

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

663-2385

INTERREGIONAL SUPPRESSION CREW
TRAINING MANUAL



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APPLICATION

This training plan was designed to achieve continuity of performance for all Inter-Regional Suppression Crews. This will enable fire overhead to anticipate the increased production rate of these highly specialized crews and eliminate overmanning and misuse of personnel.

The plan is not meant to be used as the sole means of training. In addition to the references listed each Region and Forest has many excellent training aids of their own that should supplement this plan, and nothing gets the point across better than colorful stories based upon personal experience. The geographic location of the crew may also make it difficult to practice line location in all fuel types. Emphasis should be placed where it is most needed, and work projects scheduled around training deficiencies. Ideally, this plan will stimulate thought resulting in an interchange of ideas and training methods between all IRS Crews.

The plan was designed with complete flexibility in mind because local training facilities may necessitate a rearrangement of topics. The training schedule was based on the needs of a particular crew and will have to be rewritten for each crew to insure correct travel time.

The following items should be used as a checklist to follow when fitting this plan to your individual needs:

1. Review all reference material prior to training session. Utilize visual aids as much as possible.
2. Utilize nearby specialized personnel from airports, smokejumper bases, base heliports, Regional Office, Supervisor's Office, and District to assist in training. Regardless of the quality of a training plan, the best man to instruct helicopter safety is the helicopter manager; best for first aid is a qualified instructor; best for fire behavior is a fire behavior officer; etc.
3. Insert local regulations and methods where applicable.
4. Locate training areas in as many different fuel types as possible. In line location, keep other resources in mind. Don't locate line adjacent to roads, campgrounds, trails, or other areas of high use. Don't locate on or directly adjacent to other ownership without prior approval. Don't locate in areas with high erosion potential. Coordinate with District Ranger. If properly located, practice lines can serve as presuppression fire lines.
5. Films are in great demand at this time of year. Order early.
6. Each night review session for following day and prepare training aids.

OBJECTIVES OF PLAN

1. Provide IRS Crew instructors with a comprehensive training plan.
2. Assure maximum production in the safest possible manner under any conditions.
3. Produce continuity of performance among all IRS Crews.
4. Increase efficiency of fire managers in planning manpower needs and deployment.

I. HISTORICAL DEVELOPMENTS

IRS Crews are not directly involved with the public at large, and are seldom faced with I&E situations, thus their knowledge of Forest Service History and management policies need not be of a broad nature. However, to build esprit de corps and facilitate better understanding of decisions involving them as Forest Service employees or as private individuals, pertinent basics are included in the following thumbnail sketch.

Additional information may be obtained from references 1, 2, 3, 5, and FSM 2100.

- Early 1800's - Forests ravaged by overgrazing and misuse. Public lands grabbed up by speculators through fraud and loop holes in homestead laws.
- 1881 - U. S. Department of Agriculture established a Division of Forestry (no Forests or lands under its control).
- 1888 - Gifford Pinchot made head of Division of Forestry.
- 1891 - President given power by Congress to establish forest reserves under General Land Office, Department of Interior. Reserves had no management plans and were simply closed areas until
- 1897 - Congress outlined a broad management policy which opened the reserves to managed use. This act, with later amendments, is the one under which our National Forests are still being administered.
- 1901 - Division of Forestry became Bureau of Forestry.
- 1905 - Since the only forestry knowledge existed in the Bureau of Forestry, under the Department of Agriculture, the reserves were transferred to this

Department. The Bureau of Forestry was renamed U. S. Forest Service.

- 1907 - Name "Forest Reserves" was changed to "National Forests" March 1 and 2 - Fifteen and one-half million acres of National Forests created by President Roosevelt. On March 4, he signed a bill prohibiting further additions to the National Forests by Presidential proclamation in certain Western States.
- 1911 - Weeks Act - Permits purchase by the Federal Government of forest lands necessary to protection of navigable streams.
- 1970 - Edward P. Cliff is Chief of the Forest Service, which administers 186,000,000 acres in 154 National Forests which are divided into nine Regions. Each Forest is administered by Ranger Districts through a Supervisor's Office. There are a total of 788 Ranger Districts.

FOREST SERVICE HISTORY AND MANAGEMENT POLICIES

1. History of Conservation

Gifford Pinchot, first chief of the Forest Service, realized that forests were related to streams, water power, flood control, erosion, soil, minerals, wildlife, and many other natural resources. All of these fit into one central problem of the use of the earth for the good of man. He saw that this problem must be solved if the generations are to live civilized, happy, useful lives in the lands which nature had provided.

He talked the idea over with his natural resource conscious friends, and they coined the word "Conservation". They presented it to President Theodore Roosevelt who realized the importance of the concept and made "Conservation" a part of the American vocabulary.

2. Multiple Use

In the Forest Service the word "conservation" evolved into what is known as the Multiple Use Concept. The philosophy is that all the renewable resources are related, and under proper management can continue to produce on a sustained basis for the public good. This also keeps the many uses of forest resources balanced so they interfere with each other as little as possible. The Multiple Use Law of 1960 was an act to authorize and direct that the National Forests be managed under principles of Multiple Use and to produce a sustained yield of products and services.

Ref. 2, pg. 65, 66, Ref. 4

3. Wilderness Management

Few activities of the Forest Service have held such sustained public interest as Wilderness Management. Increasing management studies indicate that wilderness is extremely fragile, and the intangible values involved create many problem areas.

Forest Service administration is directed toward maintaining the quality and character of the wilderness environment. Wilderness areas are available for such public recreation uses as are compatible with preservation of the wilderness environment. The Wilderness Act of 1964 supplemented previous laws to give us the policy under which the areas are administered today. It is essential that wilderness values be protected, even if recreational use must be limited to do so. Ref. 2, pg. 74, 103.

4. History of Wildfires

In the early years of the Forest Service, fire control was almost non-existent. Wildfire ravaged the land with suppression efforts confined to populated areas in the path of a fire. Unfortunately, by the time a fire threatened a community, it had usually increased in such size and intensity that the most valiant efforts of the townspeople would have little or no effect on the outcome. This resulted in catastrophic losses of lives and property in addition to the resources damaged and indicated the tremendous need for improved fire detection and control. The Clark-McNary Act of 1924 provided funds for the specific use of controlling wildfire. Men were organized into crews and trained in fire fighting methods. Lookout stations at strategic locations detected fires in their early stages, enabling crews to take action early and keep burned acreage down.

