Fire Camp Organization and the Duties of the Camp Personnel
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INTRODUCTION

The purpose of this paper is to furnish to the reader a general idea of the details of constructing, and organizing a fire camp, such as is used by the U.S. Forest Service in the suppression of large forest fires.

The management of fire camps is increasing in importance each year due to the improvement in fire control methods and the employment of larger crews for fire suppression work. Forest Officials have recognized the fact that the back-of-the-line forces are of equal importance with the forces on the fire line, and have taken steps to improve the efficiency of the service of supply.

The source of material for this paper was derived from Forest Service Manuals, Forest Service Officials, and from the Writer's own experience. The Writer is indebted to Lester Edge, of the Willamette National Forest for information given on this subject.
LOCATION OF CAMPS

The location of camps is of great importance in gaining the maximum efficiency of the fire crews in suppression work. Several factors enter into selecting a favorable camp spot: first, safety for the men and supplies; second, an ample supply of good water; third, space large enough for the kitchen and bed grounds; fourth, the shortest distance to the fire line with reference to transportation of supplies and equipment. The ideal camp spot is seldom found in rough country. The camps are usually located by the fire chief or scouts who have been around the fire and have decided on the plan of attack.

In establishing a camp the first thing to do is to get started; make sure all supplies, tools and equipment, and cooks are ordered and on the way. Upon their arrival in camp, make a close check to be certain everything is there for the initial start. See to the unloading of trucks or pack stock, so that the items needed first are not at the bottom of the pile. The next thing is to set up the cook stoves in a practical manner, after consulting the cooks as to the arrangement of the kitchen; give the cooks sufficient help to get the first meal started with the least possible delay, for feeding the fire crews is the foundation of good camp management.

Camp sanitation cannot be started too soon; dig garbage pit for the kitchen, and latrines for the camp crew and fire fighters, convenient to the bed grounds and below the
source of water supply.

Locate a spot for the time keeper to set up his office, preferably near the unloading place, so that he can check contracts, and give general information to the men as they arrive in camp, before they become scattered. The commissary office should be established with the time keeper's office or near by, so that accounts can be kept more accurately and up to date.

Tools and equipment should be located in a spot large enough to separate the different items, so that orders for the different foremen can be made up and segregated for the crews, then the men can line up and take away the tools without any delay.

Communication should be set up as soon as possible with the base camp or headquarters, so that further orders may be received or sent out, if necessary, to get the camp established properly.

The First Aid office should be established immediately, in order to take care of any injuries.

Transportation facilities should be organized as soon as possible, to haul the crews and supplies; a definite place should be located to park the trucks and cars, and, also, a place for the pack stock.

**Location and Construction:** The location and construction of the various sections of the camp differ somewhat according to the type of country with respect to the availability of supplies
and equipment; for instance, if the camp is located on the road, it is possible to have a better camp than if it is in rugged country and it is necessary to haul supplies with pack stock.

Supplies: The supplies should be located in conjunction with the kitchen and should be piled in an orderly manner, so that all items are accessible to the cook, and an inventory can be quickly made in order to keep a good supply of staples on hand. The supplies should be kept within an enclosure, either under a tarp or tent to protect them from the weather and to insure them from not being stolen.

Kitchen: The location and construction of the kitchen is one of the most important parts of the camp. It should be placed near the water supply and below the source of it. The kitchen should be fenced in either with poles or ropes to keep the men out; work and serving tables can be constructed around the kitchen to serve this purpose, also. If the camp is located on the road, lumber can be used to make tables and shelves; if not, strips of canvas may be nailed to laths or poles, or if proper timber is available, shakes can be made to use for the tables. All meals should be served cafeteria style, with each crew scheduled for a certain time, especially at breakfast; this eliminates confusion and speeds up the dispatching of crews to the fire line. Tables should be constructed for the men; seats are not necessary, build the tables high enough for the men to stand up and eat. In case there are several
Forest officers in a camp, it is desirable to construct a private table for them.

There should be a garbage can or box placed at the exit of the dining room for the men to dispose of the food left on their plates, and other containers in which they can put the utensils.

