including the assignment of a full-time counterpart. Working relationships with the counterpart team and other personnel, reporting channels, availability of staff for interviews and observation, should also be clarified. It must be emphasized that during the preliminary survey the O and M team must take pains to lay the groundwork for co-operation and mutual understanding between it and the organization's personnel. The latters' understanding of the nature and objectives of the assignment, and their participation in developing those objectives, should create an effective working relationship and a pleasant partnership that will enhance the chances of success of the assignment.

Fact-finding

63. Fact-finding is essentially the gathering of accurate data from people who can best supply it. It may be said in this connexion that those who do the work have most of the procedural data at their finger tips; details on policy, organization, statistics, future plans, etc., can best be obtained from those who supervise and direct the work. Hence the nature of what one wants to know will determine whom to see.

64. The actual data gathered shall be the basis for sound conclusions and practical recommendations for improvement. One approach is to prepare a check-list of information and details required before starting to gather facts. On each of the specific areas or subdivisions of the work, facts would be sought which would correctly answer appropriate questions beginning with "what", "why", "when", "where", "who" and how. For that purpose, one may develop lists of key questions to be sure that all important aspects of the problem are covered.

65. Methods for gathering facts will vary with different assignments but usually they are a mixture of the following:

(1) The study of existing records and their part in making decisions. These include completed or current "cases", files, reports or other records of business such as minutes of meetings:

(2) the securing of information by observation, examination and measurement of work (e.g. to ascertain the extent and frequency of reference to indexes, registers, or other records);

(3) the taking of evidence at interviews and by discussions about the flow of work and the content of jobs. This method is also used to verify facts, get a clear understanding of organization relationships and delegation of authority.

In some assignments, the work of each post may be reviewed, (e.g., the work done by individuals is examined and noted down); in others, the process is observed from start to finish by listing the operations involved. (e.g. in an application for a licence - from receipt to final disposal).

66. To obtain facts that vary with particular persons or circumstances and to get opinions, attitudes, or trends of beliefs, interviews yield the best results. To obtain general information or common facts (e.g., dates or numbers of transactions) it is best to rely on written sources or make direct observations. Questionnaires are of little value as a means of evaluating relationships and problems, but may be useful to obtain information on the nature, flow and volume of work where similar work is done at several locations.

67. Staff should be interviewed in a logical sequence, (that is, the sequence may follow the chronological order of the process or the interviewer may begin with the supervisor and then proceed with the subordinates. Calls for suggestions for improvement should be made at every opportunity. The operating people should be made to realize that they are actively participating in the study not only by giving the facts but more so by helping in the development of recommendations for improvement.

68. All useful facts should be recorded as soon as possible in a systematic way to facilitate their analysis. Notes of interviews should be taken in full view and the persons interviewed should be asked to comment on their accuracy. Recording of information can be reduced by compiling sample sets of forms (preferably filled in) or by asking the staff to prepare summaries of forms, registers, and reports showing their purpose, size, distribution of copies, and ultimate disposition. It is often helpful to record facts in graphic form (i.e. diagrams, process or flow charts).

69. It is always advisable to compare the progress made with the time-table, evaluate provisional findings, before deciding upon lines of further enquiry or changing the direction of fact-finding. Discussion with other colleagues can also help as a check on one's own thinking. In collecting the facts one should give constant consideration to the justification of the need for existing activities, the scope for economy, and the possibility of improvements through new or alternative arrangements.

Analysis of facts

70. It is necessary to submit the facts gathered to a rigorous and systematic examination and analysis in order to isolate problems, identify weaknesses and suggest possible improvements. The process of analysis implies breaking down the information into small elements, subjecting each to a critical appraisal, and deciding whether improvement would result through change or substitution. This is followed by a synthesis or construction of the revised way and integrating improvements suggested by the analysis.

71. Analysis may be conducted in a number of steps such as the following:

(1) Isolating problems. By decomposing an operation into smaller units of work the defects are made to stand out more clearly and usually the corrective action becomes more simple;

(2) tracing causes. Careful arrangement and study of the facts gathered will help in this step;

(3) devising alternative methods. This step will test one's ingenuity and experience;

(4) selecting the best alternatives. This requires careful assessment of advantages and disadvantages of each possible solution;

(5) analyzing proposed method. It is necessary to examine the proposed method for weaknesses, just as closely as the present method was examined for defects.

The searching application of the words "what", "why", "who", "where", "when" and "how" is a most basic and productive technique especially at this stage.

Development of solutions and recommendations

72. Theoretically, this step follows the analysis of the facts gathered. In actual practice, however, the development of solutions and recommendations frequently begins during the fact-finding and analysis of facts stages. The first impressions and ideas formed during the fact-finding and analysis stages must be re-examined over again when the complete evidence is gathered. The above method is a time-saver and certainly is convenient but it must never lead one to try to fit the facts to the recommendation, however tempting this expedient might be. The selected solutions, as well as the alternatives, are tested against the objectives at this point and finally drafted into recommendations.

73. As has been pointed out earlier, it is advisable to obtain the opinions and suggestions for improvement from the operating personnel. Where appropriate, these should be integrated in the solutions developed.

The recommendations resulting from the analysis and development of solutions should now be discussed with the operating personnel to obtain their concurrence or acceptance. It is also very desirable to discuss these recommendations with O & M colleagues at this stage.

Preparation of report and selling recommendations

74. The recommendations should have been discussed with the operating personnel as a preliminary draft of the report. Since the report forms part of a separate section of this chapter, it only needs to be said here that it should contain,as part of the recommendations,indications of the steps necessary for their installation as well as the forms, instructions, procedural manuals, memoranda, regulations, procedural and organizational changes contemplated.

75. The report is a useful aid in selling recommendations. A substantial part of the selling process however is actually done before this stage. The groundwork for co-operation and mutual understanding between the O and M team and the organization's personnel,established at their first meeting and throughout the survey,should result in their active participation at all stages of the assignment. They should respond to the invitation to give opinions and suggestions for improvement if the proposition is put to them clearly and frankly.

76. The following points will be useful in the formulation of ideas:

(1) Ideas should be usually sold in their order of acceptability;

(2) it is often advisable to discuss alternatives so that a close alternative may be accepted instead of allowing the whole idea to be rejected completely. This also has the effect of placing the recipient in the position of making a decision regarding what he considers to be the best interests of this unit;

(3) be ready to make a compromise which will not jeopardize the fundamentals of the recommendation: do not be a stickler on small issues;

(4) do not press for immediate decisions on points not accepted: they may be accepted a little later;

(5) frequently recommendations are modifications or refinements of suggestions made by the organization's personnel: these and their source should be stressed;

(6) be truthful: do not claim doubtful advantages and do not oversell;

(7) remember the "golden rule" and the human factor: make the other person feel important;

(8) be satisfied with a little; what may appear to be a compromise on fundamentals is perhaps only a temporary retreat as long as the objectives are not given up;

(9) be patient and tell the whole story: recognize that it is the <u>unknown</u> rather than the <u>new</u> that creates apprehension;

(10) submit recommendations at the right time: sometimes it is advisable to wait until the proper time in the light of programme status, conditions of organization, personalities, etc.

Installation and follow-up of recommendations

77. In order to realize the benefits of recommendations these might require early implementation. Where it is possible and agreement is reached to put them into effect, do not hesitate to do so. If the circumstances call for a gradual change, the recommendations may be implemented in installments, i.e., a phase at a time. In either case, it is desirable to have a plan of installation and some person charged with the responsibility for it. The O & M officer or team should be prepared to give advice and assistance if required. This may include training of supervisors or staff affected by the changes, design and order of new forms, and sometimes initial supervision of installation. After a suitable interval, it is advisable to assess the results achieved by a new installation. This is referred to as follow-up action.

78. Follow-up action consists of the following:

(1) Measurement of the results of the improvements usually in terms of speed of operations, response from the public, savings in staff and costs, etc.;

(2) analysis of records to determine results adherence or lack of adherence to prescribed procedure and possibilities for further improvement;

(3) checking results through observation, interview, and other appropriate devices.

79. Follow-up action provides a safeguard against possible misunderstanding of recommendations and inertia. It is also a useful exercise for an O & M officer to study the practical results of his recommendations. He should look for his own failings or partial successes as well as review his own handling of the job from start to finish. It should be another stepping stone for future successes.

The O and M Report

80. Upon completing an O and M assignment it is the practice to write a report for the following reasons: To have a record of what has taken place, to evaluate the existing conditions and to make recommendations.

81. A report must be realistic in its approach; it must be specific, clear and preferably brief. Brevity, however, should not be at the expense of completeness. If the report is unusually long and detailed, it might be a good idea to make a precis of it, highlighting the salient points. Thus, executives, who are interested in the recommendations but frequently too busy to read the report all the way through, may obtain a bird-eye view by reading the precis and study in more detail the specific points in the report which relate to their particular sphere of activity.

82. The common rules of literature are applicable in the case of O and M reports. In addition to following the rules of grammar, spelling and punctuation, an O and M officer should draft his report in a logical sequence beginning with an introduction, then developing his man points

and ending with his conclusions and recommendations. It is a wise practice to use appendices or annexes for tables, graphs, charts, diagrams or explanatory notes so as to not over-burden the report with details that might risk disrupting the continuity of the text.

83. A simple working procedure used throughout the assignment will be helpful when writing the report. It consists of the following points:

(1) Comprehend what you are to report upon; do not attempt to write the report, or even begin the assignment itself, unless this is perfectly clear;
(2) ascertain all possible sources of information;
(3) decide what sources to draw upon;
(4) arrange the information and explanations into a logical sequence;
(5) abstract what is to the point and discard the rest;
(6) draft what you consider essential into report form;
(7) summarize your findings.

84. It is also important to remember what not to do:

(1) Do not be destructive: be constructive;
(2) do not oversell your ideas: be objective;
(3) do not write for yourself alone: place yourself in the reader's mind and use your eyes and ears as though they were his;
(4) do not assume that the report is the end of the assignment: there possibly will be a discussion about it, a follow-up, implementation and a further request, now or in the future;
(5) do not fail to give credit where credit is due;
(6) if you require assistance, do not fail to ask for it: no one has an encyclopeadic mind and no one can do or think of everything. It is not humiliating to ask for collaboration when it is needed.

85. There are many ways of presenting a report. It may be sent through the mail with or without a covering letter; it may be handed personally to the head of a ministry or a department or to a group of executives assembled for the purpose; it may be discussed in draft form and then sent in final form; it may be presented to and discussed generally with the unit head and then referred to a committee of subordinates for a discussion of its details; or, it may be a combination of the above.

86. The nature of the assignment and the type of recommendations to be made will determine the procedure best suited to reach the stated objectives. It is a matter that should be discussed at the beginning of an assignment with the responsible officer, usually a minister, permanent secretary or director general and the O and M officer should accept the decision made by the client.

87. Considering that variations are unavoidable, it can be assumed that the following procedure is fairly normal:

(1) The O and M officer should keep his immediate superior informed of the developments of the assignment as they occur so that the latter will be in a position to advise at the time of reporting and possibly participate in the presentation;

(2) he should keep the client (the senior officer who made the request) informed from time to time so that he also will be prepared for the final action;

(3) during the assignment, contacts will be made with the supervisors or senior chiefs so that the details of the changes recommended will be known to them (some changes may even be implemented as the assignment progresses);

(4) when the report is prepared in draft form it may be discussed with senior heads (especially if (2) and (3) above have not been emphasized);

(5) the report in final form may be accompanied by a covering letter from the O and M unit head (or his superior if the client himself has more senior status). The report itself

may or may not bear the signature of the officer or group of officers who carried out the assignment, depending on the tradition of the unit.

Qualities desired in an O and M Officer

88. An O and M officer is a consultant, adviser and technician rolled into one. He does what the administrator would do if he had both the time and talent to do it himself. The O and M officer observes the organization structure and operating methods for the purpose of suggesting improvements. He makes surveys and special studies of organization, methods and management practices. He attends to administrative problems when directed to do so and recommends solutions. He will frequently detect problems in the making and recommend action to forestall them.

89. The O & M officer should be:

(1) Patient and diligent;
(2) thorough and resourceful;
(3) objective and analytical;
(4) capable of obtaining and using co-operation;
(5) courageous but tactful and capable of compromising;
(6) imaginative and dedicated;
(7) practical.

90. He should have the faculty of presenting a case orally and in writing. He should have an open mind for new ideas, keeping himself abreast of modern methods and latest technological advances. He should have an infectious enthusiasm for simplifying and improving ways of doing things and an attitude of humility based on a proper appreciation of the place O & M has in the scheme of things. He should be possessed of the highest integrity and a passion for anonymity. One writer expressed the desired qualities as follows:

"He should have tact, sound judgement, patience, abundant common sense, a sense of humour, and most of all he must be persistent and have curiosity and enthusiasm, otherwise he will not last the day".1/

Given the necessary qualities and sense of proportion, he will seldom experience difficulties in his relations with those affected by his activities. Such paragons in virtue, however, are very rarely found so we must use the people available who most nearly match the specifications and are willing, through training and application, to improve their capacity.

91. Persons having completed their training or aspiring to become O & M officers might do well to acquaint themselves with the following pointers:

(1) Your role is of an advisory nature: give the other person a feeling of importance: consider yourself as a salesman of ideas;

(2) you are not looking for faults but for better ways of doing things at less cost;

(3) your judgement can be no better than your information;

(4) be satisfied with a little improvement at a time but keep on pushing for further improvements;

(5) O & M is not a "shot-in-the-arm" remedy; to be of real and lasting value it must be a continuing activity.

1/ Organization and Methods, D.P. Melrose - a paper given at Loughborough College of Technology, 1960.

CHAPTER III

ORGANIZATION

Principles

91. Over the years public administrators and management practitioners, writers and researchers have collected and conveyed the lessons of experience to others. A great deal of this experience is denominated as principles, mutable principles of organization as many call them. They have gained wide acceptance and application as guides for action or ground rules in day-to-day operations. The O & M officer must familiarize himself with them and constantly review them especially when he undertakes organization analysis. They are guides for action for the administrator and their violation or improper application are indications of organizational weaknesses. These principles vary in numbers and nomenclature:

(1) Simplicity - The organi[illegible] be simple, with [illegible]uthority as possible;

[illegible]uality - The organization structure should be the one best suited to the enterprise and its objectives - not built around personalities;

(3) span of control - A supervisor should have under him a number of subordinates no more and no less than he can effectively direct, co-ordinate and control;

(4) unity of command - Every person should receive orders from and report to only one superior;

(5) clear-cut definition of functions - Organization units, functions and duties should be clearly defined;

(6) division and distribution of work - Related activities should be grouped together and work equitably distributed;

(7) delegation of authority - A superior should confer to the the subordinate closest to the problem the authority to make final decisions and to take action on the matter;

(8) decentralization - The delegation of specified functions to regional, district, and local officials representing central ministries, with the necessary authority to discharge them

(deconcentration) or the transfer of powers to discharge specified functions, to formally constituted state and local authorities (devolution);

(9) co-ordination - Uniting and correlating all activities - Arranging for and getting the right people to do the right things at the right time - The orderly arrangement of group effort to provide unity of action in the pursuit of a common purpose;

(10) line and staff as a common pattern of organization will be discussed later.

Organization Analysis

92. Organization is a dynamic, living thing continually adjusting itself to changes and new conditions to achieve its overall goals. Practical administrators are constantly searching for the organization structure best suited to achieve pre-determined objectives. Organization analysis is a practical and effective aid in this search.

93. Broadly speaking, the purposes of organization analysis are to seek improvements in planning, arrangement, co-ordination, and control activities to develop the best structure required for maximum effectiveness and economy in operations. Specifically it aims to identify and correct structural deficiencies, i.e., defects in the way authority is delegated, work is divided, responsibility is allocated, functions are grouped, duties are assigned, and relationships are established between individuals and groups working together within the organization. It is also intended to correct weaknesses in the structure which arise from poor communication, low morale or the absence of appropriate group decision-making techniques. As a by-product of the study the O & M officer should identify for future examination any problems encountered which are beyond the proper scope of his current analysis (those resulting from poor selection, inadequate staff training, ineffective decision-making, etc.).

93. A necessary part of such analysis is a good understanding of what an organization is and of the principles and practices that, if observed or properly applied, would enable it to reach its objectives. To begin with, organization may be defined as the collection of persons working together for a common purpose toward the accomplishment of an objective. Mooney and Riley describe it as "... the form of every human association for the attainment of a common purpose." They visualize it as the process of "relating specific duties and functions in a co-ordinated whole"; emphasizing "interrelation of duties as well as duties in themselves". Allen defines organization as "the process of identifying and grouping the work to be performed, defining and delegating responsibility and establishing relationships for the purpose of enabling people to work most effectively together in accomplishing objectives". For our purpose the terms organization and structure will be used interchangeably.