In 1936, 226,000 fires burned 43,000,000 acres for an average of 191 acres per fire. To contrast, in 1961, a critical year due to fire weather, 98,517 fires burned 3,000,000 acres for an average of 31 acres per fire. Ref. 6, (pg. 30) and 7.

5. Development of Present Methods

Even with the modern methods employed today, fires still can escape the initial suppression effort and reach project fire proportions. These fires sometimes require an enormous amount of equipment and manpower and special crews, and methods have evolved to fit these situations.

Each Region now has several fire overhead teams of well qualified employees with a background of experience on large fires. They are trained and equipped to assume the multitude of jobs that make up the overall suppression effort, insuring prompt control with a minimum of confusion. Ref. No. 6, (pg. 14, 23, 24).

6. History of Organized Crews

1940 - First organized crew. Forty men, completely outfitted and self-sufficient. Siskiyou National Forest in Region 6.

Each Region has organized crews. Region 3 utilizes Indian crews. (Ref. F. C. notes, April 1961). All other Regions have regular F.S. Inter-Regional Crews. Other agency crews are available for F. S. use. (S. R. V. Crews - B.L.M.).

The National Mobilization Plan lists 15 Forest Service IRS Crews in the United States, broken down as follows:

R-1 has 4 Crews
R-2 has 2 Crews
R-4 has 2 Crews
R-5 has 3 Crews
R-6 has 4 Crews

Region 6 IRS Crew History

1962 - Deschutes Crew organized
1962 - Rogue River Crew organized
1966 - Wenatchee Crew organized
1967 - Wallowa-Whitman Crew organized

7. A. History of Local Crew

1962 - F. H. (Pete) Gregory became Crew Boss. Crew increased to 25-man I.R.S. crew. Took action on nine fires in Regions 1, 5, 6.
1963 - Crew took action on nine fires in Regions 2, 4, 5, 6.
1964 - Took action on four fires in Regions 5, 6.
1965 - Took action on eight fires in Regions 4, 5, 6.
1966 - D. Hawkins became foreman. Took action on ten fires in Regions 1, 4, 5, 6.
1967 - Took action on twelve fires in Regions 5 & 6.
1968 - Took action on ten fires in Regions 5 & 6.
1969 - R. Foster became foreman. Took action on five fires in Regions 5 & 6.

7. B. Rogue River IRS Crew Fire Record

ROGUE RIVER IRS CREW FIRE RECORD

NO.	YEAR	FIRE NAME	CLASS	ACRES	REGION	FOREST	STATE
1	1962	Several	--	--	6	Deschutes	Ore
2	1962	Forest Mountain	E	460	6	Wenatchee	Wn
3	1962	Bend of River	D	160	6	Deschutes	Ore
4	1962	Buck Springs	C	90	4	Toiyabe	Nev

NO.	YEAR	FIRE NAME	CLASS	ACRES	REGION	FOREST	STATE
5	1962	Brook #516	F	1800	5	San Bernardino	Cal
6	1962	Poormans Cr.	E	450	--	State	Ore
7	1962	East Fork #772	G	8640	5	Shasta-	
						Trinity	Cal
8	1962	Moon Prairie	D	110	-	State	Ore
9	1962	White Salmon	D	----	6	Mt. Baker	
10	1963	Splatter Cyn	E	640	4	Fish Lake	Utah
11	1963	Gilkinson	E	870	6	Wallowa-	
						Whitman	Ore
12	1963	Dog Valley	F	1000	4	Fish Lake	Utah
13	1963	Gravel Creek	E	500	4	Teton	Wyo
14	1963	Five Mile	E	----	4	Payette	Ida
15	1963	Pat O'Hara	D	230	2	Shoshone	Wyo
16	1963	Spencer Gulch	C	40	--	State	Ore
17	1963	River Road	D	300	6	Wenatchee	Wn
18	1963	Coldstin	D	150	5	Klamath	Cal
19	1964	Grouse Cr.	C	70	6	Rogue River	Ore
20	1964	Indigo	F	1600	6	Siskiyou	Ore
21	1964	Willow Tree	F	2800	6	Wenatchee	Wn
22	1964	Crab Tree	F	3000	5	Mendicino	Cal
23	1965	Park Canyon	-	----	6	Wenatchee	Wn
24	1965	Wickman	-	----	4	Toyabe	Nev
25	1965	Oak Flat	C	12	6	Umpqua	Ore
26	1965	Minnow Cr.	C	50	6	Siskiyou	Ore
27	1965	Union Cr	E	905	6	Snoqualmie	Wn
28	1965	Skyline	C	85	6	Mt. Baker	Wn
29	1965	Luken #520	C	89	5	Angeles	Cal
30	1965	Steamboat Point	C	80	6	Umpqua	Ore
31	1966	Jenson	F	3000	5	San Bernardino	Cal
						Toyabe	
32	1966	Galena Cr	F	2000	4	Toyabe	
33	1966	Lyon Creek	G	7500	1	Custer	
34	1966	Lick Fire	E	455	5	Shasta	
						Trinity	Cal
35	1966	Lost Fuchre	C	11	6	Siskiyou	Ore
36	1966	Charters Mtn.	G	13,935	4	Boise	Ida
37	1966	Coyote Fire	F	1000	5	Downville	Cal
38	1966	Winter Rim	F	7000	6	Fremont	Ore
39	1966	Devils Ridge	F	1500	6	Mt. Hood	Wn
40	1966	Hornet Cr. Fire	F	1500	6	Wenatchee	Wn
41	1966	Jack Cr. Fire	D	200	6	Winema	Ore
42	1966	Indian Ridge	G	10,500	5	Happy Camp	Cal
43	1967	North Sams Fire	E	720	6	Olympic	Wn
44	1967	Ashland Cr Fire	C	16	6	Rogue River	Ore
45	1967	Prospect Butler #1	B	2	6	Rogue River	Ore