A meat house should be constructed in a shady place near the kitchen. The meat should be hung so that air will get to it from all sides, and should be covered with a wool sack or netting; a tripod made of poles, or a cross bar between two trees will serve the purpose. If water is near, a cooler can be constructed very easily. A piece of water pipe or length of fire hose can be used to good advantage in setting up a kitchen.

Sanitation: The garbage pit should be at least 100 feet from the kitchen and below the water supply. It should be dug deep enough to last for a while; chloride of lime or dirt should be thrown in the pit at regular intervals so the pit will not attract flies. The latrines should be at least 300 feet from the kitchen and convenient to the bed grounds and unloading zone (3); a narrow trench is usually sufficient for the purpose. A shovel should be left at each one, and a layer of dirt put in at regular intervals during the day.

Timekeeping and Accounting: The timekeeping office should be located far enough away from the kitchen so there is not too much confusion. A tent should always be furnished for the office, for the timekeeper's efficiency is greatly increased
when the wind does not chill him and blow the papers from his desk. The entrance should be closed with a table or counter, over which business is transacted with one person at a time and the crew has no opportunity to crowd.

The commissary can be taken care of by the timekeeper when the crew is small; otherwise, it should be taken care of by a commissary clerk. Regular hours can be established for this office to be open so it will satisfy the needs of all of the crews. A check station can be established in this office where men can leave their personal articles or extra clothing while they are on the fire line.

Tools and Equipment: The tools and equipment storage should be near the loading zone, or entrance of the camp, where it is convenient to the trucks. Space should be allowed to separate the different items in piles, or racks built of poles. Small equipment should be kept in locked boxes; stalls should be made for each crew, with the crew number attached, so that orders can be made up and ready when the crews leave camp. They also help in checking tools on their return. This section should be fenced with rope or poles to keep the men out.

Communication: The telephone or radio should be set up near the timekeeper's and camp manager's office, where it is handy for their use, but will not distract them from their office work. In large camps a public address system can be set up at the camp manager's office; this is a great time saver in locating and giving messages to the personnel.
Transportation: Trucks and cars should be located at one side of camp. A place can be cleared for the purpose. Locate the gas and oil supply in a safe place that is handy for servicing; also, clear a spot for greasing and changing oil, and working on machines. Feed racks and stalls for the pack stock should be located well away from camp. Poles can be used to build mangers and stalls, which saves horse feed and helps the packers in caring for their stock.

First Aid: The first aid station should be located at one side of the camp, away from the confusion of the camp, preferably in a shady spot. A space should be made where the patients can lie down and rest.

Bed Grounds: Bed grounds should be located on level ground, if possible, away from the main camp. A separate spot should be located and posted with the number of each crew. If it is necessary to clear ground, leave trees or brush between the different spots; this affords a little more privacy to a crew wanting to sleep while others are coming and going from work.

Wash Room: A wash room should be located convenient to the bed grounds and to the kitchen. Benches can be erected for the wash basins. Warm water can be furnished by keeping a boiler of water on a stove or fireplace near the wash stand; this is appreciated by every one and is a help to camp sanitation, as well as preventing skin diseases.
BACK-OF-THE-LINE ORGANIZATION

The successful handling of a project fire depends to a large extent upon efficient functioning of the back-of-the-line organization. This organization is just as important as the forces employed on the fire line, because the forces cannot function without an adequate service of supply. They must have adequate equipment, plenty of wholesome food, and well-managed camps in which to rest at night. Their time must be kept correctly, and every detail of the camp activities must be planned and carried out in an efficient manner, so that the fire chief will be able to devote the maximum amount of his time to the management of the fire line forces. (1)

Service of Supply Units: S.O.S. units are organized on each Forest and at the Regional Office. The men in the units are assigned and trained to certain jobs; many of them have had several years of experience in such work. It is the plan of the units to be completely organized, and upon call, proceed at once to the scene of action. (3) The units have but one objective, and that is to assist the fire chief in controlling fires just as efficiently, rapidly, and economically as possible. (3)

Scouting units are organized to assist the fire chief; these men are trained, and by using portable radios, they give very valuable assistance. They also gather weather data, and keep progress maps and history of the fire.
DUTIES OF THE CAMP PERSONNEL

**Camp Manager:** The camp manager handles all matters pertaining to camp activities, so that the man in charge of the fire can devote all of his time to the suppression of it. (3) It is his duty to organize, instruct, and supervise all back-of-the-line forces working in camp.