94. In dealing with organization one must always bear in mind that it is dependent on division of labour, a clear definition of the source of authority and the relationships between units and individuals because an objective requires action, action requires an effort and people supply the effort ; they must be formed into working teams or units if the effort is to be effective. Those groups then become "the organization". Broadly speaking, groupings may be of four different kinds:

(1) By purpose, i.e., given responsibility for carrying out one or more of the purposes intended to be pursued, such as housing, health, defence;

(2) by process, i.e., given the responsibility for carrying out a process such as engineering or medicine, bringing together in a single office or department all workers who are using some particular kind of skill, knowledge, machinery, or belong to one profession;

(3) by clientele, i.e., given responsibility for dealing with a particular group or kind of persons, like veterans, immigrants;

(4) by geographical division, i.e., a district under a commissioner, a region under a prefect or a governor, etc.

Administrative systems sometimes have the characteristics of more than one of the above forms. It may be possible for instance to find within a major ministry one form of organization designed to serve a major purpose and another to serve a special clientele.

95. The fact that organization is a peculiar mechanism that enables people to work together effectively calls for consideration of the evolution in thinking about human behavior, e.g., the "herd", the "person-to-person", and the "group" concepts. It is equally necessary to recognize that there is both formal and informal organization structures. The formal organization is a system of well defined jobs, each bearing a definite measure of authority, responsibility, and accountability, the whole consciously designed to enable the people in the organization to work more effectively together in accomplishing their objectives. It is characterized by being well-defined, relatively stable and by having responsibility commensurate with authority. It is a more or less arbitrary structure in which the individual must adjust himself to the overall conditions. He must do certain things in a specified manner, accept orders from designated individuals, and work co-operatively with others. Co-ordination takes place according to a prescribed pattern.

96. The informal organization refers largely to what people do because they are human personalities and their actions are explained in terms of needs, emotions and attitudes and not in terms of procedures and regulations. Informal groupings may extend to other units within the organization structure. The effectiveness of the group depends upon the recognition of a common goal or interest and the desire to work together in accomplishing it. There are no principles of informal organization which apply to the formulation or operation of such groups but the formal organization which fails to recognize and provide for the effective operation of such groups loses much of its effectiveness.

97. Viewed from a different angle, two aspects of the structures should also be recognized. These are the line and staff. The line performs the basic operations which are closely related and contribute directly to the objectives of the organization. The staff do not assume responsibility for work of the line nor do they have authority over the line. They advise, assist, and serve the line. The staff is the working, thinking, planning, reviewing and advisory element, whereas the line has the responsibility of "getting things done".

98. Organization analysis is an appraisal to determine whether the organization is best suited to achieve the objectives of the enterprise and actually carrying out that purpose efficiently and economically. In such analysis, the O & M problem-solving approach is highly useful. Assuming that the preliminary phases have taken place and the team is now ready to proceed to the fact-finding stage, the approach would be to determine at the outset what information should be sought. This would include the following:

(1) What work must be performed to reach the objectives of the enterprise? (A ministry, a department, a school, a hospital etc.);

(2) how can the functions comprising this work best be grouped to provide an organization that will anticipate its immediate and long-term needs? What is the basic structure best suited to the needs of the organization?;

(3) what work can best be detached and grouped as "staff" to provide for specialization and to make services available to several units at lower cost and with greater effectiveness?;

(4) what management positions must be created to provide for effective planning, co-ordination, motivation and control?

99. The technique of interviewing is always used extensively when studying the units of the structure. The supervisor of each unit is interviewed to obtain information concerning its purpose and its necessity in the organization. His problems, in so far as they relate to the structure, should be reviewed as they may reveal weaknesses in the organization. The personnel records of the unit are examined to obtain such data as numbers required, turnover rates, cyclical demands (seasonal requirements), distribution of personnel within the unit, etc. The relationship of the unit to the current structure as a whole should also be reviewed.

100. Next, it should be arranged with the supervisor to see how the work is done and by whom, starting at the point in the unit where the work originates. Each person should be interviewed to determine his contribution to the basic purpose of the unit, the lines of authority (who reports to whom) and to evaluate the effectiveness of leadership provided by supervisors. The work of each person is appraised through the statement of his tasks and duties and the distribution of work within the unit is analyzed to show whether supervisors fail to delegate authority, if an exaggerated use is made of persons commonly known as "jacks-of-all-trades", if clerical or routine work is being handled by supervisors, poor distribution of work loads, bottlenecks, etc. When necessary process charts are drawn to show in what sequence work is accomplished and the contribution of each step to the overall process. The structure should be classified according to functions and sub-functions or by type of work performed. The correlation between the unit and its defined functions should be ascertained to see if abnormal situations exist such as non-related work assignments, functions performed by more than one unit, etc. These studies could have the result of pointing where consolidation or re-allocation of units may take place.

101. The relationship of staff to line activities is next studied to see where staff units duplicate line controls or where the staff interferes with line operations. One should look into the desirability of expanding or curtailing staff activities and into cases where layman administrators give technical direction to specialized staff units. The factors that have influenced establishing the structure along present lines should be appraised and the practicability and suitability of the framework to meet current requirements determined. The necessity and legality of operating procedures, units of organization, their functions and formal positions as well as the adequacy of controls and co-ordinating devices should be the object of serious enquiry.

102. Before proposing revisions to the structure, the O & M officer should evaluate the data in respect to the following points:

(1) Overall effectiveness;
(2) adequacy of the structures;
(3) leadership provided;
(4) delegation of authority;
(5) assumption of responsibility commensurate with the amount of authority delegated;
(6) checks and balances;
(7) co-ordination and communications.

103. He then should prepare a revised or new chart to show the improvement he thinks necessary and consider tentative recommendations. His conclusions and recommendations should be discussed with management or supervisors of units and valid criticisms and suggestions incorporated in his draft report.

Organization Charts

104. Charts are devices that administrators, consultants and staff members find useful in communicating ideas about an organization. They are essentially a means to an end and must never be considered as an

end in themselves. An organization chart represents or illustrates the realities of existing or proposed structures. A neatly drawn chart consisting of lines and boxes and giving numerous details of the organization structure is not in itself prima facie evidence that the organization is sound and well suited to the needs of the institution. It nevertheless will give the administrator a bird's eye view of the structures and, if he is a keen observer and well trained in the interpretation of the device, he will become better informed about the organization and be able to make decisions that correspond more closely to the realities.

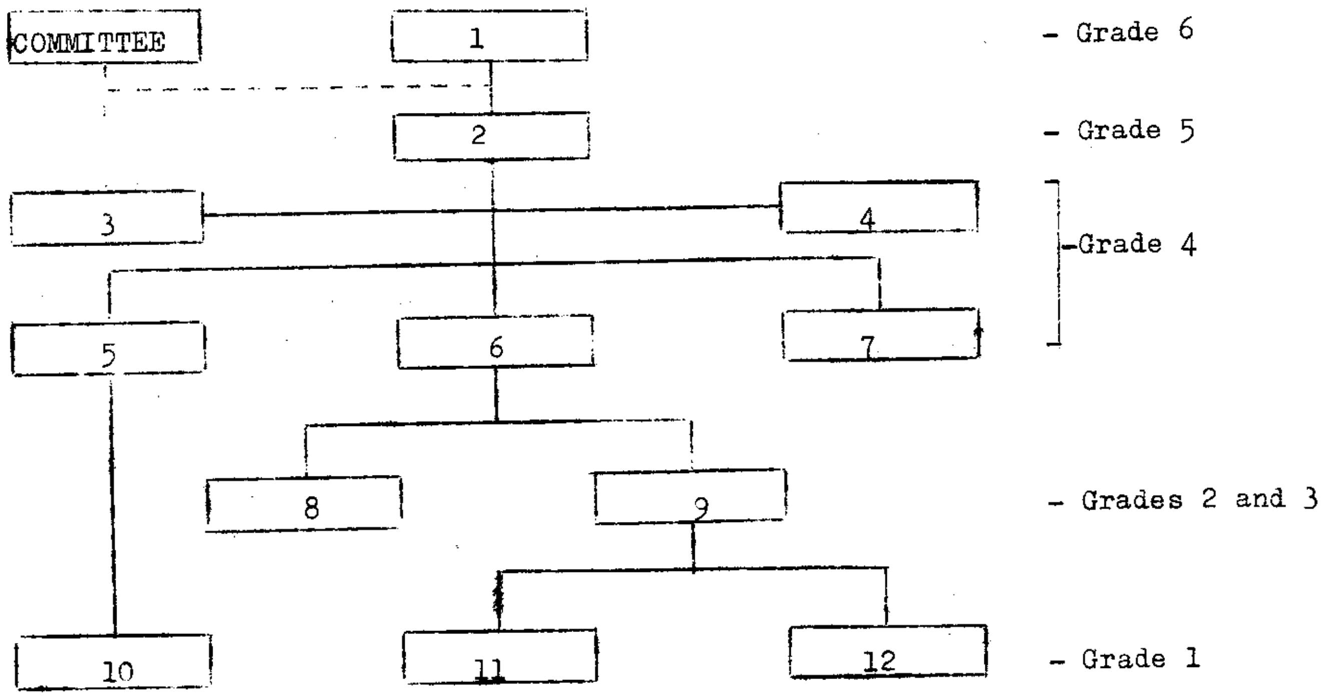
105. It is therefore essential for O and M officers to understand the fundamentals, uses and limitations of organization charts as they will undoubtedly use them frequently in the course of their work. They will use them as instruments of research, in which case they should be able to interpret and criticize them; in the course of their assignments and particularly in their reports they will find them very useful devices to illustrate the points they wish to make about the organization. The following rules will help in the elaboration and drafting of charts:

(1) Accuracy. This is probably the most important feature. Charts should reflect as faithfully as possible the true situation of an organization if sound decisions based on their study are to be expected. They should always be objective;

(2) up-to-date. It may be difficult to maintain charts up-to-date in a dynamic organization. Important changes might require a new chart or the accumulation of many changes might call for a revised or amended chart. It is worthwhile indicating the date on charts to give at least a rough idea of the state of the chart by its age at any time in the future;

(3) simplicity. There frequently is a tendency to make charts serve more than one purpose (e.g., to show the levels of authority, line and staff functions, titles, names, salary grades, etc. in the same chart. This usually confuses the reader; it would be preferable to make two or more charts to illustrate these features separately.

Poor



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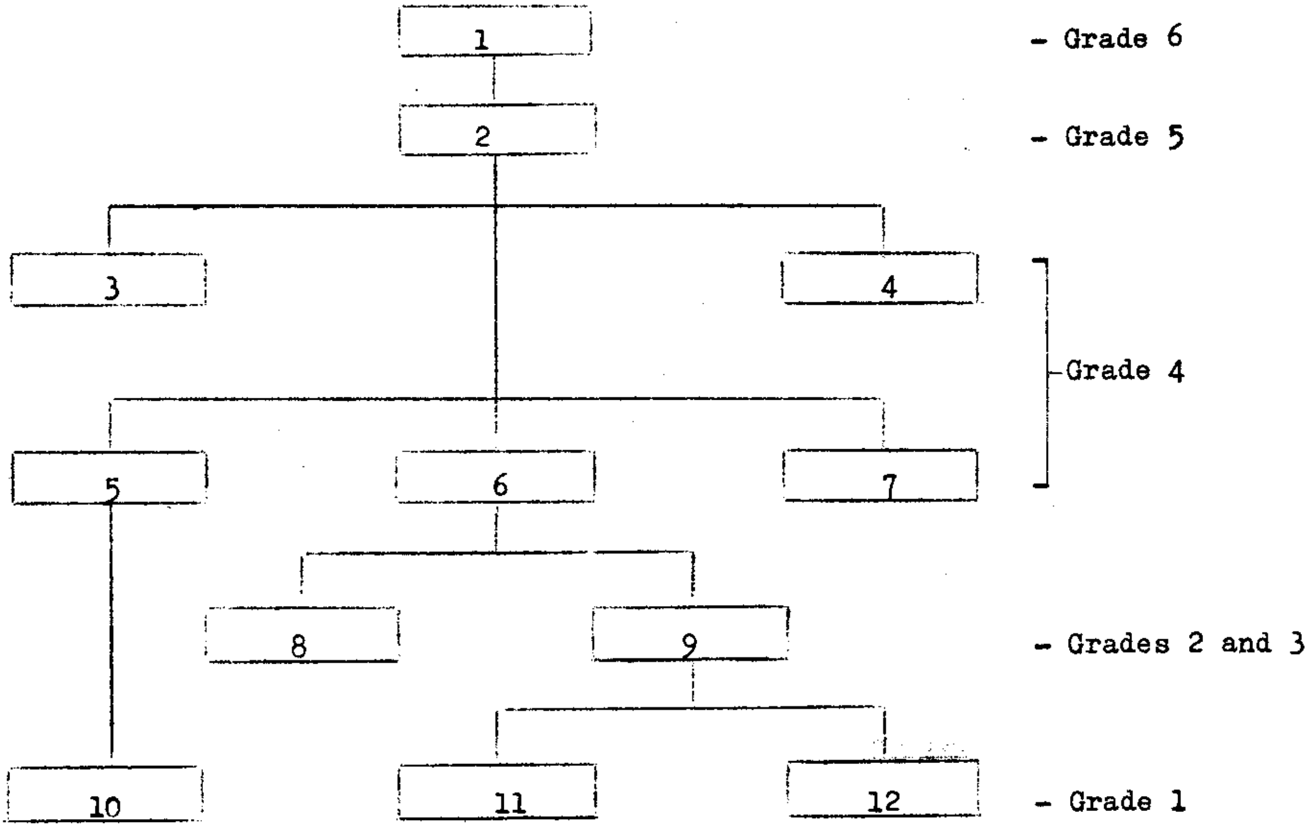

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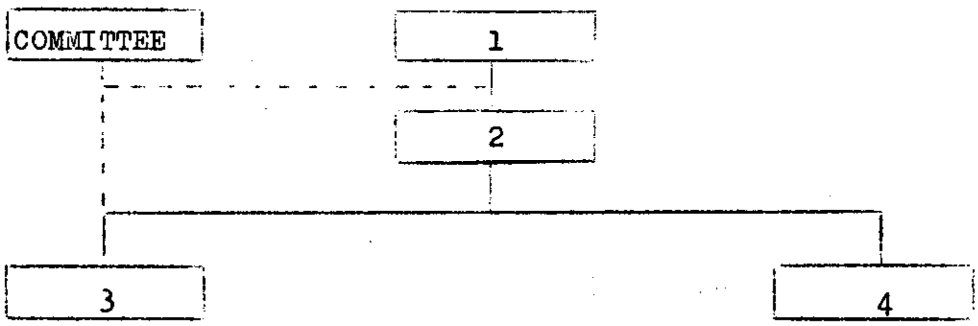
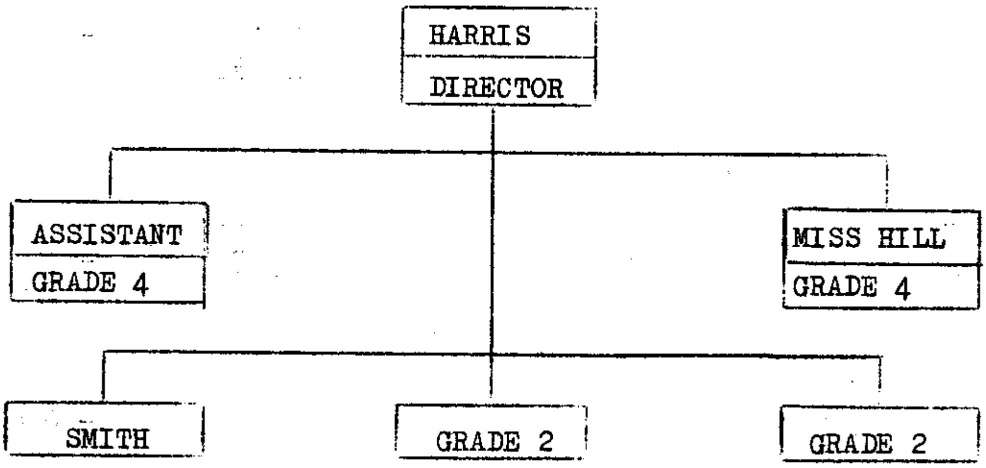


