# LINE OFFICER GUIDELINES

TO

INCOMING OVERHEAD TEAM INCIDENT COMMANDER

Mesa Verde National Park, Colorado

October 31, 1989

# DELEGATION OF AUTHORITY

As Superintendent of Mesa Verde National Park, I have the ultimate responsibility for protection of the Park's resources and the lives of Park visitors and employees. Your expertise in the area of fire management will assist me in fulfilling that responsibility during the present crisis. By means of this memorandum on this day of
The statement will provide you with my priorities in fire suppression, specific restraints which are necessary to protect the Park's cultural and natural resources, and other guidelines for carrying out your overall task of fire suppression within this Park. In addition, the Line Officer's Briefing Statement will provide you with a list of Park Personnel who have been assigned to assist you in carrying out your duties and a list of facilities which are available to you under the conditions stated.
Upon your arrival, I (or my appointed alternate) will conduct an on-site briefing for you and your overhead organization. A fireline briefing will also be conducted for you and your staff by the local incident commander.
Robert C. Heyder Superintendent, Mesa Verde National Park
Incident Commander - Incoming Incident Management Team

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#### I. PRELIMINARY CONSIDERATIONS

- A. The assumption of this fire by a Incident Management Team must be as smooth and orderly as possible. The local Park Incident Team will remain in charge until officially released.
- B. Mesa Verde, as the ordering park, will specify the expected time(s) of arrival and takeover by the Overhead Team.
- C. In order to protect the visiting public and to avoid conflicts between visitors and fire-fighting crews, it will by my policy to close the park to visitation if a major fire threatens a developed area or occurs on or near Chapin Mesa.
- D. The Overhead Team Incident Commander should contact the Park Superintendent immediately upon assignment and arrange for:
  - 1. Expected support staff.
  - 2. Location and time of Line Officer's briefing.
  - 3. Local transportation needs of team.
- E. Mesa Verde will do the following prior to the arrival of the Overhead Team:
  - 1. Determine alternative Incident Base or ICP locations.
  - 2. As requested by Overhead Incident Commander, order fire camp supplies and initiate basic support organization for the fire.
  - 3. Provide an ample supply of topographic, base, and archaeological site maps.
  - 4. Arrange transportation needs of the Overhead Team (from airport to park and on fire).
  - Establish time and location of Line Officer's briefing.
  - o. Obtain necessary information for Line Officer's briefing (see checklist).
  - 7. Order BIFC Radio System (if needed).

#### II. FIRE PROTECTION PRIORITIES

## A. Human Safety:

Human safety will be the prime concern in fire-fighting efforts. UNDER NO CIRCUMSTANCE WILL PUBLIC OR EMPLOYEE SAFETY BE COMPROMISED.

Experience on Mesa Verde project fires indicates that most accidents involve falls, heat-related problems, and injuries from rolling rocks on steep terrain. Other factors you will want to keep in mind are personnel disorientation, providing plenty of drinking water, food spoilage in heat, etc.

We do have one species of rattlesnake, as well. Crews should be briefed on these, as well as routine safety considerations, prior to going on-line. Park roads are narrow with sharp curves and steep grades. These conditions are made more hazardous by heavy visitor use. Drivers must use caution and be alert. Traffic regulations will be enforced for safety sake.

Wildlife, especially deer are frequently on the road.

#### B. Cultural Resources and Constraints

The primary and most significant features within the park are archeological. Mesa Verde National Park is the type locality of archeological remains representative of the northern or Mesa Verde Branch of the prehistoric San Juan Anasazi culture. Thousands of archeological sites including pithouses, masonry pueblos and cliff dwelling, water diversion canals, reservoirs, ceremonial complexes with kivas, and farm terraces are scattered throughout the park, averaging over 100 per square mile in some areas. These archeological resources have become scientifically more valuable with the passage of time and the loss of archeological resources in nearby areas.