On small fires the camp manager may take care of all activities personally, and increase the camp personnel as the work increases. (1) When necessary to employ assistants, each man should be put in charge of one or more branches of the work and be held responsible for it; for instance, a man may be put in charge of timekeeping and commissary, and if necessary, an assistant timekeeper may be assigned to work under him. All activities performed by the men in charge of different sections should be checked by the camp manager.

In large camps the camp manager should not attempt to do anything personally, except to supervise, and make certain that everything is progressing as it should to meet the needs of all concerned.

**Receiving Officer, duties in part:**

1. To cooperate with the camp manager in locating the timekeeper's office in such a manner that it will be close to the unloading zone, and arranged so that the men will have to pass in single file past the checker's table. See that all men check in when they arrive; assign them to a crew and make sure that they know their crew number.
Have sufficient sanitary facilities near the loading zone.

Have sufficient light, and signs posted to aid the men arriving in camp to find their way about.

Check the undesirables, sick, lame, lazy, too young or too old, and those with improper clothing, especially shoes, and weed them out to be returned to the place hired.

Assemble foremen and assign them to crews. The crew then becomes the foreman's responsibility.

Direct foremen to supervise the drawing and distribution of bed rolls or other equipment that might be distributed.

Follow a system of crew numbers throughout the period of the fire, so that each crew will retain the same number regardless of change in personnel. See that each man is assigned a number and foreman, and knows where the crew bed ground is located. Each man should be given a tag for his bed roll with his name, contract number, and crew number, to attach to his bed, with instructions to roll his bed each morning and leave in a pile in the bed ground. The foreman is responsible for seeing that this is carried out.

Keep such crew records as may be necessary.

**Supply Officer, duties in part:**

1. To become responsible for all equipment and supplies upon their arrival in camp. He will see that all items are checked and accounted for before signing transfer slips, and immediately store them in their proper place. Small articles such as flash lights,
hand axes, etc., should be kept in locked boxes.

2. Maintain stocks, and fill all orders for equipment and supplies from various camps on the fire. (3) All orders must go through him for food, tools, hay, grain, gasoline, etc.

3. Keep himself informed as to the increases or decreases in personnel, and regulate his stores and orders accordingly. (3)

4. To have charge of tool sharpening, equipment conditioning, and provide necessary tools, filing racks, bins, etc.

5. To supervise such help as may be necessary for the work assigned to him. See that their lines of authority and duties are understood. (3)

6. To arrange for proper collection of tools and their return when they are released by the fire chief. (3) All property turned in should be signed for by the person receiving it.

7. To construct marker in case equipment and supplies are brought in by plane. Four white bed tarps laid in the form of a cross will serve the purpose. Cargoes should be accurately counted and located as they drop. Use a compass if cargoes are dropped in timber or brush.

8. Stay on the job until camp is broken and all equipment is cleared (3), or until properly relieved of property. Keep an accurate list of all property and shortages at all times.
Steward or Head Cook, duties in part:

1. To prepare daily food orders based upon standard ration lists furnished him and deliver the orders to the supply officer at the specified time set by the officer. Prepare menus which contain a well-balanced diet of fresh meat, vegetables, and fruit.

2. To assign cooks and helpers to their proper place and shifts, and see that they are on the job at the right time and doing their share of the work. See that there is sufficient help to handle all shifts and regulate the hours so that they do not have to stay on shift an excessive length of time. Use tact in handling the crew to prevent any harsh arguments being started which might get them in a bad frame of mind.

3. To see that meals are ready at the exact specified time. Also, to always have sufficient food ready to serve a small crew on short notice.

4. To see that the proper number of lunches are made up and ready to go at the specified time. Lunch making is a large job in itself, so that suitable lunch material should always be on hand, and a suitable table constructed to prepare lunches in mass production.

5. To see that food is properly taken care of and prevent waste.

6. To see that sanitary conditions within and around the kitchen are kept on the highest possible plane. A dirty food handler should not be tolerated.
7. To see that all dishes and utensils are properly washed. They should be rinsed in boiling water.

