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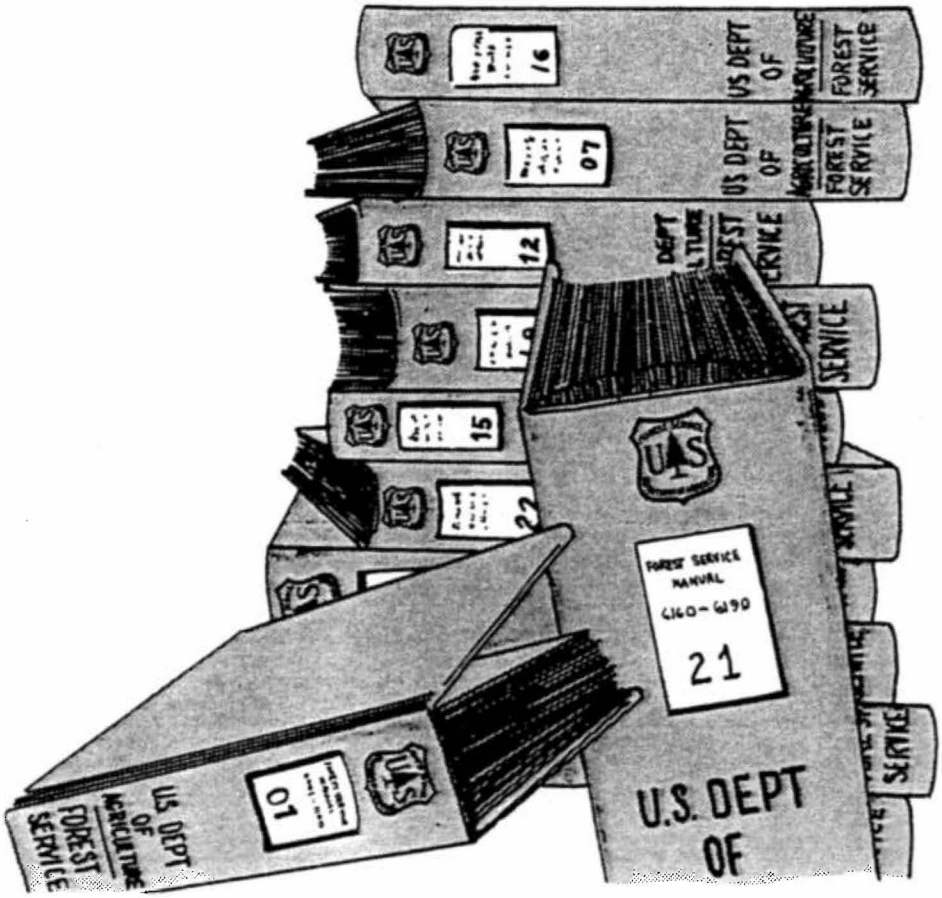
The Management of Policy and Direction in the Forest Service

Daina Dravnieks Ernst Valfer Appendix by Russel Stolins



THE MANAGEMENT OF POLICY AND DIRECTION IN THE FOREST SERVICE

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Appendix by Russel Stolins

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Management Sciences Staff

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ACKNOWLEDGEMENTS

We thank the almost 400 people at the Districts, Forests, Regions, Stations and Areas who comprised our questionnaire sample, for giving freely of their valuable time and effort for filling out the questionnaires. Additionally, we thank the over 200 participants in Regions 2, 5, 6, 8, the Southeastern Area, the Rocky Mountain, Southern, Pacific Northwest, and Pacific Southwest Research Stations, and the Chief's Office, for granting us interviews as well as answering the questionnaires. Finally, we thank Craig Rupp, Regional Forester, R-2, for taking a special interest in our study and making available to us his time and original materials.

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INTRODUCTION

Each is given a bag of tools,
An imposing set of books of rules,
Of it to make, ere life is flown
A stumbling block or stepping stone.
Adapted from R. L. Sharpe

Since Hammurabi, King of Babylon, established his famous code of rules in the 13th Century B.C., (and possibly even before then), institutions from kingdoms to businesses have institutionalized their code of behavior in more or less elaborate sets of written laws, rules, and regulations. This is so in spite of the fact that rules reduce flexibility and hence adaptiveness and creativity. But the benefits of insuring a more consistent mode of behavior and reduction of uncertainity in ever more complex societies have been found to outweigh their disadvantages. And so today we find that almost every business or public organization has a set of written rules ranging from partnership agreements to complete guides for decisionmaking in every facet of organizational life.

In the Forest Service we have rules, policies, and directions codified in external sources over which we have no control (e.g., the Code of Federal Regulations, Federal Personnel Manual, GAO Manual), our own Forest Service Manuals (FSM) and Handbooks (FSH) which are the major repository of continuing policy, rules, regulations, and direction, and in innumerable letters, memoranda, and Supervisor's Orders. By these means we try to guide and standardize our decisions, actions, and behavior under many predictable circumstances. We have found that no Forest Service employee argued the necessity of the existence of a large framework of guides and strictures. But such a pervasive and ubiquitous system of rules as the FSM and associated references naturally generate a goodly number of questions and criticisms throughout the organization. These arguments center around the questions of

adequacy, sufficiency, or excess of these guides and rules (i.e., the volume and content), their utility, and their management. Once established, rules and regulations tend to remain in spite of a steady flow of changes in personnel, environment, and conditions. Individual rules may become modified or, in rare cases, stricken, but the body of laws grows, and its philosophical and mechanical structure, like English common law, stands fast.

It is no wonder then that new organizational administrations perodically request that one or more facets of the main body of regulations guiding the organization be examined to assure philosophical and mechanical currency or make recommendations to update the system.

Thus in December 1977, the Associate Chief called for a major effort to update the Washington Office segment of the FSM within the following six months and to examine the feasibility of automating the production of the FSM at the Washington Office level. We do not know what portion of the W.O. Directives System was indeed carefully reviewed and updated during that period, but a careful analysis was made of the Forest Service Directives' production and distribution at the W.O. level and published by Administrative Management in April 1979 (Godsey, 1979). This thorough analysis focused entirely on the mechanics by which the W.O. Directives System is generated, produced, and distributed to the field. The report included 63 major and minor recommendations on how to write, produce, and distribute directives. The use of new equipment for speeding up and improving the mechanical creation of the hard copy for distribution to the field was one of the major recommendations.

The study did not concern itself with the distribution of direction at the field level, its impact and utility to the user and, only to a limited degree, with new technology which might allow for automated storage and distribution to all levels of the organization.

A field oriented examination of the management and utility of the means by which policy and direction is provided to all levels of the organization below the W.O. was subsequently assigned to the Management Sciences Staff (MaSS) for fiscal year 1980.

Statement of the Problem.

The laws, rules and, regulations governing the behavior, operations, and decisions of members of the Forest Service are presented in their original form in such basic instruments as Executive Orders and the Congressional

Record. These laws and rules are then defined, interpreted and expressed in more detailed directions in operating manuals issued by such agents as the OPM, GAO, OSHA, etc. Specific interpretations of these regulations plus additional guidance generated by Forest Service officials are reposited in the "Bible" of the Forest Service, the 22 volumes of the Forest Service Manual (FSM), and the 14 volumes of the Forest Service Handbook (FSH). Interim or short term direction is also often provided in letters, memoranda and, sometimes, oral orders.

The generation, distribution, and up-keep of these 36 volumes is a Herculean task. A possibly even greater task is placed upon the user of these rules who must first remember which actions, decisions, and behaviors are prescribed, or at least "guided", in one or another of these references. The user must then decide whether s/he remembers the guidance or prescription sufficiently well that s/he need not make reference to the printed word before taking the appropriate action. If s/he decides that a reference to a manual or other guide is necessary, the third task is to find the appropriate reference. Under these conditions a fourth task is imposed, that of interpreting the meaning of the reference and applying it to the situation at hand. These four processes can take an appreciable amount of effort and time and often require consultation with other individuals either at the same location or, more probably, at a higher echelon of the organization.

A general problem can be stated: Are the users of Forest Service policy and direction at levels other than the W.O. well served with the present methodologies of providing such information? If they are not well served, what are the major impediments and how might they be remedied?

Study Objectives.

The objectives of the study were:

1. To determinate the utility of the present means of providing policy and direction to line and staff of the Forest Service below the Washington Office level.

   Utility here is defined as:

   a. The usefulness of the content of policies and directions, and,

   b. The ease with which the relevant information can be obtained.

2. To make recommendations, if necessary, to increase the utility of the policy and direction system.
3. To give a first order evaluation of the acceptability and utility of major new technologies for the storage and retrieval of policy and direction in the field.

Study Methodology.

The basic methodology used in this study is the survey approach. Through preliminary interviews at one Regional Office, two Supervisor's Offices, four Ranger Districts, and one Research Station, variables relating to the objectives of this study were identified. A questionnaire and interview protocol were then constructed to probe in some detail employees' perceptions, attitudes, and actions relating to these variables. These questionnaires and interview protocols were then pilot-tested at another Regional Office, two Forests, four Ranger Districts and one Research Station. A revised set of questionnaires and protocols was then designed for a national survey.

The basic questionnaire used in this survey contained 34 questions, the majority were the simple check-off or fill-in type with a few open ended questions to elicit further information. Part II of the questionnaire probed the familiarity of each respondent to 30 specific policies and directives issued by the Washington Office within a six month time span before the questionnaire was administered. The policies and directions covered a horizontal slice across functions in the W.O. Not all functions were represented since not all had issued new policies and directions during that time period. The policies and directions ranged from such universal topics as the Host Program and use of over-time to more specialized directions in fire or engineering management.

Part III of the questionnaire varied between Regions, Stations, and Areas. It listed from 4 to 13 recent policies or directions issued by the specific Region, Station, or Area across functions. It attempted to probe familiarity with local policy and direction. No attempt was made to probe Forest and District familiarity with their own Supervisor's supplements or orders.

Distribution of Questionnaire.

The questionnaires were distributed as follows:

Regional Office

Deputy Regional Foresters

all Staff Directors or their acting

the person in charge of the Directives System

Supervisor's office

Forest Supervisor

Deputy Forest Supervisor

all senior staff, including Administrative Officer

Ranger District

District Ranger

senior staff

Administrative Assistant or District Clerk

Research Station

Deputy Director

all Assistant Directors

Operations Group Leader

three or more Project Leaders

S&PF Area

All Assistant Directors

select Staff Directors or their acting

field representatives in two or more field locations

Sample Size.

The initial version of the questionnaire was distributed to the Rocky Mountain Region, two Forests in that Region, four Districts in those Forests and the Rocky Mountain Research Station. Because the questionnaire was extensively revised after these pilot tests, not all the questions and answers from this initial version of the questionnaire were used in the final compilations.

The final version of the questionnaire was distributed to Regions 1, 3, 4, 6, 8, 9, and 10. Each Region made further distributions to two Forests in that Region and each Forest--except in Region 10--made distributions to two Districts on that Forest.

Only one Forest in R-5 (Shasta-Trinity) and two of its Districts filled out the final version of the questionnaire because personnel at the Regional Office and at two of its Forests were used in the initial exploration of the problem areas.

The Southeastern S&PF Area and the following Research Stations were also included in the questionnaire survey:

Forest Products Lab

Central

North

Pacific Northwest

Southeastern.

Southern

The total number of questionnaires distributed to all Regions, Stations, and Areas was 450. Of this number, 370 were returned (82%) and used in the analysis. A demographic breakdown of this sample by hierarchical levels, positions, and functions is presented on page 1 of Appendix A.

Interviews.

The interview format was a team interview. In the Washington Office, Staff Directors and their senior staff were interviewed as a single team. At the Regional Offices, the Deputy Regional Foresters and Staff Directors were interviewed in groups of four to six persons at a time. The Forest Supervisor and his senior staff were usually interviewed as a single team, likewise the District Ranger and his senior staff.

At the Research Stations the Deputy Director and Assistant Directors were usually interviewed as a team; the Project Leaders were interviewed in one or more sessions depending on their locations. All Project Leaders at one location were interviewed jointly.

At the S&PF Area the Assistant Area Directors and Staff Directors were broken into groups and interviewed separately; the field representatives were intereviewed on location.

Ten external users of our Directives System were interviewed on location in Macon, Georgia; Jackson, Mississippi; Berkeley, San Francisco, and Sacramento, California; and Portland, Oregon.

All interviewees, except those in the Washington Office and external users, had filled out the questionnaire prior to the interview. The questionnaire was used as base data for the interview.

Interview Sample.

Problem structuring interviews were held in the Pacific Southwest Regional Office, two Forests in that Region and four Districts in these Forests. Some preliminary interview topics were also explored at the Pacific Southwest Research Station.

Detailed interviews as follow-ups to the distributed questionnaires were held in Regions 2, 6, and 8, two Forests in each Region, and two Districts on each of the Forests. The personnel in one Forest in Region 5 (Shasta-Trinity), and in two of its Districts were also interviewed. Similar interviews were held at the Rocky Mountain, Southern, and Pacific Northwest Stations, and at the Southeast Area and two Field Offices. A total of 218 people were interviewed for this study. This includes ten external users. Most interviews lasted approximately 1 to 1 1/2 hours.

Data Presentation

Opinions, perceptions, ideas and suggestions reported in this study were, except where specifically noted, presented to us during the interviews and in the questionnaires. The authors did not attempt to validate the subjective data by a parallel collection of objective facts (e.g. by physically tracing flow patterns and flow times or on-the-spot monitoring of usage). Where necessary, the interviewees were challenged to justify their opinions and perceptions. Also, interview data collected at one level of the organization was presented for response at the next higher and lower level of the organization. Finally, we took the precaution of only reporting those perceptions and opinions that were voiced frequently and not convincingly refuted.

GENERATION OF FSM AND FSH

Policy and direction in the format of the FSM and FSH originates at the Washington level and applies to all organizational levels. Supplements are often issued at the Regional, Station, Area, or Forest level for guidance of their organization. Supplements provide interpretations or more detailed direction specifically applicable to the organizational unit(s) for which they are issued.

Symptomatic problems arise at the level of organization where they originate, and do not relate to the specific unit. Other problems apply to specific, functional areas without regard to the organizational level. Still, other problems appear to be random local phenomena.

Where possible, we have identified the organizational level or functional area which gives rise to the problem. Random or rarely mentioned problems are not mentioned in this report.

We sometimes received conflicting opinions about what is wrong with our Directives System and with our general system of communicating policy. When describing problems in the text, we left these contradictions intact, in order to represent the full spectrum of field opinions.

Management Problems Relating to Policy Generation

Many Staffs at the Regional and Washington level shared the same problems with generating policy:

Sufficient staff to do a good job of researching the costs and impacts of a proposed policy were not available. It was frequently suggested that the Chief and Staff should first determine if they want a given policy, and not allow a Staff to generate a policy of their own accord.

Policy statements and directions are more often written by detailers than by staff personnel. The field resents this because it results in policy written by anonymous persons who come and go, which makes it difficult later to get information or explantions. Such anonymous, depersonalized policy loses credibility.

Some W.O. Staff members are there for training while others for their expertise. Those in training should not write policy.

When detailers or Staff personnel write policy, control must be exercised before releasing it. Some Staff Directors read new or revised policy before releasing it for line officer approval. Others release it assuming it has

been carefully coordinated and is acceptable. When a Staff Director releases a policy for the Chief's signature, the chances are good that the Chief, or Deputy in turn, will sign it without necessarily reading it in detail. Control, in actuality, for determining whether a new policy is well-integrated into already existing policies, and whether it is actually needed, generally rests, therefore, with one or more staff officers rather than the appropriate line officer. This leads to a repeatedly expressed field impression that they are expected to implement too much policy and direction which is not sufficiently coordinated or thought through.

Most W.O. Staffs were concerned that those who write policy and direction do not have adequate time or knowledge of proper format and have inadequate additional help to do a good job. Most frequently they refer back to old directives and use them as models for new policy. This does not produce the desired result.

All Washington Office Staffs agreed that the major problems preventing the timely release of policy and direction have to do with long delays incurred both in the directives review process by other Staffs, and in the procedures of the Directives Staff. A document may sit on someone's desk for weeks before it is read and they feel they could get policy out much faster if such extensive reviews were not required.

Those Staffs which had full time coordinators for the Directives System had better control over their own and other referenced material. They reviewed new policy and made sure references were properly cited, checked for correct grammar, punctuation, and mechanical details. They checked the contents for comprehensibility and made sure everyone concerned had a chance to review the document. They generally worked closely with the Directives Group in Administrative Management and were familiar with the format requirements of the FSM.

Even though all W.O. Staffs were supposed to have at least a part-time Directives Coordinator, most of these Coordinators were too busy with their other assignments to devote much time to monitoring directives. As a result, no one was responsible for insuring that the contents of directives are valid and that the format is correct. Some Staffs admitted they were not familiar with Directives Management format requirements, which often resulted in draft forms of the documents going back and forth several times until they met specifications. Occasionally, W.O. Staffs complained that the Directives Management staff was inconsistent in their acceptance or rejection of

directives.