Archeological collections and study materials of irreplaceable and immeasurable value are located in the Research Center, Museum and Visitor Center. The buildings bousing those artifacts are unlargable to wildland fire because of their close proximity to the pinyon-juniper forest and due to the nature of the materials used to construct them.

In addition to the primary cultural resources, a number of park buildings in the Headquarters Area, including the Museum, Administration Building, and Chief Ranger's Office, have been designated as historic buildings and require special protection. Where human life is not threatened, protection of the artifacts and study materials located in the Museum and Mesa Verde Research Center, along with the major ruins, must be given first priority with regard to fire protection. The artifacts, historic buildings, and a major portion of the mesa top ruins and cliff dwellings are located on Chapin Mesa. Thus, Chapin Mesa must be considered as the primary geographic area in need of fire protection.

Specific constraints to be followed during fire suppression are:

- 1. No heavy equipment, such as bulldozer, will be used. Specific requests for use of heavy equipment must be approved by the Superintendent.
- 2. Cultural resource personnel familiar with the area will be made available as Archeological Resource Locators and will work closely with crews and equipment operators.
- 3. Fire-fighting personnel will be briefed on the significance of archaeological resources they may be expected to find in the field, and how to avoid damage to them while constructing fire lines.
- 4. If construction or improvement of fire roads is approved it will be done with a minimum of surface disturbance and a maximum width of 12 feet, and then only with approval of the Superintendent.

## C. Developed Areas:

Much of the developed area is on Chapin Mesa, and (as indicated above) is first priority. Two other developed areas requiring mention exist. One is Wetherill Mesa, an area with high visitor use and archaeological-aesthetic values. Protection of this area is of high priority, but secondary to Chapin Mesa. Entrapment of visitors in the area is a consideration since (as in the case of Chapin Mesa) there is only one road into the developed area.

The other developed area is <u>Morefield Campground</u>. A number of park and concession buildings require protection here. In addition, the 494 campsites

existing here represent a considerable Federal investment. The threat to human lives and private property are also a concern. Due to the nature of fuels, primarily grasses, forbs, and scrub oak, a fire in this area could be expected to spread rapidly.

A multi-unit motel, lodge, cafeteria, employee trailer housing, and National Park Service Visitor Center are located on the north end of Chapin Mesa. These facilities are surrounded by brush and scrub oak. In the past the threat of a wildland fire in this developed area was not considered likely, but with the fire behavior observed on the Long Mesa Fire in July 1989, such a fire is possible. If a Long Mesa Fire type situation were to occur again on the north end of Chapin Mesa the protection of the Far View facilities would rank high.

## D. Natural Resources and Constraints:

Vegetative cover varies greatly within Mesa Verde National Park, being affected by altitude, topography, and natural condition such as fire. An overall view of this vegetation mosaic can be obtained by reviewing the vegetative-type map in Appendix "A." A larger (scale 1' to 24,000') vegetative-type overlay map will be provided for you, along with other necessary maps in the Fire Overhead Map Kit.

A brief discussion of major vegetative types follows:

## Pinyon-Juniper

Of major concern to the Fire Manager is the pinyon pine (Pinus edulis) and juniper (Juniperus osteosperm & J. utahensis). A climax forest composed of these two species covers the mesa tops in the southern part of the park. A total suppression policy has contributed to high density of trees and heavy fuel loading, 12 to 32 tons/AC. Exclusion of grazing animals has allowed the build-up of ground vegetation in many areas providing a continuous fuel ladder. Major fires occurring in the park in past years have spread rapidly and have burned at very high intensities. Recovery of the forest proceeds at a very slow rate.

Fire strategy should allow for protection of vegetation along visitor corridors (roads and trails) or in developed areas whenever possible. The aesthetic value is worthy of protection.

## Douglas Fir

In sheltered areas along the north escarpment of the park and in the heads of most canyons, there are scattered small stands of Douglas fir (Pseudotsuga menziesii). Fuel loads tend to be rather heavy in these areas, particularly where disease and insect infestation have caused high mortality.