3. In case there is more than one camp, the steward should visit each one regularly, if possible, or have an able assistant check them for him. If this is done, his work will be more efficient and all kitchens should run more smoothly.

**Paymaster, duties in part:**

1. To assign a sufficient number of timekeepers to the receiving camp to take up contracts, give numbers to men, and head time slips.

2. To organize timekeepers for various camps, and instruct them as to the proper procedure of their work. (3)

3. To have sufficient forms and office equipment available. (3)

4. To keep a constant check on all timekeepers to see that they are keeping their work up to standard.

5. To have charge of final pay-off.

**Timekeeper, duties in part:**

1. All overhead will register with the timekeeper, giving their names, from where they came, from what appropriation they are being paid, present assignment on the fire, and any other information deemed necessary. (3)

2. Issue time books to foremen with instructions as to the proper method of keeping time. The strawbosses under each foreman will keep the time of the individuals and turn it over to the foreman at the end of the shift.
3. Make up two time books for each foreman, so that when he turns in a book at the end of a shift he can take the other one for the following shift; this gives the timekeeper more opportunity to record the time and also do it during the day time in better light.

4. Entries in the time books should be checked at the time the foreman turns in the book, so that if there are any errors they may be remedied at once by the foreman.

5. Set up time slip in duplicate for each man. Great care should be exercised in heading the time slip by listing the names, addresses, and numbers exactly the same as they are on the contract. (1)

6. Enter all time daily, and keep time slips up to date. A time saver for this work is to have sufficient quantity of note book carbon paper, and leave a sheet of it between the two copies of the time slips.

7. All time slips will be filed alphabetically in a small file case. (3) In case the men remain steady in a crew, time can be saved by filing under crew number or name of foreman.

8. All commissary items will be posted from the commissary ledger daily.

9. Errors in computations on time slips will be corrected by the timekeeper without erasing or rewriting the time slips. Such changes must be initialed. (1)

10. Errors in time must be checked with the foreman. (3)
11. Men must not leave camp before their time is computed and the time slip signed by them. Make sure that they sign their name the same as it is headed on the time slip.

12. When a man or crew is transferred from one camp to another on the same fire, the time slips will be checked by the timekeeper to see that entries are completed up to the time the men leave camp for their new assignment. Then the timekeeper will initial the original time slip opposite the last entry, put both time slips and contract in an envelope, seal it, and write name across the flap, address to the timekeeper of the assigned camp, to be delivered by the truck driver or some responsible party.

13. When a man is discharged, quits, is released, or is sent to another fire, notations will be made in the foreman's and camp time book, and his time slip will be completed in all particulars and signed by him, the timekeeper, and the camp manager before he leaves camp. The time slips and contract will be sent in a sealed envelope by a responsible person to the proper address as directed by the camp manager.

14. Timekeepers will be assigned to certain crews for the duration of the fire.

15. To avoid delays and confusion, when individuals or crews are transferred from one camp to another, entries, including time, commissary, and property must be kept absolutely current.
Commissary Clerk, duties in part:

1. Check commissary upon receipt. (1)
2. Display commissary, and keep in a neat orderly manner. (3)
3. Keep accounts and inventory up to date, and watch fast-moving items to prevent exhaustion of stocks. Orders should be placed far enough in advance to insure an adequate supply at all times.
4. In cooperation with the timekeeper, issue coupon books for the use of commissary purchases by the men. The coupon books will be charged on the time slip, with credit given for coupons left at the termination of employment.
5. Selling prices will be determined by the supply officer and a sales list made of all items.
6. Open the commissary for business during the hours that will accommodate all of the crews, usually early morning and evening until bed time.
7. Coupon books and coupons represent cash and must be regarded as such. (3) They must be properly safeguarded at all times.

Transportation Officer, duties in part:

1. To establish vehicle pool and to have charge of all transportation and traffic, including the routing and directing the work of truck drivers, packers, and others servicing the fire organization. (3)
2. To be responsible for maintaining, repairing, and servicing all transportation equipment. (1)
3. To organize through camp police such traffic control and
direction which may be necessary.