(4) uniformity. Boxes containing information about posts or persons should show this information in a consistent and uniform manner;

Poor



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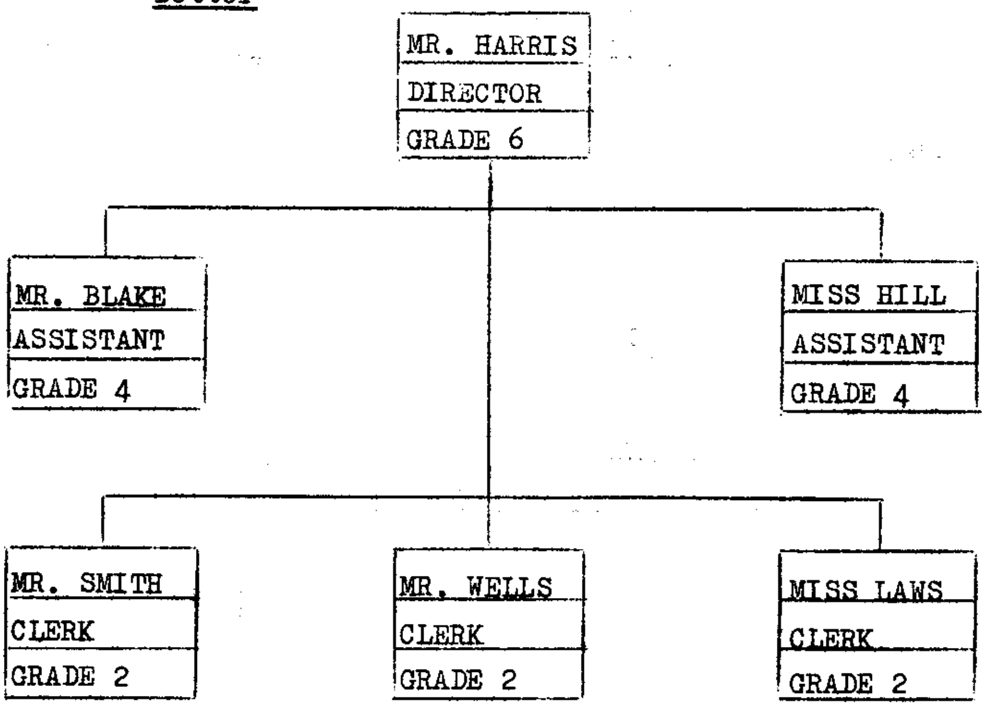
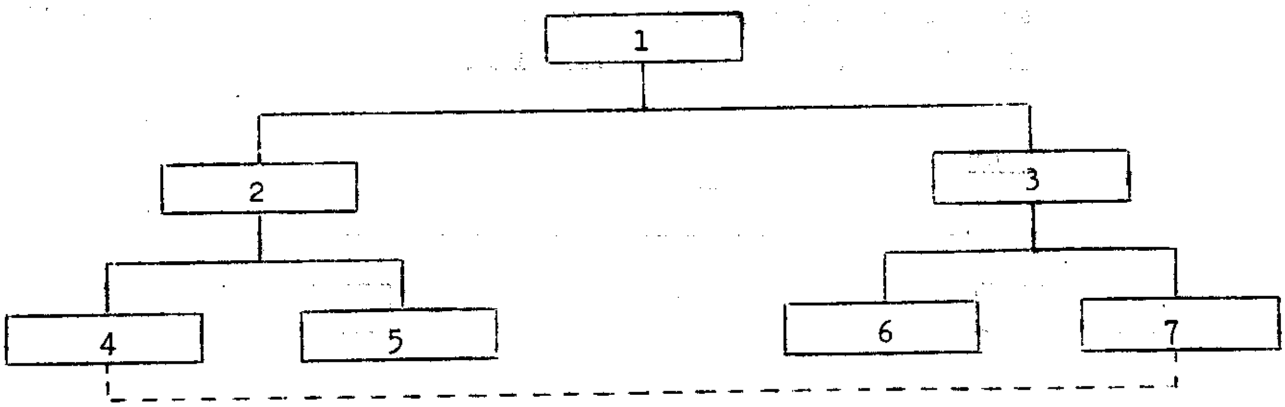


(5) logical sequence. Units or persons having special relations by reason of the sequence of their work or functional affinity should be shown, whenever possible, close to one another in order to shorten the lines of reference;

Poor



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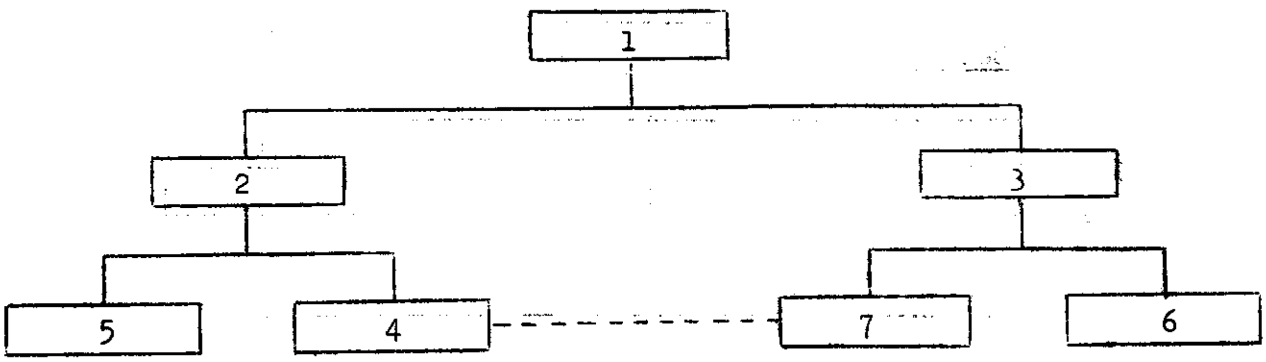
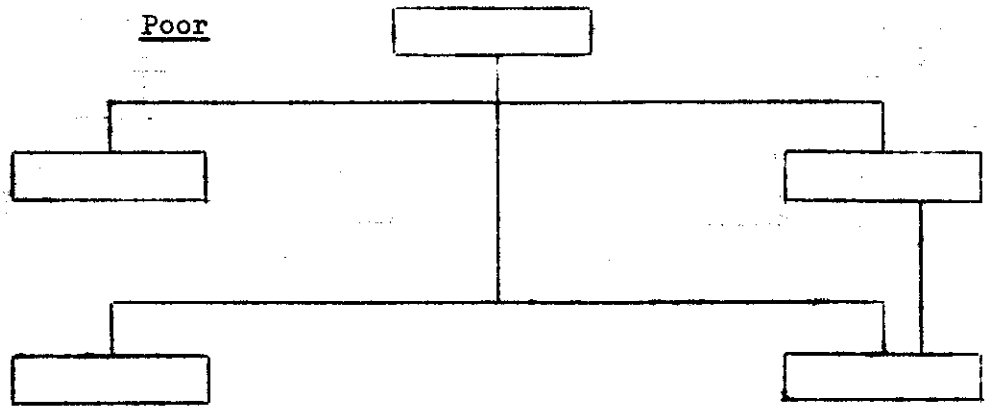


(6) the use of lines. Authority is shown by full black lines going downwards; responsibility is shown by the same lines but going upwards (horizontal lines are used to connect two vertical lines as shoulders do for the arms of a body. Oblique lines should never be used). As a general rule lines should issue from the middle of the bottom of a box and enter at the middle of the top. When it is not possible to do so then common sense should dictate the course to follow. If a special relationship is to be illustrated, the use of a dotted line is preferable to a full line;

Poor



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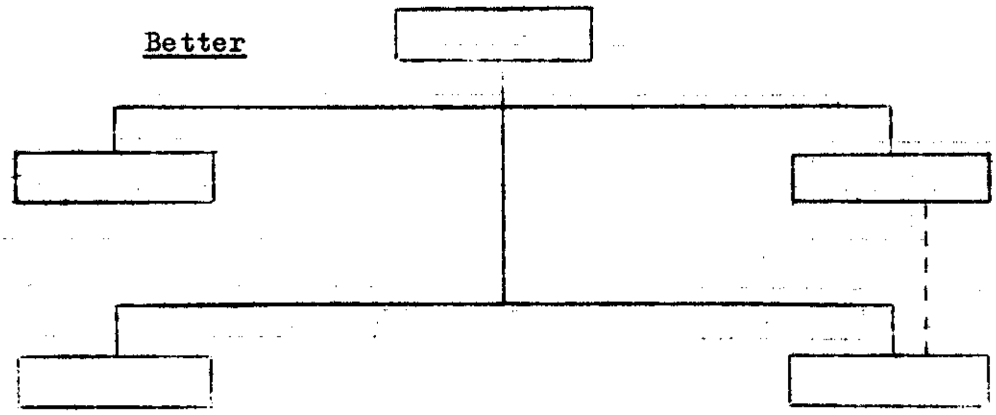

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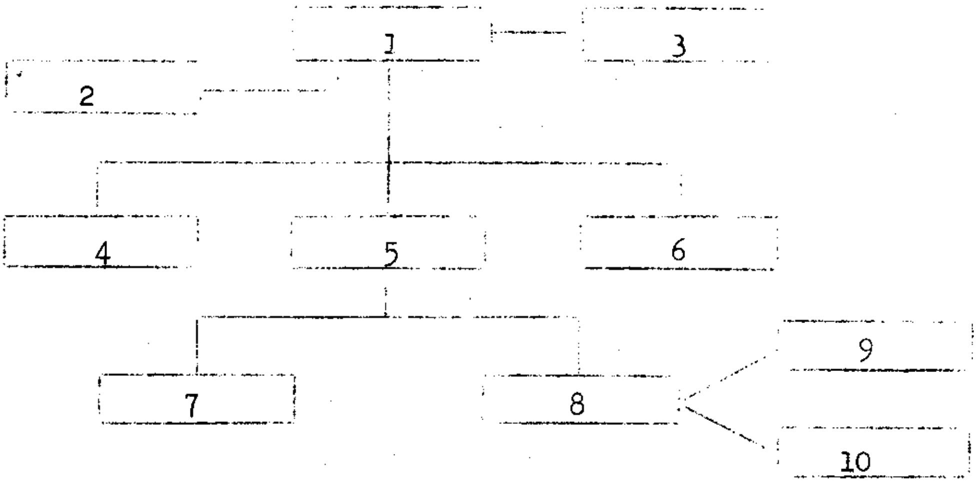

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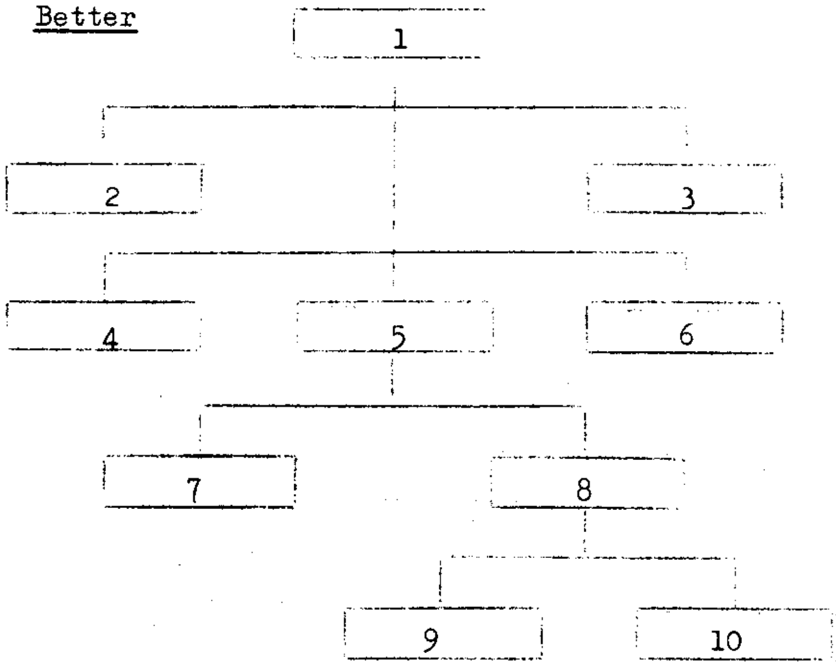
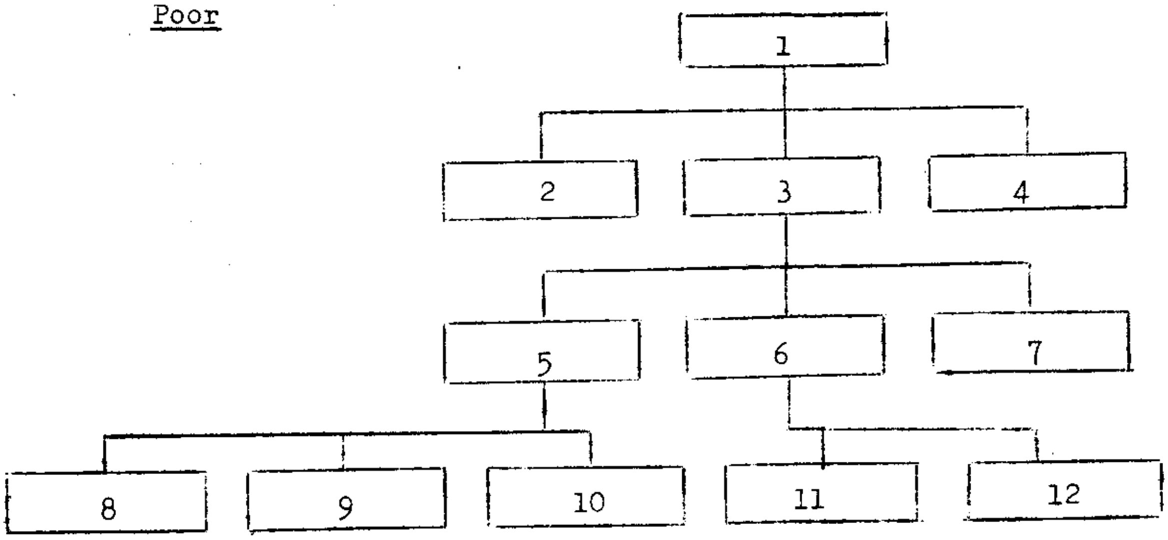


(7) appearance. The appearance of a chart, though of less importance than some of the other features, is nevertheless a point to bear in mind. Greater attention will be given to a neat and well balanced chart than to one in which the draftsmanship leaves something to be desired.

Poor



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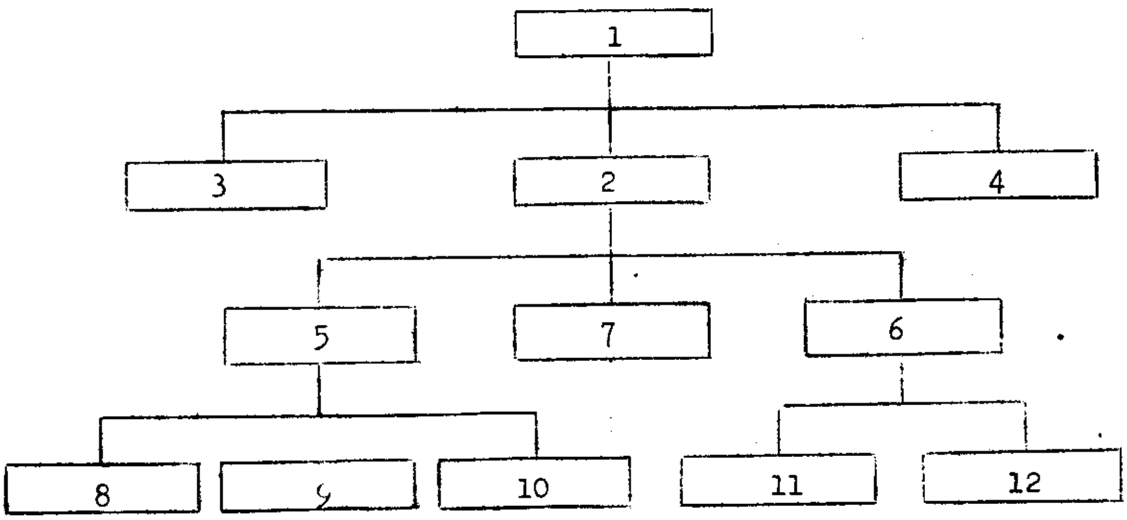


CHAPTER IV

WORK SIMPLIFICATION

106. Work simplification is the systematic analysis of all the factors affecting work to save effort, time or money and to produce more with better quality. It is a means through which unnecessary steps, reports and forms may be eliminated, bottlenecks removed and work schedules arranged more effectively. Thus work may be better balanced, backlogs reduced and speedier services rendered to the public. It involves the careful scrutiny of every action performed by personnel, every form, machine, equipment and material to ensure that each one is justified and fulfils a useful role in the process.