NO.	YEAR	FIRE NAME	CLASS	ACRES	REGION	FOREST	STATE
46	1967	Peggy Cr	C	85	6	Wilamette	Ore
47	1967	Cupola	D	130	6	Wilamette	Ore
48	1967	Indigo Cr.	E	400	6	Siskiyou	Ore
49	1967	Lick Fire	F	1500	6	Wallowa-	
						Whitman	Ore
50	1967	Hoodoo	D	120	6	Wallowa	
						Whitman	Ore
51	1967	Lookout	F	1450	6	Wallowa	
						Whitman	Ore
52	1967	Bunchgrass	C	20	6	Wilamette	Ore
53	1967	Eagle Rock	E	700	6	Wilamette	Ore
54	1967	Sugar	E	650	5	Six Rivers	Cal
55	1968	Liebre	G	52,000	5	Angeles	Cal
56	1968	Wolf Creek	E	350	6	Ochoco	Ore
57	1968-	Marks Creek	E	4000	6	Ochoco	Ore
58	1968	Sambo	D	120	5	Klamath	Cal
59	1968	Sagehen	D	200	5	Tahoe	Cal
60	1968	Applegate	C	14	-	State	Ore
61	1968	Lucas Ranch	C	16	6	Siskiyou	Ore
62	1968	4th of July Mountain	G	28,000	6	Wenatchee	Wn
63	1968	Canyon	G	20,000	5	Angeles	Cal
64	1968	Middle Fork	F	7000	5	San Bernardino	Cal
65	1969	Grouse	E	350	5	Shasta Trinity	Cal
66	1969	Jones Beach	B	3.5	5	Klamath	Cal
67	1969	Go	E	500	5	Klamath	Cal
68	1969	Rough Ridge #2	F	7500	6	Wallowa-	
						Whitman	Ore
69	1969	Wier Grade	E	600	6	Deschutes	Ore

Fire Organization

Ref. 8

IRS Crew Organization

Organizational structure of IRS crews differs from crew to crew. The following has been used by a Region 6 crew for the past four years with excellent results.

Foreman - Has overall responsibility for training, performance, and safety of crew at all times.

Scout/Squad Leader - Is given intensive training in the duties of a scout. Acts as line locator when necessary and as scout anytime the crew is working in a hazardous area. When not needed as scout or line locator, acts as squad boss of a seven-man squad. Is also alternate foreman and should be a qualified sector boss.

B. Overtime

Base rate plus 50 percent is provided for hours worked in excess of regular shift.

C. Hazard Duty Differential

25 percent of base pay when eligible under Civil Service Regulation 550.904.

D. Sunday Differential

25 percent of base pay when Sunday is scheduled day of work week.
6155.17

E. Holiday Pay

Ref. FSM 6161.2

F. Annual Leave

0 to 3 years = 4 hrs./pay period (include military service)
3 to 15 years = 6 hrs./pay period
15 years + = 8 hrs./pay period

Ineligible until employed for 90 days (FSM 6163.51). Must (except for emergencies) be planned in advance.

G. Sick Leave

4 hrs./pay period - No ceiling - Don't abuse.

H. Leave Without Pay

CWN tours (FSM 6163.6).

I. Travel Pay

Travel to and from fire is compensable. Ref. 6155.19b.
Per Diem - local regulations, R6, \$8/day less \$2/meal.

J. Pay Periods

Sun-Sat bi-weekly - payday (local area).

K. Deductions

FICA - 4.8%
Federal Income Tax - 20% average
State Tax - Local
Meals and Lodging - Local

- 2 Squad Leaders - Working-leaders of 7 to 11 man squads. Gives direct supervision to squad members on work projects and fire suppression activities. Evaluates individual and squad work performance and maintains highest possible standards. A squad leader's responsibility is not confined to his assigned squad, rather it overlaps to include the entire crew. He should be a qualified crew boss.
- 2 Sawyers - Clear ahead of line construction crew. Receive intensive training in use of power saws.
- 1 Head Pulaski - Alternate squad boss. First man on the line. Establishes type of line to be constructed (width, cup trench, step trench, etc.) and revises line location as needed. Informs crew of special hazards that arise as work progresses.
- 4 Pulaskis - Cut small material left by sawyers, loosen duff and other fuels in fireline.
- 9 hoes - Clear line to mineral soil. Cut small roots.
- 4 Shovels - Clean line to mineral soil. Throw dirt on rotten fuels adjacent to line. Cool down hot spots as needed.
- 1 End Shovel - Last man on the line. Insures line is constructed to established standards. Alternate squad boss.

All crew members are trained in the use of each hand tool to achieve maximum flexibility. ~~Four~~ crew members receive sawyer training.

On most fires a scout is needed during initial attack and line construction activities. When the fire reaches the mop-up stage, the scout becomes a squad leader, providing leadership where it is most needed.

GENERAL POLICIES

1. Pay & Benefits

Hourly Rates

A.	Grade	Regular	Sun. & Haz. Dty	Overtime	Bi-Weekly Rate
	GS-3	2.51	3.14	3.77	200.80
	GS-4	2.81	3.51	4.22	224.80
	GS-5	3.15	3.94	4.73	252.00

L. Compensation for Injury

Government will assume financial responsibility for injuries received while in pay status. Ref. 9.

M. Standby and On Call Status

Standby is compensable when employee is held in a specific location fully outfitted for immediate dispatch.

On Call - Fire employees may be restricted to a general area without being in ordered standby status. Ref. 10. This on call status is not compensable. (Include local rules).

N. Dispatch

May be at any time. Prepare ahead. (Procedure - R.O. to S.O. to local dispatcher).

O. Work Week - Days off. Explain why work weekends.

2. Property Equipment

A. All Property - All property of the U. S. is provided for official use only. When property is lost, stolen, damaged, or destroyed, employee responsible for its custody will be held liable unless relieved by the property management officer or the board of survey. Ref. 11.

B. Vehicles - Any person who operates any Government owned or leased vehicle must possess an SF 46 (Operator's I.D. Card). An SF 46 may be obtained through the local Forest Service examiner by standard testing measures. A person with a questionable driving record may be deemed ineligible for an SF 46. Ref. 12.

Operators shall observe all State and local laws and regulations and shall practice defensive driving. It is the responsibility of all employees to report any unsafe act to his supervisor. Operators shall insure that all passengers fasten seat belts before the vehicle is put in motion. Insert local policies and rules. (Speed limits, lights on, etc.)

3. Housing Policies

A. Crewhouse Cleanliness

Occupants responsible for rooms (beds made, room orderly). Halls, lounge, and bathroom maintained by crew members as delegated. Quarters shall be ship-shape prior to work hours.

B. Get-Up Time

All crew members will arise promptly at (local rule). Squad Leader (or person assigned) will assure get-up time is met by entire crew.

C. Lights Out

Lights out will be at (local rule). Respect this rule. If you come in late, BE QUIET. Some people require more sleep than others.

D. Alcoholic Beverages

There will be no alcoholic beverages nor marijuana or any other type of drugs or objects designated illegal by law allowed in the bunkhouse.