Few cultural resources are found in these areas, but the aesthetic value of these trees, most of which may be seen from the park road, should be recognized and protected.

Also deserving protection is a small stand of scientifically valuable Douglas fir with tree ring chronologies dating from AD 1176 to the present. Located in an eastern side canyon of Navajo Canyon at the same latitude as the Mesa Verde Research Center, the stand is referred to as the Schulmann Old Tree Area.

## Mountain Shrub Zone

A mountain shrub zone exists along the north rim of the mesa and is composed of dense thickets of oak and serviceberry, interspersed with openings dominated by black sagebrush. Due to recent total suppression of fire, pinyon and juniper trees are gradually becoming established in this zone. The mountain shrub zone stretches southward across mid-latitudes of the park, covering about 40% of the land.

#### E. Wilderness Areas and Constraints:

Mesa Verde National Park has three parcels of land set aside as wilderness areas. These parcels, totaling 8,100 acres, are identified on the wilderness map in Appendix "A". Parcel "A" on the north escarpment consist of 1,800 acres of sparse pinyon-juniper and saltbrush on slopes which drop sharply from 8,400 feet to 6,400 feet. Parcel"B", also on the north escarpment, consists of 1,250 acres of Douglas fir, Gambles oak, and saltbrush on slopes varying from 8,500 feet to 7,000 feet. Parcel "C" is located to the east of the park and consists of 5,450 acres of dense

and sage. An escarpment runs through this area from north to south, with elevations varying from 6,500 to 8,300 feet.

Much of the wilderness area is of high aesthetic value to the park visitor. Since all three parcels of wilderness border on private land or lands of other agencies, fire suppression must be aggressive to prevent its escape from the park boundaries. However, requirements of the Wilderness Act dictate the following constraints:

- 1. Fire-fighting equipment or methods used should be those that least degrade wilderness values.
- 2. Heliports and helispots may not be constructed. Natural openings may be utilized as helispots.\*
- 3. No fire road will be constructed.\*
- 4. The use of motorized vehicles in these areas must be limited to bonafide cases of necessity and will require approval of the Superintendent.
- 5. Natural areas disturbed by fire control measures must be rehabilitated during mop-up.
  - \*In emergency situations minimal temporary improvements may be carried out with approval of the Superintendent.

## III. FIRE HISTORY

As can be seen on the accompanying 1/2" - 1 mile scale map (see Appendix A), Mesa Verde has experienced periodic project fires (approximately every 11 years) in the last 60 years. All run in a general north-south pattern, following general mesa configurations. Most have burned in the heavily fueled pinyon-juniper complex and were pushed by winds of 15-20 miles per hour. Other fire conditions followed usual patterns of low relative humidities and fuel moisture. Project-size fires usually occurred several days after lightning ignition, when stationary high pressure centers were present in the Four-Corners Area.

#### IV. COOPERATIVE FIRE PROTECTION AGREEMENTS

Mesa Verde currently has cooperative fire protection agreements with the Ute Mountain Indian Agency. The cooperative agreement with the Ute Mountain Indian Agency provides for helicopter initial attack.

The fire protection agreement with the Ute Mountain Indian Agency is of particular importance since the reservation borders the park on the south and west. A copy of this agreement may be found in Appendix "C".

#### V. RESOURCES AND FACILITIES AVAILABLE

#### A. In Park:

#### 1. Fire Camp

Mesa Verde National Park is limited in the number of locations suitable for a large fire camp. Choice of the two possible locations (Far View and Morefield Canyon) is dependent on (a) location of the fire; and (b) my decision to close a portion or all of the park.

- a. Far View Complex includes lodge/cafeteria facilities, water, power, some phones. Use of lodge/cafeteria would require closing this portion of the park to visitation. This is a suitable area for fires located west of Moccasin Mesa that do not threaten Far View.
- b. Morefield Canyon the large campground (with water and shower facilities) could be utilized if closed to the public.