Some policy and direction requires funds for implementation not available now or in the foreseeable future. The field questions the necessity of such policy and direction.

Regional, Forest and District personnel felt that policy is often unsuitable for the specific purpose it addresses. A great deal of policy is developed by people who have lost touch with the reality of the field. They recommend recycling W.O. or R.O. Staff to the field so they will generate more realistic policy as a result of their exposure.

Internal and External Coordination

Most Staffs try to coordinate new policy with existing policy within their functional area as well as across functional areas. They admit that to do a thorough job they would need more time and help. As a result, a lot of policy is not well-coordinated even though it is sent for review to all Staffs believed to be relevant. Most feel that the review is not sufficient.

Some W.O. Staffs said they worked closely in coordination with other Staffs who generated policy relevant to both Staffs, while others complained of a lack of coordination between functional areas affected by new policy. Multi-agency direction was a problem with Staffs such as HRP and Personnel who get much of their basic direction from other agencies such as D.O.L. and O.P.M. The W.O. Staffs in turn interpret this material for Forest Service use. Several Regions complained that because of the long period of time required for policy changes to be made in the FSM, the externally controlling organization (e.g. Department of Labor) had, in turn, changed its policy again. This results in a lack of coordination between the externally issued policy and that appearing in the FSM.

In the W.O., several Staffs commented that jealousy and protectiveness over issuing directives does exist. This can interfere with coordinating policy among related Staffs. When policy is sent by one Staff to another for review, the comments by reviewing Staffs sometimes are not incorporated into the document since it is felt to be in the domain of the originating Staff. Coordination is therefore sometimes weak and can result in conflicting or inconsistent direction.

An example of cited conflict is watershed management direction issued by the FS and the SCS. But lack of policy coordination occurs not only between different agencies but also between different functions within the FS.

When a Staff rewrites only segments of an FSM policy section, it may sometimes contradict or make other segments obsolete. It is not always possible to revise all affected sections at once, and thus the field can be left with conflicting policy.

Areas such as Fiscal and Accounting, Personnel, and S&PF also have the problem of interagency direction coming from such sources as the Code of Federal Regulations, the GAO Manual, OMB circulars, and the OPM. Interviewees felt that too much material from these sources was included in the FSM, and that the material could be more effectively handled by cross-referencing. The Manual should repeat passages from other references only to the extent necessary to get the job done. Other than that, basic laws and references do not need to be repeated.

Directives Content

Several Regional Office Staffs expressed the opinion that frequent changes in the W.O. Staff result in generation of too much new policy. The impression exists that much new policy is generated because new people feel they have to leave an impression or need to do something tangible rather than because a real need for the policy exists.

All line and Staffs at all levels of the Forest Service agreed that there is too much "how to" direction in the FSM. They want to see it taken out of the FSM and put into Handbooks. Some Staffs do not feel they have enough "how to" material to fill an entire Handbook, and they would like to be able to publish such Handbooks under a multiple Handbook jacket. They felt at times the clearance procedures for getting a Handbook approved for issue were too restrictive. Consequently, some Staffs have decided to issue their own Technical Reports which function as handbooks, but are not subjected to traditional requirements or delays.

Some Staffs were not sure what level of expertise to address when writing FSM policy. They are not sure whether to aim at the novice or the more experienced user, nor were they sure what literary level to use.

Communications

In question 28 we asked whether respondents communicate sufficiently with higher levels on policies and directives to meet their needs (Appendix, D49-50). Roughly 80% of the Regional, Forest, and District, 96% of the Station, and 90% of the Area respondents indicated they had sufficient

communication with higher levels. Many of these answers, however, contained cautious complaints that their communications were limited and were not always responded to. Others said that limited communication was sufficient because further efforts would increase red tape and add new restrictions.

The complaints accompanying the "no" responses varied depending on the organizational level. Regions complained of having their requests and recommendations ignored by Washington Office Staffs, and that bringing problems to their attention earns them a bad reputation. They also complained that they did not get timely responses.

Respondents at the Forest level complained of the unwillingness of higher levels to listen to concerns at lower levels, and did not feel adequately included in policy formulation.

District level respondents also felt they did not have enough opportunity to give inputs while policy is being formulated. Some said that the pressure of their day to day activities did not permit them time for good communication, and when they did, higher levels "were not always listening". Communication between District and Regional Offices is discouraged, so District Rangers or their staff rarely call the R.O. Some Districts were in close communication with the Forest Supervisor's Office, especially if they were located near each other, while others complained of isolation. The W.O. and R.O., which generate policy, usually felt they had sufficient input from the field. The field, however, felt their inputs for new policy and direction are sometimes collected after policy has already been written and firmly established. They feel that asking for field comments is often only a formality, and the turnaround time is too short for appropriate and adequate responses. They voiced a high degree of dissatisfaction over the lack of feedback from higher levels why certain field inputs and ideas could not be incorporated into the new policy. Without appropriate feedback many feel their opinions were not considered and their input was assummed to be irrelevant.

When comments come back to the W.O. they are severely filtered. District Rangers do not write directly to the W.O. Their comments go to the S.O. The Forests' comments in turn go to the R.O., and finally the R.O. sends a summary to the W.O. With this much filtering of information, much gets lost and changed, and ultimately the W.O. does not get a good picture of what the field thinks and what its needs are.

Several Staffs at the W.O. indicated they did ask for field comments but sent their requests only to the Regional Offices. They left it up to the R.O. to seek comments from Forests and Districts. It was pointed out to us that one problem the field encounters is the short turnaround time for "reply due" requests. Most arrive a few days before and sometimes even after the due date. A "reply due" may be sent out from Washington with a 3 or 4 week deadline, but because it has to go through two to three levels before it reaches the designated person, it may arrive after the date has passed. This is evidently the case at most District levels. The impact on the Ranger is negative because he does not have adequate time to respond, and he feels his comments will not be taken seriously. They therefore conclude that responding to "reply due" requests on draft policy is a waste of time, and many consider it a low priority item. This results in a breakdown of credibility at lower levels of the organization.

Some Staffs at the W.O. did feel they got adequate feedback from the field on draft policy. One Staff holds two annual meetings during which they discuss needed changes and are able to get most of their writing done without using detailers.

Other Staffs hold frequent meetings of subgroups at the Regional level and thus have a satisfactory flow of information. Some Staffs feel they keep in touch through field visits, while others do not think that is enough. One Staff was even told they spend too much time and money sending out policy for field review.

Some W.O. Staffs spend years of effort revising whole sections of the FSM, and ask the field for extensive comments. Others find themselves making extensive policy revisions in response to new laws, and do so without informing the field why policy is being changed. They admitted that the reason the field complained so much is that they were not given background information about recent changes in laws, and saw the deluge of new policy as senseless.

A good example of the review process occurred when Coop Fire revised their policy. They asked for extensive input from all W.O. Staffs, all Coop Fire units, BLM, BIA, and States. They sought comments by "reply due" letters and by phone, and got all their input in 30-45 days. All responses were read and acknowledged, and everyone who commented was given feedback. They felt they did not have problems with field acceptance because of extensive field involvement during the policy formulation stage.

The Southeastern Area S&PF gets a great deal of feedback from the field via trip reports. This, we understand, used to be a common means of collecting information in the NFS as well as S&PF. These reports communicate subjective information as well as data, and if S&PF Staff perceive a problem in the field, they document it on the trip report. If the matter is very important, they will follow it up with a letter.

Generation of Direction Orally and by Letter

Ideally, all permanent policy and direction should be in the FSM, but because of the lengthy delays in preparing it for issuance, policy and direction is often issued informally by memorandum or phone calls. We found no consistency between Regions or Forests on the frequency, types of topics or general preference for issuing direction informally. Its acceptance by lower levels depended on individual preferences for formal structure.

Generally line officers did not mind direction in letter form, so long as it was followed up within a reasonable period of time by a FSM supplement. This, of course, does not always happen, and the letter-issued direction becomes a permanent reference. The major problem with oral and even letter direction is retrievability. When memory serves well and the specific topic, file code and approximate date of the memorandum is recalled, the direction can be referred to and used. When memory fails, search for appropriate policy and direction is limited to FSM, when no cross-reference to memorandum direction is kept. The utility of oral or letter policy and direction is therefore directly tied to its immediate recall.

THE DISTRIBUTION AND DISSEMINATION OF POLICY AND DIRECTIONS

Flow

The flow of policy and directions within the W.O and out of the W.O. is documented in the April 1979 report "Analysis of Forest Service Directives Production and Distribution" by Pamela S. Godsey. The distribution is made, as documented in the Godsey report, by mail or UPS destined directly to Regions, Stations, Areas, and Forests. These locations are then responsible for further distribution within their organizational structure. Regional, Station or Area supplements are directly distributed by these originators. Forest supplements follow the same pattern. Stations, Areas and Forest Supplements are numerically a small fraction of the Regional supplements, which in turn are significantly fewer in number than the policy and directions originating in the Chief's Office.

The distribution pattern appears to be standardized and well documented. But many field and staff employees at the Forest, District, Project Leader, and Field Office levels are completely unaware of the immediate distribution source and are unable to identify whom they would have to contact to find out the distribution status of a particular policy or direction item. They are, however, aware of what staff unit originated any particular policy or direction.

Routing

No consistent procedure exists for routing policy and direction to the appropriate recipients. The most common practice is for the mail room or receiving clerks to route the material according to file designation directly to the staff or line officer responsible for that functional area. These initial recipients then route information to other Staff who may benefit from knowing about it. Some people share information across functional lines while others are more protective and limit the distribution. It is not uncommon to find a District Ranger or an Administrative Officer at a Supervisor's Office who routinely scans all incoming policy and directions, but they are in the minority. Some District Rangers routinely route all Regional and Forest supplements to every professional and supervisor on the District. In Stations, distribution tends to be more limited; Washington Office policy and direction is restricted primarily to the line managers and the Administrative Staffs, with select distribution to Project Leaders. Station supplements, on

the other hand, are distributed to all groups within the Station.

Multiple file designations are sometimes used, especially in policy and direction transmitted in memorandum form, to insure a wider distribution.

External users (libraries, state agencies, industrial users, etc.) automatically received designated policy and directions from the Washington Office, Regions or Stations. If the demand arises, they will request additional material not routinely routed to them. External users are generally not sensitive to the time required for policy and directions to reach them.

Flow time

It is difficult to establish how long it actually takes for a policy and direction to reach its destination. The date on the cover letter or on the intermim directive is not always a reliable indicator of the actual date of release and shipment. Memoranda, by their more personal nature, tend to receive a higher priority treatment both in the mail room and in the in-baskets of the various readers. FSM Supplements are sometimes left unread in the baskets for considerable periods of time. Complaints about late receipt of policy and direction were, in fact, ubiquitous and sometimes appeared exaggerated. One District indicated that the distribution to their level can take up to two years. Yet it was reported that news about major new policies were often obtained from the local news media before official word filtered down through the organization. An example given was the establishment of the new grazing fees. One Ranger said that he was unable to knowledgeably discuss these fees with permittees who had read the news in the newspaper or heard it on the radio.

Question 1 of the questionnaire asked the participants at all levels of the organization to indicate whether they received policy and direction from the various organizational levels in a reasonable time, a little too late or much too late. Fifty percent of all respondents at all organizational levels indicated that they received policy and direction too late; but only sixteen percent of them reported that it was much too late. As could be expected, the percentage of late reports increased in proportion to the organizational distance from the issue point of the policy and direction. The percentage of late receipts of Washington Office policy and direction was reported to be: 55% at the Region, 64% at the Forest and 73% at the Districts. Late distribution of policy and direction from the Regional Office was reported to

be: 12% for Regional Staff, 55% at the Forest level and 69% at the District level. Timeliness of policy and direction from the Supervisor's Office on the other hand received generally favorable responses. Station distribution of policy and directions were rarely identified as being too late (16.5%). One fact mitigating the perceived long transit time for policy and directions is that staff and line officers are generally aware of relevant new policy still in the pipeline. Often they have participated in the drafting or at least the reviews of the proposed policy and are thus familiar with the effects it will have on their work.

To insure recognition of important new policy and direction, the originating Staff, especially at the Washington Office, often follow up with personal phone calls to the field location. By this means the written policy and direction is given emphasis and the field has been alerted to its arrival.

The file designation system used in all Forest Service correspondence and in the Directives System also frequently slows down communication. Many issues have no specific file designator. The closest file designator may be misleading and thus the communication or directive is routed through many hands to find the correct user. But even with specific designation, directives pass over many desks without being read.

Another identified severe time problem was the frequent arrival of a "reply due" memorandum either shortly before or even past the due date.

Question 2 of the questionnaire requested suggestions for speeding up the delivery of policy and direction. The question was unstructured to allow respondents to write their own answers. The majority of answers dealt with generalities calling for improving the distribution system or the draft review process. The latter would naturally not improve the flow time from originator to recipients but would decrease the total processing time.

In spite of the contacts between specialists and line officers at many levels of the organization, there remains nagging doubt at the field levels that the latest information in the Directives System or in their files is not current and cannot be relied upon, particularly on sensitive issues. Everybody knows of sections that have not been rewritten in many years and are believed to be obsolete. When there is considerable uncertainty, only the risk takers will make decisions on the available information, making their own interpretations as they see fit. More conservative managers will call their counterpart at the next echelon to verify their own information, or ask for a chain reaction all the way to the Washington Office. Most field units are

forbidden to make contact with persons two or more echelons removed. A District inquiry to the Washington Office, therefore, requires a minimum of three separate phone calls.

Most communication about policy and direction is neither direction giving nor receiving. It primarily clarifies, interprets, gives information, or analyzes. These are Staff functions and should be directed between staff officers point to point. No one argues with the need for policy and direction to bear the approval of a line officer and then be channeled from line to Staff. But the rigorous interpretation of the line to line communication dictum can lead to long detours and consequent time loss, when only staff people need to be involved.

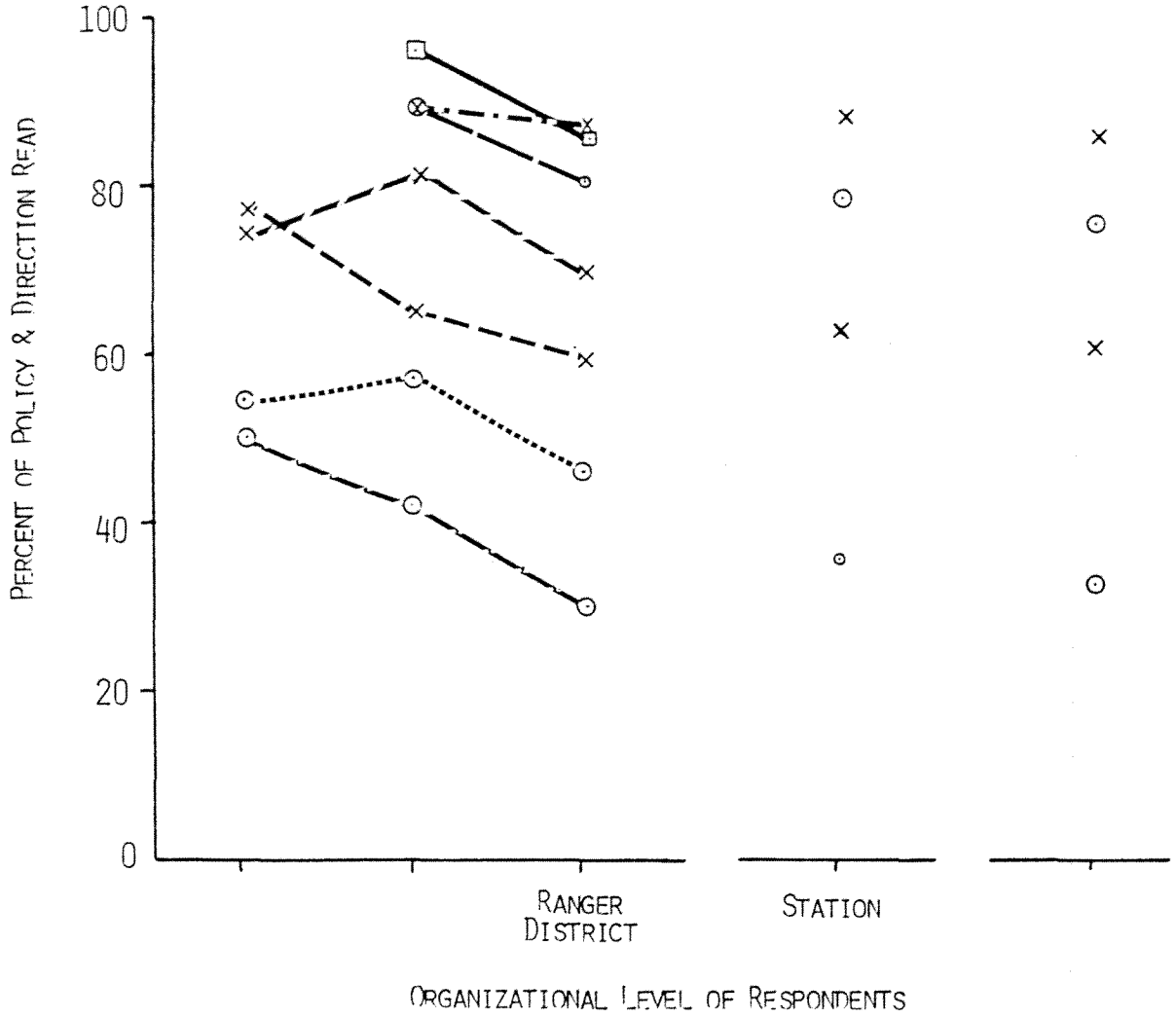
Who Reads What

There are four major determinants which influence to what degree a Forest Service employee reads a policy or direction giving communication that arrives at his/her desk. The first is the content of the policy and direction. If the subject or topic is relevant to the reader it will naturally receive priority attention. Urgency is of equal importance. High priority, indicated by an action due date, will receive favorable attention over communications without a due date. A third major determinant is the format of policy and direction. A letter or memorandum carries a more personal and immediate sense than the formal directive and, in most cases, will tend to receive priority attention over the formal directive. The fourth determinant is the authority that the originator or signer of the policy and direction has over the implementor or reader. The reader here thinks of two components: 1) the authority of knowledge vested in the person thought to have written the policy and direction, and 2) the authority of position of the signer over the reader. As a general rule on this issue, accepted authority decreases with the number of intervening levels between the signer of the policy or direction and the reader. The Chief's signature has considerable relevance at the Washington level, but much less at lower levels of the organization.