107. Work simplification is founded on the following broad concepts:

(1) There is one right way of doing a job;
(2) the best way may not be the most obvious;
(3) work simplification can be applied to any kind of work;
(4) a systematic and orderly approach will yield better results than haphazard or "hit or miss" methods.

108. To accomplish the objectives of work simplification, detailed studies and analyses are necessary bearing in mind the following aspects of the work under consideration:

(1) Distribution;
(2) sequence;
(3) volume;
(4) movement and flow.

The analysis of the work from the above four points of view will reveal what steps can be eliminated, actions combined, bottlenecks or back-tracking removed. In other words, ways will be suggested to make the work more simple and therefore more effective and at less cost.

109. Work simplification is a detailed task. It is important to select and isolate the problems to be dealt with. The job to be improved should be carefully chosen and the O and M officer should concentrate on it until

an adequate solution is found. To assist him determine where the highest priorities exist he should consider where:

(1) Bottlenecks and backlogs are known to exist;

(2) schedules and targets are not met;

(3) established production goals and quality standards are not attained;

(4) waste in manpower, materials and machine-time occur frequently.

110. When the job to be studied has been determined, every detail of the work should be questioned in the light of generally accepted practices for efficient work. The following questions may be asked at each step or aspect of the work:

(1) What is done? Why is it done? What is accomplished? Is it worth the cost? Is all of it necessary? What would happen if it were not done or if a part of it were not done?
Possible actions would be: eliminate unnecessary details and simplify where it is practical to do so.

(2) Where is the work done? Why is it done there? Could it be done more efficiently elsewhere? Can it be combined with similar work at another point to produce greater volume and a more stable workload?
Possibility: change to a better place.

(3) When is the work done? Why is it done at this time? Could it be done earlier or later to better advantage? Can peak loads be levelled off by better scheduling, better staffing, more effective control and a higher average production?
Possible actions: combine details where practical; change to a better sequence; improve scheduling.

(4) Who does the work? Why does that particular person do the work? Are skills and abilities properly utilized? Is the work being done at the proper level in the hierarchy?
Possibility: change the location of the work or the person doing it or train him further.

(5) How is the work done? Could it be simplified? What about the layout, motion sequence and the use of mechanical aids?
Possibility: simplify wherever possible.

It is well to remember that all these questions need not be asked in every case; they should be used in appropriate cases where the possibility for improvement may be exploited.

111. In large organizations or in complex processes where the number of persons, forms, reports, actions and details almost invariably obscure the objectives to be reached, the O and M officer must use certain devices to systematize his own work. The most common of these devices are:

(1) Work distribution charts;
(2) process charts;
(3) flow or movement diagrams;
(4) volume estimation or work counts;
(5) organization charts (elsewhere described).

These devices used either singly or in combination with one another will help the observer obtain a bird's eye view of a situation much in the same way as a map will help a traveller orient himself.

Work Distribution Charts

112. In studies involving a complete organization or a large unit some methods must be evolved to analyze the work of numerous employees engaged in several functions. In these cases, work distribution charts will assist the O and M officer visualize what is taking place in a comprehensive manner which more simple observations will not do. The three statements described below are an inter-locking series of working papers designed at summarizing the activities of groups of workers which will permit the delineation of tendencies, making of comparisons and analyses in an orderly manner. A common denominator is first of all required and the one that will serve most purposes is the time element.

Task lists or statements of duties.

113. These are daily lists of work done by employees, task by task, showing the time devoted to each. To obtain an accurate picture, a normal period must be selected (without holidays, peak periods, end of the month or year, etc.) of at least two weeks and every employee must describe, in his own way, what he did and how long he took to do it. This must be checked not

later than the following day for interpretation, accuracy, exaggeration and omissions. In case of jurisdictional problems or misinterpretation, the advice of the supervisor should be sought. A sample of a task list follows:

TASK LIST

NAME ________________ FUNCTION ______________________ DATE __________

NUMBER ______________ OFFICE ______________________

TO BE FILLED BY EMPLOYEE			TO BE FILLED BY OBSERVER		
DESCRIPTION OF WORK	TIME BEGAN	TIME COMPLETED	TIME	CODE	REMARKS

Employees should be advised beforehand that they are to show the actual times of beginning and ending of their various tasks. Rest periods, late arrivals or special permissions should be recorded as such because the total time will be checked against the normal work day. Also the time spent waiting for work, which is no fault of the employee, should be stated. When the employee's individual daily sheet has been completed and checked, the observer computes the time, assigns a code to the activity and records whatever observations might clarify a doubtful situation. The codes will vary from assignment to assignment but the following list is a typical example:

1. Administration
2. Supervision
3. Training
4. Dictation
5. Typing
6. Entering ledgers
7. Balancing accounts
8. Making statements
9. Adding figures
10. Filing
11. Investigating
12. Answering inquiries
13. Time for personal needs
14. Waiting for work

Recapitulation of employee task lists

114. When the daily sheets are completed, the information is then posted to the recapitulation sheet by code, each day to a line. A sample of a recapitulation sheet follows:

RECAPITULATION OF EMPLOYEE TASK LISTS

NAME ______________ FUNCTION ______________

NUMBER ______________ OFFICE ______________

DAY	CODE														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
TOTAL															

This is an intermediate or working statement, the totals of which are posted to the next and final statement.

Final work distribution chart

115. A sample of this statement follows:

WORK DISTRIBUTION CHART

	CODE														
EMPLOYEE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
TOTAL															

The O and M officer now has an opportunity to analyze the time spent by every employee (including supervisors and heads) for a period of 10 working days, by tasks. This will give a wealth of information concerning the adequacy of allocation of duties to staff, the degree to which functions are sub-divided, where idiosyncracies arise in the distribution of work, the absence or abuse of basic functions such as supervision, etc.

Process Charts

116. Process charts are a device to show the trajectory of forms or materials in a certain process or in an operation. They can be of two types (vertical or horizontal) and the following symbols are used to indicate the type of action that takes place in both cases:

◯ = An operation. When something is being created or changed or added to. For example, typing a letter.

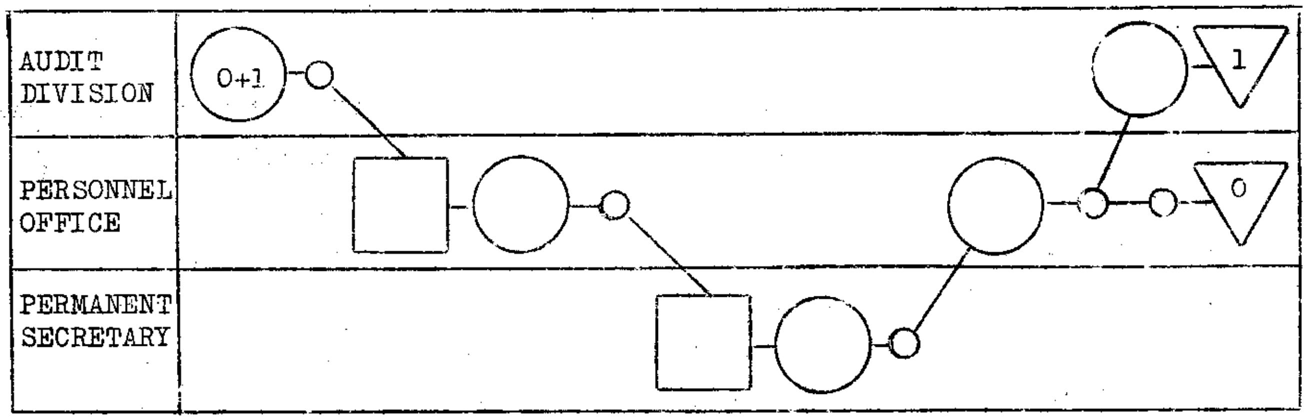
○ = Transportation or movement from one point to another. For example, a letter being taken from one desk to another or one unit to another.

□ = A check or verification which does not change or alter the substance of the object under review but is done to insure the accuracy or validity of a certain document. For example, proofreading a letter.

▽ = Filing or storing. For example, placing a letter in a filing cabinet.

The above symbols are the basic ones used in making process charts. It is however possible to adapt the symbols to suit certain circumstances. For instance, if the purpose of the chart is to reveal abuses in filing methods there may be advantages in using the conventional symbol ▽ for permanent filing and  for temporary filing.

Example of a Horizontal chart indicating the simple process of forwarding a request to fill a personal vacancy from the Audit Division follows:



The following is an example of a vertical chart:

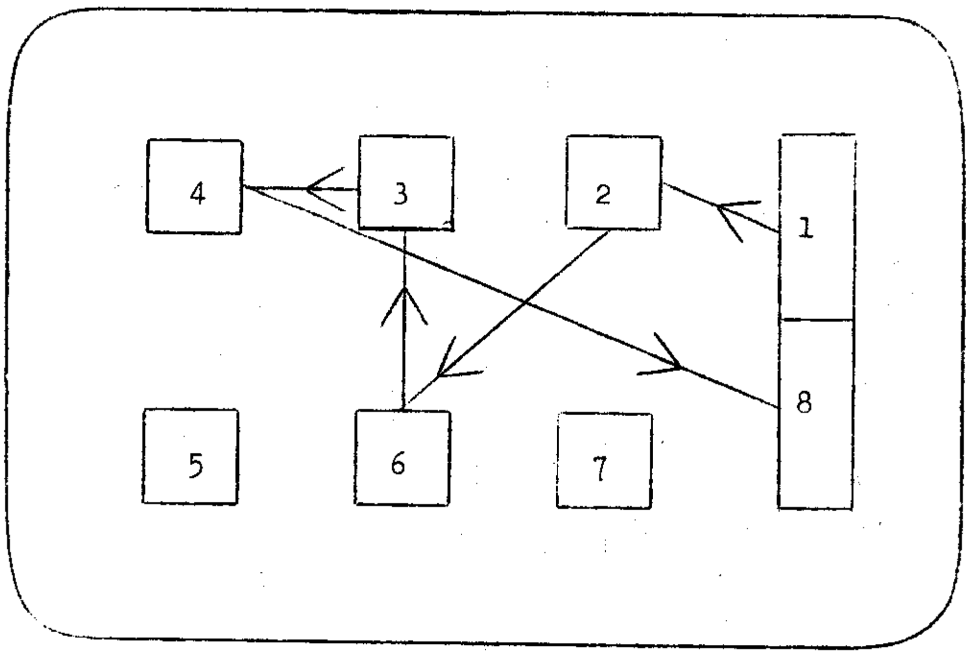
	Description of present operation	◯	○	□	▽		Description of proposed operation	◯	○	□	▽
1	Audit Div. prepares request in 1 orig.+ 1 copy					1	Audit Div. prepares request in 1 orig.+ 1 copy				
2	Sends to office of Personnel					2	Sends to office of Personnel				
3	Verified against establishment list					3	Verified against establishment list				
4	Countersigns the request					4	Countersigns the request				
5	Sends to Permanent Secretary					5	Sends to Permanent Secretary				
6	Verified against establishment list					6	Approval by Permanent Secretary				
7	Approval by Perm. Secretary					7	Sends to office of Personnel				
8	Sends to office of Personnel					8	Records entry				
9	Records entry					9	Files original				
10	Files original					10	Sends to Audit Div.				
11	Sends to Audit Div.					11	Records entry				
12	Records entry					12	Files copy				
13	Files copy										
	TOTAL	5	4	2	2		TOTAL	5	4	1	2

The horizontal and vertical charts are used for different purposes. The horizontal type usually gives a better overall or a bird's eye view of a process; the vertical type gives more details or the description of each item. Also with a second or proposed process shown side by side with the existing one it is possible to see at a glance the gains realized and estimate them in terms of minutes or hours. Note in the above vertical chart that the number of verifications was reduced from 2 to 1.

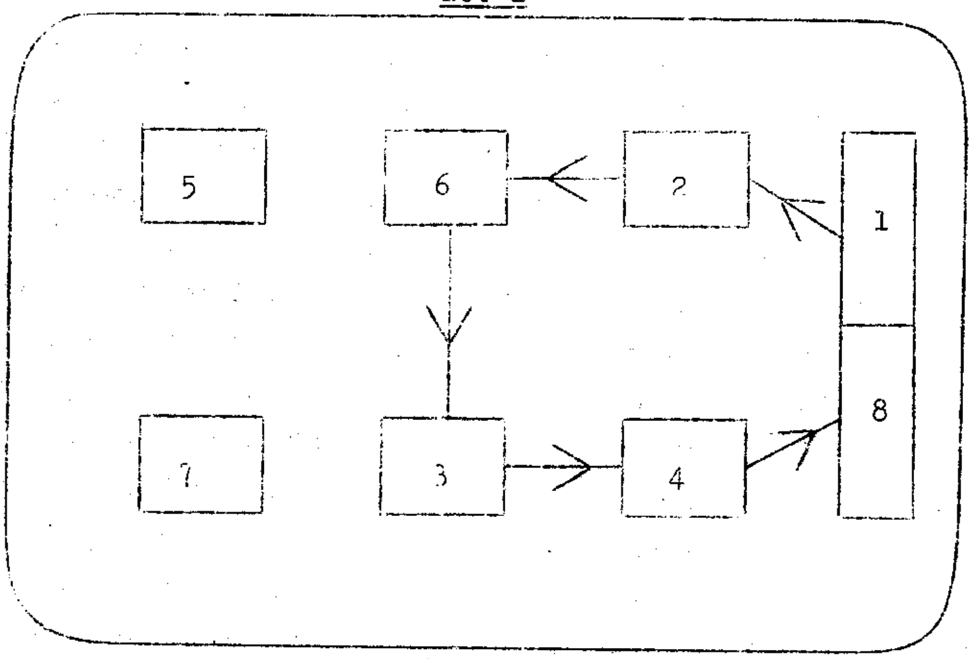
Flow of Movement Diagrams

117. These diagrams are based on the floor layout (which may be simplified if need be) and they intend to show the flow or movement of forms, materials or persons in a certain office. They reveal back-tracking, criss-crossing, isolation and other impediment to a smooth operation as the following examples show:

No.1



No. 2



The two examples given above show in a very simple manner how the re-arrangement of stations or desks may prevent criss-crossing in an office. Also diagram No.2 shows that the flow of documents has been concentrated in one end of the room, allowing more freedom for persons at desks 5 and 7 to carry on their duties undisturbed.

Volume Estimation or Work Counts

118. No standard practice can be suggested for making a quantitative appreciation of the work done. Yet it is essential to obtain this factor so that comparisons may be made and an estimate of the staff required. The data can be obtained from a variety of sources. Special survey records made by the staff concerned when the daily task lists are prepared. For instance, clerical operations may be gauged by knowing how many lines were typed or cards punched or items sorted per day, etc. (It will be more difficult to estimate the volume of work accomplished by an auditor, a librarian or a research assistant. Nevertheless some way must be found to estimate this also).

119. General records pertinent to the organization under study might be useful such as: number of beds in a hospital, number of classrooms in a school, number of vehicles in a transport unit and number of miles travelled by an inspector per day or per month, etc. This information can then be compared with that of similar organizations elsewhere or from year to year to give an idea of the relative efficiency of the unit. Figures of production may also be checked against recognized standards. Obviously, work distribution charts, process charts, flow charts, work counts and organization charts can often be used in combination with one another to give the overall picture and assist the O and M officer arrive at useful conclusions. It must be remembered that they are only means to an end and unless they are accompanied by good judgement and imagination they may fall short of their objective. Also, the O and M officer must decide which of these instruments are the most useful to his purpose and experience will guide him in their selection and uses.

CHAPTER V

FORMS DESIGN AND CONTROL

120. One of the most important and significant aspect of office work is its dependency on temporary or permanent records and therefore on forms of one kind or another. There is hardly an operation or a transaction that is recorded on paper for which a form has not to be especially designed. It is easy to conclude that many opportunities exist to practice economies and improve the service if rational methods are used in the design and control of office forms. Forms are used to give formal approval and consign authority, to give instructions and information, to make request, to make payments and certify that payments have been made or goods received, to record activities, actions or transactions and for many other purposes. Forms can be designed to guarantee uniformity and accuracy of information; by using mechanical equipment for their processing, it is possible to reduce manual labour to a considerable extent; forms facilitate data integration into the accounting, statistical and reporting systems; and finally, forms properly designed, reduce filing and communication problems.