## 2. Radio System

The park system operates on 170.050 MHZ direct; 169.400 MHZ repeater through the Park Point repeater. Base stations are located at Park Headquarters, Morefield Ranger Station, Park Entrance, and Hovenweep National Monument. The park has no portable base stations or repeaters. The central dispatch is located in the Chief Ranger's Office.

Upon receipt of the BIFC Radio Cache, The Superintendent and Chief, Resources Management and Visitor Protection, will brief you and your staff as to possible repeater sites, local terrain problems, etc.

Other frequencies in use from Park Point Lookout are:

Dolores River Project - 162 to 174 MHZ Band

Empire Electric - 37.74 MHZ; 73.02 MHZ; 75.98 MHZ

Ariz. Dept. of Public Safety - 460.300 MHZ; 465.300 MHZ

Western Area Power Administration - D.O.E.

## 3. Supply Depot

There are several possible locations for supply depots within the park. I have chosen the one having best potential for effectively supplying service needs on the fire. The depot has been established at:

The	Directo	or of	the Depot	is	
Park	radio	call	number		

The supply depot is for you and your Logistics Section Chief to utilize and man as you deem appropriate.

# 4. Transportation System

Difficulties will probably be encountered in managing an directing the additional traffic necessitated by a project fire. The Park Facility Manager and Roads and Trails Foreman (see Mesa Verde organizational chart) will be available to help evaluate and correct system deficiencies, if needed.

If the park is closed, buses will be available from Mesa Verde Company.

- 5. Maps, Aerial Photos, and Reproduction Facilities
  - a. The following maps, overlays, and aerial photos are included in the Fire Overhead Map Kit. This kit will be given to you along with this Briefing Statement:
    - i. Five standard 1:24,000 USGS topographic maps of Mesa Verde National Park.
    - ii. Five FIRE GRID/HELISPOT 1:24,000 topographic maps of Mesa Verde National Park.
    - iii. Five full sets of 7.5 minute quads of the park.
    - iv. One archeological base acetate overlay, 1:24,000 scale to be used with standard topographical park maps.

- v. One vegetation base acetate overlay, 1;24,000 scale to be used with standard topographical park map.
- b. Both color and black-and-white aerials photos of the park are available. These can be checked out to you by the Chief Ranger and are produced locally at the research center (1 hour required to develop).
- c. The Park's Fax machine number 303-529-4498. The machine is located at the Headquarters Building Complex.
- 6. Initial Attack Crews and Equipment

Initial attack on small fires that occur while your fire is in progress, will be the responsibility of park personnel. If initial attack efforts fail, we may request your assistance and resources and would expect your cooperation when this need arises.

The park has a small helitack crew, Bell 206 BIII helicopter, a 60 person cache, and a variety of slip-on pumpers for initial attack purposes. As these are very limited resources, I would expect them to be released from your fire as soon as possible after your arrival. The same would hold true for other park resources committed to your fire.

The park has three operational fire towers. These are Park Point Lookout (manned full-time during the summer months), Whites Mesa and Cedar Tree Tower. The Park Point Tower serves as a lookout for several different agencies (San Juan National Forest, Ute Mountain Ute Indian Agency, Southern Ute Indian Agency, Bureau of Land Management, and the Montezuma County Sheriff's Office). It is equipped with a phone (529-4520) and multi-channel radio communications with San Juan National Forest, Ute Mountain Ute Indian Agency, and other agencies.

#### 7. Fire Weather

Daily weather forecasts are received on the AFFIRMS terminal, located at park headquarters. These forecasts are broadcast, when received, by the park radio dispatcher.