4. In cooperation with camp manager, secure a list of extra trucks and other equipment available in case the crews are increased or breakdowns occur in the equipment in use. (1)

5. To establish lines of authority and duties for all transportation men under his supervision, keep time, and arrange working hours for them. (3) Keep time of hired pack stock, mileage of rented trucks.

6. To have the trucks lined up in an orderly manner, and ready to go when the crews are dispatched in the mornings; also, to find out where and when to pick up the crews at the end of the shift.

**Camp Police, duties in part:**

1. To patrol the camp area and be constantly on the alert for any condition or practices that are not in keeping with the common welfare of all concerned.

2. To protect government and private property against theft and damage. (3)

3. Prevent violence or disturbances, and unnecessary noise while crews are sleeping.

4. See that men do not enter or remain in closed areas, especially the kitchen.

5. Keep a close check on sanitary conditions, especially the water supply, latrines, and garbage pits.

6. Assist in orderly routing of crews through camp.

7. Report any men known to be infected with a communicable disease, or who may in some other way have an undesirable
effect upon the welfare of the camp. (3)

8. To prevent as much as possible the scattering of paper and waste around the camp. (3) Keep the camp clean.

9. See that directional and other signs are in place and readable.

10. Maintain lighting facilities for the camp and see that the lights remain in the designated places.

11. Assist in the orderly line up of men for mess and issuance of tools and equipment.

12. Help locate and maintain warming fires for the crews; see that there is always a supply of hot water for washing.

13. When the camp is moved out, see that the area is cleaned of all refuse, and left in as good shape, if not better, as it was found upon the establishment of the camp.

First Aid Officer, duties in part:

1. To administer first aid at any time necessary.

2. To maintain a sufficient quantity of equipment and supplies to meet any emergency.

3. To thoroughly familiarize himself with the Regulations of the U. S. Compensation Commission, and prepare such reports as may be required. (3)

4. To keep account of each case treated. (3)

5. Keep first aid tent neat and clean at all times.
Liaison Officer, duties in part:

Where a large C.C.C. organization is used, the liaison officer will act for the S.O.S. chief, and will handle all contacts between the Army and the Forest Service. He should be thoroughly familiar with the C.C.C. instructions and polices on the subject. An ideal man for this job is a C.C.C. Camp Superintendent, or a C.C.C. foreman who is well informed on the subject.
SUMMARY

The organization as outlined in the preceding pages functions very well, even when it is necessary to fill most of the jobs with "pick up" labor. As a recommendation for improvement, it would be advisable for each camp manager to have a capable assistant, preferably a Forest Service employee to be trained in this work, who can be depended upon to take charge of the camp and relieve the camp manager for rest periods.

Another thought for recommendation is a requirement for all cooks and helpers to have a physical examination before going on duty in the kitchen. The purpose of such an examination is to prevent the spread of disease by food handlers. The examination could be given by the first aid officer in many cases.

It is the sincere hope of the writer that this paper has given a general description of the organization of fire camps and may be of some use to the reader in the future.
LITERATURE CITED

1. FIRE CAMP ACCOUNTING AND MANAGEMENT.

2. FIRE CONTROL HANDBOOK.

3. SERVICE OF SUPPLY HANDBOOK.
Service of Supply Organization for Large Fires

Fire Chief

- Employment Service
- Scouting Service
- Service of Supply
- Suppression Force

S.O.S. Chief

- Equipt. Supply Officer
- Transportation Officer
- Line Camp Organization Officer
- Paymaster and Head Timekeeper
- C.C.C. Liaison Officer

- Warehouse Help
- Hostlers
- Blacksmith Packers
- Mechanics
- Truck Drivers
- Traffic Control Men

Camp Manager

- Supply and Equippt.
- Transportation Officer
- Cook Kitchen Force
- Camp Police and misc.
- Camp Help
- Timekeeper Commissary First Aid
- Assitants

- Filer Tool Sharpener
- Packers Truck Drivers

Water and Lunch Service to fire line
Fire Camp Diagram

Supplies

Kitchen

Tables

Hot water

Wash room

Warming room

Garbage Pit

Latrine

Latrine

Truck Pool

Entrance

Commissary

Time-keeper

Equip. and tools

First Aid

Bed Grounds

Crew #1

Crew #2

Crew #3

Crew #4

Crew #5

Crew #6

Pack Stock