121. Forms are produced in an endless variety. The effective control of forms is a prime concern of any well-run organization. Form design is the first step in this important process. When considering a new form or the re-design of an old one, two aspects must be borne in mind. First, the object of the form, its purposes and the subject matter it is intended to carry will determine what information is to be included in the form, its phraseology, its order or sequence and general appearance. A form may, for instance, be filled by hand or typewritten; it may be filled completely at one station or it may require successive entries at two or more stations; it may be a statement of account (requiring space for words and figures) or it may be a questionnaire or an application for employment. All these types of forms require a different treatment by the forms designer who should use the norms and standards described below in preparing his drafts. Second, the physical characteristics of the form (paper, colour, ink, size or shape, etc.) have an importance of their own as they will affect the durability, flexibility and handling of the documents. The forms designer must understand the nature of these characteristics to be able

to make useful suggestions on the manner in which the objectives of the form will be served by them. The following paragraphs give practical suggestions on the features that should be considered when a new form is designed or an old one reprinted.

Design Practices

Title and number for purposes of identification

122. Each form should be given a title that is descriptive enough to eliminate misleading references and short enough to be memorized easily. Terms like: "Personnel form" "Receipt" "Requisition" are not to be recommended. More specific titles like "Application for Employment", "Cash Receipt Voucher", "Purchase Requisition" or "Requisition to fill Vacancy" are advisable.

123. Each form should be given an identification number according to a previously established series. The needs of the organization and the volume of forms will determine how extensive or flexible this should be. For instance, in an organization where some 25 or 50 forms are used, a single series from 1 to 99 would suffice; on the other hand if the forms or anticipated forms reach a total of 200 to 300, it would be advisable to have three or four series such as: P 1 to 99 (for the personnel forms) F 1 to 99 (for the finance forms) R 1 to 99 (for the registry forms) etc.; in cases of very large installations, using from 800 to 1000 forms, a more elaborate system of numbering might be needed.

124. The name of the institution should be clearly stated on all forms that have external contacts. Purely internal forms do not need this if the title and identification number are sufficiently clear. The identification symbol is frequently preceeded by the initials of the institution (e.g. ECA-F-99).

Instructions

125. Instructions on how to fill the form, the number of required copies, its distribution, handling and filing may be made known in a number of ways:

(1) Detailed instructions given in a standard practice manual;
(2) detailed instructions printed on the reverse of the form itself;
(3) concise instructions on the front of the form either in large faint printing across body or in small print at the bottom This type of instruction is limited to such phrases as: First copy to receiver, second copy to audit department, third copy to file, etc.

Content of the form

126. The substantive material to be included in a form should follow the general pattern of a literary composition: the introduction, the body and the conclusion. Another way of saying this is that one proceeds from the general to the particular.

127. To decide what should be included in a form one should first make a list of all the items of information one can think of about the form. Each item should then be scrutinized regarding its necessity and importance. When this examination is completed (and the list shorn of unnecessary details) a certain order for precedence must be given to the component items. Various orders will suggest themselves according to the nature of the information and the purposes to be served by the form. Hard and fast rules are difficult to follow in this matter and the forms designer will frequently be guided by circumstances that vary a great deal. In a general way, however, the following possibilities may be considered:

(1) The sequence in which the information is fed to the form;
(2) the sequence in which the information is extracted from it;
(3) the identification of a subject should be placed at the top of a form (name, address, date, age, marital status, etc.);
(4) information which will assist in classifying, indexing or filing the form might well be placed in the upper right or left hand corner (serial number, code number, date, name, etc.);
(5) signatures usually do not require a high space priority. They should follow the statement they aim to validate.

Spacing

128. It is important to synchronize the form and the medium of transcription so that no time is lost in making mechanical adjustements during the transcription process and for the purpose of giving the form a neat and tidy appearance. The following table indicates how to ensure proper spacing on the form:

(1) For handwritten entries:
  5 characters to the horizontal inch and
  4 lines to the vertical inch.

(2) For typewritten entries:
  12 elite or 10 pica characters to the horizontal inch
  3 lines to the vertical inch for double spacing or
  6 lines for single spacing.

(3) For columns of figures;
  8 handwritten figures to the inch if no spacing or margin for dollars and cents or thousands and hundreds is requested, or
  6 to the inch if spacing is required
  10 typewritten figures to the inch if not spaced or
  8 if spaced.

Multiple-copy forms

129. Forms having more than one copy provide an excellent medium to produce information accurately and economically that is intended to reach various destinations or serve several purposes. Multiple-copy forms are classified under four headings:

(1) Individual forms which are either detached or bound in pads. In these cases it is usual to insert carbon paper manually which may be used several times;

(2) form sets (always padded). These sets may contain from 1 to 10 copies; the carbon paper may or may not be one-time carbon; copies of different colour will assist in sorting;

(3) continuous forms (in sets of 25, 50 or 100). These types of forms require inter-leaved one-time carbon paper and the use of a guide strip to keep the forms in line in the typewriter. The typewriter platten is equipped with a star-like wheel, the spokes of which fit the perforations of the guide strip to keep the form feeding in a straight line. The guide strip and the carbons are separated from the form itself by the typist who tears the sets along perforated lines. These forms are always filled in by typewriter and not manually. Also, they are used in connexion with conventional or electronic data processing machines;

(4) registers or boxes containing form sets to be filled in by hand for use at counters or in mobile positions. A crank or outside wheel activates the set which is moved up to the new writing position when the previous form is filled and torn off. Each form is interleaved with one-time carbon paper and goes over a hard metal surface at time of writing so as not to interfere with the blank forms packed in the box below.

Size

130. The size of a form will depend on the amount of information it has to carry, its uses and its ultimate filing. In considering these aspects it is also important to remember that uniformity in the overall size of forms will reduce handling, binding and filing problems.

131. Cards usually are of the following sizes by inches: 3 x 5, 4 x 6 and 5 x 8. Occasionally, and for specific reasons, they may be larger or smaller but the three sizes given above cover more than 95 per cent of the ordinary requirements.

132. Paper forms vary to a larger extent because of the intricacies of the substantive material and the need for its co-ordination with the system as a whole and the use of office machines. However, 8" x 10" is a size that will suit a very large number of the conditions.

Colour

133. If one is dealing with a multiple form it is advantageous to use colour as a distinguishing characteristic. When colour combinations are being planned it is well to remember that the human eye can be confused with dazzling contrasts. If the contrasts are judiciously used it is possible to obtain a pleasing and attractive form as well as one than lends itself well to sorting and distribution.

Ink

134. The ink selected should provide a proper contrast to the paper and give a clear, uniform and smooth imprint. Again, colour should be used with discrimination as otherwise a form may become confusing. Technical considerations are frequently important in the selection of ink. For example, certain printing processes require a certain type of ink; certain papers will absorb some inks and others not; some inks tend to fade more quickly than others.

Paper

135. The physical characteristics of the paper on which forms are printed (weight, strenth, resistance, size, colour, etc.) should be related to the uses that will be made of the form and its span of life. For instance, a form made in 12 copies with carbon inter-leaved would necessarily be of light paper to allow clear typewritten impressions on all copies. In addition, if the form is to receive unusually hard treatment or if it is to be kept in storage for long periods of time, consideration will have to be given to its tensil strength and its conservation qualities.

1. Weight - Paper is generally sold by weight. Normally a mill sells paper in standard sizes according to the purpose for which it is intended and calculations for its ultimate use as forms should bear this in mind. The following weights are recommended:

Purpose	Weights
Legal document	28 lbs.
Ledgers	24 "
Letterheads	20 "
Forms from 1 to 4 copies	16 "
Forms from 6 to 8 copies	13 "
Over 8 copies	tissue paper

2. Grade - The grade of the paper refers to its quality and is based generally on the kinds of materials used in its manufacturing process. The quality of paper varies in proportion to its rag content. High quality bond papers combining qualities of strength, permanence and appearance used for letter heads, legal documents and ledgers are made from 100 per cent rag. Stepping down from that level, the grades of paper contain less rag and more chemical wood pulp until 100 per cent pulp is reached for the cheaper papers which lack the qualities of appearance, durability and strength. The grade of paper selected for form depends on the expected life of the form, its handling and the desired appearance;

Life of form	
1 to 5 years	100% sulfite pulp
6 to 12 years	50% sulfite pulp and 50% rag
over 12 years	100% rag

3. Texture - The grain of the paper is determined by the alignment of the fibers making up the paper. This is an important item because it will determine in part the rigidity of the paper. The grain should be parallel to the typewriter platten so as to prevent slipping. Furthermore, if the grain runs at right angle to the platten it may cause the forms to curl or buckle.

Printing

136. From the standpoint of good composition alone it is not advisable to use more than two type faces on a printed sheet and one is preferable. Some type faces are unsuited for office forms, some are hard to read and others are too elaborate. The most popular type faces are the simplest

in design such as: Gothic, Sans-serif and Bookman. When designing forms, a draftsman should always have available a table of type faces indicating the number of letters or characters used to an inch and how this will be expressed in vertical and horizontal points. This information is necessary if precise specifications are to be passed on the printer.

Forms control

137. To achieve better procedures and work methods through greater simplicity in the design of the form, strict conformity to accepted and useful standards is necessary. Forms control will assist in reaching the following objectives:

(1) Elimination of needless forms;
(2) improvement in design of needed forms;
(3) economy in the production, distribution, storage and use of forms;
(4) analysis of forms in their relationship to procedures and methods.

Forms control units

138. The establishment of forms control units will assist institutions reach a higher degree of efficiency in the management of forms than if their design, ordering and control is left to individual divisions or sections. The location of such central units may be in the O and M office or in some other branch of the central government that has a vital interest in the overall management of forms.

139. The functions of the unit may be summarized as follows:

(1) Elimination of unnecessary forms by determining:
   (a) whether they serve a useful purpose;
   (b) whether an existing or modified form will serve the same purpose;
   (c) whether the present form may be changed in any way to improve its usefulness.

(2) Making a functional analysis of all forms in relation to their procedures, and where necessary re-designing the forms to bring about simpler and smoother work methods;
(3) inc ·asing the efficiency of procedures which require the use of .rms;
(4) reducing the printing costs by standardizing designs as much as possible, and by the use of more accurate specifications;
(5) exercising control over potential costs of paper and printing in the production of forms;
(6) controlling the storage and distribution of forms.

140. A form control unit, to be effective, should build up an historical file of each form used in the organization. This file should contain, in addition to the current and preceeding samples of the forms, all pertinent information in relation to them. Files may be set up according to one or a combination of the following orders:

(1) Functionally (personnel, finance, registry files, etc.);
(2) numerically,according to the identification symbol;
(3) by ministry, department, etc.

141. When a new form is requested or an old one comes up for reprinting, the control unit should study the contents of the form history file in the light of the new requirements and also cross check for possible combination or adaptation of existing forms.

142. Forms control involves studies into rates of usage, deterioration or wastage factors and what is an economical production quantity. Statistical records are necessary to ascertain these factors. Also important is the time-lag between ordering at the point of storage or usage and the delivery of new forms. This should be estimated as accurately as possible so that production and systems are not interrupted because of shortages which would have been avoided by adequate planning.

CHAPTER VI

OFFICE MACHINES AND EQUIPMENT

143. Office machines and equipment embrace a great variety of contrivances. Some fulfil the objectives of economy, speed, accuracy and control of operations, some act as agents of convenience and flexibility and others help to increase the output of the office. Office work is so dependent on machines and equipment that it is not possible to consider a new system or a change to an established one without giving consideration to one type or another. For this reason it is important that O and M officers should know about the various types of office machines and equipment, their uses, their characteristics and especially their limitations. In particular, they should be thoroughly familiar with the equipment presently in use in the organization and have accurate and up-to-date information about the new or improved equipment on the market. A partial list of the main items of Office Equipment on which O & M officers should have detailed knowledge is given in this section including a check list of points to consider when evaluating some of the equipment with a view to adaptation or purchase. It should be noted that in this list, service facilities, supplies or attachments and prices are shown as factors. This is important because there are many varieties of models available and all too frequently features are purchased which are not required or not economically justified.

144. It is desirable to develop in the O & M unit a library of information on equipment and machines which will be of benefit to the unit and departments of the organization. This will comprise pamphlets and brochures from the suppliers and agents, articles from office management and similar publications, notes or descriptions of installations presently used by the organization and other related data. This material should be properly catalogued and filed so that it is available for immediate or future reference and care must be taken to keep it up-to-date and that the month and year of origin of the equipment to be recorded, as technological changes occur frequently in this field.

145. Good relations should be developed with the suppliers and agents of equipment so that the supply of information is maintained regularly and help is readily given when investigation into possible equipment is made. A new and developing O and M unit should not attempt to restrict the activities of representatives in the various departments of the organization but it should receive advise of such visits and of the possibilities that are being explored. This will not only add to the knowledge of affairs of the unit but give an indication as to whether it should become involved or whether the matter can be settled substantially between the department and the supplier.

146. Most types of machines and equipment will require careful studies, which are generally known as feasibility studies,to determine their adaptability from a technical point of view and the ability of the organization to sustain the cost. These studies should bring out whether the machine can serve more than one purpose (flexibility), what are its estimated production and idle times, its expected life, its actual cost in comparison with other types of machines and whether the machine can be well integrated into the process as a whole. It is well to beware of machine vendors' claims concerning their performance, durability, flexibility, etc. and information supplied from these sources should always be checked and tested whenever possible.

Accounting Machines

147. These have wide variations in capacities, abilities and prices. They are frequently custom-built and can be modified to meet the specific accounting needs and objectives of a buyer. The main factors to be considered are:

Keyboard size and type
Number of registers and totalling features
Programme control units
Range of automaticity
Training of operators
Delivery dates
Service facilities
Price.

Adding and Calculating Machines

148. There is a hazy line of demarcation between adding machines and calculators. Designers have broadened the scope and function of the basic adding machine to such an extent that now there are few pure models on the market. Both adding machines and printing calculators come in 10-key and full-keyboard models and both print the results on paper tape. Both add, subtract and multiply. However, the main operational difference is that the printing calculator multiples automatically, while the adding machine multiples by repetitive addition. Both types may be made to divide and both have models that carry and print credit balances.

Adding machines

149. The following factors should be considered:

Electric	Manual
Subtracts	Multiples
Columns entry	Columns total
10-key type	Full keyboard type
Extra zero key	Step-over keyboard
Repeat key	Non-add key
Correction key	Minus repeat
Automatic punctuation	Wide carriage
Prints in red:	Symbols for:
Total and sub-totals	Total and sub-totals
Negative entry, credit balance	Negative entry, credit balance
Non-add entry	Non-add entry
Service facilities	Price

Printing calculators

150. Considerable variations exist in price, size and attendant capabilities. Some features to look for include:

Electric	Manual
Printing calculator	Register - No. and type
Accumulators	Transfer features
Discount keys	Make-up keys
Single or multiple motor-bars	Keyboard locks
Dial clearance features	Carriage positioning and decimal points
Sub-totals	Repeat keys
Colour printing	Grand totals
Service facilities	Price

Non-printing Rotary and Key-driven calculators

151. Key-driven and rotary calculators are full-keyboard, non-printing machines. They register totals on dials at the top of the machines. Operators use a touch system with these machines that lets them enter several digits at one time. A feature that distinguishes key-driven calculators from rotary calculators is its immediate reaction to pushing the keys. There is no need to use a handle, button or bar to make the machine add. As soon as the operator presses a number key the dial shows the amount. Key-driven machines are suitable where fast addition and subtraction are a need. With each additional depression of a key, the number is instantly added to the previous total and the new total appears in the dial or dials.

152. It is not a large step from an adding machine to a simple book-keeping machine which has additional features built in. The first step from an adding machine to a simple book-keeping machine is the addition of a typewriter carriage, usually with one or two total registers built in. From these, the next step is generally the addition of a front-feed carriage which enables a fast posting to a ledger card and the carrying of a continuing record or a backing ledger sheet.

Addressing Equipment

153. This equipment has a wide range of versatility and prices. It may, for instance, run off lists of addresses in addition to direct printing on envelopes, cards, letters and documents. It also lends itself to some statistical and control actions. The main features to consider are:

Type of equipment: Metal plates, plastic plates, heat transfer, card masters and labels.