The Parks fire weather stations are as listed:

Chapin Mesa	CHAPIN	055704
Morefield	MORFLD	055706
Park Point	PARKPT	055799
Hovenweep NM	HOVENM	422709

Mesa Verde also uses a significant interest group (SIG) for the surrounding area. The SIG 043 includes:

Nucla	NUCLA	053801
Benchmark Tower USFS	<b>BCHMRK</b>	055202
Ignacio BIA	IGNCIO	055804
Needles, Canyonlands NPS	NEED	422707

Spot weather forecasts may be obtained by transmitting necessary field weather data to the park dispatcher who will obtain the forecast from the fire weather specialist in the Denver Office.

#### 8. Outside Park - Local Resources:

## 1. Air Support

## a. Fixed Wing

The closest primary retardant base is Grand Junction, Colorado - BLM, approximately 40 minutes flight time. Cortez, Colorado may be used as a backup base, limited to 1,000-gallon aircraft. Farmington, New Mexico, may be used as a backup base, utilizing aircraft in the 2,000-gallon range. Farmington would be the first choice.

There are several small aircraft commercial flight services in both Cortez and Durango, Colorado.

## b. Rotary Wing

In addition to the park helicopter, BLM has ships at Grand Junction Colorado tract periods). There are two sources of commercial light helicopters at Cortez and Durango. Additionally, Fort Carson Army Base, Colorado, can provide large helicopters, subject to military restrictions.

## 2. Heavy Equipment

A variety of heavy equipment is available from local construction companies, ranging from D-4 to D-8 cats and 4,000 - to - 8,000 -gallon water trucks. Buses are also available locally.

#### Food Service

There are two grocery stores in Cortez; two in Durango. The ARA Mesa Verde Company in the park, can do limited catering.

## 4. Emergency Medical Services

Both Cortez and Durango have hospitals capable of handling most medical emergencies. The closest burn center is the Bernalillo County Burn Center in Albuquerque, New Mexico.

The park has an ambulance and certified Emergency Medical Technicians. Cortez, Mancos, and Durango also have ambulance service.

If the Park is closed to visitors the Park's Emergency Medical Services personnel will be the Medical Unit for the Incident. Because of the jurisdiction the Park will provide a qualified Medical Unit Leader.

#### 5. Communications

Additional phone lines may be available from U.S. West if needed. Existing phones may be used.

## VII. PARK PERSONNEL ASSIGNMENTS

## A. Support Personnel Assigned to fire:

1. Multiple Use/Cultural Resource Advisor Line Officer's Liaison

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Multiple Use/Cultural Resource Advisor and as Line Officer's Liaison. He has line authority for the Superintendent and can assist in problems requiring the Superintendent's advice. He can also provide information and

	advice concerning the natural and cultural resources, developed areas, wilderness areas, etc., that may be affected by suppression actions.
	Local Administrative TitleRadio Call #
2.	Public Information Officer
	(Name)
	Local Administrative TitleRadio Call #
3.	Comptroller - Contracting Officers
	The Park Administrative Officer and the Park Purchasing/Procurement Agent (see park organizational chart, Appendix "B") will be available to assist your finance section. However, I would expect all purchasing and fiscal transactions to be completed by your staff prior to team departure, so as to eliminate all financial loose ends occurring afterwards.
4.	Resource Line Locators
	(Name)Administrative TitleRadio Call #
	Administrative TitleRadio Call #
	(Name)Administrative TitleRadio Call #

These people have been assigned to work with your line personnel to assist in locating cultural resource sites on-the-ground prior to line location and construction. A suggestion would be to assign them to your Sector Bosses. These people have archeological backgrounds, and are equipped with archeological site base maps.

5.	Law Enforcement Officer	
	(Name)	_is a ed for same
	Administrative TitleRadio Call #	
6.	Supply Depot Director and Staff	
	The following park personnel have been assigned to man the Supply Depot at your request. They should work for your Serv Chief where best utilized.	ice
	(Name)Administrative Title Radio Call #	
	(Name)Administrative TitleCall #	_Radic
	(Name)Administrative Title Radio Call #	_
	(Name)Administrative TitleCall #	_Radio
7.	Fire Rehabilitation Team	
	Park Ranger, chairs an ad hoc rehabilit team which is charged with development or rehabilitation plan soon after this fire controlled.	f a

I expect all line, helispot/port, and fire camp rehabilitation to be completed by your crews prior to their departure (spreading cat piles, building water bars, spreading brush, etc.). However, other rehabilitation work will be carried out by park personnel.