These relationships are supported by the data shown in Figure 1. The data comes from question 3 of the questionnaire. Within NFS, the Stations and the Areas, policy and direction given in letter or memorandum format invariably show a higher reading rate than that communicated in FSM or FSH format. The only exception is at the Supervisor's Office. Directive supplements and letters and memoranda signed by the Supervisor have the same reading rate.

FIGURE 1

PERCENT OF POLICY AND DIRECTION READ
AT VARIOUS ORGANIZATIONAL LEVELS



LEGEND

- SUPERVISOR'S ORDERS
- LETTER OR MEMORANDUM ISSUED BY SUPERVISOR'S OFFICE
- FSM OR FSH SUPPLEMENT ISSUED BY SUPERVISOR'S OFFICE
- LETTER OR MEMORANDUM ISSUED BY REGION, STATION OR AREA
- FSM OR FSH SUPPLEMENT ISSUED BY REGION, STATION OR AREA
- LETTER OR MEMORANDUM ISSUED BY THE WASHINGTON OFFICE
- FSM OR FSH ISSUED BY THE WASHINGTON OFFICE

With one exception, the policies and directions issued at any organizational level have the highest reading priority at that same level. The reading percentage decreases as the issuing level becomes further removed. At the Forest and District levels, the highest reading rate is for directions issued from the Supervisor's Office followed by Regional letters and memoranda, Washington Office letters and memoranda, Regional directives and finally Washington directives. The differences are large. Eighty to ninety percent of the Supervisor's direction is read at the Supervisor's Office and District levels, while only 30% of Washington Office directives are read at the Ranger District level. At the Regional Office both Washington and Regionally originated letters and memoranda are seen as equally meaningful and urgent, followed by Regional and Washington Office directives which are also seen to be of equal importance.

At the Station and Area level, locally issued memoranda and directives are read at a significantly higher rate than those issued at the Washington Office.

The above data conform to intuition in that proximate direction would be expected to have more impact than more remotely-issued direction. Less formal direction by letter, memoranda or oral instruction was hypothesized to be seen as more urgent and relevant than the more formal means of direction giving. This hypothesis was proven true.

The field estimates that between 15 and 20 percent of all the directions they receive come to them informally either by phone, letter or memorandum.

Similar patterns of readership of policy and direction communications are revealed in Part II of the questionnaire.

Twenty-seven recent policies and directions issued by the Washington Office in FSM format were presented and respondents were asked to indicate whether they had read it. Verification of their answers were obtained by key word responses.

The results are displayed in Figures 2A through 2F. Policies and directions have been categorized whether they relate to administrative or resource issues. The respondents from Staffs primarily responsible for implementing the direction were identified as primary users. Answers from line officers were also identified. All other respondents for that policy question were called non-primary users. Answers were plotted separately for line officers, primary users and non-primary users.

FIGURE 2A

PERCENT OF WASHINGTON OFFICE ISSUED ADMINISTRATIVE POLICY AND DIRECTION REVIEWED AT THE REGION, FOREST AND DISTRICT LEVELS BY INDICATED PARTIES

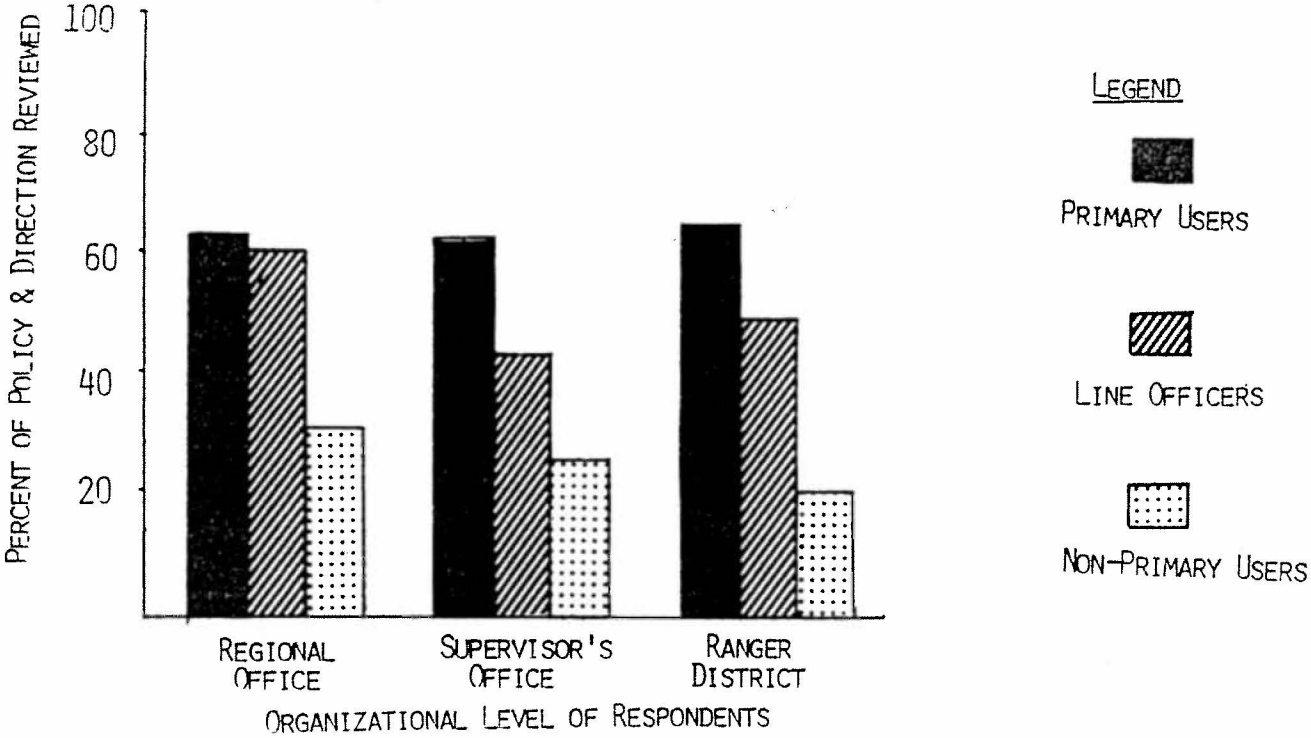
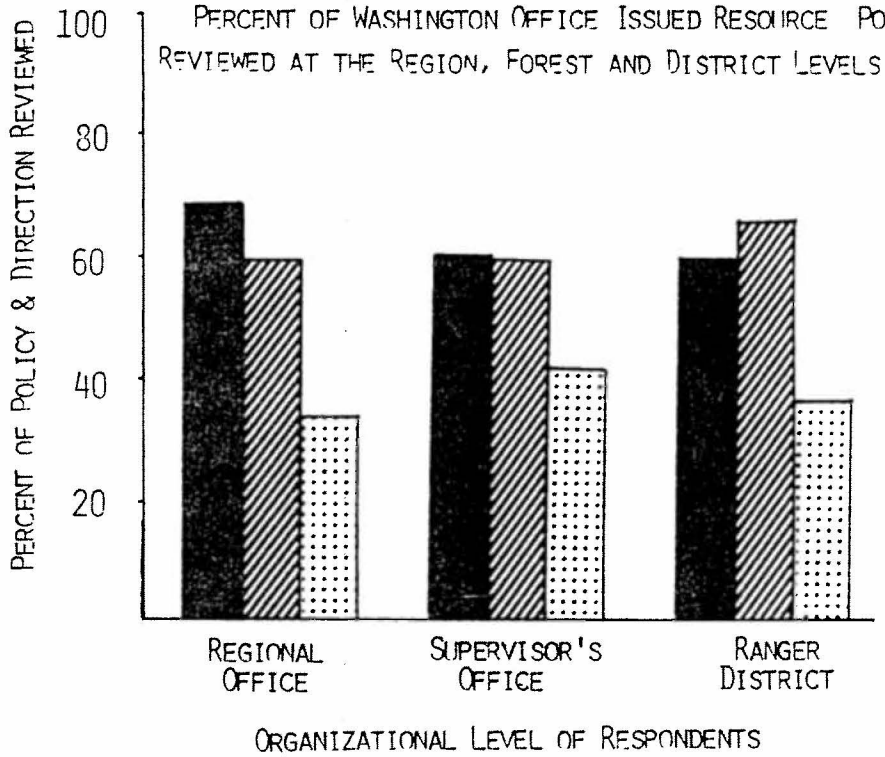


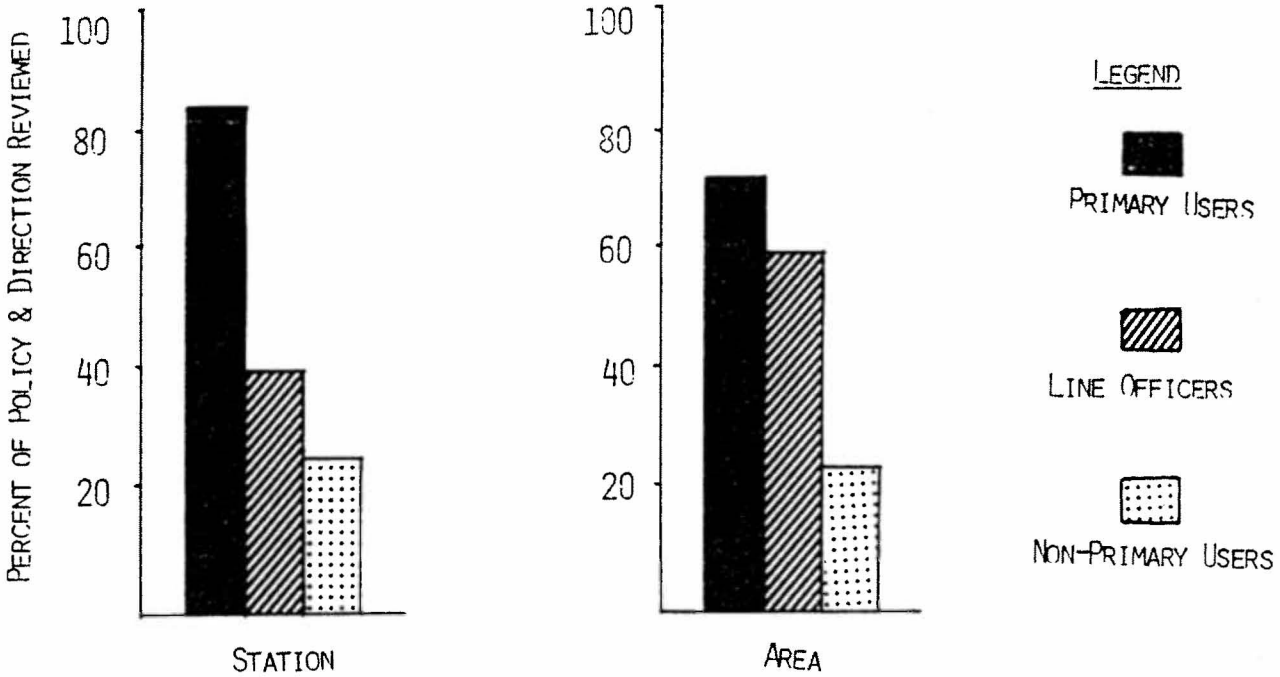
FIGURE 2D

PERCENT OF WASHINGTON OFFICE ISSUED RESOURCE POLICY AND DIRECTION REVIEWED AT THE REGION, FOREST AND DISTRICT LEVELS BY INDICATED PARTIES



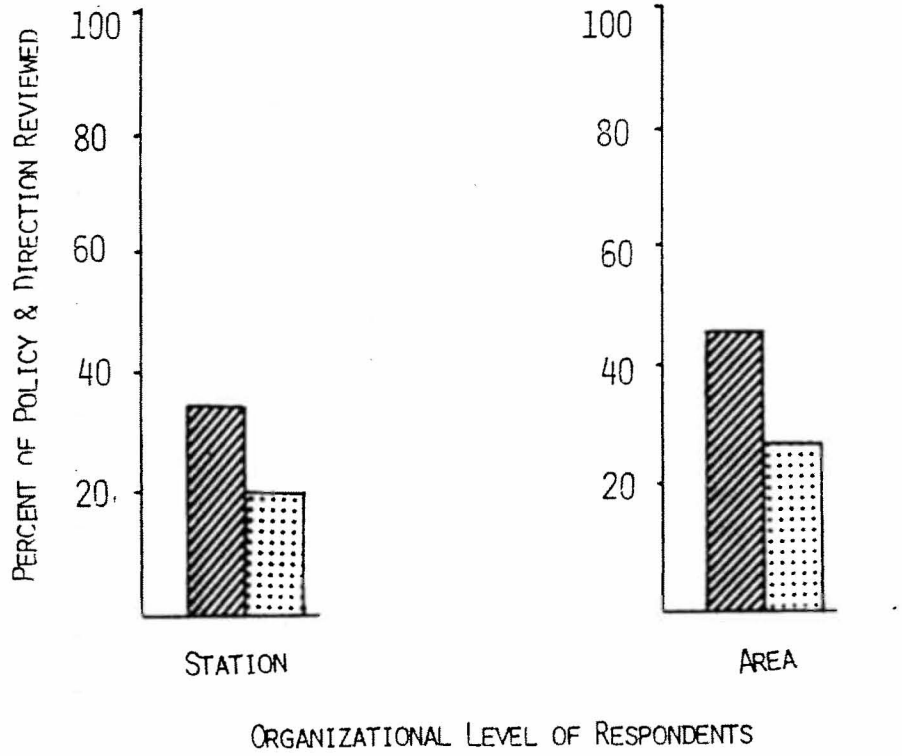
FIGURES 2B & 2C

PERCENT OF WASHINGTON OFFICE ISSUED ADMINISTRATIVE POLICY AND DIRECTION REVIEWED AT THE STATION AND AREA LEVELS BY INDICATED PARTIES



FIGURES 2E & 2F

PERCENT OF WASHINGTON OFFICE ISSUED RESOURCE POLICY AND DIRECTION REVIEWED AT THE STATION AND AREA LEVELS BY INDICATED PARTIES



One fact stands out in Fig. 2 A-F. For all organizational entities (i.e. Region, Stations, etc.), familiarity with resource or administrative policy is highest for the primary users, followed by line officers and, in third place, the non-primary users. An exception is resource policy at the R.O. (Fig. 2D). In all three NFS levels there is no signifcant difference between primary users and line officer's knowledge of resource policy and direction. They range between 60 and 70% (Fig. 2D). Non-primary users' knowledge is consistently lower, ranging from 20% to 40%.

When comparing administrative policy knowledge to resource policy knowledge, there is no difference for primary users in the NFS, as would be expected. Surprisingly, line officers and, not surprisingly, non-primary users are appreciably more knowledgable about resource than about administrative policies and directions.

For Stations and Areas the primary users' knowledge of administrative policy and direction is higher than for the equivalent NFS personnel; line officers and non-primary users are about equally well informed as their equivalents in NFS. We identified no primary users at Stations and Areas for resource policies and we found line officers and non-primary users in both units to be significantly less knowledgable in this area than their equivalents in NFS. This was expected.