Selection capabilities
Mail-piece handling sizes & type
Electric
Counters
Service/Supplies

Feeding and stacking methods
Additive or original material
Manual
Control tapes
Price

Cheque Writers - Protection Equipment

154. Cheque writers provide protection against forgery and tampering with negotiable documents either by inside or outside agents by using devices such as embossing the figures and amounts on the face of these documents. Also by having the cheques processed automatically, controls may be maintained on their issue. The features to consider are:

Electric	Manual
Keyboard	Lever-set
Ribbon	Ink
Writes	Signs
Endorses	Cancels
Dates	Counts
Batch No.	Consecutive Nos.
Automatic feed	Adjustable guides
Cylinder	Capacity
Service	Price

Automated Data Processing Equipment

155. This is the most advanced and sophisticated type of equipment designed to serve office work. The variety is infinite, starting from the conventional types based on key punched cards with mechanical or electric impulses to the electronic machines using punched cards or recording tapes. The cost of these machines is very high so their adaptation to the systems and requirements they serve must be well synchronized and their utilization and operations planned in such a way that the machines do not remain idle (two or three shifts per day should be considered as a normal objective). Feasibility studies should be made only by fully trained experts and vendors' claims always checked very carefully. The following are a few of the features to be considered:

Punched cards	Recording tapes
Conventional equipment	Electronic equipment
Flexibility	Volume production
Rent of equipment	Buying the equipment
Servicing (locally or otherwise)	Spare parts
Delivery dates	Installation
Training operators	Price

Communication Equipment

156. This section would normally include telephone and other telecommunication equipment but as these vary to such an extent, professional guidance is necessary when considering their utilization. The features shown here apply to Inter-Com-Systems:

Talk via hand-set or call box
Call by button or dial
Unit mounting: Desk or wall set
Power: Battery or regular current
Master unit features:

Remote reply	Secretary transfer
Page all stations	Multiple-station call
Monitor sub-stations	Privacy control
Audible call signal	Visual call signal
Hold button	Caller identification
Audible call signal	Visual call signal
Remote reply	Privacy control
Service	Price

Dictating Equipment

157. The purpose of this equipment is to register the human voice on tapes, records or cylinders and thus save the time a secretary would normally spend while taking dictation. It is highly adaptable when clear, simple and repetitive statements are being dictated and when these conditions are met it can become a substantial time-saver. However, the device has limitations when voices are not clear or distinct or when the dictation is not straight forward such as when intricate reports or highly technical subjects are to be transcribed. The main features to consider are:

Recording medium: Magnetic - tape, disc, belt, roll
Permanent - belt, disc, roll
Recording time
Single/dual purpose machine: - dictate/transcribe
Microphone controls: reverse, recall
Transcribing controls: volume, tone, speed
Foot or hand controls: Alternative ear pieces
Conference facilities
Service/Supplies/Price

Duplicating Equipment

158. One of the most effective ways of overcoming the problems of handling office documentation is through the use of duplicating equipment to speed up the paperwork processes, to reduce clerical costs and to improve the service to the public. The use of duplicating methods has grown substantially in recent years and it is widely used when producing fairly long runs of document copies. It is less widely used in the systems area for a number of reasons. The costs of stencil masters and copy paper are higher than those of other processes when applied to systems work. Registration control is more difficult and the cleaning of masters for re-use takes more time than in some other processes.

Gelatime Hectograph Duplicating

159. In this method, the copy is placed on a master using a hectograph ink base. The master is placed in a machine and a hectograph image is transferred to a gelatin roll in the machine. Blank hectograph paper is fed through the machine and the image is transferred to the paper. From a systems standpoint, the method has some limitations since the master can only be used once and the number of acceptable copies is limited to about fifty. However, more than one master can be produced in the same writing so in some circumstances this method too can be used to advantage.

Fluid Duplicating

160. In this general duplicating class are the spirit duplicating methods and the direct fluid processes such as Azograph and Chemograph. The spirit duplicating method utilizes masters on which the images to be printed are placed on the back of the master by a reversed hectograph carbon sheet. The master is placed in the machine and copy sheets, lightly dampened with an alcohol fluid, are fed through the machine. Various qualities of masters can be used in this process providing up to 350 or more good copies.

Offset Duplicating

161. This process is an ink printing method and the term offset is derived from the fact that the master does not come into contact with the paper being printed. The image is transferred from the master to a blanked roll and from there to the copy paper. Images which are to be reproduced are drawn, copied or printed on the master using a medium with some type of grease base. Offset duplicators can use paper, zinc, or aluminium plates as masters depending on the number of copies required. In systems work, offset duplicating machines can be used to advantage because information can be added to masters after they have been used initially, or facsimile masters can be prepared during the copy run. In addition, blockouts, variable masters, imprinted masters, fold-overs, etc., can all be used.

Contact Printing

162. In contact printing, which is sometimes called white printing or the Diazo process, copies are made by placing relatively inexpensive translucent or transparent paper master forms on top of sensitized copy paper and exposing these to ultra-violet light. The image on the master form is transferred by exposure to the sensitized copy paper.

163. The features to be considered in these types of equipment are:

Electric or manual
Volume and volume control
Cutting stencils (typewriter and drafting)
Stencil re-use
Proofreading and corrections
Service facilities and supplies
Price.

Filing Equipment

164. Storage of documents, reports and correspondence is a vital necessity in any office. Files concerning the history of previous transactions, negotiations, agreements, personnel records, etc. are kept available to inform the organization about the past, so that present and future courses may be soundly determined. The most common types are file cabinets (with

2 to 5 drawers, letter, foolscap or document size), card boxes or cabinets (3 x 5, 4 x 6, 5 x 8 sizes) cardwheels and kardex. It is advisable to consider steel equipment for protection against fire. For addittional details see Chapter on Office Layout.

Furniture

165. Furniture is perhaps the least technical class of office equipment consisting mainly of desks, tables and chairs. In this category are also included bookcases, telephone tables, cupboards, hat-stands, floor rugs, etc. but these items are used more exceptionally than as a rule. A wide variety exists in size, shape, quality and appearance to meet the needs of economy, convenience, comfort and prestige. For additional information see Chapter on Office Layout.

Typewriters

166. The typewriter is one of the first office machines that appeared on the market. It was the invention that opened the door to book-keeping and accounting machines. The typewriter still fulfils its original function although many improvements have been introduced to make it serve a variety of conditions. Thus, there are portable typewriters, silent typewriters, electric typewriters, wide-carriage typewriters, etc. The following are the principal features that should be considered:

Manual	Electric
No. of keys	Language keyboard (French, English, Arabic, Amharic, etc.)
Line length	Carriage length
Half-space	Weight
Interchangeable carriage	Automatic Tabulation
Repeat actions	Type faces
Service/Price	No. of possible copies

CHAPTER VII

OFFICE LAYOUT

169. Office layout analysis and planning will minimize the time used in non-productive motions, reduce communication barriers due to poor space utilization, limit confusion in the flow of procedure and eliminate inter-office friction due to unfair distribution of space. The basic objectives of office layout analysis and planning are to keep the work moving forward and flowing in a continuous pattern as near to a straight line as possible and to keep the distance between process points or inter-related persons as short as possible.

170. Portraying the facts relating to office layout in chart form will produce most of the techniques required to develop a space arrangement that will provide maximum support for a system. Every "move" or "transportation" symbol on a chart should cause the systems analyst to consider some or all of the following items:

(1) A general layout of the entire operation with the flow of major systems and sub-systems;
(2) a detail layout of each office involved in a system;
(3) a floor plan of the office showing the utility and structural details;
(4) the distance in feet (or other suitable measurement) represented by each "transportation" operation;
(5) the type of work accomplished in each department and the flow of work between departments;
(6) the relative importance and priority of each operation;
(7) the volume and flow of documents;
(8) the number of persons performing various tasks in each unit;
(9) the kind, quantity and size of office equipment employed.

171. Layouts drawn to scale should be available in the Property, Public Works or similar departments, but if such layouts do not exist at the time of study, it may be necessary to have them made in order to obtain the basic measurements, shape and size of the structures. In fact, a general layout is an essential ingredient of all forward planning since space to handle the anticipated tasks is a part of such plans.

172. The first step towards developing a more effective general lay-out to support a new system is to superimpose the flow of the system involved on the layout. Certain minimum rules should be followed in preparing this general type of overlay:

(1) The flow lines should be drawn from major function to major function, not from section to section;

(2) the flow lines should follow the paperwork, not the material;

(3) only the major communications between departments should be shown on the chart.

The objective of the resultant chart is to provide a factual basis for the analysis of space in relation to flow of work and communications. It will substantiate the symbols which represent a move between desks or stations and suggest situations where a major space re-allocation may reduce the time consumed by the movement of persons, documents or material.

173. If it becomes advisable to plan major physical re-arrangements, this must take place with due consideration of all the other relative factors. As a start, the floor space of the existing layout should be tested against the space required in the proposed layout. If heavy equipment or storage is involved, floor load limits should be examined, utilities (electricity, water, etc.), permanent partitions, stair wells and other permanent fixtures should be noted as they also can have a bearing on the cost of re-arrangement.

Summary of Suggested Methods for Improving Workflow

174. (1) Place closely related divisions adjacent to one another;

(2) organize office groups so that related work is carried on around particular functions, such as personnel, accounting, stores, etc.;

(3) locate service units, such as stenographic pools and machine rooms, as close as possible to the work centres for which they do the greatest volume of work so that short and straight lines between these points may be drawn;

(4) dictating equipment may be used to reduce the travel time of stenographers and messengers;

(5) provide a sufficient number of main, intermediate and cross aisles to handle movement in the office. If persons must leave their work areas frequently, their desks should be on an aisle;

(6) provide a sufficient number of well-placed telephones to reduce the movement of people and paper;

(7) restrict private offices and partitions in the interest of flow of work;

(8) provide medium and large sized offices with two exits;

(9) situate staff who deal with the public near the entrance of a building and adjacent to a main corridor;

(10) arrange filing cabinets in rows facing one another, rather than in a single line. The practice of utilizing floor space adjacent to blank walls for long single rows of files is not generally efficient though sometimes necessary because of structural weaknesses in a building;

(11) accelerate internal transportation by the following means, where applicable:

(a) Provide aisles of sufficient width to accommodate supplies and mail trucks;

(b) provide sufficient doors into main corridors;

(c) number all corridor doors consecutively and clearly mark them to indicate room occupants. In a general office area, signs should identify the various groups (e.g. Registry, Personnel, Information, etc.);

(d) use dumb waiters, conveyor belts and pneumatic tubes where justified by special circumstances.

<u>Ways to improve space utilization</u>

175. Space may be conserved by following some very simple rules based on common sense. The following are but a few examples:

Private offices and partitions

176. The number and size of private offices and partitions should be kept to a minimum as they increase overall space requirements. Private office dimensions of 10 x 10 feet are sufficient in most cases. Advantages may be obtained by the use of semi-partitioning.

Desk layouts

177. Work areas within an office can be arranged so that the total aisle space required is reduced to a minimum. Space may be saved either by placing desks side by side or in pairs with the operators facing one another. For general clerical operations, pairs of desks side by side is usually the most economical way of using space.

Work surfaces

178. (1) Many office operations do not require 60"x34" or 60"x30" desks and space problems can often be solved by the use of smaller ones. According to studies in motion economy, work surfaces of 50"x30" or 45"x30" are sufficient for the average clerical worker;

(2) few clerical operations require both a desk and a table; one or the other may often be dispensed with without loss of efficiency;

(3) many clerks do not require desks; a chair at a sorting or collating table usually is sufficient;

(4) in some particular situations, custom-built desks and tables can lead to economies in floor space and improve the efficiency of operations;

(5) telephone tables can usually be dispensed with.

Filing and storage

179. (1) With the use of five-drawer filing cabinets, 58½ inches high, instead of the standard four-drawer type, a space saving of 20 per cent in some operations can be achieved without hardship to the majority of filing clerks. The normal file drawer stacking rules are:

(a) Active or current files - 4-drawer stacks
(b) Semi-active files - 5-drawer stacks
(c) Inactive files (dead storage) - stacked to the ceiling

A row of three-drawer filing cabinets can serve as a counter. Desk high two-drawer filing cabinets are useful especially in combination with single pedestal desks.

(2) Circular desks with sorting compartments of special sorting equipment, as compared to ordinary tables, are space savers besides being more efficient in other ways;

(3) open shelving may be used to replace filing cabinets, cupboards and bookcases where dust is not excessive and material is not confidential. Shelves should be adjustable for better use of space. As an alternative to open shelving, sliding panels may be used to keep out dust and still conserve space;

(4) unused equipment should be put in a storage area or declared surplus and disposed of.

Health and comfort standards

180. Adequate light, heat, ventilation, and cleanliness in all parts of the office permit the best use of space. Lifts, staircases and comfort stations should also be considered in connexion with space requirements.

Aids to improving flexibility

181. (1) Use movable partitions and equipment. Accordion-like folding walls may be used with advantage in conference rooms;

(2) place non-movable equipment in suitably prepared permanent locations, outside the general clerical area;

(3) standardize equipment according to type and size to facilitate interchange between office groups;

(4) use adjustable shelving;

(5) provide good lighting and ventilation and reduce noise to a minimum;

(6) obtain floors of uniform strength to withstand any arrangement of normal office equipment;

(7) for peak loads and anticipated expansion, leave larger spaces between desks to allow for extra work surface.

Security

182. Where operations involve the use of money, negotiable or valuable documents, their care or security must be taken into consideration. For instance, a cashier's cage should not be located close to an entrance or exit door. Provision should be made for permanent or temporary storage of valuables in safes, vaults or in locked cabinets, preferably made of non-inflammable material to prevent loss by fire. As this equipment may be heavy, structural factors should be considered.

Estimating Space Requirements

183. In estimating space requirements, the following steps are suggested as guides in making the calculations:

General clerical office (open space):

184. (1) Estimate the number of people who are to occupy each general office and indicate the size and amount of furniture each person requires;

(2) determine the size of the work areas needed:

(3) from the number of people and size of their work areas, compute the total work area;

(4) add 5 per cent to 10 per cent for cross-aisles;

(5) add 10 to 15 per cent for extra furniture and equipment except filing cabinets and for unforeseen situations or special purposes. An addition of 15 to 20 per cent should be made to the work area of each person receiving the public;

(6) check the resulting figure to see if it allows the health minimum of 60 square feet of floor space per person in open offices;

(7) add the space required for concentrations of filing cabinets to the previous total working area. The final figure obtained is the allowance which should be made for the open office.

Private offices (single occupancy)

185. Determine the number and size of private offices required and calculate total needs. (See also paragraph 176).

File rooms

186. Calculate file room space on the basis of number of file cabinets required. (See also paragraphs 164 and 179).

Storage, special equipment and miscellaneous

187. Establish the requirements for storage space, special equipment and miscellaneous areas according to actual measurements of these items plus a 10 per cent allowance for normal annual increases.

Developing a New Layout

188. In drawing up a new layout it is necessary to have a full knowledge of the space provided, of the requirements for the operations to be performed, and of the principles and standards of good layout. The same general procedure should be followed in the gathering and analyzing of data and the presentation of a new plan for a large or a small group. The following steps are suggested in developing a new layout:

(1) Prepare an accurate floor layout diagram of the present arrangement of furniture and equipment. A scale of $\frac{1}{4}$ inch or $\frac{1}{2}$ inch to the foot may be used, depending on the size of the area or the floor plans available;

(2) list the functions performed and their relative importance, the main methods used and procedures followed, the employees performing the various tasks, the relationship between the tasks and the workload. Make use of organization charts and lists of duties;

(3) convert the procedures into workload lines on the present floor layout diagram, showing the main paths of documents from desk to desk. Deficiencies in the present layout as to work areas and workflow will then become evident. The diagram with its associated notes provides the most useful source of information for the space layout planner. With this overall picture it is possible to determine what changes in layout are most urgently required and what is involved in such changes. It is helpful to find out from the people themselves what they think of present arrangements and what changes they can suggest. Factors affecting working conditions such as light, ventilation and noise, are usually of the greatest importance to them;

(4) obtain blank floor plans of the area to be occupied showing all fixed elements such as windows, doors, radiators, pipes, supporting beams and solid partitions. The floor plan should be checked against the actual area to ensure that it has been drawn to scale and is up-to-date;

(5) indicate adjustable features of the area to be occupied on a copy of the new floor plan, including movable partitions, lighting installations, power outlets and telephones;

(6) obtain where possible,architectural and structural drawings of the building which will indicate washrooms, corridors, stair wells, lifts and the building material used in solid partitions;

(7) group by function the employees who will occupy the new space. Estimate increases and decreases of staff in the foreseable future;

(8) list employees for whom private offices are essential and the size of the offices required;

(9) ascertain the furniture and equipment to be placed in the new floor area. Advantage should be taken of this opportunity to get rid of obsolete and surplus equipment. This is also the time to experiment with new types;

(10) obtain information as to floor loads for the new area, especially where heavy equipment and files are to be used;

(11) calculate space requirements for the various office groups to be placed in the new area, using as a guide the steps listed under Estimating Space Requirements. If the total area is greater than the space available, the allotment of some activities must necessarily be adjusted downwards;

(12) ascertain any future plans regarding the other parts of the organization. These might involve expansion, contraction, abolition, a change in functions or combination with other functions;

(13) make templates bearing each employee's name for all the furniture and equipment on the present layout diagram. The present layout diagram should then be pinned to a board and the templates secured in their respective places either with drawing pins or rubber cement. The simplest method of arranging a detailed layout is to use cardboard templates for furniture and equipment drawn to scale and placed on the blank floor plan. Colours can be used for a variety of purposes, such as to indicate various sections of the organization or different tasks;

(14) determine the most suitable location for the major functions of the organization on a copy of the new floor plan. Layout principles and limiting factors, as well as the use of area requirements already determined should be taken into account. The general flow lines and the main and cross aisles may then be inserted lightly in pencil;

(15) draw in the essential private offices and other partitions on the new floor plan, showing the swing of all doors;

(16) transfer the templates from the present layout to the new floor plan, arranging them according to workflow, adequate spacing and the other rules of good layout. The templates of furniture not found on the present layout must also be added;

(17) indicate required changes in partitions, telephones, power outlets and lighting on the new floor layout;

(18) discuss the layout with the supervisors concerned and obtain their acceptance;

(19) have the accepted layout drafted or photographed and the required number of copies reproduced.