E. Firearms

No firearms allowed in the bunkhouse (local rules).

F. Cars

Park in designated spot. Drive sensibly. To local people you represent the crew at all times.

G. Breakage or Damage

Damage will be paid for by the parties responsible (local rules).

H. Girls in Bunkhouse

(Local Rules)

I. Laundry

(Local Rules)

J. Telephone

The office phone is for official use only, and other than for fire, is to be used only for emergencies. Advise your family and friends.

K. Meals

Meals will be served only at designated times (local rule). Be on time or do without. Come to the mess hall fully dressed. Keep noise down. Insert local rules pertaining to meal tickets, KP, etc.

L. Sign Outs

Before leaving the bunkhouse use the sign-out board. Leave the number at which you can be reached. Location is not sufficient. (Insert local rules)

M. Office

The office is for business only and is off limits except by permission of foreman or squad boss.

4. Transportation

A. Foot Travel

Line out, carry tool properly, watch spacing. Ref. FSM 5135.61.

B. Bus and Truck

Tools sheathed, separate from men, take vacant seat furthest from door. Use safety belts. Quiet. Respect driver and property.

C. Aircraft

Tools and gear loaded first, under supervision of pilot. Use safety belts. Don't move around unnecessarily.

V EQUIPMENT

1. Personal Gear

Sturdy work clothes, preferably forest green. Boots should be logger type with vibram sole and heel. Work gloves. (Insert local rules and guidelines)

2. Fire Pack

Must be ready to go at all times and contain the following items:

1. Uniform (2 fire shirts, 1 change pants)
2. 3 changes underwear and socks
3. Toilet kit (soap, towel, toothbrush, etc.)
4. Coat that will keep you warm and dry
5. \$25.00 traveler's checks, money order, or cash
6. Miscellaneous (gum, sneakers, cut-offs, etc.)
7. Sleeping bag
8. Rations (1 day supply)
9. File
10. Fire shelter
11. Hard hat

Keep pack at designated spot at all times. Don't break into it for daily use.

Weight of pack must not exceed _____ (local rules).

3. Waist Belt or Vest

Must be worn or in designated spot at all times and will contain the following:

1. 2 canteens (1 qt.). Change water daily. Keep filled.
2. 1 kit, first aid, 1 man.
3. 1 kit, snake bite.
4. 1 whetstone.
5. 1 file.
6. 1 headlight with batteries.

4. Fire Shelter

Must be kept with fire pack at all times. Ref. film "Your Way Out", instruction sheet enclosed with shelter. Ref. FSM 5135.27.

5. Power Tools

1. Saw - Sawyer will normally be clearing out ahead of crew during line construction, but may be called back on the line to fell snags or to assist pulaski section. When sawyer is operating in your area, be alert. The noise from the saw and the nature of the work makes it impossible for him to know where you are at all times. Get the sawyer's attention before you approach him or pass through his work area.

Operation of Power Saw (Instructions for Sawyers Only- See XVI).

- A. Orientation to types of saws that may be used. (Ref. manufacturer's instruction manual). Stress work saved, cost of saw, bar, chain, and accessories, importance of proper maintenance. Ref. 33 (pg. 3, 18, 19, 27, 28, 35, 37, 38). Ref. FSM 5135.43.

2. Fireline Trencher, Flail, and Other Locally Used Power Tools

(Ref. manufacturer's instruction manual, Health & Safety Code)

6. Hand Tools

1. Pulaski (Description of Tool and its Use)
 - A. Handle straight and smooth, free of checks or splinters, head tight and sharp.
 - B. Carry at balance point, downhill side, sheath on, proper spacing when walking or working.
 - C. Clear work area, have secure footing, cut brush and limbs in path of swing.

- D. Firm grip, cut away from yourself. Limb on opposing side of tree. Cut boundsaplings close to ground. Stand clear.
- E. When scraping, keep feet clear. Cut roots to one inch with hoe side. Cut small roots - don't pull.
- F. Keep head sharp (demonstration) and rust-free, handle smooth and oiled (linseed oil).
- G. Leave in plain sight in safe place when not in use.

Ref. 33 (pg. 34), Ref. 5135.44b.

2. Hazel Hoe (Description of tool and its use)

- A. Ref. A, B, C, E, and F under "Pulaski".
- B. Drive blade in ground in safe area when not in use.

Ref. FSM 5135.44c.

3. Shovel (Description of tool and its use)

- A. Ref. A, B, and F under "Pulaski" and B under "Hazel Hoe".
- B. Use knee for leverage.
- C. Knocking down fire on ground or in tree.

4. (List locally used hand tools)

7. First Aid Belt

- 1. 1 belt with each squad.
- 2. Know location of belt.
- 3. Use when necessary, replace shortages immediately.

8. Belt Weather Kit

- 1. To be carried by scout on all fires.

V CONDITIONING

Crew members must be in top physical condition. The amount of productive work accomplished is directly dependent upon the endurance of the crew. The man that is out of shape will tire more easily, become less alert, and is more apt to have an accident. There have been many excellent books written on physical conditioning and many different exercises have been designed for

various degrees of fitness of people in all walks of life. The following exercises have been in use by an IRS crew for four years and have been found more than adequate for this type of work:

Exercise

Key Points

- | | |
|--------------------------------|---|
| 1. Push-ups | 1. A. Body Stiff - horizontal
B. Support - on toes and hands
C. Lower chin on ground
D. Return to starting position |
| 2. Neck Roll | 2. A. Head forward - chin on chest
B. Roll head clockwise
C. Roll head counter-clockwise |
| 3. Body Twist | 3. A. Arms horizontally outstretched
B. Swing arms and shoulder clockwise
C. Return to starting position
D. Swing arms and shoulders |
| 4. Trunk Twist | 4. A. Upright position with hands on hips
B. Lean forward from hips, and rotate upper body in circular motion. |
| 5. Toe Touch and Backward Bend | 5. A. Bend forward at hips and touch toes (keep knees straight)
B. Straighten with hands on hips
C. Bend backwards as far as possible |
| 6. Toe Touch and Twist | 6. A. Arms horizontally outstretched, feet apart
B. Touch right hand to left toe
C. Return to starting position
D. Touch left hand to right toe |
| 7. Side Straddle Hop | 7. A. Feet together and hands to side
B. Hop - arms overhead - feet spread apart (18-24 inches)
C. Hop return to starting position |
| 8. Arm Roll and Hop | 8. A. Arms horizontally outstretched with feet together
B. Move arms in 12-inch circles and hop on left foot
C. Reverse arm circles and hop on right foot |

- | | |
|--|---|
| <p>9. Arm and Shoulder Stretch</p> <p>10. Run in Place</p> <p>11. Run</p> <p>12. Hike with Fire Pack</p> | <p>9. A. Arms horizontally outstretched with feet together
B. Swing arms on horizontal plane without moving body</p> <p>10. A. Stationary position
B. Run in place with knees high</p> <p>11. A. Cross country</p> <p>12. A. Adjust pack to fit
B. Treat blisters immediately</p> |
|--|---|

FIRE BEHAVIOR

Ref. 13 (CH. 40)
Ref. 14
Ref. 15

COMMUNICATIONS

1. Passing Message on the Line

Make sure you understand message before you pass it on. Make sure person you pass message to understands it and passes it on.