The pattern of diminished familiarity with hierarchical distance from the policy issuing office, shown in Figure 1 is not repeated by this data. For administrative policy recently issued by the Washington Office, similar user groups in all NFS levels, Stations, and Areas have approximately similar familiarity. This also holds true for resource policies for all NFS levels.

A similar analysis was made for administrative and resource policy issued at the Regional Office. The results are plotted in Figure 3A and 3B.

Again, as in Figure 2, there is no consistent decrement in familiarity with organizational distance from the level of policy issuance. This is further reinforced when we compare Figure 2A with Figure 3A and Figure 2D with Figure 3B. There is no consistent pattern in familiarity between policy and direction issued at the Washington and Regional levels.

FIGURE 3A

PERCENT OF REGION ISSUED ADMINISTRATIVE POLICY AND DIRECTION REVIEWED AT THE REGION, FOREST AND DISTRICT LEVELS BY INDICATED PARTIES

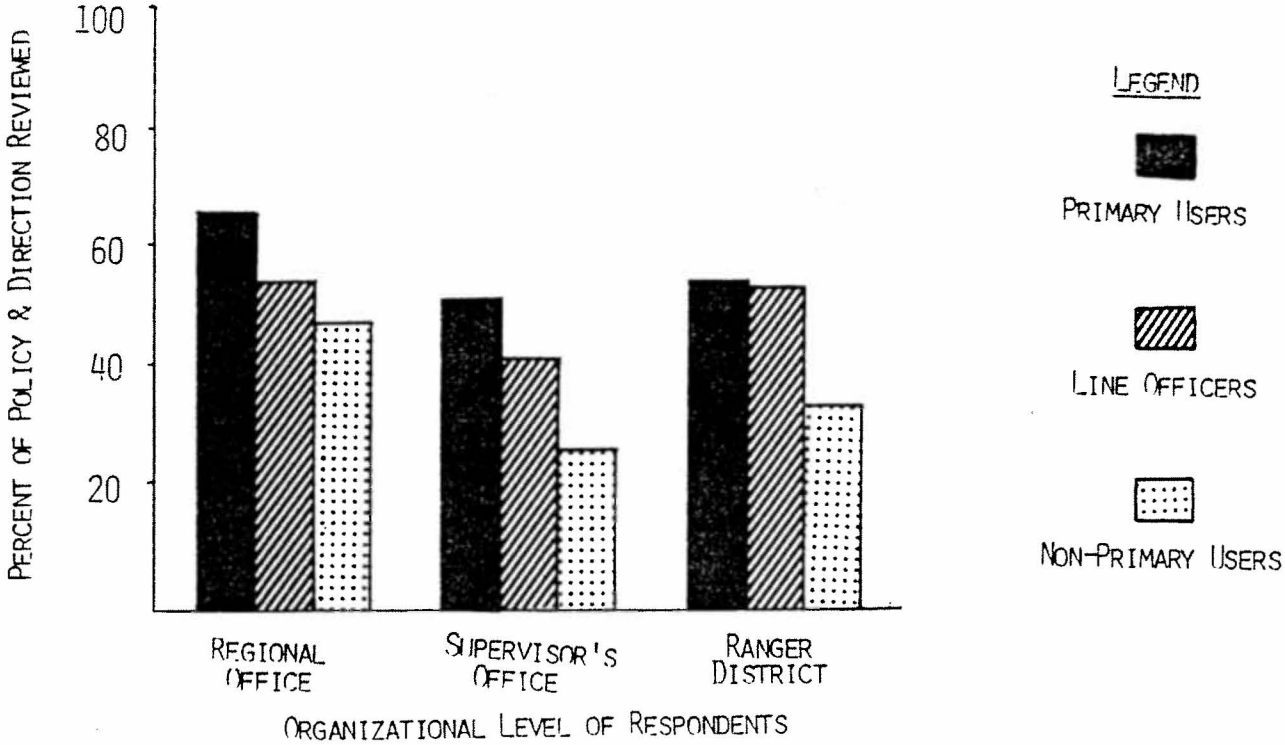
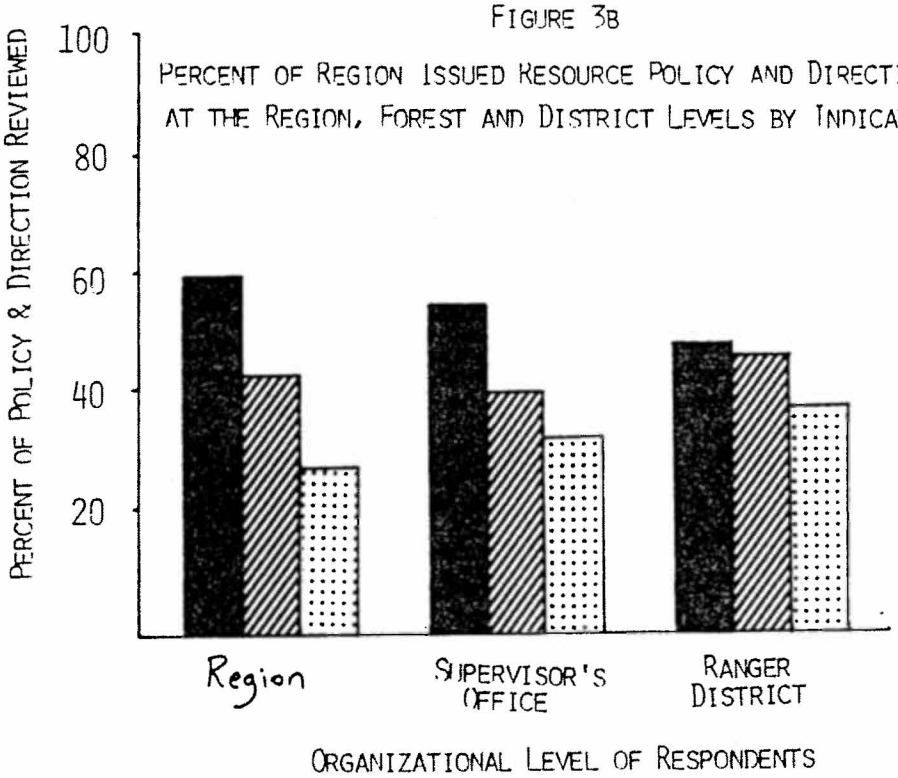


FIGURE 3B

PERCENT OF REGION ISSUED RESOURCE POLICY AND DIRECTION REVIEWED AT THE REGION, FOREST AND DISTRICT LEVELS BY INDICATED PARTIES



Updating of FSM

The updating and upkeep of the Directives System was a frequent topic during the interviews. Some respondents identified updating as the number one weakness of the present Directives System. All indicated that the update frequently lags. Most of the lags were attributed to the delay in rewriting obsolete sections. One example given was the policy and direction on electronic site fees which was to be revised by 1974 when it was five years old, and which had still not been revised by 1980. Another previously mentioned update problem relates to the long flow time from originator to user. Electronic mail, as discussed below, could eliminate this problem, but will not eliminate delay in rewriting.

Amendments to the Directives System are accompanied by a cover letter which explains the purpose of the amendment. Many field personnel either do not read or understand the cover letter. It was reported that many people still feel obliged to read the whole amendment or revised directive to find out whether it concerns them.

Some Forests and Districts reported that the upkeep of the FSM is a low priority job performed whenever there is time to spare. It therefore rarely gets done on time. This contributes to the outdated character of some sections of the FSM.

At the time of the study interviews, many FSM users did not know the expiration date for intermim directives and for policy and direction issued in memorandum format. Since then the limited life of interim directives has been redefined but the authors do not know how well this is known in the field.

General rules exist for file destruction or storage of memoranda and letters. These were reported to range between one to five years. But general rules are generally not followed. There appears to be great uncertainty about the life cycle of memoranda-formatted policy and direction in many organizational units, especially at lower field levels. The life cycle of a memorandum is equal to the memory span of concerned employees. If they remember the existence of the memorandum, it remains the valid reference. We came across one District Ranger who kept a file in his desk of memoranda dealing with his pet policies. Unless specifically cancelled, these memoranda were assumed to be valid indefinitely.

A senior Staff member at a Regional Office lauded the benefits of a slow and inefficient updating procedure for Policies and directions including the FSM. He reminded us that the Forest Service is held tightly in the spiderweb

of its directives, that efficiency of operations requires a degree of stability, and that constraints to upsetting that stability thus tend to help improve efficiency. He therefore suggests that there is considerable advantage to the slow process of updating and communicating changes in rules, regulations and direction. Any modifications which would speed up the process would be counterproductive to the efficient operation at the field level. The field would need to be in a constant state of flux and would never have time to adjust to any one set of directions. At the core, this is one of the national arguments against the proliferation of government regulations.

New Technology

The distribution and updating problems of the present system have led to a search for a technological solution. Two technological alternatives are frequently identified: microfiche and computerized storage and distribution. While many people voiced some reservations about changing to a new medium, remarkably few respondents were opposed outright to a change in system.

Administrative units whose direction comes primarily from sources external to the Forest Service, see less need for change in the Forest Service Directives System than the people whose policy and direction references are primarily contained in the FSM or FSH. These external directions are not directly quoted in the present Directives System, and would not be expected to be entered onto the microfiche or computer except as references.

Microfiche

The advantages and limitations of the use of microfiche for directives management have been well documented on pages 42 through 47 by Godsey (1979). In addition to Godsey's well documented problem with reading microfiche, there is the added inability to "browse." As one Ranger stated: "Everyone on the District enjoys browsing through the FSM, they don't only use it when something specific must be looked up. They would not browse through a microfiche version. This browsing allows them to come across a lot of incidential information--just due to curious wandering through the Manual."

We fully concur with Godsey's analysis and feel that the investment in direct and indirect costs for such a change are not warranted in light of the limited improvements over the present system and that for this particular application microfiche would be only an intermediate solution, already technically obsolete.

Computerized Storage and Distribution

Technology is readily available to further automate the composition and distribution process. Godsey (1979) explored the options of OCR scanning and word processing for camera copy production in the Washington Office. This study therefore made only a cursory examination of the potentional for extended procedures primarily as seen from the field point of view.

Such a procedure visualizes the storage of the Directives System, probably including the Regional, Station, Area, and Forest supplements, on computer discs in a dedicated mini-computer with direct telecommunication access to every Region, Forest, District, Station, and Area. New entries or changes to the disc would be made from word processing type input terminals at the Washington Office, Regions, Station, and Forests with appropriate entry control security. Extensive indexing and cross-referencing is possible and would be stored on the disc. Output would be by CRT and/or printer. Users could call for display or a printout of items of interest to them. At appropriate intervals (e.g., bi-weekly or monthly) an update notice or listing could be automatically distributed to all field consoles.

Advantages and disadvantages of such a system, primarily as seen by the field, are discussed below.

Computer Facilities

Adequate input and output devices are not yet available at many Supervisor's Office and Ranger Districts. Where computer facilities are lacking, trained personnel are also generally not available.

Another technical concern voiced by some field personnel are the consequences of equipment or telecommunications channel breakdown. Such a breakdown would be most critical when an individual desires to look up a directive with which s/he is not familiar and for which there is no readily available desk copy. A lengthy facility breakdown could also be critical when distributing crucial updates.

Computer Access

One of the major concerns expressed at all field levels is the need for ready access at their organizational unit to the terminal, and central processing and storage. Reference to the Directives System usually is time dependent in that a significant delay in access could inhibit, if not stop, the continuation of the work related to the inquiry. Ready access requires a

dedicated facility at the central storage and processing locations. It also requires a sufficient number of I/O devices at the field locations to permit users to make their inquiries and to obtain their output as needed. Such capability is generally available at Regions and Stations, but not necessarily at Forest and Districts.

A few users indicated that their needs would be met if they could obtain a display or hard copy of policy and direction whenever necessary. The majority of field personnel visualized that they would print out, for their own desk use, those sections of the Directives System for which they have frequent and repeated need. Since the present routine mail distribution of FSM updates to all file locations would be eliminated as part of the raison d'etre of the computerized system, the onus for assuring the currency of their own in-desk version would rest with each user. If users were not disciplined sufficiently to carefully scrutinize the periodic update listing and then obtain the update printout for their in-desk reference use, one of the more significant advantages of the computerized system version, would be lost.

Acceptance of New Technology

Personal objectives or anxieties related to the use of computers for directives management were relatively modest, possibly because computer use is by now widespread in the Forest Service. The expressed reservations were generally structured around the technical problems already discussed above. These included: breakdowns, the likelihood of hardcopy build-up, errors in computer programs, and hard-to-read copy. Very few people admitted to a personal discomfort with computers as such. Those who did focused on the computer as a symbol of an impersonal organization and that computers are tools by which organizations create and enforce centralized control. One party at a Forest expanded on this topic by suggesting that computers "orient people away from their creative, professional orientations and provide cookbook solutions. They tell professionals what and how to do it. I don't like the idea." But such critical distrust and anxiety of computer use seems to be rare today.

A more objective concern derives from the potential efficiency of a computerized Directives System. Because such a system makes additions, modifications, and distributions easier, some interviewees felt that it would therefore contribute to an increase in the volume of directions generated. This type of reasoning also proposed that one of the safeguards against hasty

and overzealous creation of new policy and direction is the present slow processing time, which inhibits the generation of new policy and allows for reflection and modification before issue. To decrease the delay might lead to an increase in volume and, equally painful to some observers, less well deliberated policy and direction. One could argue that the distribution and update system does not change the controls exercised on the generation of new policy or on the editorial process. But we must admit that people feel more pressured if they know that controls, in the form of policy and direction, can be rapidly and "impersonally" exercised.

Cost

No attempt was made to obtain costs more precise than within an order of magnitude. The costs of installing and operating a computer system for directives management is a function primarily of the number of simultaneous users who could be expected to demand access to the central processing unit. This determines the tele-communications network costs. If we assume 1,000 inquiries per day nationwide, lasting ten minutes on the average, and peaking during the two mid-morning and two mid-afternoon hours, we obtain an average peakload of forty simultaneous uses. This, according to knowledgeable sources at PSW, would require a telecommunication network costing approximately $400,000 per year. If the average peakload increased or decreased by a factor of two, the telecommunication network charges could be expected to change proportionately.

The Directives System and related index and cross-references would require one medium or, possibly, large disc storage and drive costing approximately $30,000.

A necessary dedicated facility could be in the form of mini-computers obtainable for approximately $200,000. The necessary software package is probably available but would most likely need to be modified. Its cost is unknown.

Operation at the central processing unit would probably initially require two or three people and could, after debugging and run-in periods, be reduced to one person at approximately $20-25,000 per year.

The estimates of annual operating costs (including depreciation of purchased equipment) runs from approximately $400,000 to $900,000 per year depending on the average peakload of simultaneous users. This does not include provision of input/output devices to all participating units. This

rough estimate also does not include the conversion time from the present printed copy to computer storage. Such conversion is not possible by an optical reader because the print and format of the present Directives System could not be read, as far as we know, by available OCRs without extensive and probably impossible translation problems. Furthermore, the present OCR equipment is, according to our sources, not very reliable. Conversion would therefore require retyping and formatting into the word processer which, for a different application, was estimated by Godsey to cost up to $60,000. This estimate was only for the Washington Office Directives System. A cost of at least an equal order of magnitude would need to be incurred by the Regions, Stations, and Forests for converting their supplements into the central processer.

From this discussion it appears that the technological jump to a computerized process for the Directives System requires a moderately high initial investment and a fairly high annual dollar outlay. The savings in time to communicate new policy and direction, in manpower to process and store the present Directives System, and in storage costs would have to be high to offset these costs. These savings were not calculated for this study because it is assumed that under present conditions the above investment is not feasible. Should this assumption prove false, then it is recommended that Administrative Management, possibly in collaboration with the Management Sciences Staff, make a detailed cost and benefit analysis of conversion of the Washington, Regional, Station, and, possibly, Forest Directives Systems to a computerized process.

GENERAL USEFULNESS

Just as Agency personnel accept the necessity of policies, guides, rules and directions, they also recognize the need for various formats for channeling these controls. Policy, tradition and practice have determined the usage of each channel. But this predetermination is not absolute. There are many occasions for choice.

In this chapter we examine how the use of the various channels impact the field, their relative effectiveness as a communications device, and suggestions for increasing that effectiveness.

FSM

From questions 5 and 30 and from our field interviews, the general consensus emerged that the FSM is necessary as the primary repository of policy and direction. As a basic policy instrument, however, it has become too procedural to be fully useful. Many feel that the FSM is needed more at the Forest level where there is little or no direct access to experts, whereas at the Regional level it is used less frequently because questions are often settled by direct communication with the appropriate Washington Office Staff. Staff Directors in the Regional Office rely mostly on their memory and refer to the Manual only when problems arise. The inducement to look something up is prompted mainly by the employee's fear that they may face trouble if they do not. People frequently keep desk copies of those sections of the FSM relevant to their area of responsibility. They do not update it regularly, but they feel they generally have the latest information.