Moving Procedure

189. In general, movement of a group to a new location should not begin until all required structural changes have been completed, so that there will be as little disturbance as possible to the work of the group. When re-allocations of space occur within an organization the expense and inconvenience of moving may be reduced by leaving furniture behind, where possible, and using that which is available at the new location.

190. Moves of any size should be made outside regular working hours. When a move takes place, staff members with copies of the present layout should be stationed in the area being vacated to direct the moving crews and to ensure that everything is properly tagged and taken away in the right sequence. Other staff members with copies of the new layout, should be stationed in the area to be occupied to direct the proper placing of equipment.

191. The following procedure applies generally to all layout changes:

(1) Identify all equipment that must be moved by assigning numbers to indicate the person to whom it belongs and letters to show the division, section or unit. The identification number should indicate the order in which the equipment should be moved;

(2) write the identification numbers on the required number of copies of both the present and new layout diagrams;

(3) see that the drawers of desks and file cabinets are secured and where necessary place the contents in special containers for transfer;

(4) prepare tags showing the allotted numbers and letters and attach them to all equipment, containers, and other material to be moved.

CHAPTER VIII

SOME PRACTICAL SUGGESTIONS

192. There are so many possibilities open to the application of O and M studies that it is only by inference that one can grasp the entire scope of this important function. O and M work consists of assignments undertaken to improve the structures, practices and procedures of government at whatever level a problem happens to be. It may embrace a wide range of units or again it may be limited to a single unit or a particular operation. If one were to give illustrations to convey the idea of the scope of O and M work it might be wise to choose assignments that are of the average type assuming that the imagination of the reader would enable him to encompass cases that can be much more complex and others that might be much more simple. It must also be remembered that O and M assignments do not only cover cases requiring corrections, adjustements or improvements but also the development of procedures to meet the demands of new policies or units. It is also possible that the advice of O and M may be sought to wind up the activities of units or the abandonment of policies no longer required.

193. To illustrate, some areas are indicated in the following pages where assignments might take place of a type that would be classified as average. Practical pointers will be given to assist O and M officers visualize what these assignments should involve, what questions should be raised, studies made and enquiries undertaken.

Records management

194. Records management is one of the newer administrative arts. Its development as a recognized technical area in the field of administration has only come about within the past twenty years. As a functional problem area, however, it has been the subject of management attention for a much longer period, at least since the typewriter and carbon paper became standard office equipment. Records management deals with one product common to all organizations, regardless of size, purpose or location - paper.

Management and control of the ever increasing bulk of paper has been a problem to all those concerned with efficient and economic administration.

195. Records are the memory of any organization as they serve to perpetuate or preserve knowledge of acts, events, or ideas. For our purpose, they may be defined as any written or graphic material related to the public business which reflects the activities of government, reports, legal documents, and other papers supporting or containing recommendations, decisions, actions or other administrative determinations. Publications however are not usually considered to be records. An important characteristic of records is that they consist of material that can be classified and arranged in a methodical manner for presentation and ready reference.

196. The management of records is no easy task although frequently it is not given the importance it deserves. Some registries have large accumulations of important records that need constant attention, classification, review and up-dating. The management of these records require the exercise of good judgement, the establishment of sound procedures and the training of staff so that the organization may rely on the creation and maintenance of files and especially on the fact that the records will be made available when they are needed. It would be a mistake to think that small organizations do not need the same services. There also, methods must be devised to give prompt attention, rapid movement, quick finding, safe storage and proper disposal of government documents and papers.

197. For purposes of convenience records may be kept or stored in three different types of places:

(1) Filing Unit - Records awaiting decision of officials may be kept in filing units which are usually located in sections. The records may be classified according to a self-indexing systems (alphabetically) in loose folders and kept in drawers with pending files. They serve only the unit keeping them.

(2) Registry - A registry could serve a ministry, a department or a division if the latter is large enough to warrant the full service of a centralized registry; otherwise, the unit would be classified

as a simple file unit. The records kept in the registry are usually records that have undergone the registry formality, that is, are fastened together in binders, registered, indexed, numbered, and the binders are stored in a classified order either on shelves or in filing cabinets. Inactive or dormant records are kept in the registry either in filing cabinets, shelves or vertical filing boxes. Registries, organized on a centralized basis, also render such services to the organization as the reception and distribution of incoming mail and the despatch of outgoing mail.

(3) Archives - Dead records of importance (records with legal, administrative, political and historical value) are kept in the archives. Many countries have two types of archives: ministerial or departmental and national archives.

Location of registry

198. There is no standard way of organizing registries and filing units that will serve all cases. They vary from department to department according to the nature of the work and the conditions under which the service must be given. Most registries however fall into two broad groups: centralized and decentralized. Neither centralization nor decentralization can be recommended as a standard policy to be applied generally. Centralization or decentralization of registry depend entirely on the size, location of offices, specialization of functions, etc. of the department or ministry.

Classification Systems

199. Classification has been defined in the Short Oxford English Dictionary as "a systematic arrangement according to a method or system". The choice of the right method or system is of the utmost importance in the establishment and maintenance of files. Too simple a system will sooner or later become incapable of further expansion; too elaborate a system is confusing to the unskilled user, and liable to be a hindrance rather than a help in locating material. The criterion as to what system to use should be the

speed and accuracy in which a paper on file can be found when wanted. The classification system should be built around the organization and functions of the office it serves, keeping in mind the present and possible future reference requirements. As these vary with different organizations and even between units of the same organization, no one standard system can be successfully applied to all installations.

200. Some of the classification systems commonly used are:

(1) Alphabetical (for simple installations);
(2) subject (the most usual system);
(3) numerical: serial, block, code, decimal, universal (for use in large installations frequently in conjunction with the subject classification);
(4) alpha - numerical (for use in large installations frequently in conjunction with the subject classification);
(5) geographical (of limited application);
(6) time or chronological (as a cross-reference).

Processing the Records

201. The following is a list of the various processes to be found in registry work:

(1) Incoming - (a) Receiving;
(b) sorting;
(c) opening;
(d) extracting and controlling;
(e) registering and indexing;
(f) routing;
(g) internal traffic (issuing & controlling);

(2) Outgoing - (a) Collecting;
(b) sorting;
(c) registering;
(d) consolidating;
(e) folding, inserting, sealing & stamping.

Retention and Disposal of Records

202. Planning the retention and disposal of files and records is one of the most important phases in the registry procedure. An analysis must be made of the material on file to distinguish between what is of permanent value, and what can be destroyed within an estimated period of time. In large organizations such as a government department or agency, the whole system will eventually bog down through the sheer accumulation of records without such an analysis followed by a planned programme of retention and disposal.

203. The planned programme of retention and disposal of records must include:

(1) Inventory: the actual physical listing of all the records maintained by the department or agency together with a collection of operational data concerning the records;

(2) Appraisal or analysis: the collection of all data concerning each particular records group and the preparation of preliminary retention schedules;

(3) Negotiation: the obtention of approval for retention schedules;

(4) Storage: the construction and arrangement of suitable storage space for inactive and dead records;

(5) Maintenance: the keeping up of the programme, ensuring compliance and monitoring the flow of records from the office to storage and eventually to its disposal.

204. Records may be divided into three main categories:

(1) Material without value, e.g. copies of acknowledgements, correspondence pertaining to closed matters, etc.;

(2) material with value which, in turn, falls with two categories:

(a) short-term value, e.g. current transactions or transactions that will be closed within a period of from 6 to 12 months;

(b) long-term value, e.g. having an expected interest life of more than one year. Some cases may be as high as 20 years. In this category fall personnel files (which should not be

destroyed until all possible claims from an employee have become non-existant. This is usually from 3 to 7 years after separation) and inspection and audit files which have considerable usefulness several years after the event.

(3) Material with permanent value such as draft constitutions, laws, state contracts, etc.

Filing Equipment

205. Equipment is important to records management for three reasons:

(1) Utilitarian. This equipment, if well chosen, will assist clerks reduce their motions and efforts and raise their productivity.

(2) Accuracy. Files and file control records maintained in a convenient and accessable manner will reduce the chances of error.

(3) Security. Proper equipment will safeguard records against loss by fire, piliferage and wear and tear.

206. Types of equipment required include:

(1) Envelopes;
(2) covers;
(3) folders;
(4) block-files;
(5) shelves, cupboards;
(6) cabinets with from 2 to 5 drawers;
(7) card-index and containers.

Government Supply Management

207. Supply management is not restricted to purchasing and storage; it includes all measures which can be taken in order to obtain the maximum use of money spent on supplies, materials, equipment and contractual services. Effective maintenance, limitation of stores investment, transfer and disposal of unused items, effective and economical transportation of goods received and goods issued and efficient planning of warehousing are all included in supply management.

208. In countries which depend greatly on long-distance supplies and foreign currencies, all activities regarding purchasing and storage have to be planned well in advance of the time when the goods are to be actually used. The following points should be included in most purchasing plans:

(1) The availability of funds (local and foreign);
(2) a complete description of the items that need to be purchased (quality and quantity);
(3) when will the items be required;
(4) methods of supply such as the use of centralized and decentralized warehouses, stocks at site of work, open-end contracts, etc.

Standard rules and regulations

209. In order to achieve the aims of efficient government supply management, there should be standard rules and regulations governing purchasing and storage to guarantee:

(1) the maximum use of the country's financial resources;
(2) efficient methods of purchasing;
(3) fair treatment in awarding contracts;
(4) the prevention of over-buying;
(5) that qualified technical specifications are always used;
(6) the standardization of items as much as possible;
(7) that rights and responsibilities of suppliers are made clear and effective.

210. To achieve the above objectives standard rules and regulations must cover clearly and in detail the following points:

(1) Modern storage buildings, adequate space and storage lay-out;
(2) the provision of separate bulk and issue stores to ensure prompt deliveries;
(3) modern storage accounting and inventory control;
(4) scientifically based maximum and minimum stores levels;
(5) disposal of surplus, obsolete and scrap items;
(6) proper maintenance devices.

Specification and Standardization of Government Supplies.

211. The most important factors contributing to the effectiveness, efficiency and economy of government supply management are specification and standardization of supply items. The formulation of easily understandable specifications and the establishment of standards will lead to good relations between buyer and seller and insure that both derive greater satisfaction from the purchasing transactions.

212. By specification is meant accurate detailed and clear descriptions of the technical requirements for materials, products, or services so there can be no misunderstanding as to what is required. A good description of an item usually includes drawings, dimensions, quality of materials which make up the item, tolerances, tests of strength, purity, specific gravity, colour, weight, performance, capacity, packing and shipping.

213. By standardization is meant the limitation of goods, equipment and supplies to the most essential and serviceable types, sizes and varieties of items. Standardization eliminates the purchase and storage of vast quantities of different sizes, colours, types and varieties of supply items. It not only reduces the cost of maintenance and over-investment in stores, but reduces the price of each standard item, minimize obsolescence and favours interchangeability. For instance, instead of ten types of cars and seven types of typewriters, the intelligent use of standardization will reduce these types to three and one respectively. The greater the quantity of each item to be purchased, the lower the cost per unit. The above example also applies to spare parts and supplies.

Centralization vs. Decentralization

214. The problem of organization of government purchasing and supply usually centers around the question of whether these services should be centralized or decentralized. The following may guide O and M officers in arriving at a solution after surveying the situation:

(1) Centralization

(a) Economy in handling large quantities; quantity discounts, reduced transportation charges;

(b) better storage facilities;

(c) improved purchasing or procurement skills: a central purchasing department by reason of a larger budget and establishment might afford better qualified staff than small and scattered units. Also, this type of organization might be able to afford representation abroad;

(d) better control through the use of punched cards or other types of book-keeping equipment.

(2) Decentralization

(a) Advantage of location: the goods are stored closer to the point of usage;

(b) more specialized knowledge of the goods used. For example, a ministry of health probably knows more about the drugs to be purchased and how to handle them than a central purchasing and supply unit.

(3) Combination of both

(a) Specialized articles such as drugs, school books, theodolites etc., could be purchased by the specialized branches and stored by them subject to a central clearance or control;

(b) articles of general use such as typewriters, desks, pencils, writing paper, dictionaries, trucks, automobiles, etc., could be purchased and stored centrally. The requisitioning ministries or departments to be issued as required or given a periodic quota to be stored locally;

(c) a central purchasing agency charged by statute to undertake all purchases for the government should consult and seek the advice of consuming ministries or department when drafting specifications or evaluating tenders or bids concerning articles that are the concern of special users. In this way, the technical standards can be maintained and a centralized control established at the same time.

Establishing a Central Payments Office

215. To make government payments to employees, pensioners, suppliers of material, equipment or contract services, social security beneficiaries, etc., a central payments office may be established to take advantage of volume production through automated data processing equipment, improved control methods and faster transcription when long payment lists are the case. Many factors must be seriously considered as the transition from a decentralized to a centralized system in the government will have far reaching effects and the cost of the equipment will be heavy.

216. The functions of a central payments office are to issue payment cheques, make deductions for pension and social security contributions, repayment of loans, income tax deductions, etc., and make records (personnel records, subsidiary accounts, etc.) in accordance with the authority received from the responsible hiring authorities. In determining the need for a central payments office, the advantages and disadvantages must be considered not only to be aware of possible criticism that new procedures may encounter but also to enable the systems to be as effective as possible in order to reduce the weight of the disadvantages. The following should be considered:

Advantages	Disadvantages
- Better co-ordination and Control.	- Communication problem - transport of documents.
- Economy of work and records, reduction of paper-work through uniformity and standardization.	- Possibility of universal breakdowns.

- Greater security, through a reduced number of people responsible.	- Reduced personal contact
- Specialization producing greater skill.	- The introduction of expensive machines may result in higher costs at first.
- Elimination of scattered and ineffective systems.	- Possible delay and resultant discontent if responsibility is not properly delegated.
- Introduction of machines will make it possible to have a greater volume production and reduce the danger of peak loads before pay dates.	
- Better analysis and comparison records will be made possible.	

Aspects to Consider

217. (1) Information required.

(a) Salary data: Personnel lists with types of pay (basic, over-time, allowances, incentive gratuities) types of deductions (social security, income taxes, repayment of loans);

(b) information on method of payment (cash, cheques, bank credits, assignments);

(c) paying agencies;

(d) paying dates and pay periods;

(e) sources of funds.

(2) Principal Information Media required

Salary advice form (universal document giving name, address (if necessary), identification number, credits, debits, adjustments).

Three Basic Systems

218. These are: manual, mechanical (book-keeping type machines) and punched cards or computors. The range of applicability is determined by the volume to be handled in a fixed period usually a month. The following table may be used as a guide:

up to 2,500 payments	-	manual
2,500 to 5,000	-	mechanical
above 5,000	-	punched cards or computors

219. Manual operations consist of simple transcriptions onto cheques with appropriate stubs or carbon copies which become vouchers and are incorporated in the accounting process. In a highly decentralized system the operations would likely be done manually except where departments or ministries could justify the use of more intricate methods by their volume.