2. Radio

- A. Keep radio with squad at all times
- B. Keep conversation to a minimum. Business only.
- C. Use the 10 and 4 codes.
- ☒ D. Three channels are: 1 - IRS Crew Net; 2 - Regional Fire Net; and 3 - Air Net (To communicate with aircraft or emergencies only).
- E. Transmit only with antenna extended.
- F. Exposed, elevated locations give best transmission.
- G. Hold mike at 45 degree angle, 1 inch from lips. Key transmitter for one second before speaking. Talk slowly, in a normal voice.
- H. Use local call signs and procedures.
- I. Keep radio in case, clean, and dry.
- J. Don't tamper with radio. Replace batteries. If still inoperable, send to technician for repairs.
- K. Keep radio off during electrical storm. Ref. Forest Communications Plan.

3. Ground to Air Communications

- A. Keep helispot kit containing streamers, signal card (FS-8), and helispot construction sheet with each squad.

VIII SAFETY

1. Accidents are painful, costly, time consuming, and usually preventable (98%). There has probably been more thinking, talking, and writing about safety than any other single topic in Government Service. Private enterprise has picked up the ball and invests millions of dollars annually on various safety programs. It has been recognized that money invested in accident prevention returns the investment in less time lost, less paperwork, better production, and better employee/employer relationships. This, with man's desire to prevent suffering, makes a safe attitude a must.

The old saying "An Accident Waiting to Happen" is a challenge to all of us. There is a definite sequence of events that lead up to every accident that occurs. Some of these events (personal background, personal defects) are difficult to detect, while others (unsafe acts or conditions) are quite evident. Our objective is to correct unsafe acts and conditions as they are detected, thus eliminating "accidents waiting to happen". Safe working habits and hazards for each particular job will be described as that job is covered in this training plan.

2. 10 Standard Firefighting Orders. Ref. 16, Ref. 17.

3. Safety From Fire. Ref. 18 (Ch 10), Ref. 19, Ref. 33 (pg. 26 and 31).

IX FIRST AID

Ref. 20 (Ch. 10, 14 - 14.7), 21, 22, and 23.

Standard First Aid Course to be given following two weeks training session if qualified instructor is available. (Crew Foreman should be qualified). Outline reporting procedures and exhibit forms.

X SUPPRESSION TECHNIQUES

1. Line Construction

A. Direct Method (Construct line on immediate edge of fire)

1. Can't use on hot fires
2. Eliminated holdover and burning out (Move from line construction directly to mop-up stage).
3. Allows for cold trailing (Cold fire edge substitutes for line).
Ref. FSM 5133.2, t133.21

B. Parallel Method (Construct line near or parallel to fire edge and burn out).

1. Used where fire is too hot for direct approach.
2. In location: cut across fingers, avoid sharp angles, leave hazard fuels outside line, lead fire to allow line construction and burning out time, minimize roll (straight up and down slope where possible), and avoid hazards.

- C. Clearing - Wide enough to stop fire (width differs with fuel and topography), trim trees adjacent to line, clear to mineral soil, throw unburned material outside, Burned inside, cup trench where necessary, step trench on steep terrain, cover rotten logs and stumps adjacent to line with dirt. Crew moves as fast as slowest man.

2. Burning Out - A safe line is a black line.

- A. Demonstrate use of fusees, drip torches, coals, etc.
Ref. Health & Safety Code Ch. 3, 3.14; Ref. FSM 5135.45b.
- B. Firing Crew immediately behind line construction crew.
- C. Maintain visual contact.
- D. Use extreme care when building line uphill from burning-out crew.

3. Patrolling and Holding

- A. Remain in assigned area.
- B. If needed elsewhere, notify squad boss.
- C. Maintain communications.
- D. Put out and flag all spot fires.
- E. Put out fire inside that may blow across.
- F. Improve line as needed.

4. Situations That Shout "Watch Out"

Ref. 24

5. Mop Up

- A. Begin mop-up as soon as possible.
- B. Work in pairs - Different tools.
- C. Work methodically from fireline in.
- D. Dig out rotten stumps, anthills, squirrel caches, and mix with dirt until out. (Use water if available).
- E. Flag snags and notify squad boss.
- F. Turn or trench logs to prevent rolling.
- G. Watch for hot holes. Prod with tool to avoid burned feet.
- H. Cold trail unburned areas inside fireline.
- I. Feel with hands.
- J. Be thorough. Fires have reburned after they were declared out.
(Cite local cases)

6. Use of Water

- A. A Tool. Don't abuse it. It retards, insulates, cools, and extinguishes.
- B. Source may be creek, pond, tank truck, spring, helicopter, collapsible tank, etc. (Demonstrate and Explain)

- C. Pumps. Explain and demonstrate use of different types. Ref. Manufacturer's instruction books. Emphasize proper gas and oil, importance of maintenance, priming procedure, etc.
- D. Hose and Fittings. Types of hose and different characteristics, hose lays, check valves, siamese valves, nozzles, etc. Demonstrates connecting to pump and reducing from 1½ inch to ¾ inch using mop-up kit with applicators. Explain use of gravity sock. (Explain pressures involved and use of pressure relief valves).
- E. Bladder Bags. Various types. Fill from any source. Trombone pump can fill from a small trickle. Use of spray or stream nozzle.
- F. Wet Water. Detergent - Penetration increases eight times. Foams. Unsafe to drink.
- G. Ref. Fire Control Guide 5162 (Water Handling Equipment Guide).

7. Tractors

An important tool. Interesting to watch, but dangerous to be around. Can push over tree that knocks over snag that falls 200 feet from tractor. Don't work below machine. (Rolling rocks and logs) Ref. 25.