Question 30 asked whether the Forest Service Directives System presents the necessary policy and direction to the satisfaction of the respondent. We classified answers by function across all organizational levels (Appendix, D52-53). The highest satisfaction rates, by functions, were reported by: Engineering (50%); F&A (50%); P.M. (44%); Fire (38.5%); and Research (35%). Overall, 26% of the 370 respondents said that they were satisfied with the utility of the Directives System. The greatest dissatisfaction was reported by line officers. Forty percent of them answered that the Directives System did not meet their needs.

When arrayed by organizational levels, the highest satisfaction rate was reported by Stations (36%), followed by Areas (31.5%), Regions (27%), Forests (25%), and last, the Districts (18%).

None of these satisfaction rates exceeded 50%. But if the "more or less satisfied" answers are added to the fully satisfied answers, we find that no functional group or organizational level was below 60%. With the exception of line officers, Wildlife and the Human Resources function all other classifications were satisfied at the "more or less" or higher levels at 70% or better. Considering the great number of expressed concerns and complaints, this is a good showing of general satisfaction.

FSM Volume and Detail

The most common criticism of the FSM relates to its excessive volume. Excessive volume in this sense has two attributes: perceived unnecessary policy or direction per se, and unnecessarily detailed instructions within the necessary policy. Unnecessary policy, as discussed under policy generation, is seen as a costly exercise in central control. It is not responsive to local conditions and inhibits initiative.

Field people felt frustrated that authority for certain activities such as timber sales, work closures, space leasing, and fire action guides was truncated. They disagree with the need to set such low limits on their authority, and were frustrated because they did not understand the reasons for it. They would prefer to have more authority delegated to them, and that monitoring of compliance with the intent of the policy would be done through functional reviews rather than through restrictive "how to" interpretations.

The purpose of much of the excess volume is seen to provide an unnecessarily over-protective mantle for individuals and the Agency for coverage in all possible situations. Such overprotection is rarely necessary in their view and does not allow management by the exception principle. Instead, it overprescribes actions to be taken and unnecessarily limits discretion.

It is hard, for example, for them to accept having to get Regional Office approval to buy a typewriter worth several hundred dollars when they have authority to build bridges valued at $250,000. Such discrepancies in dollar amounts do not make sense to them.

Another segment of the excess FSM volume was identified to consist of unimportant or insignificant content revisions to existing policy. Each FSM change generates a new directive and additional paper flow and storage.

Regional and local supplements also were criticized. At the Forest and District level we repeatedly heard that too often the Regional supplements only repeated the content of the white pages from Washington in different

words. They felt that Regional supplements frequently do not provide needed interpretations, and are therefore not necessary. In large and fairly sophisticated districts, we found that some Rangers feel hampered by S.O. policy, and frequently take W.O. and R.O. direction and use it without Forest level interpretation.

The frustration with volume is exacerbated by the perception that so much of the FSM is concerned with trivia while important operational concerns are not covered. Several of the larger Forests and Districts with technically sophisticated Staffs say that up to one-third of their Forest operations are outside the scope of the FSM. District and S.O. silviculturalists said that much of the FSM is biologically incorrect and out of date, and conflicts with research as they know it. These people keep up with needed information on their own and do not look to the FSM for technical guidance.

As a general remedy for overprescription it was suggested that before issuing a new policy or directive, the responsible line officer should demand of the originating Staff an analysis of the benefits and costs associated with implementing it. The B/C should include direct and indirect impacts as well as increments in person hours per year over present procedures.

In contrast to the many who voiced concern about overprescription and over-direction, others asked for more guidance from higher levels. In one Region, District Rangers expressed frustraton with having to make too many policy interpretations on their own without guidance from the S.O. They felt the S.O. operated in an information vacuum and the District Ranger was forced to take on part of the Forest Supervisor's responsibility. In instances where Forests or Districts have a dominant resource use, such as minerals, for which current policy is inadequate, they often cannot get the Region to provide guidance and leadership. They then interpret what policy does exist as best they can to meet their needs. Forests and Districts resent this task because they feel that leadership and guidance should come from higher levels and that lower levels should not be left to make such decisions. Several Regional Staffs said they are forced to create their own policy because they do not have leadership from the Washington Office. They would prefer a weak decision to no decision.

There there are simultaneous requests for both more and less direction, sometimes from the same staff. It Derives from the uncertainty and anxiety many line officers experience when faced with making decisions without knowing where the leadership stands in terms of encouraging local risk taking vs.

minimizing potential damage from a faulty local decision. As stated before, this conflicting need for both autonomy and protection exceeds the problem of the FSM and will not be resolved by technical modifications to it. Resolution is possible only by a clear, supported and reinforced stance on this issue by top management.

Regarding detail of direction, we were repeatedly told by the Districts that implementation of direction is especially difficult when the direction is too detailed. In their opinion, if they are required to follow narrowly prescribed details, they lose the flexibility to "bend" or adjust the implementation of policy to suit local conditions. Consequently, in many cases, they cannot implement a policy at all, whereas if they had had the flexibility to interpret, they may have been able to implement it at least partially.

As mentioned earlier in the report, precise direction is seen as necessary and desirable on some issues, for example: minerals, law enforcement, fire policy, pesticide use, and other politically sensitive issues. Where the consequences of making errors are severe, the field prefers tightly prescribed direction. There are also areas where they want more direction. At the District level some felt that personnel and fiscal policy needs to be specific but does not presently give adequate guidance. Similarly, the NFMA gives general guidelines on social and economic issues, but Regional supplements and Supervisor's Orders do not give enough additional direction for implementation.

Washington and Regional Staff responses to the field concern about detail varied. Some Staffs justified the FSM content in their function by attributing it to basic laws which force them to spell out precise policy. Other Staffs said that they took a successive approximation approach, writing minimum details and tightening direction if field inspection revealed insufficient compliance.

To facilitate utilization of the FSM, line officers would like to see the reinstitution of a user manual course. Many remembered that the Forest service gave such a course up to 10 years ago, and recalled it as being helpful for orienting newcomers.

USEFULNESS OF VARIOUS FORMATS

We asked the field to rank the six Forest Service communication media that commonly provide information about present or future policy and direction according to (1) ease of understanding and (2) overall usefulness (Question 5).

The six media were: FSM, letters and memoranda, oral instructions, Friday Newsletter, private newsletter, public media (newpapers, radio, TV, etc.). We normalized the scores for all levels of the organization (Appendix, D-8).

Of the choices listed, letters and memoranda, and oral instructions were considered by all levels of the organization, except the S&PF Areas, to be the easiest to understand, followed by the Directives (FSM), Friday Newsletter, private industry newsletters, and, finally, by newspapers. Areas found oral instructions to be easiest to understand, and the Friday Newsletter second easiest.

All levels considered the best and most useful overall format to be letters and memoranda, followed by FSM Directives, oral instructions, the Friday Newsletter, private industry newsletters, and newspapers. The identical ranking, except for inverting Directives and oral instructions, holds for combined normalized scores for both "easiest to understand" and "best overall."

Letters and memoranda were, therefore, almost uniformly the first choice for a combined criterion of clarity and usefulness. The FSM came in a surprising second choice, followed by the other formats as mentioned in the preceeding paragraphs. When examining the responses to question 5 by organizational unit, the small differences in the scores are not significant (Appendix, D-8). At the Forest, Region or Area level we can therefore not discriminate between Directives and letters and memoranda as a first or second choice in overall utility. And for all organizational levels together the 71/2% difference in scores between letters and Directives is also not significant. In our interviews, however, there seemed to be a heavier tilt towards memoranda for primary utility. This may be because in the interviews the concept of "general utility" and the concept of "ease of understanding" were combined. Directives ranked a distinct third in question 5 for "ease of understanding" (Appendix, D-8).

Direction Given Orally, by Memorandum and by FSM

Much of the instruction from the Regions to the Forests on what to emphasize when implementing policy comes in the form of letters rather than FSM supplements. Because of the length of time required to issue Regional Supplements, most Forests prefer to receive policy and direction in a more timely manner and in a less formal format. They object to promises that information contained in memoranda will be incorporated into the FSM, a

process which frequently takes years.

Some Forest Staffs have close relationships with their Regional counterparts, as well as with other Staffs, and frequently call to get the latest information on new policy. Many also hold monthly management meetings during which the Forest Supervisor gives oral directions to his District Rangers. We did find a number of Forests which did not hold regular management meetings and District Rangers on these forests felt they did not get enough direction to do their job confidently.

District level line and Staff had mixed reactions to the desirability and effectiveness of written and oral direction. Some felt that too much direction was given orally or by memorandum while others did not mind and actually preferred it. Some Rangers took memorandum direction more seriously than FSM direction, usually because it was signed by a line officer at the next highest organizational level to whom they are accountable, and because the direction is more immediate. In contrast, FSM direction is usually not new, i.e., they have already heard about it and are often already following it and, thus, it tends to be of less immediate importance. Some Rangers took policy in the form of amendments more seriously than they did that which came out in letters. They hesitated to implement memorandum direction for fear that it would be changed soon. Manual policy, on the other hand, is legally binding and not subject to frequent revisions.

Employees new in a job who are not yet familiar with the guiding directions are dependent on the FSM as their basic reference. It is also referred to when problems come up for which precise and legally accurate information is necessary.

Since District personnel do not have access to all other Federal sources of policy, they have to communicate orally or by letter with the S.O. to get clarification. Many Districts and Forests found oral communication to be the best and most understandable form. They liked to talk back and forth and claimed it resulted in less distortion and misunderstanding than written communication.

One consistent complaint with oral and memorandum policy and direction is that it is not readily documented and, hence, is easily lost. It is not cross-referenced or filed consistently and is not permanently available. New personnel unfamiliar with current policy and direction have no consistent or predictable source of information and, understandably, were the most likely to criticize prevalent informal policy and direction dissemination practices.

As mentioned earlier, much of the policy which applies to S&PF and Research Stations, though disseminated in written form, is most commonly transmitted to the user orally. S&PF maintains closely knit informal contacts both within the Forest Service and with State and private clients. Most policy gets transmitted and interpreted through personal contact with users. Project Leaders at Stations indicate that they get close to 100% of all necessary direction from the Station's AD's during Project Leader or other meetings and pay little attention to other policy and direction sources.

FUTURE DIRECTION

In our interviews and in the open-ended question 24, we explored the various sources and means by which information about future Forest Service direction is received (Appendix, D38-42). While not so directed, most respondents to question 24 limited themselves to Forest Service media.

National Forest System

For all levels of the NFS the dominant medium for gaining information about future direction was oral communication, especially between adjacent hierarchical levels (W.O. to R.O.; R.O. to S.O., etc.). If the units are two or more levels removed from the W.O., the Friday Newsletter is the dominant instrument.

The next most important sources for all are the less formally written documents, such as memos, speeches and draft policy, and finally the more formal means such as the FSM. More specifically, Regional responses identified oral communications (on a person to person basis or meetings) as by far the best medium for information from either the Chief's Office or the Region. Next are letters and memoranda, followed closely by the Friday Newsletter (for W.O. news).

At the Forest level, the Friday Newsletter dominates the choices for future policy information from the W.O. Oral communications followed by memoranda are the dominant Regional channels, and the oral channel is also foremost within the Forest.

Only two leading media were identified at the District level: the Friday Newsletter from the W.O. and oral communication from the S.O.

In the interviews, this question was opened to include external information sources. The interviews at the District level revealed that here people relied most heavily on local newspapers as one of their major sources

of information on current policy. For future policy their primary written sources were: the Western Timber Association Newsletter, the Journal of Forestry, and other publications from the the Society of American Foresters. Some even said they get most of their information about Regional and Forest plans from local newspapers. All want more forewarning on major policy changes, such as changes in user fees, or planned increases in timber sales. They want better cues so they can anticipate coming changes that will affect manpower and budgeting.

Oral communciation from the Supervisor's Office was also an important source at the District level. This is to be expected since Districts tend to have daily phone contact with the Supervisor's Office, and look to it for guidance on most of their day to day questions. In the course of this frequent contact, information about future direction is also transmitted.

Those Regional Staffs and Forests which get Chief and Staff (C&S) Notes felt they were very useful in providing headlines about new direction. They felt they got more information and background from these notes on new policy than they do in any other Forest Service publication. The C&S Notes have a limited distribution and are not always circulated to lower levels. Yet these people expressed a great interest in receiving them, and felt they would find them useful for their work.

Research Stations & Areas

Station personnel found the Friday Newsletter and letters the most important data source from the W.O., while oral communication was the dominant source for Station policy.

Project Leaders stated that the Assistant Directors formally keep in contact with them through the annual plan of work and annual accomplishment report. They do not explicitly monitor their compliance with policy and direction, and trust them to complete their work on their own without much supervision. When asked, Assistant Directors agreed that they had little problem with enforcing policy, since much of it is not applicable to the Project level. They directly explain relevant policy and it's impact to the Project Leaders. Most Project Leaders did not concern themselves with future direction, except in their immediate area of interest. A number had not heard anyone stating clearly where research was going in the future.

S&PF Area responses revealed no dominant source for information about future direction, though oral communication was the most important source of information from the Chief's Office.

External Users

We found no external users who had problems finding out about future Forest Service direction. Their own informal information network, frequent contacts with Forest Service representatives, especially S&PF, various trade publications, and proceedings of the National Committee on Federal Timber Purchases, which meets four times a year, are all major sources of information about new policy.

Summary

In summary, we found that for all organizational levels, oral communication was the most important source of information about future direction from the next higher level. This is to be expected since Staffs tend to communicate with their counterparts at adjacent levels more frequently by oral means. Communication becomes more formal between levels farther removed and, thus, written information becomes the dominant form. Consequently, the Friday Newsletter is the most important single source of information about future direction from the Washington Office to the field levels below the Region.

Presently, the Friday Newsletter is the most universally read, authoritative information source. It is also the only consistent source of information from the Washington Office that the field relies on. Having such prominence, the Friday Newsletter is under-utilized. The field complains that it is not sufficiently comprehensive. We suggest that it be expanded to include more information on the background and other developments relating to future policy and direction. This would serve two purposes: 1) it would keep the field generally informed and involved, and, 2) it would send advance signals to affected line officers, as well as others, to give them time to prepare to make changes. This would satisfy their need to have more general knowledge about what is going on in the Forest Service, especially at the Washington level, and it would give them more advance "warning" of impending changes.

ADDITIONAL USER COMMENTS

From the NFS

A number of Forest Staffs observed that Regional policy often merely repeated in different words what was already stated in the W.O. FSM and thus added no new information. They felt that real policy was made at the Forest

level, where they had to interpret the white pages to implement the direction. Forests varied with respect to how much they involved District Rangers in developing annual Forest work plans and in asking for their input before issuing policy. We generally found that those District Rangers who worked closely with the S.O. felt they influenced policy and were not surprised when new policy was issued.

From S&PF

S&PF field units want guiding policy on sensitive issues, especially ones which cross agency lines, e.g., Forest Service and SCS. But S&PF personnel found most FSM supplements not meaningful to them. They found the supplements to be fragmentary and difficult to interpret without reading the entire section, especially in business management topics. They preferred memoranda because they are more self-contained and clear and therefore more directly useful for accomplishing work.

We were told that when Coop Foresters try to use the FSM in areas such as contracting and personnel, they are confused by it, they do not understand the written information, and most of the time they must check with an expert in the Area Office to get clarification. Though the majority of S&PF interviewees kept copies of the FSM in case they need it someday, they said that they generally did not have much use for it. Some people had worked in the field for 15-20 years and could remember having referred to the Manual only two or three times. They got most new policy and direction verbally through frequent contacts with higher levels, and find that the FSM usually confirms information already known. They have a feeling they know in which direction they are going and know where to ask for help when needed.

S&PF Staff, whether located in Regions or Areas, concurred that NFS policy is often not suited for the optimal management of specific sites. Area personnel shared the non-western NFS view that policy writers in NFS are not aware of Area or NFS needs in the East. In this regard, they felt that S&PF policy tried to be more sensitive to local requirements where possible. They also felt that personnel classification standards for positions were not suitable for S&PF Area needs. Standard position descriptions and classifications did not correspond well to the educational and consulting types of jobs needed by S&PF and were geared instead to satisfy NFS requirements. Similarly, they feel that the inspections system, and Regional planning policies are written primarily for NFS and do not fit S&PF needs.

As a consequence, the Areas prefer to, and often do, write their own policy. They think they have a better sense of what is needed than the Washington Office, which is more removed from the Area's problems and has less knowledge of its needs. They do not mind, and sometimes prefer, to write their own policy if the field unit is designated as the lead unit.

Some S&PF field office personnel did not recall seeing any Area supplements for some time, and they did not feel that management from the Area is concerned with them.