220. The principal advantage of the mechanical system over the manual is the elimination of multiple writing of records and the consequent saving in time. Also a reduction in the error factor is made possible. Both require:

(1) Personal ledger cards;
(2) payrolls;
(3) cheques;
(4) listings or registers;
(5) records.

Punched cards or computors generally require:

(1) A basic record, on card or tape with name, address, department etc. and basic personal information;
(2) a change of information card;
(3) a deduction card or record;
(4) an earnings-to-date card or record produced by the paymaster.

(N.B. The preparation of a pay-register before the cheque is issued will provide the opportunity for a pre-audit).

Organization and Control of Transport Services

221. The O and M service is interested in all aspects of the organization and in all methods employed in the particular part of the public service with which it is concerned. Many services are taken for granted in an organization, such as opening and dispatch of mail, typing letters, posting to ledgers and the like. It is only too easy to overlook the advantages that would result from the more efficient running of such services. The principles governing the effective operation of all such services are the same: good organization, effective supervision and control, efficient methods, speedy and thorough investigation and rectification of breakdowns and faults in the system.

222. The enclosed lists contain a number of questions which an O and M officer, given an assignment to study the organization and control of transport services in a ministry, might ask himself and/or those engaged in various activities relating to transport. Many subsidiary questions will, of course, arise and in particular sets of circumstances different aspects of the problem will assume differing degrees of importance or require emphasis.

Transport of Goods

223. (1) Defining the Problem

(a) What is the description of goods? Should this be restricted or extended?

(b) What is the volume of goods that must be transported to and from each destination per week, per month, per year?

(c) Are there special times at which deliveries must be made? Are there peak periods of movement? Can arrangements be made to avoid strict time limits and minimize peaks?

(d) Are regular deliveries necessary?

(e) Are there any special handling problems because of bulk, urgency, fragility, dead weights, etc.)

(f) Can movements be eliminated or minimized by changing existing organizational or administrative arrangements?

(g) What are the present arrangements for the transport of goods? How much is transported by each means? Are the present transport arrangements satisfactory from the users' point of view? What are the costs? What are the difficulties?

(2). <u>Use of Public Transport Facilities</u>

(a) How far are regular public services (post, road, rail, sea, air) available to meet the needs? What are the costs (e.g. per ton/mile) of each form of public transport?

(b) What are (or would be) the disadvantages of using public transport?

(3) <u>Use of other Government Transport</u>

(a) What other Government transport operates over the same or similar routes?

(b) Is there spare capacity on such transport? Would it meet all or any of the needs?

(c) Would it be possible to co-ordinate the use of such facilities or services to meet the needs?

(d) How would the cost be shared?

(4) <u>Hire of Vehicles</u>

(a) Would it be possible to hire vehicles to meet all or any of the needs? (This is particularly worth considering when journeys are not regular or when peaks of movement occur at rather infrequent intervals).

(b) What would be the cost of such hire?

(c) Would it be possible to find economic loads for hired vehicles? Could use be made of return journeys?

(5) <u>Use of Ministry Vehicles</u>

(a) What ministry vehicles are available?

(b) How far can (and should) they be used to meet the transportation needs?

(c) Are they dependable?

(d) Can they be used to economic capacity?

(e) How many ton/miles per week, per month, per year does each vehicle accomplish?

(f) How do total average costs (e.g. per ton/mile) of transportation by ministry vehicle compare with costs of transportation by other means?

(g) What advantages are there in using ministry vehicles?

Transport of Passengers

224. (1) Defining the Problem

(a) Who is authorized to travel at ministry expense? Staff members (of what rank, etc.)? Their families (in what circumstances)? Visitors?

(b) What journeys are official? Home to office? Travel for recreational purposes? Visits to hospital, etc.?

(c) What is the approximate number of passenger/miles travelled, in each category per week, per month, per year? What is the shortest, average, longest journey likely to be?

(d) Are there peaks of travel over any route or at any time of the year?

(e) Are there regular journeys?

(f) Can travel be eliminated or minimized by changing existing organizational or administrative arrangements?

(g) What are the present arrangements for the transport of passengers? How many are transported by each means? Are the present transport arrangements satisfactory from the users' point of view? What are the costs? What are the difficulties?

(2) Use of Public Transport Facilities

(a) How far are regular public services (road, rail, sea, air) available to meet the needs? What are the costs (e.g. per passenger/mile) of each form of public transport?

(b) What are (or would be) the disadvantages of using public transport?

(3) Use of Other Government Transport

(a) What other government transport operates over the same or similar routes?

(b) Is there space capacity on such transport? Would it meet all or any of the needs?

(c) Would it be possible to co-ordinate the use of such facilities or services to meet the needs?

(d) How would the cost be shared?

(4) Use of Private Motor Vehicles

(a) Under what circumstances is authority given for the use of private motor vehicles on official business? Should this practice be extended or restricted?

(b) Is the use of public transport, other government transport and ministry vehicles, on the same or similar routes, considered before authority is given?

(c) Is there a rule that private vehicles used on official business are insured against third party claims?

(d) How are users reimbursed? On a per mile/km. basis? By an ad hoc or regular allowance?

(e) How is the mileage used on official business checked?

(5) Hire of Vehicles

(a) Would it be possible to hire vehicles to meet all or any of the needs? (This is particularly worth considering when journeys are not regular or when peaks of movement occur at rather infrequent intervals).

(b) What would be the cost of such hire?

(c) Would it be possible to use hired vehicles economically? Could use be made of return journeys?

(6) Use of Ministry Vehicles

(a) What ministry vehicles are available?

(b) How far can (and should) they be used to meet the transportation needs?

(c) Are they dependable?

(d) Can they be used to economic capacity?

(e) How many passenger/miles per week, per month, per year does each vehicle accomplish?

(f) How do total average costs (e.g. per passenger/mile) of transportation by ministry vehicle compare with costs of transportation by other means?

(g) What advantages are there in using ministry vehicles?

Official Vehicles

225. (1) Control Movements

(a) What arrangements are in operation for co-ordinating the movement of goods (and passengers) by official vehicles? Is there a vehicle pool in operation? What vehicles are (and should be) excluded from the pool? Are such vehicles also excluded from strict movement control (and should they be)?

(b) Is there a transport manual? Is it in enough detail? Are amendments and new instructions issued when appropriate?

(c) What central control arrangements are in operation? What powers have been delegated and to whom? Is everyone concerned fully aware of the extent and limits of his authority? Is there a despatcher system in operation?

(d) Are vehicle journey logs used? Are they always maintained up to date? Are chec.s made regularly on their accuracy?

(e) Is each vehicle in the care of an allocated driver? Should more use be made of this practice?

(f) What arrangements are in operation for replacing drivers when they are sick, etc.?

(g) Are there rules as to how many miles (or hours) per day a driver should drive? How is waiting time handled? Are vehicle journey logs regularly checked to ensure that these rules are observed?

(h) Can official vehicles be used for private purposes? What rules govern this? Is repayment required?

(2) Authorized Drivers

(a) What rules apply to the authorization of persons to drive official vehicles? Are they contained in the transport manual?

(b) What training is given to such drivers? Are they taught to maintain their vehicles? And to do running repairs?

(c) What checks are made to see that they remain fit to drive official vehicles?

(d) Are the causes of all accidents and breakdowns investigated? What action is taken if the driver is found to be at fault?

(3) Maintenance, Repair and Replacement

(a) Are vehicle maintenance and repair logs in operation?

(b) What steps are taken to ensure that all vehicles are regularly maintained and serviced at appropriate intervals?

(c) What arrangements are there for repairs in case of accidents, breakdowns or mechanical defects?

(d) Are vehicles regularly inspected by a suitably qualified official to ensure that they are in all respects roadworthy, safe and in good condition? What records are kept of such inspections?

(e) What criteria are there for establishing when a vehicle should no longer be used?

(f) How are vehicles which are no longer required disposed of?

(g) What provision is made for replacing vehicles after their useful life is over?

Travel Regulations

226. (1) The Form of the Regulations

(a) Is there a book (code, manual, etc.) of travel regulations? Or is the matter dealt with by circulars?

(b) Are the regulations amended as necessary and kept up to date?

(c) Who has copies of them? Are they easily available to all who might travel on official business?

(d) How are queries or difficulties of interpretation of the regulations resolved?

(2) The Content of the Regulations

(a) How wide do the regulations range? Is there a separate book of transport regulations covering the operation and control of official transport?

(b) Are there clear rules as to what journeys will be considered as official and what expenses are admissable? Are the amount of allowances fixed for different grades and different purposes?

(c) Are there rules relating for the use of public transport as opposed to official transport or private vehicles?

(d) Is authority necessary to use private vehicles for official journeys?

(e) Are there provisions for checking that official journeys by official or private vehicles are made by the most economical route?

Elaborating Administrative Manuals

227. One of the most frequent problems that management encounters is the difficulty of maintaining communications with the various levels. This applies equally to the dissemination of information about the policies to be pursued as about rules, regulations, privileges, responsibilities and general instructions. The use of administrative manuals can contribute in no small part to the solution of this problem. Organization and methods officers will frequently encounter situations in the course of their work where it will be obvious that the elaboration of the manual will resolve many problems concerned with communications.

228. To formulate valid criticism and make practical suggestions, O and M officers should understand the principles governing the elaboration and use of such manuals. A review of existing manuals of the organization as well as from outside will be helpful in giving ideas regarding their preparation, content, presentation, how to keep them up to date and how they should be used in practice. The following are intended to be guides towards this end.

Objectives

229. A manual obviously cannot cover every situation that might arise in an organization. It is first necessary to determine what it should attempt to cover, for instance, the indoctrination of new staff. In this case, it should concentrate on what new employees have to learn at the very beginning of their careers with the organization (history and general policy of the organization, hours of work, norms and procedures concerning correspondence, filing, messengers service, etc.). Other manuals of a more technical nature might be concerned with accounting and auditing procedures, personnel practices, travel regulations etc.

Types of manuals

230. Manuals may be of a general nature or published centrally for the government at large such as: A manual on purchasing practices and procedures which would guide all government activities in this field or a manual published by the Civil Service Commission outlining the government policies on recruitment, promotions, transfers, disciplinary action and retirement.

231. Other types of manuals might apply to a ministry or a department and are more specific although they also must conform to the general governmental policies. Examples of these would be manuals on the payment of social security benefits, the collection of income taxes, etc.

Contents

232. Obviously manuals must be written bearing in mind the type of persons who will be concerned with them. It would be a waste of time to write a manual in complex legal terminology if it is intended to be used by newly engaged or junior employees. The principle rules or guides to be followed are the following:

(1) There should always be an introduction to indicate why the manual is issued, who will be using it and how it is to be used;

(2) instruction or advice concerning the conduct of individuals or actions to be taken should have their sources clearly indicated by quoting, if necessary, the original statutes, laws, or decrees that govern the policies involved. This is to make doubly sure that the content of manuals does not contravene any major policy;

(3) it is important to explain in detail the organization that is responsible for the execution of a certain policy. For instance, a manual on personnel practices should include a description of the organization charged by statute to carry out the government's personnel policies (civil service department or commission, establishments department etc.);

(4) the procedures, systems or practices involved in the operations that are the object of the manual should be given in detail as this is the organic reason of the manual. For instance, if a manual deals with the payment of social security benefits it should describe, step by step, the various actions required to apply for benefit, how the means or work tests are to be applied, what forms are to be used, what follow-up is necessary, what control is made and by whom. Various orders or sequences may be followed in the deployment of this information:

(a) The chronological order or the order in which actions occur in practice;

(b) the functional order or the grouping of actions that pertain to a particular function, regardless of the time at which they occur;

(c) the organization order or the grouping of all the actions that occur in each unit, regardless of their chronological or functional orders.

It is necessary to choose one or another of these methods as a mixture of all three will be confusing. The one that has the closest relation to the object of the manual should be chosen and it is advisable to make a cross-reference index so that all matters can be reached from various angles.

(5) As most types of productions and performances have their standards it is useful to describe and explain these in a manual so that supervisors and staff can measure their own output against the standard. This produces an excellent and impartial criteria which can be used in cases of controversy or dispute and also be an incentive to achieve better results;

(6) it is essential to include a table of contents and where practicable an index.

Elaboration

233. The principal sources of information for the content of manuals are: the basic laws or decrees governing the subject matter, organization charts corresponding to the units under discussion, job descriptions, procedure analyses, forms, reports, bulletins and especially the opinions and comments of the unit heads concerned. To sift this information and appreciate its true value it is advisable to proceed step by step and prepare drafts and submit them for comments to a number of persons who by reason of experience and knowledge can suggest refinements and improvements. In this particular respect, the opinion of a legal branch would be most useful in avoiding serious mistakes later on. Special attention should also be given to the rules of literature, spelling and grammar. Charts, illustrations and appendices will be very useful.

Physical appearance

234. Although of less importance than the content, the appearance or physical characteristics warrant consideration also. Questions of paper, printing, size, colour and binding are among these. Overall dimensions of 9" x 6" are recommended as well as the use of loose-leaf sheets. A hard cover is advisable because of its lasting qualities. The most current printing type is Gothic or Sans Serif. Pages may be printed on both sides.

Page and Paragraph Numbering

235. As new pages may be inserted from time to time it is better not to number them consecutively but use instead the paragraph numbers as a means of identification. Paragraphs should be numbered in a sequence beginning with each chapter. The decimal system is advisable as it leads itself to greater expansion and flexibility.

Keeping the Manual Up to date

236. It is almost as important to keep a manual up to date as it is to produce it in the first instance. In a dynamic organization, changes, adjustements and improvements are introduced with more than less frequency and alterations to the information contained in manuals should be made without delay so the staff may act in accordance with the new policies or instructions without interruption. The advantage of loose leaf binders will become obvious when this problem is faced. It is far easier to remove and replace sheets than to make changes in a bound volume.

Use that can be made of manuals

237. Once approved and published, manuals should be distributed to strategic points in the organization so they may be consulted by the members of the staff who are required to do so. Heads of departments, sections and units should have copies for their immediate reference as well as libraries and reference rooms. Depending on the nature of each manual, members of the staff may share them with their co-workers. When this is the case, it is habitual to locate not less than one manual for each group of 5 employees with a minimum of one per unit.

238. Training makes use of manuals to a very large extent. Opportunity is taken when a new manual is published or an old one substantially revised to hold courses as a means to introduce it. Also, new employers participating in induction courses can use manuals as a part of the course material

and study their various provisions because this is where they will find how to do things and when to do them.

239. Manuals are used to settle controversies that may arise on jurisdictional questions or about performance standards or on the definition of responsibilities and privileges of staff members. Reference to a pre-determined decision contained in a manual is a very effective way by which disputes can be settled or confusion cleared up in an impersonal and impartial manner. Finally, manuals are an important source of reference either to refresh one's memory or to act as a check-list. It is by studying these volumes, as one would consult a dictionary, that one learns about the organization and operations of an institution.

ANNEX

BIBLIOGRAPHY

The following bibliography of selected authors on public administration will be useful to start building up reference libraries in O and M offices. It is possible that some of the volumes suggested are now out of print and other have been superceded by more modern textbooks. Volumes on public administration and articles in professional journals are continuously coming out so it is hoped this list will serve as the nucleus of O and M libraries which will grow in size and importance as the demand is felt and the supply of new and fresh material is made available.

1. A Guide to Modern Management Methods; Stryker, Perrin
2. A Manual for Administrative Analysis; Pfiffner & Lane
3. A Primer of Public Administration; Finer, S.E.
4. A Work Measurement System; US Bureau of the Budget
5. ABC of Supervision; University of Illinois
6. Administrative Control and Executive Action; Lemke, B.C.
7. Administrative Manuals; Grainger, K.E. - UN Publication
8. An Introduction of Public Administration; Gladden, E.N.
9. An Introduction to Orga..ization and Methods Service in the Government of Canada; Gardner, C. James.
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11. Appropriate Forms; B. Kronvall - UN Publication
12. Automation and Management; Bright, J.R.
13. Basic Issues in Public Administration; Rowat, Donald C.
14. Better Report Writing; Waldo, Willis H.
15. Cases in Controllership; Hasslez, Russell H. & Neil, E. Harlan
16. Central Administration in Britain; Mackenzie, W.J.M. & Grove, J.W.
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20. Communication Through Reports; Douglass, Paul
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52. Letters: A Guide for Improving Them; US Department of Agriculture.
53. Letter and Minute Writing; H.M. Treasury, O & M Division.
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