8. Air Operations

- A. Helicopters. First used in 1950. Modern supercharged or jet turbine ships are effective at all altitudes.
 - 1. Use. Ferrying men and equipment, surveillance, hose lays, water drops (sling bucket), emergency evacuation.
 - 2. Safety. Board and leave machine from front or sides (in pilot's view and on his signal), chin strap on or hat off in crouched position. Avoid main and tail rotors. Doors and bubble are fragile. Seat and shoulder belts are mandatory. Don't distract pilot with conversation. No smoking within 50 feet. Ref. Helicopter Signals (5700-11) Ref. 33 (pg. 5)
 - 3. Helispot Construction.
 - a. Best location on exposed knob or ridge with drop off in direction of take off.
 - b. Provide for take-off and landing into prevailing wind.
 - c. Clear 60 foot diameter touchdown pad.
 - d. Make pad 15 feet x 20 feet, maximum slope of 10 percent, solid footing.
 - e. Provide 100 feet approach, 300 foot take-off path.
 - f. Avoid dead air holes and high grass meadows.
 - g. Mark with triangle or H. Provide wind indicator (cloth, flagging on trimmed sapling).
 - h. Most heliports and some helispots on organized fires will

have a helicopter manager. Always follow his instructions.
Ref. 26 and 27

4. Film - "Helicopter Management". Ref. 28 and 29 (2.28)

B. Retardant

First effective use was in 1956. Various types have been used. (Borate, bentonite). Two types are in use at present - firetrol, a mixture of clay and ammonium phosphate is stored in bags, in the dry state, and mixed with water at retardant bases prior to loading into aircraft. It contains a pink dye to permit aerial evaluation of drops and costs \$0.15/gallon to put in the aircraft. The other type presently in use is LC (Liquid concentrate) retardant, composed of ammonium poly phosphate, sodium dichromate (rust inhibitor), and water. Its cost is \$0.12/gallon. It throws a longer pattern than firetrol and is slower drying (5-8 days). It is shipped in the liquid state to the storage area and is mixed (4 parts water to 1 part LC) as it is loaded. LC may be rust colored or purple.

Desirable Characteristics of Retardants

1. Low Cost
2. Readily available
3. Nontoxic to plants and animals
4. Adheres to forest fuels
5. Mixes easily
6. Nonabrasive, noncorrosive
7. Long lasting suppressant action
8. Effective after drying

Retardant drops are spectacular and helpful, but won't put the fire out without the help of the ground crews. If a drop is not in your immediate area, go about your own work.

Ref. 30 and 31

Safety

1. Aircraft will make trial run over drop zone.
2. Get all personnel out drop zone and keep them out until after drop.
3. If caught in drop zone, stay clear of snags and timber, lie down, face oncoming aircraft with hard hat in place. Discard hand tools to side and grasp something firm. Retardant may weigh over five tons per drop. Drop height is 75 - 100 feet above brush or canopy.

4. Return to drop area immediately to utilize effect.
5. Watch footing - retardant is slippery.

Ref. 33. (pg. 3 and 8)

C. Cargo Drops (Hose, pumps, tools, sleeping bags, food, etc.)

1. Select drop spot on ridgetop, meadow, or sidehill with safe approach and get away for aircraft. Should be clear of snags and large trees.
2. Mark spot with white or orange T at least 7 feet long. Point foot of T in direction of wind.
3. Make sure all personnel are out of danger zone (200 feet wide, 300 feet from T in direction of aircraft approach, 1000 feet from T in direction aircraft is traveling) until drop is completed.
4. Don't drop within 600 feet of camp.
5. Post lookouts to observe drop and mark cargo when it is down.
6. Aircraft will gun motor three times to indicate a free fall.

XI PERSONAL CONDUCT AND APPEARANCE

1. Always act in a rewarding manner to yourself and your employer, both on and off the job.
2. You represent the crew. Our crew is a No. 1 Crew. We are proud of the image we project within and outside of the Forest Service organization. We expect all crew members to maintain this image in their conduct and appearance. Ref. 32
3. When in fire camp -
 - A. Stay together as a crew at all times.
 - B. Wash before meals.
 - C. Meals may be frozen or prepared. Cooks and camp personnel have a hard job. Be courteous and respectful.
 - D. Keep sleeping area policed up and personal gear stacked.
 - E. Consult bulletin board for information.
 - F. Take all complaints to squad bosses or foreman. Don't bother overhead.

XII WORK RULES

1. A crew has but one leader.
2. Always follow orders to the letter.
3. Each man is responsible for other crewmen.
4. A crew never separates.
5. Abide by the 10 Standard Firefighting Orders.
6. Keep calm, be alert, act decisively.

XIII LIST OF ADDITIONAL REFERENCES

1. Organization Charts (W.O., R.O., and S.O. Fire Control, District Supervisors
2. USDA Information Bulletin 301 "Outdoor Recreation in the National Forests".
3. USDA Booklet "The Forest Service - How it Fits in the Federal Structure" June 1969.
4. USDA, Forest Service PA-771 "Multiple Use - Sustained Yield Act of 1960".
5. USDA Fact Sheet - 20.
6. USDA Information Bulletin 130 "Protecting the Forests from Fire".
7. Chief's 1620 Memo of 11-15-62.
8. ~~Fire Organization Charts (Small Fire, 3 Sector, 3 Division).~~ FSA 5000
9. FSM 6181.
10. FSM 6155.19 Ch. 5.
11. FSM 6411.112.
12. FSH 6409.11 (713.1).
13. FSH 5109.12.
14. USDA Programmed Text "Introduction to Fundamentals of Fire Behavior".
15. USDA Publication "Safe Practices Under Blowup Conditions" 1957.
16. FSM 5135.51.
17. USDA Programmed Text "10 Standard Fire Fighting Orders" 1965.