Some S&PF field people generally felt that they had adquate knowledge about Forest Service policy and direction. They deal reasonably frequently directly with Staff Directors in the Area Office, and they also receive a great amount of information from State agency representatives, who at times get new information before it reaches Forest Service respresentatives.

Other field offices, however, felt left out of the information flow and wanted more interpretation of W.O. direction and more contact with the Area Office.

While the Areas preferred to remain outside the constraints of Regional policy because they feel it is almost entirely aimed at satisfying the needs of NFS, they also feel it is important to participate in formulating Regional policy so that S&PF viewpoints are included. They are, however, ambivalent about how much to enter the NFS policy mainstream.

Areas' complaints were not that numerous, but they did comment that physical isolation from higher levels often inhibits informal communication on sensitive issues.

From Research

We found that most W.O. as well as Station directives were not read by Project Leaders, nor, presumably, by scientists. They consider themselves to be researchers and not managers. While many Project Leaders/scientists are aware of major policies, such as those affecting deviation from sustained yield or the Freedom of Information Act, most rely on the Assistant Directors to run the necessary interference for them, or to issue specific instructions so they can comply with new administrative or research requirements. The Assistant Directors willingly try to shield Project Leaders and scientists from administrative details, so they can concentrate their efforts on research.

Because research managers know how to cope with directions and Project Leaders and scientists do not see themselves directly affected, Station personnel registered the highest satisfaction score with the Directives System of all organizational units. But they shared Regional views that there is too much direction from above.

From External Users

We interviewed a number of external users of the FSM in the private sector, in State government, and in university forestry libraries, to assess the extent of their use of the FSM and their satisfaction with it. None of these groups used the FSM frequently or relied on it enough to be greatly concerned about its contents.

The Universities we contacted keep most sections of the FSM, except fiscal and accounting, to serve as references for faculty and students, as well as for private legal and consulting firms. Reference libraries estimated that the FSM was used 50-60 times a year. Graduate students and faculty used it as source material for their research, though it was seldom used for classes.

The sections most frequently used for research purposes are: Wildlife, Silviculture, Recreation, and Timber Management. FS Handbooks, on the other hand, are used for class instruction, especially those for Silviculture, Timber Management, Engineering, and Land Management Planning.

These University libraries do not routinely get Regional or Station supplements. If requests are made for these, they refer them to the originating source. They do get Regional Handbooks in response to requests.

They do not have any complaints about the timeliness with which directives are sent. They are seldom under pressure to provide current information and when they do request supplements or handbooks from Washington they arrive promptly.

Interim Directives used to be received regularly, but they were not sure whether they still get them. Most ID's are not filed promptly and are allowed to accumulate in baskets to be sorted through by interested users. They had no system for removing outdated ID's, and suggested that it would be useful to receive instructions warning that ID's are due to expire.

University libraries considered it important to have the FSM as a reference tool, even though it did not get used frequently. Because public libraries do not carry the FSM, private users must look to the universities as a source for Forest Service policy.

Indexing and cross-referencing did not seem to be a problem since users usually know what they were looking for.

Many libraries now have access to computer terminals and thus have no objections to a computerized FSM. They would prefer to have hard copy as well, with computer updates to accomodate those users who may need to browse through the material.

Private industry recipients used the FSM infrequently. Except where specific direction is needed, such as Regional direction for timber sale accounting, they get most information on current and future policy from Forest Service representatives and the timber industry organizations. Because they are more affected by Regional direction, and have good rapport with the Forest Service, they do not hesitate to call Regional Staff members for clarification.

At the time of the interviews, Western forest industries relied heavily on a publication put out by the Western Timber Association informally called the Craigogram, named after its former author George Craig. This newsletter contained much new information of importance to the forest industry. Because of Craig's frequent and reliable sources in R-5 and R-6, as well as the W.O., the newsletter was a highly sensitive and reliable source of future direction, and was frequently the only timely source even for our own Forest Service employees. The Craigogram provided much needed and frequently requested background information explaining how policy came about and gave a meaningful and easy to understand summary of it. From our interviews we concluded it to have been the most respected and timely source of interpretation of new F.S. policy. This publication comes forth at least once a week, sometimes more frequently, and is received by subscribers long before most official communication from Forest Service sources. Within the Forest Service, it is most heavily relied on by District Rangers, who are the farthest removed from decision centers, and are usually the last to receive new information through conventional Forest Service channels.

State forestry organizations receive W.O. and R.O. supplements on fire control, forest management, forest engineering, nursery genetics, and insect and disease management. They rarely, if ever, refer to them and feel they could get along without them. They use the FSM supplements primarily for legal interpretations regarding contracts, grants, and funding, but almost always in conjunction with phone conversations to the nearest S&PF office.

In these offices the FSM is frequently kept in an unordered file and is therefore easily not retrievable when needed. Supplements are retained only

because they are sent to them and may someday be of use. These offices rely mostly on letters from the Regional Forester for important current information.

In the forest industry, Interim Directives have a more significant impact on decisions than do most other FSM supplements, but even these arrive too late to be of much use. Since many forest industry personnel are former Forest Service employees they retain close contact with the Regional Office and usually get important new information by phone first.

This repeats what almost all other interviewees mentioned. FSM users in State agencies and forest industries found direction at times vague and verbose. They find the digest irrelevant and at times misleading because it does not properly summarize important new policy. The indexing is poor and not helpful in locating material.

None of the State Departments of Forestry we interviewed objected to computerizing the FSM, though some did not have printers with their computer terminals, thus making it difficult to obtain hard copy. If they could be guaranteed to have the latest information on computer they would not need to call Forest Service representatives as frequently. But many consider it important to maintain good relations and prefer personal contact to written communication.

SOURCES OF GREATEST HELP

By Function

In Question 15, we asked respondents to name the functional areas (e.g., Timber, Engineering, Personnel) from which they receive policies and directions that generally: (1) help them most in doing their job; (2) are next most helpful; (3) and those that make it most difficult to accomplish their job (Appendix, D 20-24).

The FSM Title numbers mentioned by Stations, Areas, and Districts were the same as those mentioned by Forests and Regions (see Appendix, D 20-24 for further details). Resource functions tended to be more favorably evaluated, whereas organizatonal support functions were more heavily identified as making the respondent's job difficult. This can be expected since resource functions are identified with getting the primary job done, whereas support functions tend to be identified with operational procedures and limits which are often seen as impediments to getting work accomplished.

Question 13 asked respondents to identify those sections which were particularly well-written (Appendix, D-20). Eleven different Titles were mentioned, with 5 to 9 responses each. Title 2400, however, was mentioned 27 times. This high number of favorable mentions reflects the great deal of attention paid to timber management, the most important resource function, both in terms of funding and quality of direction provided for that area.

Though Law Enforcement was not mentioned in response to Queston 13 in the questionnaire, in interviews it was repeatedly pointed out as an example of a well-written policy, which was backed up by strong leadership at higher levels. Some did complain that, initially forms were printed in the FSM without instructions for filling them out. The delay in getting instructions caused the field problems in processing violations.

In response to Question 12, forty major FSM Titles (e.g., 1100, 1200, 1300, etc.) out of a possible total of 53 titles were cited as obsolete or poorly written (Appendix, D-18, 19). Of these, FSM 2300, 2800, 6100, 6500 were mentioned more than ten times. We recommend that these groups look in Appendix D-18 for complete distribution figures and consider rewriting their respective sections.

Not surprisingly, all of the sections mentioned as being well-written by some were also mentioned as being poorly-written by others. Different people perceive the same policy differently; what may be clear for one may not be so for others.

By Organizational Level

In question 16 we asked which levels of the organization issue policies and direction that most help or hinder the respondents' work accomplishment. Regions, Forests, and Districts all perceive the next higher level as being the most helpful, while Station and Area personnel indicate that they are relatively unaffected by Washington Office and Regional Office direction, and find their own respective direction most helpful (Appendix, D-25, 26). While questionnaire responses showed that most Forests do find R.O. direction the most helpful, in our interviews Forests and Districts frequently indicated that they felt the R.O.'s role as interpreter of policy and direction to be the least necessary. They felt they could take W.O. direction, interpret it at the Forest level, and come up with equally valid policy without having the Regional Staff act as a buffer between the field and the W.O. On the other hand, Business Management Assistants on Districts usually took Regional

direction seriously because it affected and aided their work directly.

MECHANICAL ASSISTS TO INCREASE USEFULNESS

Cross-Referencing and Indexing of FSM

Our field interviews and question 10 of the questionnaire revealed considerable dissatisfaction with the index and the cross-referencing file in the FSM (Appendix, D-16). The index is incomplete, and the key words used in the FSM are not always accurate. Timber and related activities had fewer problems than Recreation or Wildlife, which need a more detailed and better index to find necessary material. Neither the index nor cross-referencing is kept current, thus the user is frequently unaware of cross-functional impacts. The most difficult search problems appear in multi-functional topics. Single-functional topics are generally sufficiently familiar to the searcher and do not present problems.

Policy and direction in the administrative area is particularly complex, confusing, and difficult to find. This area more than any other uses a large number of sources outside the Forest Service, such as the Code of Federal Regulations, USDA Regulations, Federal Procurement Regulations, OPM Regulations and others. Presently the FSM does not provide sufficient cross-referencing to these other sources, and therefore also no guidance to a new employee on their significance and use.

Some sections of the FSM on the other hand contain so many cross-references that they interrupt the reader's thoughts. Excessive cross-referencing can, furthermore, mislead the reader to trivial or irrelevant material.

The inadequacy of the present index and cross-referencing aides markedly increase the difficulty for new employees to gain mastery over the FSM. Some Districts provide training in FSM use to new employees but find that the system is not sufficiently consistent or complete for the novice to master without extensive "hands-on" experience.

FSM Amendent Digest

Presently all amendments come out with a digest which, besides giving instructions for inserting the amendment, is supposed to concisely provide the most important changes being made in the policy document. In our interviews we did not find a single person who considered the digest adequate. Most found it useless. It usually contains trivial information, frequently referring to numbered sections rather than describing the contents in words.

Since most recipients of amendments do not have time to read the entire content, they universally consider an improvement of the FSM digests of the highest priority. If the digests were good abstracts of the contents, they would be kept informed of new and changing policy and direction because they would be more likely to read it. Without a good digest they often miss important new information.

INTERPRETATION/ASSESSMENT

Policies and directions rarely have a priority identification, except for due dates. On the face of it, all require immediate implementation. Since funding and staffing levels are rarely sufficient to allow across the board implementation, the field has to prioritize policy as best they can. In setting priorities they consider at least the following:

1. Is the policy a congressional mandate?
2. Does it affect work in progress?
3. if implemented, can service be provided at an equal or better level than at present?
4. If implemented, can timber management plan objectives be met?
5. How will the policy affect prior work in progress that was interrupted?
6. What are the line officer's priorities?

The format of the direction also influences the priority it is given. At the Forest level, Emergency Directives receive the highest priority, followed in descending order by memoranda or letters from the Forest Supervisor, memoranda or letters from the Regional Forester, memoranda or letters from a Deputy Regional Forester, memoranda or letters from the Supervisor's Office Staff, directives from the Washington Office, and last, and of lowest priority, is a request received after the due date. At the R.O., the order is similar to that at the Forest level, except for the letters from the Supervisor or S.O. Staff. With title changes, this order is also valid at Stations and Areas.

Policy and direction from the Washington Office is not differentiated in its relative importance. District Rangers complain that they cannot determine whether one particular policy is more important than another; they all appear equally important. Particularly urgent items tend to stand out by their relevance to critical issues (RARE II, herbicide use, etc.), but the great majority of policies and directions are undifferentiated on urgency. Consequently, "selective neglect" is practiced because not all policies can be implemented given financial or Staffing restrictions.

Other Staffs complained that more coordination is needed between long range programs at the Washington Office level. The field is caught in the middle while trying to follow policy without being given adequate resources to accomplish objectives. Conflicts arise, for example, between increasing timber output over the long term and cutbacks in ceilings. They realize that

some policy is written to satisfy political pressures but they want to know which policy has to be followed to the letter, and which can be satisfied in principle. Right now all policy comes down as "top priority--must implement." This is obviously impossible and while some line officers are comfortable with determining for themselves to what degree they can interpret policy, others are not comfortable and want more explicit guidance. Additionally, given the volume of policy and direction coming down to the field, they cannot implement it all, nor can they give it all equal attention.

Communication For Clarification

The amount of contact Rangers have with the Supervisor's Office varies greatly. Where communication is good they contact Staff officers directly by phone to get clarification, and rarely require letters to back up informal policy interpretations. Some Rangers have close working relationships with their Forest Supervisor and call him frequently to get up-to-date information. These Rangers do not rely on written supplements and prefer to keep current via personal contact.

Some Districts hold staff meetings once a month where they get to meet with the Forest Supervisor and his Staff. Inspection and assistance trips also allow the S.O. to determine how a District is doing. These visits are important to get policy and direction clarified.

Most Districts do not have such frequent formal meetings with the S.O. and instead rely on letter and phone communication when problems develop. They complain that often the S.O. does not have the latest information and they frequently take 4-6 weeks to respond. They feel that technical assistance visits would be useful in helping them straighten out problem areas.

Stations and Areas did not have many specific complaints and are less anxious about policy and direction in general. Several Station respondents did say that their physical isolation from decision makers tended to inhibit informal communication on sensitive issues. Area representatives preferred to interpret policy as broadly as possible, and felt that sometimes inquiries led to interference from higher levels.

Other issues covering communication and problems with upward flow of information are covered on pp. 11-14.

In summary, though we heard frequent complaints of insufficient contact with higher levels, the overall impression was that this did not generally interfere with execution of policy and direction. As mentioned earlier, it

may even have the advantage of preventing additional meddling and consequent restrictions by higher levels.

Conflict Between and Within Directions

About 67% of the respondents from Regions, Forests, and Districts, 54% from Areas, and 27% from Stations said they encountered conflicts between policies or directons issued under different codes (question 19, D-31).

Policy function codes most frequently identified as conflicting with policy under other functional codes were: 2400 (Timber Management), originating at the Washington and Regional levels; 2300 (Recreation), 1900 (Land Management Planning), 2700 (Land Use Management), and 6100 (Personnel Management), all originating at the W.O. (question 20, D-32).

The various organizational levels exercised differing degrees of independence when confronted with conflicting policy and direction. The most independent of the group were Forest level respondents, 37% of whom exercised their own judgment; 28% of the Districts, 27% of the Regions, 25% of the Stations, and 26% of the Areas also indicated they used their own judgment to resolve conflicting policy. The rest of the respondents consulted either with higher levels, the originating source, or other sources for clarification (question 21, D-33).

Sometimes the intent of a policy, as the field sees it, clashes with the corresponding specific instructions for implementing it. The most frequently mentioned functions where this is true were: Timber, Research, Administration, S&PF, Land Management Planning, Fire, Range, Recreation, and Engineering.

Personnel Administration, Fiscal and Accounting, and HRP obtain much of their policy and direction from sources outside the FSM, such as the Federal Personnel Manual, Code of Federal Regulations, etc. This creates the problem of how much of the parent material needs to be included in the FSM. Some Forests and Districts prefer to work with the original Federal regulations rather than with Forest Service interpretations. One Washington Office Staff reminded us that each Agency is required to interpret Federal regulations to insure that they are followed uniformly throughout the organization.

Incorporated references are as legally binding to the Agency as FSM material. The field has difficulty making decisions as to which policy to follow when the external policy has been changed but the Forest Service has not yet had a chance to revise the FSM to correspond to the new regulations. We were told that in some functional areas FSM revisions are not made for

months and in this case line officers feel they are making decisions without legal backing.

The field recognizes that some contradictory policies often take years to resolve; in the meantime they try to operate as best they can. Almost all agree that they often receive mixed signals from major policy items such as ceiling limits and travel reductions, which make it impossible to execute some policy fully, and others not at all. Some respondents liked conflicting policy because they can then justify their own preferred interpretation, but most are uncomfortable with these conflicts and would prefer to eliminate them.

Flexibility to Interpret

Most Staff interviewed in the Washington Office felt that the directions they wrote are sufficiently flexible to accommodate all Regions, Stations, and Areas, and that standards prescribed to the lower level line officers are minimal. While frequently asked for further interpretations of policy, they prefer to allow the Regions, Stations, and Areas to prescribe the "how to." Staff do not claim to have all the answers and suggest that field personnel are often equally knowledgeable. Several Washington Office Staffs reported that inquiries from the field for further interpretation are treated individually, according to their assessment of individual capabilities. In some situations local interpretations to fit their conditions may be encouraged, while in other situations further centralized guidance may be preferred.

When intent of a policy and details for implementation conflict, more than 75% of respondents from Regions, Forests, Areas, and Stations replied that they followed their interpretation of intent rather than the detailed prescription (question 23, D-36,37). At the District level this willingness to risk drops to 64%, with a greater percentage choosing to follow the detailed prescription.