To facilitate this team's activities, helicopters and other equipment may be necessary for reconnaissance. The team chairperson will work through the Multiple Use Advisor to arrange for team needs and to insure that park rehabilitation efforts do no conflict with other aspects of fire management.

## VIII. DEMOBILIZATION

Demobilization plans should be prepared by your staff. However, I would expect to be consulted as to time of release of the Fire Management Team. Feel free to request any assistance the park might provide concerning demobilization.

#### IX. LINE OFFICER BRIEFING CHECKLIST

To be used in conjunction with Briefing Statement at time of Line Officer's briefing to incoming Overhead Team.

1.	Gene	eral
	a.	Fire name
	b.	Approximate sizeacres @ (location shown on park map)
	c.	Date of start@hrs
	d.	Name of local Park Incident Commander
	e.	Park closed: NOYESDATETIME
	f.	General weather conditions
	g.	Fire behavior

i. Present fire camp location  j. Other fires on park  Delegation of authority and assignment of responsibility - Park Superintendent's representative (if applicable):
Delegation of authority and assignment of responsibility - Park Superintendent's
responsibility - Park Superintendent's
Required briefing of crews regarding archeological concerns prior to going on line:
Assignment of Line Resource Locators: (See personnel assignments).
Briefing on National Park Service suppression policy: (See Appendix "D").
G.H.Q. organization (if needed or contemplated)
Evaluation team assigned? Leader_ Members_
Priorities for control
Fiscal limitations and constraints
Legal considerations (current investigations)
Local political considerations

[rai	nsportation routes/problems
ir	operations
•	Air tankers assigned
٠.	Effectiveness of air tankers to date
c.	Air Attack Boss - Name
i.	Helicopter assigned
∍.	Night flying helicopter policy
Manı	
(Exa	power on fire (general)act crew names and numbers if available.)
(Exa	power on fire (general)act crew names and numbers if available.) ipment on fire (general)act numbers, names, ETA's provided if ilable.)
(Exa	power on fire (general)act crew names and numbers if available.) ipment on fire (general)act numbers, names, ETA's provided if
(Exa	power on fire (general)act crew names and numbers if available.)  ipment on fire (general)  act numbers, names, ETA's provided if ilable.)  munications system in use: Radioephone

	20. Physical condition of Park Overhead Team and Crews_
	21. Estimated time off-Park Team to assume command
	22. Policy covering release of team
	T. FIDE Dogg ( PRIDEING CURCUITOR
Incoming arrival a are thorough the content of the	Overhead Team will be briefed by local Fire Boss upon at fire. Incoming Team should not assume fire until they oughly briefed and comfortable with the situation. Both Commanders will determine exact hour of command change. Lefing, functions will start phasing into their areas of bility, but will not assume control until the mined time.
1.	Map of fire (best available)
2.	Spread-fire behavior
3.	Fuels: Burning
	Ahead of fire
4.	Anchor points
5.	Natural barriers
6.	Line held (on map)
7.	Fire weather forecast
9.	Hazards (aircraft and personnel)

Access from camp to line	_
Manpower and equipment on line	
Manpower and equipment ordered (con	-
Aerial photos? Yes No Helispot and heliport locations (use map)	-
Water availability	
Camp fire protection	-,-
Crash fire protection at heliport  Med-i-vac arrangements	
Measures taken for road dust abatement	
Review of existing control plans in effect	
Overhead on line (names and location put on map)	
Any security problems?	
Special archeological considerations	
Time for take-over fire	

23.	Any	other	problem	areas,	considerations,	etc.?