18. R-6 Fireline Notebook
19. FSM 5135.5
20. R-6 5134.5
21. USDA Handbook 227 "First Aid Guide"
22. FSM 5135.22
23. USDA Publication "First Aid Instructor's Guide"
24. FSM 5135.52
25. FSM 5135.41
26. FSH 5709.12 (37--2)
27. R6-7700-1 (Helispot Report Form)
28. R-5 Helitack Handbook
29. Health and Safety Code
30. NFPA Report "Chemicals for Forest Fire Fighting"
31. NFPA Report "Air Operations for Forest Brush and Grass Fires"
32. Federal Employees Fact Sheet No. 6 "You and the Public"
33. USDA, Forest Service, Progressive Referral Sequence "Safety Policy and Programs"

XIV

TRAINING FILMS

No.	Title	Time (Min)
1	Helicopter Management	24
2	The Greatest Good	10
3	The Wilderness Trail	144
4	Air Tanker Attack	20
5	Building The Fireline	27

No	Title	Time (Min)
6	Crew Boss	35
7	Fire vs. Fire	26
8	Fire Weather	27
9	Introduction to Fire Behavior	16
10	1-Man Flail Trencher	14½
11	Safety for Sure	10
12	Water on the Fire	27
13	Your Way Out	16½
14	A Fire Called Jeremiah	48
15	Hand Tool Series	60
16	Hold That Line With Dirt	10
17	Rescue Breathing	21
18	The Roll of Drums	30
19	Man Against Fire	30

XV TRAINING SCHEDULE

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
1st Day Mon.	0800	P.T. (Physical Training)	Outside Qtrs.	See pg. 14	
	0815	Introduction & Organization	Classroom	Pg. 2-7	
	0845	FS History & Mgt Policies	"	Pg. 3	Film 2
	0930	General Policies	"	Pg. 8	
	1000	Break	"		
	1015	Equipment	"	Pg. 12	Films & 13, 10, Discussion 15

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
1st Day Mon	1200	Lunch	Classroom		
	1300	Issue Equipment	Quarters	Pg. 12	
	1330	Move to Field	Map No.	Pg. 33	
	1400	Hand Tool Exercise	Field	4-Step Method	
	1500	Break	Field		
	1515	P.T. (Explain Why)	Field	Pg. 14 15-min. exer., 2 mi. hike w/packs	
	1615	Return to quarters- stow gear	Field	Safety while loading and unloading	
	1630	Review Day's Tr.	Quarters	Main points, questions	
	1700	Through For Day			
2nd Day Tues	0800	P.T.	Outside Qtrs.		
	0815	Fire Behavior	Classroom	Pg. 16	
	1000	Break	"		
	1015	Fire Behavior	"	Film & Dis- cussion	9
	1040	Communications	"	Pg. 16 Dem- onstration w/radios	
	1100	Fire Weather	"	Film & Dis- cussion	8
	1130	Safety	"	Pg. 17, Film	11
	1200	Lunch	"		
	1300	Safety	"	Pg. 17	
	1345	First Aid	"	Pg. 17	
	1445	Fireline Construction	"	Pg. 17	
	1500	Break			

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
2nd Day	1515	Fireline Construction	Classroom	Pg.17 , Film	5
Tues.	1600	P.T.	Outside		
(Cont)	1630	Review Day's Training	Classroom	Main Points, questions	
	1700	Through For Day			
3rd Day	0800	P.T.	Outside		
Wed.	0815	Burning Out	Classroom	Pg.18 , Film	7
	0900	Patrolling & Holding	"	Pg.18 , Film	16
	0915	"Situations That Shout Watch Out"	"	Pg.18	
	0945	Move to Field	Map No. 2		
	1015	Fireline Construction	Field	Fuel Type - Low Resistance to Control - Flag Trail. Have squad leader train Sawyer's separate.	
	1200	Lunch	"		
	1300	Review Line Constructed	"		
	1330	Use of Water	"	Pg. 18	
	1630	Return to Qtrs.-Review	Quarters		
	1700	Through for Day			
4th Day	0800	P.T.	Outside		
Thurs.	0815	Use of Water	Classroom	Film	12
	0845	Mop Up	"	Pg.18	
	0930	Move to field	Map No. 3		
	1000	P.T.	Field		

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
4th Day	1030	Fireline Construction	Field	Medium Resistance	
Thurs.					
(Cont)	1200	Lunch	"		
	1300	Fireline Construction	"		
	1500	Break	"		
	1515	P.T.	"	4 mi. hike w/pack	
	1630	Return to Qtrs. Review	Quarters		
	1700	Through for Day			
5th Day					
Fri.	0800	P.T.	Outside	Exercises	
	0815	Crew Boss	Classroom	Film	6
	0900	Move to Field	Map No. 4		
	0930	P.T.	Field	1 mi. Run Exercises	
	1000	Break	"		
	1015	Fireline Construction	"	High Resistance	
	1200	Lunch	"		
	1300	Fireline Construction	"		
	1500	Break	"		
	1515	P.T.	"	4 mi. hike w/pack	
	1630	Return to Qtrs. Review	Quarters		
	1700	Through for Day	"		
6th Day					
Mon.	0800	P.T.	Outside	Exercises	
	0815	Tractors	Classroom	Pg. 19, Film	18
	0900	Move to Field	Map No. 5		
	0930	P.T.	Field	Exercises	

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
6th Day	1000	Break	Field		
Mon.	1015	Fireline Construction	"	Extreme Resistance	
	1200	Lunch	"		
	1300	Fireline Construction	"		
	1500	Break	"		
	1515	P.T.	"	5 mi. hike w/pack	
	1630	Return to Qtrs. Review	Quarters		
	1700	Through for Day			
7th Day					
Tues.	0800	P.T.	Outside	Exercises	
	0815	First Aid-Rescue Breathing	Classroom	Film	17
	0845	Move to Field	Map No. 6		
	0915	P.T.	Field	Exercises	
	1000	Break	"		
	1015	Fireline Construction	"	Medium resistance	
	1200	Lunch	"		
	1300	Fireline Construction	"		
	1500	P.T.	"	Exercises	
	1530	Return to Quarters	Quarters		
	1600	Review - Film	"	Film	3
	1700	Through for Day	"		
8th Day					
Wed.	0800	P.T.	Outside	Exercises	
	0815	Travel to Field	Map No. 7		

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
8th Day	0845	P.T.	Field	Exercises	
Wed.					
(Cont)	0915	Fireline Construction	"	Medium Resistance	
	1000	Break	"		
	1015	Fireline Construction	"		
	1200	Lunch	"		
	1300	Fire Problem	"	Initial attach thru mop-up stage	
	1630	Return to Qtrs.- Review	Quarters		
	1700	Through for Day			
9th Day					
Thurs.	0800	P.T.	Outside	Exercises	
	0815	Air Operations (Helicopters)	Classroom	Pg. 19 , Film	1
	1000	Break	"		
	1015	P.T.	Outside	Exercises	
	1030	Air Operations (Retardant & Cargo Drops)	Classroom	Pg. 20 , Film 21	4
	1200	Lunch			
	1300	Move to Field	Map No. 8		
	1330	P.T.	Field	Exercises	
	1400	Helispot Construction	"	Pg.19 , Field Exercises	
	1500	Break	"		
	1515	Select & Mark Drop Zone	"	Pg.21 , Field Exercises	
	1545	Return to Quarters	Quarters		
	1615	Personal Conduct & Appearance	"	Pg.21	