District Rangers felt that it is easier to take risks at the Regional and S.O. Staff level, since decision makers at these levels are not held directly responsible for the results or consequences of enacting a policy. Many District Rangers are less willing to take risks, unless they know "all" the factors because they are held directly accountable for the impact of their decisions. Rangers do want the freedom to act but frequently feel they do not have sufficient knowledge of all relevant policy, and therefore cannot accurately gauge acceptability of their decisions by their superiors. They

are forced to, and do make decisions, but frequently without complete confidence. They experience additional pressure due to the significant time lag that exists on many Forests before policy is clarified and Forest Supplements are issued and received at the District level. This often puts Rangers in a bind because they are unable to make decisions based on complete information. We found that frequently District Rangers did not get timely answers from higher levels when needed, and made many decisions on the basis of past experience.

Generally Forests and Districts do not deliberately disregard Washington Office or Regional Office direction. Most of the time they interpret policy locally only if given the leeway to do so through such wording as "may" or "should"; they reinterpret the "how to" but not the "what." If the administrative climate of a Forest is not too restrictive, most Rangers are comfortable interpreting policy on their own, and find that budget direction helps them prioritize policy for implementation. On some Forests, however, the management style is more restrictive so that Rangers do not have much discretion in interpreting policy. Here we found the greatest call for precisely detailed direction. The fewest risks were taken by Rangers who did not feel confident that they had the backing of their superiors, or where they did not have a clear idea of what was expected of them.

Under normal conditions Districts seem to have adequate flexibility, and most Rangers are comfortable with their freedom to make decisions. Many do complain that at times policy is used as a tool for power and they get punished for not following it to the letter. Some complain that they are often asked to make their own interpretation but are later criticized for making the wrong decision. Some Rangers say they took more risks in earlier years, but because of bad experiences now require precise direction before making decisions. In some Regions, groups of Forests get together and interpret policy as they see necessary. Generally, they would like to see the Washington Office more clearly identify where interpretation of direction is flexible and should not be further restricted at lower levels, and where there is no discretion. They would like the W.O. to spell out policy clearly on politically sensitive issues such as RARE II and pesticide use. Divergence in interpretation of policy is seen as significant only when there are legal ramifications.

Policy

must then be consistent to protect all Regions.

Western vs. Non-Western Oriented Policy

The question of consistency between Regions in matters of national policy or direction came up repeatedly in our interviews. Non-Western Regions contended that W.O. policy frequently addresses only Western conditions and is hence not applicable throughout the country. Stated examples of such policy are: Fire protection, fire management, fire crew training and physical standards for crews, and the fire danger rating system, which many feel are appropriate for the level of fire danger found in the West but are excessive for the East and South. Other examples cited were: Transportation analysis requiring the link-node model, which is suitable for relatively unroaded areas but not for areas such as the South where many well developed road networks already exist; timber branding policy, which requires that timber be branded even when its value does not warrant it.

We asked various Washington Office Staffs to respond to these complaints. They generally felt that in the cases where one standard policy was issued, the requirement for all Regions to conform was warranted. For example, they felt that the frequently criticized step-test for fire fighters was a valid requirement for all Regions because fire fighters used in level terrain, such as the South, may also be called to serve in other Regions where the terrain may be more demanding. Additionally, some policies are mandated by NFMA and are not discretionary. They feel that many critics at lower levels do not realize this and are not aware that if they do not follow prescribed policy they are breaking the law.

According to Washington Office Staff, policies for Timber and Fire offer less room for local interpretation, while those in other functions such as Range Management, Recreation, Wildlife, and HRP can more readily be adjusted to Regional variations.

In summary, the field would prefer to operate with W.O. policy and make their own interpretations whenever possible. They want Regional policy to be issued only where consistency is required, and variation cannot be tolerated, as in the writing of Environmental Analyses and Statements.

We concluded that the freedom to interpret policy and direction is bounded by the same desires and constraints as the Forest Service issuance. On the one hand, everyone at all levels would like to see the Forest Service have maximum flexibility to respond rapidly to local or changing conditions, which

means minimum number of policies and directions and maximum freedom to interpret. On the other hand, the penalties for error have become high, sometimes intolerably high, both for individual decision makers and for the organization.

Though we talk about autonomy, by the very number and detail of our directions we effectively deny it, except on routine issues. We train our people to think they can be independent decision makers who will be protected by above from making grave errors, yet we often apply severe penalties for making the wrong decision. That is why we find the same line manager or Staff person asking for less direction and more complete guidance at the same time. By "straddling the fence," the leaders of the organizaton do not give clear signals to their managers. As a result, we have neither courageous managers nor faithful, uncomplaining direction followers. We must make up our minds to either allow risk taking or train our managers to function in a more rigorously prescribed environment.

IMPLEMENTATION

We found no consistent criteria on which the field based its decision when or whether to implement new policy. Generally, the cues for implementation were: adequate funding and operational feasibility. Even existing policy often cannot be implemented adequately because of insufficient funds, ceilings, or other constraints; and new policy often has an even lower priority. Policies which tend to be ignored, at least temporarily, are those which have no deadline for implementation, no fiscal support, or low apparent sensitivity or urgency.

Though no one claimed to deliberately disregard policy, budget directions did dictate the emphasis of various directives. In one Region a relatively high percentage of directives is not implemented because there is not enough manpower to put them into action. If they cannot implement them right away, they try to phase them in as funding and manpower permits. For this reason, we often got the comment that a longer implementation time would be useful.

In some Regions the Forests and Districts get clearer signals from the Regional Forester or Forest Supervisor than in others on how he wants policy to be implemented. If lower levels of the organization do not see commitment to a policy at the next higher level, they generally do not see any reason for following it. If, on the other hand, the Regional Forester or Forest Supervisor is clear in communicating his expectations, the Districts have no problems with second guessing what policy is important.

Research Stations and S&PF Areas saw a lesser impact from policies that had to be implemented immediately. Almost all Project Leaders said they adjusted slowly to new policy changes. S&PF also found it harder to guarantee that new policies will be followed immediately. They cannot directly control how States chose to implement changes. Since their role is advisory they try to encourage the results they want, but they cannot enforce.

In questions 25 and 26 we asked respondents if they sometimes took action on future policy before the effective date, and why (D-43,44 and D-45,46).

Seventy-nine percent of the Regional, 60-67% of the Forest and District, 53% of the Station, and 44% of the Area respondents indicated that they did at times implement policy early. Frequently, they took preparatory steps only, so that they can shorten delay time in implementation after policy and direction is officially issued.

At the District level implementation of new policies tends to be delayed until major, on-going projects are completed. They will finish the project under existing policy, and then implement the new directive as soon as possible thereafter.

Districts do want maximum freedom to act, but they need to be kept informed of new policy by the S.O. If they know about a policy and know all the factors, they can calculate the risks of partially implementing it or ignoring it. If, however, they are not aware of all the factors, their errors in judgment can be costly. Since it is the District that is held accountable for getting results, it is important for the District Ranger to have full knowledge of all significant policy and the results that are expected from him. They feel at times that the S.O. asks them to take risks without fully informing them of possible consequences.

Most Forests claimed they did try to give Districts liberal latitude in interpreting policy, and preferred to enforce results through the management review process.

Several suggestions were made by Regional, Forest, and District line officers that would facilitate implementation:

1. Cost out a policy before it is issued. The costs of implementing a policy or direction may well outweigh its total benefits.
2. Whenever possible do not prescribe procedures for implementing policy and direction. Prescribed procedures may not fit all units and may be operationally or economically unproductive.
3. Where objectives of one policy or direction are in conflict with the objectives of another policy or direction (e.g. minimize total costs vs. minimize mileage and gasoline consumption) indicate priorities of the conflicting objectives.

An issue somewhat related to item 2 above was identified during the interview. The W.O. sometimes provides a positive answer to Congressional inquiries on requests (e.g. permits), which the S.O. would deny on its merits. Sometimes the field is not even aware of the prior W.O. commitment. Higher levels should not make commitments on local issues without first discussing the issue with local management.

Washington Office Responses

The Washington Office is aware that not all policy issued there can be implemented in the field. There are times when by law they must issue policy, fully knowing it cannot be implemented now. In such cases they rely on the Regional Foresters and Forest Supervisors to set priorities or give the field signals to delay implementation.

Some Staffs are aware that the policy they issue is not adequately interpreted at the Regional and Forest level for the Districts' use. One Staff in particular had recently made important policy revisions. Although they went to great lengths to explain and publicize the new direction to the users in the field, they found that it was not being followed. They later traced this problem to a lack of understanding of the new policy, and a lack of appreciation of it's urgency by most Regional Foresters. Regional Foresters, by not becoming adequately involved themselves, were not able to get their line to implement the changes.

One W.O. Staff Director expressed the opinion that it is not necessary for the W.O. to spend a great deal of time interpreting policy for the field. He felt that line officers are paid to make decisions about how to implement policy and should be willing to assume the risks associated with doing so. He feels it is part of their job.

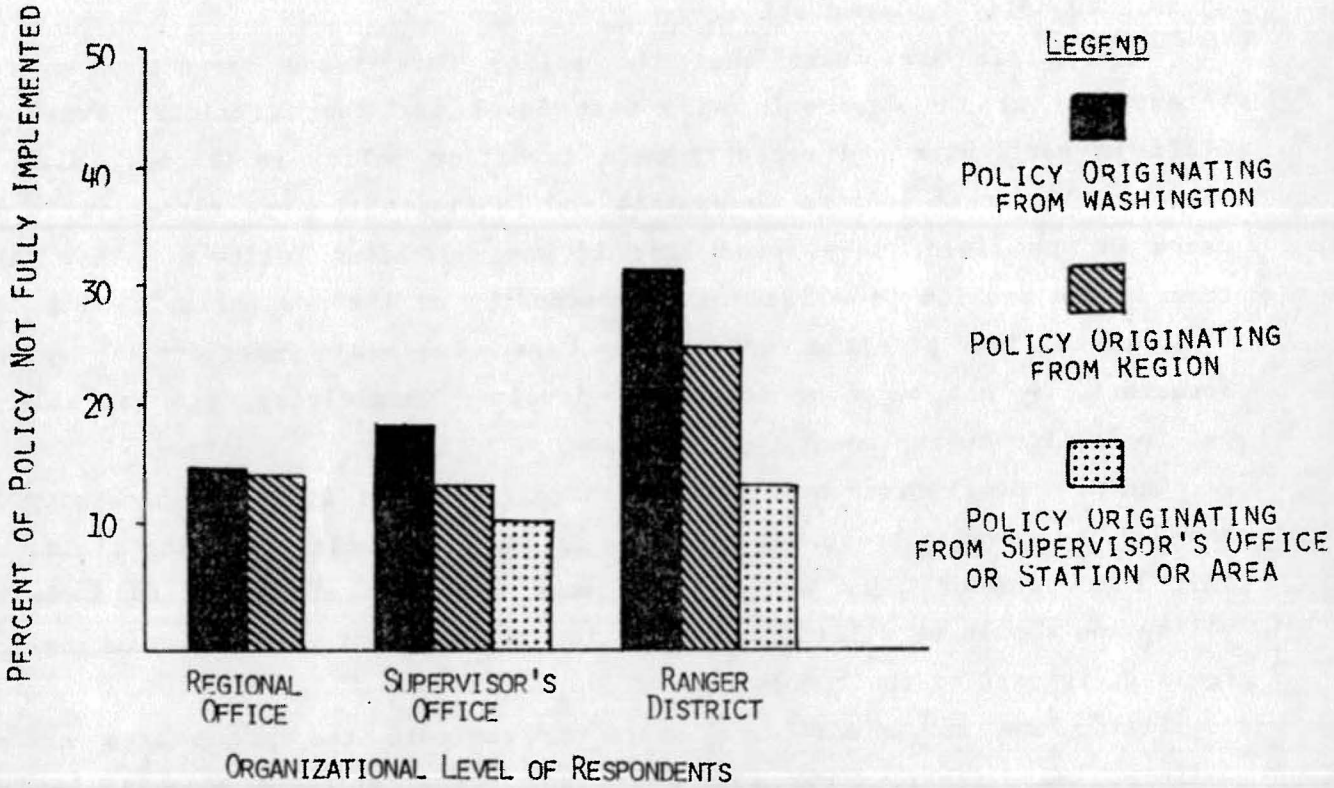
Field line and staff were asked to estimate the percentages of new policies and directions which they did not fully implement because they did not feel it is possible or advisable to do so. Figure 4, derived from question 9, strongly supports the intuition that the percentage of non-compliance increases with the organizational distance between the policy and direction originator and receiver (D-13,14). This general trend remains valid even if we allow for some misreading of question 9, especially in the applicability of Regional policies and directions to the Research Stations. No consistent pattern was observed between responses by line and staff officers.

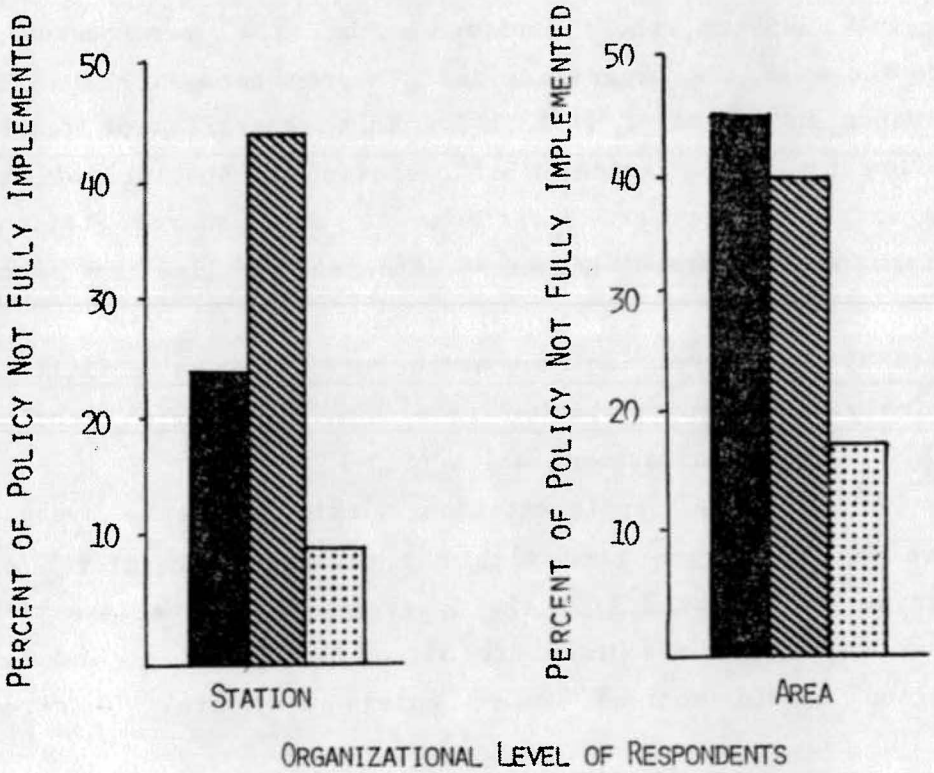
Question 7 probed the perceived implementation rate on major activities. There is a surprisingly high implementation rate immediately upon receipt, averaging around 41% for all organizational units (D10-12).

The percentages of additional implementation within 3 months averaged 35%. The cumulative implementation rate within 3 months is therefore 76%. This was higher than we had expected from the interviews. In the interviews most people said that sufficient resources are often not available, and that policies and direction should not be issued unless they are. Deferred

FIGURE 4

PERCENTAGE OF NEW POLICIES WHICH ARE NOT FULLY IMPLEMENTED





implementation until resources are available, was however surprisingly low, averaging 19%. Deferred until forced to implement was even lower, averaging 8%. (These averages do not add up to 100% because of rounding off errors.)

Since immediate compliance with all policies and directions is not feasible, the response rates, if a true reflection of reality, show a very responsible approach to policy and direction implementation. There is no significant difference between line and staff in regards to implementing policy within 90 days. For both it is very high. There is also no significant difference in implementation rate between organizational levels, or even between NFS, Research, and S&PF. It appears from this data that the organization responds fairly uniformly to demand for policy or direction implementation.

Functionally, implementation is also fairly uniform, ranging between 70-80%. The three exceptions are Personnel, Fiscal and Accounting, and Forest Insect and Disease, where implementation within the first 90 days was 90% or higher. This high rate is to be expected for PM and for F&A since these are both administratively critical and legally binding functional areas, and for FID because of the political sensitivity of chemical treatments.

Review and Evaluation

We found consistent complaints throughout all levels of the organization, especially at the Regional level, about the ineffective use of the review process as a means to evaluate compliance with policy. In terms of an organizational scheme, the Forest Service was identified as strong in planning and operations, but weak in evaluation. The agency was said to be too operationally oriented and does not use the review process as it was intended. The review process was characterized as a good vehicle to determine which policy to change once it is established, and as a means by which to find out what works and does not work.