<u>Day</u>	<u>Time</u>	<u>Subject</u>	<u>Location</u>	<u>Method</u>	<u>Film No.</u>
9th Day	1630	Work Rules	Quarters	Pg. 22	
Thurs.					
(Cont)	1645	Review Day's Training	"		
	1700	Through for Day			
10th Day					
Fri.	0800	Travel Airport	Airport		
	0900	Aircraft Loading & Safety	"	Practical Exercise	
		Local regulations - Tour Facilities	"	Pilots & Airport Personnel	
	1200	Lunch			
	1300	Return to Qtrs.	Quarters		
	1400	Review Entire Session	"		
	1500	Break	"		
	1515	Review	"		
	1700	Through for Day	"		

XVI SAFE USE OF POWER CHAIN SAW (For Sawyer's & Helpers Only)

Location - Field - Map No.

Ref. Health & Safety Code

Items - Power saw, single bit cruisers axe, fire extinguisher, gas in safety can, oil, felling wedges, combination saw tool, files (round and flat), safety glasses or goggles, and chaps.

1. Introduction: Short history of saw. Exhibit hand cross cut saw, early power saw, and modern saw. Cite contribution of saw to growth of country, use in fire control.

II. Fuel Saw

1. Level area, bare ground.
2. Cool saw 5 minutes.
3. Safety can with correct mix.
4. Chain oil and gas reservoirs.

III. Adjust Chain Tension

1. Loosen lock nuts.
2. Adjust tension screw (chain links just touch bottom of bar).
3. Move chain around bar (gloves on), snap chain, readjust.
4. Tighten lock nuts with bar in upper position.

IV. Sharpen Chain

1. Check depth gauges. Use flat file and proper gauge.
2. Use proper size file and file guide or handle and guard.
3. Cut on push stroke only (35°), lift from teeth on back stroke.
4. File each tooth the same.
5. Never file without gloves on.

V. Start Saw

1. Ten feet from fueling area.
2. On ground, not hip.
3. Chaps, safety glasses on.
4. Switch on; choke if cold; pull with short, quick jerks; choke in when saw starts.
5. Don't race engine when not under load.

VI. Bucking

1. Clear work area, remove burned bark, dirt, rocks.
2. Anticipate special hazards:
 - A. Bind on tree
 - B. Direction of roll or slide
 - C. Saplings bound by log
3. Stand on uphill side - good footing.
4. Begin cut at proper angle.
5. Undercut or use wedge.
6. Guard against splitting.
7. Demonstrate how saw "kicks" when tip is touched against solid object.

VII. Felling

1. Clear work area and escape route.
2. Size up tree - Species, burning top, sound or rotten, loose bark, widow makers, lean, limbs heavy on one side, desirable line of fall free of obstructions.
3. Post lookout to watch for falling limbs, etc.
4. Make Sure no one besides falling crew is in area.
5. Make undercut (correct height and depth).

Felling (Cont'd).

6. Shut off saw - Call warning.
7. Make backcut 1-2 inches above undercut, leave holding wood and use wedge if necessary. Watch saw kerf.
8. Call warning just before tree starts to fall.
9. Move back on pre-chosen escape route.

VIII. Cutting Brush

1. Keep saw away from feet (safety toe boots).
2. Watch whip back.

IX. Field Maintenance

1. Tighten all screws and nuts.
2. Clean bar slot and check sprocket.
3. Clean air and fuel filters.
4. Clean or replace spark plug.
5. Clean chain oiler tube.
6. Keep chain sharp and adjusted.

REMEMBER - A DULL SAW WILL SLOW UP THE ENTIRE CREW. USE EXTREME CARE WHEN CUTTING CLOSE TO GROUND, ROCKS, WIRE, ETC.

XVIII CREW MEMBER'S EVALUATION

The crew member's evaluation form is used to document the performance of each crewman. The headings of the form make it self-explanatory. It is filled in by the squad boss during the summer and completed at the end of the fire season. The foreman reviews it and adds his comments. It should contain any information that would benefit the foreman as he plans his work for the coming year.

In the event of a change in foreman during the winter months, it will enable the new foreman to review the experience and qualifications of each crew member. With this knowledge he can determine what positions on the crew are vacant and can plan his recruitment around this. He also will know what portions of his training plan will need the most emphasis.

The form should also include any adverse behavior on the part of the crew member.

CREWMEMBER'S EVALUATION

YEAR 1969
 Name Gene Whitney Grade GS-4 Line Position Alternate Sawyer
Hoe

1st year on crew

PRIOR EXPERIENCE: 1 year as member of Chelan Ranger District trail crew

RESPONSE TO TRAINING: List strong and weak point of training and point of additional training needed.

Handles hoe and pulaski well. Was given sawyer training and served as sawyer on several fires. Would be an excellent candidate for sawyer next year. Has no apparent weak points.

WORK RECORD. List strong and weak points in such factors as drive, adaptability, dependability, judgement, physical stamina, and leadership abilities.

Narrative Report

Gene is a quiet and cooperative worker and does what is asked of him with a minimum of complaints. He doesn't agree with everything the crew does, but he causes no problems. He does a good job with hand tools, but is much happier when used as a sawyer. He gets along with the other crewmembers well and can adapt to changing situations. He uses sound judgment in fire situations. He realizes immediately when another crewmember is not doing his share and is quick to point this out. Physically he is well fit and handles himself well. With another year's experience he should make a squad boss.

Evaluated By Dave Spies, Squad Leader

Date 9-1-69

SAFETY AND ACCIDENT RECORD. Meetings attended, safety achievements, safety training, personal attitudes.

Gene responded well to safety training and recognizes unsafe conditions when they arise.

He had no accidents this year.

PERSONAL CONDUCT AND APPEARANCE. In respect to on and off job, fellow workers, supervisor, dress on and off job, and living quarters.

Gene conducts himself well both on and off the job. He gets along well with his supervisors but occasionally questions authority. He keeps his personal appearance up and keeps a fairly neat room.

PLANS TO RETURN NEXT YEAR

Yes No

x	
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POSITIONS QUALIFIED FOR IF RETURNING

1. Sawyer

2. Illoe