Though Staffs in the Washington Office use the review system to monitor policy compliance, few see it as a means to assess the suitability of policy once it is implemented. Most admit to tightening policy when they observed field non-compliance. Only a few Washington Office Staffs suggested that they examined reasons for non-compliance or questioned the need for that policy, or made suitable adjustments.

Once policy is in the FSM there appears to exist little give and take between the field and the Washington Office to determine necessary adjustments.

Because amending an existing policy is a difficult process, it is not undertaken lightly. The usual impetus for such an effort is a major change in external direction or in the field situation. "Minor" field complaints seldom warrant the initiation of a policy change process. Thus the field is left on it's own to interpret and "bend" policy when needed as best it can without breaking it overtly.

CONCLUSION AND RECOMMENDATIONS

Policies and directions are primary messages linking, orienting and, sometimes, propelling members of an organization to common goals and objectives. They define the boundaries of behavior for each employee. The impact of policies and directions cannot be over-emphasized.

Policies and directions are, however, not independent variables. They are part of the larger organizational system and reflect organizational philosophies, motivations and inhibitions.

While this study points out some specific feasible operational improvements for Forest Service policy and direction management, it also reveals longstanding and fundamental conflicts which must be resolved if the policy and direction structure is to be internally consistent and meaningful to all members of the organization.

Oversubscribing

Constance Lundberg, Attorney-at-Law, said at the SAF Conference in Spokane, Washington, in October 1980: "The Forest Service ties its own hands by over-prescribing processes and rules". The conflict at all levels of the organization mirrored in our policies and directions is between control and associated risk avoidance, vs. more flexibility, delegation and, probably, lower operating costs.

The Forest Service has never made a clear choice and our policies and directions reflect that. We may be over-protective in some areas and provide insufficient direction in others. The pattern is not consistent. The result is confusion, with simultaneous requests for less complete and more complete direction, less and more freedoms, less and more guidance and uncertainty about top management's real attitude towards autonomy and risk taking.

If the security vs. risk conflict is not resolved, all other recommendations for better direction management are merely cosmetic improvements. Even the recommendations for technological improvements, which offer potentially significant cost and efficiency benefits, would by themselves only allow the system to run faster in two opposite directions at the same time.

The managerial literature identifies line officers as risk takers willing to gamble to obtain the organizational goals while staff officers are characterized as more conservative and generally more interested in exercising control through technological or administrative prescriptions. Policies and

directions are written in our Agency primarily by staff officers and are reviewed by line officers, and since neither, apparently, dominate the process, the conflict is unavoidable.

General Alton D. Slay, Commander of the Air Force Systems Command, made these observations about the same problem in the Air Force to the Senate Appropriations Committee during a hearing in the Summer of 1981:

"The argument is always made . . . that having several layers of scrutiny in a program protects against mistakes. In my experience . . . layering causes more mistakes than it prevents". Contrary to the latest trend of recentralizing authority; the further up any chain that a decision is forced beyond its natural level, the greater the likelihood of a bad decision.

Problem: As the Forest Service has grown in a more demanding and regulated environment, our decision making has become more complex. Technological and administrative prescriptions have increased and, we suggest, have been over-prescribed. With a calculated degree of risk, this trend can be reversed for the benefit of the Agency and the public.

Recommendation 1: Select, on an experimental basis, one or more Forests in one Region and allow these Forests to disregard methodological prescriptions if, in their view, it will increase efficiency of operations and not contradict Agency policy. During initial phases of this experiment the Forest may need to inform the Region in advance when Regional or National prescriptions are disregarded. Such an experiment would have to be carefully designed and monitored.

Policy Communication

The user makes three judgements about policy and direction: (1) its value to him/her, (2) how much s/he trusts the writer of the policy, and (3) the authority of the signer of the policy. Items 2 and 3 decrease with the distance between user and writer or signer. Part of this loss is because most employees contact only adjacent hierarchical levels.

Problem:

Lack of contact between higher and lower levels creates lack of confidence in both directions.

Recommendation 2. Permit, on an experimental basis, the personnel at District and Forest levels at one or more Forests to contact relevant Staff two levels removed and to be contacted directly by them for information. Provide means whereby information gained is retroactively made available to the intervening level.

Recommendation 3. Permit, where feasible and advantageous, responses to "reply due" inquiries to be mailed directly from one level in the hierarchy to two levels above (e.g., District to Region, if Regional inquiry, or Forest to Washington Office, with copies provided to the intervening level). More communication will get through and better linkages are achieved. It will place the burden for discriminating between conflicting opinions on the originator of the "reply due" correspondence because less prior screening takes place.

Recommedation 4. Periodic regular meetings during which major new or revised policy and direction is discussed were repeatedly identified as a major aid in overcoming blocks and uncertainties. Specially at the S.O. level, a monthly meeting between the Supervisor, the Ranger and Senior S.O. staff is strongly recommended, vene with high travel cost from outlying Districts.

Recommendation 5. Encourage broader distribution of Chief & Staff Notes within the organinization for *** , a telegraphic indication of possible new direction and as a link to top management.

Problem:

The field feels insufficiently informed about strategic/intermediate planning and related policy. In contrast, they feel sufficiently informed about short range or tactical planning. Formal policy dissemination by means of the FSM does not address strategic planning issues since it is not sufficiently time-sensitive.

Recommendation 6. Add a specifically labeled (e.g. Policy Issues) section to the Friday Newsletter, and summarize new, pending, or revised policy in that section. Elements from the Chief and Staff Notes dealing with those issues could be summarized.

Problem:

The terms "objectives", "goals", and "targets" in some sections of the FSM (e.g., 2210) are inconsistent with the terminology as defined, for example, in the PPB process. The differentiation between the the terms "policy" and "direction" is equally unclear. When basic definitions are confused, communications are difficult.

Recommendation 7. Adhere to standard FSM definitions for the terms "objectives", "goals", "targets", "policy", "direction", and use these terms when communicating about these issues.

Policy Generation

Problem:

There is a pervasive feeling in the field that the criteria used for issuing direction are either too loose or non-existent. The operating dictum is perceived to be: "When in doubt issue a directive".

Recommendation 8. Explore all other available avenues to reduce or eliminate a problem before issuing a new direction.

Recommendation 9. Establish three minimum criteria for determining whether new directives should be written and issued:

(1) Frequency of use--

Adhere to the policy that a directive should be issued only when its use is known to be frequent.

(2) Permanence of need--

Create a permanent policy or direction only when it is unlikely to be modified or revoked in the near future.

(3) Fiscal feasibility--

The costs and impacts of implementing a policy or direction must be evaluated before it is issued. These costs could outweight the expected benefits. Issue policy or direction only when resources are available to make implemention possible now or in the near future.

Recommendation 10. Policies must be written and designed so that management can readily ascertain whether they are implemented, otherwise policies cannot be enforced.

Problem:

Directions, whether in formal or informal format, have an anonymous originator. Except for routine line officer's approval, responsibility for the direction is not traceable.

Recommendation 11. The staff officer primarily involved in issuing a new direction (generally below the Staff Director's level) should be identified. This is in addition to the authenticating signature of the respective line officer. This way responsibility for issuing direction cannot be hidden. In the FSM, the name of the direction writer or initiator can be carried on the amendment page. (Administrative Management made a similar recommendation in their 1979 report.)

Problem:

The value of the signatures of senior line officers has, because of frequent use, deteriorated in the minds of most field personnel. While we adhere to the line and Staff concept requiring a line officer's responsibility for all ordered action or direction, most personnel believe that line officers are unable to examine, question, and personally review the orders they sign. The value of a senior line officer's signature several levels removed as an incentive to emphasis or motivation is, therefore, very low.

Recommendation 12: To provide emphasis to orders and directions, use the most senior line officer (i.e., Chief for Washington Office and Regional Forester for Region) only for most urgent communications.

Problem:

When a directive is scheduled to be amended the news often reaches the field via the rumor route, thereby creating unnecessary uncertainty about present action.

Recommendation 13: When elimination or modification of existing direction is being considered, and if such modification could critically affect existing decisionmaking in the field, provide advance notice of such action in the Friday Newsletter or other weekly release.

Problem:

The digest rarely provides sufficient cues for a user to decide whether to read the amendment. Present key words or one liners are useless to most field users.

Recommendation 14: Significantly expand the digest on the FSM Amendment Sheet to facilitate the user's decision whether to read the amendment.

Distribution and Processing

Problem:

The line and staff structure of the Forest Service demands that the distribution of correspondence (including policy and direction) goes from line officer to line officer. Technical correspondence or directions follow the same route, but are generally of little interest to the line officer. Time is lost because many writers do not know which file number to use so that corespondence is routed to the intended recipient.

Recommendation 15: Address direction and other correspondence directly to the intended recipient. Where protocol must be observed, correspondence could be addressed to the line officer with "attention to: _____".

Problem:

Processing time for generating, updating and amending the FSM and FSH in the Washington Office is long. While some field people find comfort in this delay, most would prefer to receive new direction as soon as possible.

Recommedation 16: Assign due dates for the review and coordination of directions in the Washington Office and in the Regions (for Regional supplements), and pressure for adherance to these due dates.

Problem:

The time and cost of printing and distributing updated policy or direction under the present system is high.

Recommendation 17: Do not change the present hard copy format into microfiche. This is at best an interim solution. The dollars, time and effort required to effect this change do not seem warranted by the limited benefits in storage and mailing simplification. (This confirms a similar 1979 Administrative Management recommendation.)

Recommendation 18: When all field installations have computer terminals and printout facilities, and it is feasible to consider a dedicated centralized processer, initiate a complete cost, manpower, and hardware evaluation for the transfer of the Directives System from its present hard copy format to a computerized system as discussed in the report, pp. 27-30.

This study explored the new technologies for storing, updating and distributing directives and found substantial support for their use at all field locations.

Content and Structure of Directives System

Problem:

Field responses strongly indicate that the FSM contains unnecessary details on "how-to" instructions.

Recommendation 19: Experiment, as proposed in Recommendation No.1 above, with reduced controls in one or more experimental forests.

Recommendation 20: Extract methodological instructions from the FSM and either eliminate or, if absolutely necessary, introduce them into FSH.

Problem:

Policy too often overprescribes operational procedures on non-sensitive issues, and underprescribes on politically sensitive issues. When policy is too explicit it may not only limit flexibility to interpret, but it may give the public specific information which, if misinterpreted, may be used to sue the Forest Service.

Recommendation 21: Keep non-sensitive policy broad. It should give maximum flexibility to line officers to exercise discretion. On sensitive issues where risk must be minimized, provide precise limits on policy interpretation.

Problem:

Forest Service organization tends to follow function. The Directives System is organized by function which, in most cases, corresponds to the organization. It is often difficult to assign or find the unique functional designation because functional areas do not always clearly correspond to organizational structures and are sometimes split among many organizational units, for example, planning. Furthermore, many directions do not fall into one single functional designation.

Recommendation 22: When organizational changes are made, resist temptations to change functional designations to fit the new organization. Use a double file designation in correspondence and more extensive referencing and cross-referencing in the Directives Systems to reduce search procedures.

Problem:

At present, there is no clear indication of the priorities of various policies and directions. All appear on the books as equally important. At times the field attempts to read priorities into such wording as "must", or "may". Since not all directions have equal priority for limited resources, the field personnel assign their own priorities, but then often have anxieties about the correctness of their evaluation.

Recommendation 23: Provide cues to priorities of directives by establishing a three step priority rating. A possible rating could be: A) For immediate action, B) Implement as soon as possible, C) Action when resources are available. Priority "A" should have the Chief's or Associate Chief's personal approval.

Problem:

The field sees a need for policy and direction writers at the Regional and even more at the Washington Office to keep current with operations and limitations in the field. Since rotation is becoming less feasible, field

review becomes increasingly necessary.

Recommendation 24: All major directions should have adequate field review for feasibility and appropriateness before they become final. In emergency situations such reviews might be obtained orally.

Problem:

Because of ever increasing economic and socio-political demands placed on the Forest Service, an increase in conflicting policies and directives is inevitable. The cost of conflicting direction in terms of confusion and uncertainty in the field is high.

Recommendation 25: Continue the existing process of review of direction by all involved Staffs at the policy generating level. The consequent delay is a necessary cost.

Recommendation 26: Provide priorities for conflicting objectives where the conflict cannot be eliminated (e.g. minimize total travel cost versus minimize mileage and/or gasoline consumption).

Recommendation 27: Make trade-off analyses where conflicting policies seem unavoidable and prorities cannot be intuitively assigned or are not obvious from the regulations.

Problem:

The Washington Office sometimes provides a positive answer to Congressional inquiries on requests (e.g. permits) which the Supervisor's Office would deny on its own merits. Sometimes the field is not aware of the prior Washington Office commitment, makes a contrary decision and places itself in conflict with the answer given the permittee by the Washington Office. As a consequence, congressional pressure is at times brought directly upon the Forest Supervisor.

Recommendation 28: Higher levels should not make commitments on local issues without first discussing the issue with local management.

Problem:

The cross-referencing in the FSM is incomplete and inadequate. Cross-referencing from one functional area to another and from Forest Service sources to other Federal references is particularly weak. External policy sources that do not serve to clarify direction, when reproduced in the FSM, add unnecessary volume and can confuse the user.

Recommendation 29: Cross-reference, but do not reproduce externally provided policy and direction such as laws, the Code of Federal Regulations, the Federal Personnel Manual, and the GAO Manual. Use cross-references and repeat passages from other references only to clarify the directive.

Problem:

The index for the FSM is relatively useless to the inexperienced user and only marginally useful to the knowledgable Staff member.

Recommendation 30: Increase the number of key words and improve the accuracy of key words used in FSM index, especially regarding multi-functional topics such as Recreation, Wildlife, and Land Management Planning.

Problem:

The writing style and presentation of the Directives System is a major field concern. Formal and legal structures are always cumbersome and consequently hard to read and understand. The field often has difficulty comprehending FSM material.

Recommendation 31: Writers for the Directives System must have sufficient English language skills to provide efficient, yet readable text. An alternative to this is professional editing which can be very expensive. Writing style should be positive and less legalistic except where specific legal restrictions need to be spelled out. Negative writing style is not conducive to action. The Directives Management Group should have the authority and means to control writing quality.

Recommendation 32: Provide highlights for ease of recognition of significant elements and reformat for easier reading. This may warrant a professional consultant's opinion.

Recommendation 33: Increase the use of charts, graphs, and illustrations for better readability and impact.

Problem:

Obsolescence was identified as another major detriment to the utility of the Directives System.

Recommedation 34: Staffs responsible for FSM titles 2300, 2800, 6100 and 6500 in particular should examine their sections for obsolescence and bring them up to date.

Problem:

The Directives System is used to regulate the quality and/or quantity of individual or group performance.

Recommendation 35: Remove elements from the Directives System where the main purpose is regulation of individual or group performance. Allow this function to be managed by the local manager, as is the intent of our management structure.

Problem:

Universal prescriptors may be counterproductive when the situations and requirements differ markedly between Regions or Stations.

Recommendation 36: Officers responsible for issuing new direction must be more sensitive to their impact and be willing to forego degrees of control in order to increase the usefulness of the direction to the field.

Problem:

It is often impractical or extremely costly to implement a new regulation or direction when it is issued in the later stages of an on-going process (e.g. contract).

For example, harvest plans and road designs are frequently redesigned several times to adjust to new policies and directions that are issued during the processing period, thus causing costly delays.

Recommendation 37: Except for highest priority direction where a "retrofit" is mandated, new regulations and directions should become effective with the start of the next activity cycle, after ongoing designs, plans or operations are completed.

Problem:

The field sometimes must act on a new sensitive issue before a directive can be issued. Currently, they do not feel they get adequate guidance to allow them to act with confidence.

Recommendation 38: When action is necessary in the field before a full directive can be written, issue a policy memorandum for field interpretation. The Washington Office or R.O. can then monitor the field interpretation and react to it by modifying the bounds, if necessary. This process would prevent overspecifying and would permit maximum flexibility.

Problem:

Direction is sometimes issued without adequate information for the field to understand why it is needed. As a consequence, there is no motivation to comply with it.

Recommendation 39: New or revised directions should provide information on why they are necessary and what they are expected to accomplish.

Problem:

All field comments on proposed new regulations can rarely be accommodated in the final policy or direction. Employees resent it when their comments are not adopted. They often feel that their input was not considered worthwhile or was not even read.

Recommendation 40: When new or revised policy or direction is issued, provide a throw-away information sheet on the logic for the new policy or direction and why major field suggestions could not be incorporated.

Problem:

The Directives System is a complex and voluminous structure. Many new employees and older employees who have changed functional assignments are not familiar with the content of relevant sections. New employees are not taught how to use the System effectively.

Recommendation 41: Reinstitute a course in the use of the Directives System or issue a self-teaching guide to its use. When the Directives System is transferred to an electronic mode, retraining for the use of that mode for large segments of the agency may be necessary.

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