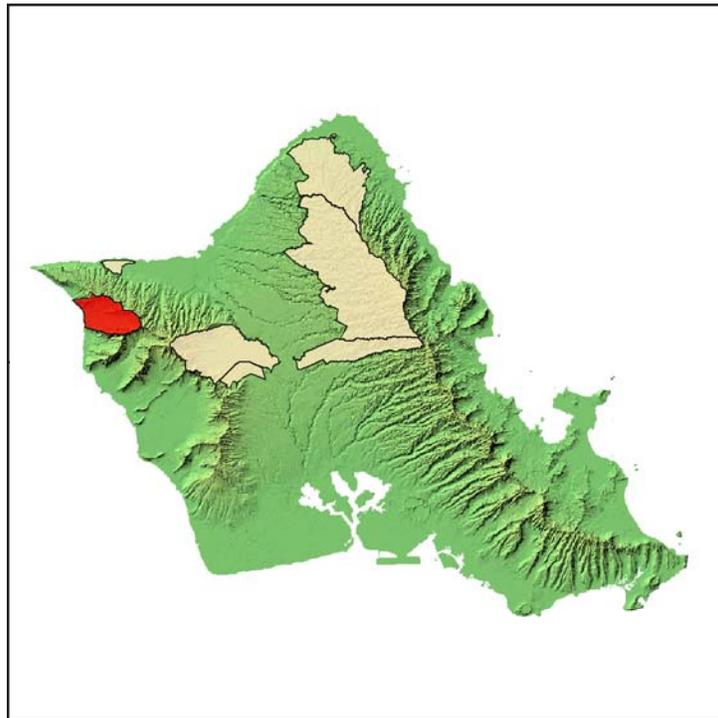


MAKUA MILITARY RESERVATION

STANDING OPERATING PROCEDURES



MAKUA MILITARY RESERVATION WILDFIRE SOP

1. GENERAL

1.1. Purpose.

The purpose of this Standing Operating Procedure (SOP) is to provide specific requirements that delineate the responsibilities of Federal fire department, Range Control personnel and using training units in the prevention and suppression of wildland fires at Makua Military Reservation. Its primary objective is to prevent unplanned ignitions through sound preventive measures. It also establishes procedures control fire and protect natural/cultural resources. See Figure MMR-1 for an overview.

1.2. Scope and Applicability. The provisions outlined in this SOP are applicable to all military training units and personnel assigned to or utilizing MMR. Unit commanders, regardless of service or component, whose unit(s) have been allocated use of MMR, will ensure compliance with this SOP. All officers, noncommissioned officers and civilian personnel will familiarize themselves with the contents of this SOP prior to use of the range facilities. Considering the adverse effects of wildfires, it is imperative that awareness on the part of all leaders is maintained and that all personnel are provided instruction in fire prevention and fire suppression. It is the intent of this SOP that the instructions and guidance contained herein are applied with a view towards accomplishing training goals with a minimum number of wildfires and limited damage to natural/cultural resources.

1.3. Responsibilities. In addition to the positions and responsibilities in the USARHAW Wildfire Management Program outlined in various sections, specific MMR responsibilities are as follows:

a. MMR Range Operations Supervisor, G3/DPTM, RDH. The Range Operations Supervisor shall ensure that all fire protection measures/resources are available, properly staged, and in operational condition prior to initiating any training activities. This includes minimum staffing, fire response vehicles, fire cache equipment, helicopters (on-site and standby), serviceable fire buckets, and filled dip ponds, as identified in the requirements of the IWFMP and this SOP.

b. Installation Commander. The Installation Commander has the overall responsibility for fire prevention and protection requirements and environmental management at KLOA.

c. Director of Installation Fire and Safety Office. The Director of Installation Fire and Safety has overall responsibility for the wildland fire management program.

d. Fire Chief, Federal Fire Department (FFD). The installation Fire Chief is responsible for the organization, supervision, and management of all aspects of the fire prevention and protection program in accordance with the provisions of DoDI 6055.6, Fire Protection.

d. Range Officer, G3/DPTM, Range Division Hawaii. The Range Officer has overall responsibility for enforcing the provisions of the Integrated Wildland Fire Management Plan (IWFMP) and other applicable training directives and regulations, including restrictions on or cessation of training activities based on the fire danger rating.

MAKUA MILITARY RESERVATION WILDFIRE SOP

e. Range Operations Supervisor, Schofield Barracks. The SB Range Operations Supervisor is responsible to the Installation Commander for ensuring proper fire prevention measures are taken by troops in rear areas; fires in forested and other training areas, when discovered, are promptly reported; and augmenting the Federal Fire Department in fighting any fires at MMR.

f. Wildland Fire Program Manager, IFSO. The Wildland Fire Program Manager is responsible for the execution of the Army's wildland fire program. Collaborates with other resource managers, FFD and other cooperative fire agencies to ensure that supplies, equipment, training, and qualified personnel are available to meet the goals and objectives of the IWFMP.

g. Unit Commanders and Division Chiefs. Commanders, managers, and supervisors at all levels of the organization are responsible for ensuring unit personnel are familiar with and comply with the provisions of this SOP and applicable regulations, fire prevention restrictions, training activities within biologically sensitive areas, and providing qualified personnel to support the wildland fire management program.

h. RDH MMR staff (Range Control) has the responsibility of enforcing all the provisions of this SOP and IWFMP.

i. Fire prevention is the responsibility of every soldier, contractor, and any other person working or training at MMR.

1.4. Environmental Considerations.

a. As outlined in Chapter 7.2. of the IWFMP, wildfires pose significant risks to threatened and endangered species of plants and animals and their native habitat at MMR. These habitats are found outside the firebreak road and mostly along the high valley walls and on the ridgelines of the installation (Figure MMR-2). Wildfires can burn within the firebreak road without causing a threat to sensitive habitat in Biological Sensitive Areas (BSA). However, due to the absence of other control barriers, and the presence of Unexploded Ordnance (UXO) outside the firebreak, fires outside the firebreak are considered critical. While wildfires in MMR are normally confined to alien grasses, each time a wildfire burns against the native forest, a portion of the habitat may be burned. With repetition over the years, the native forest is moved back and replaced with alien grasses. This has caused a gradual retreat of the native forest.

b. Cultural resources, including known archeological sites, are also found within the range complex. Unlike the natural resources, these are located within the firebreak road. Most of these sites have been burned or changed by some other process sometime in the past. However, wildfire suppression still threatens archaeological sites at MMR. Suppression techniques such as unmonitored carelessly constructed bulldozer lines, off road driving of fire apparatus, vehicles, and other ground fire suppression measures can damage cultural resources.

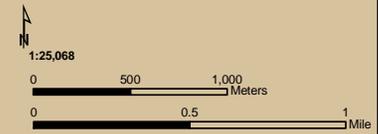
c. Because of the above concerns, fire management in MMR is a sensitive issue. All personnel working or training at MMR for any reason will adhere to the requirements, procedures, and precautions set forth herein.

Makua Military Reservation Fire Suppression Resource Locations

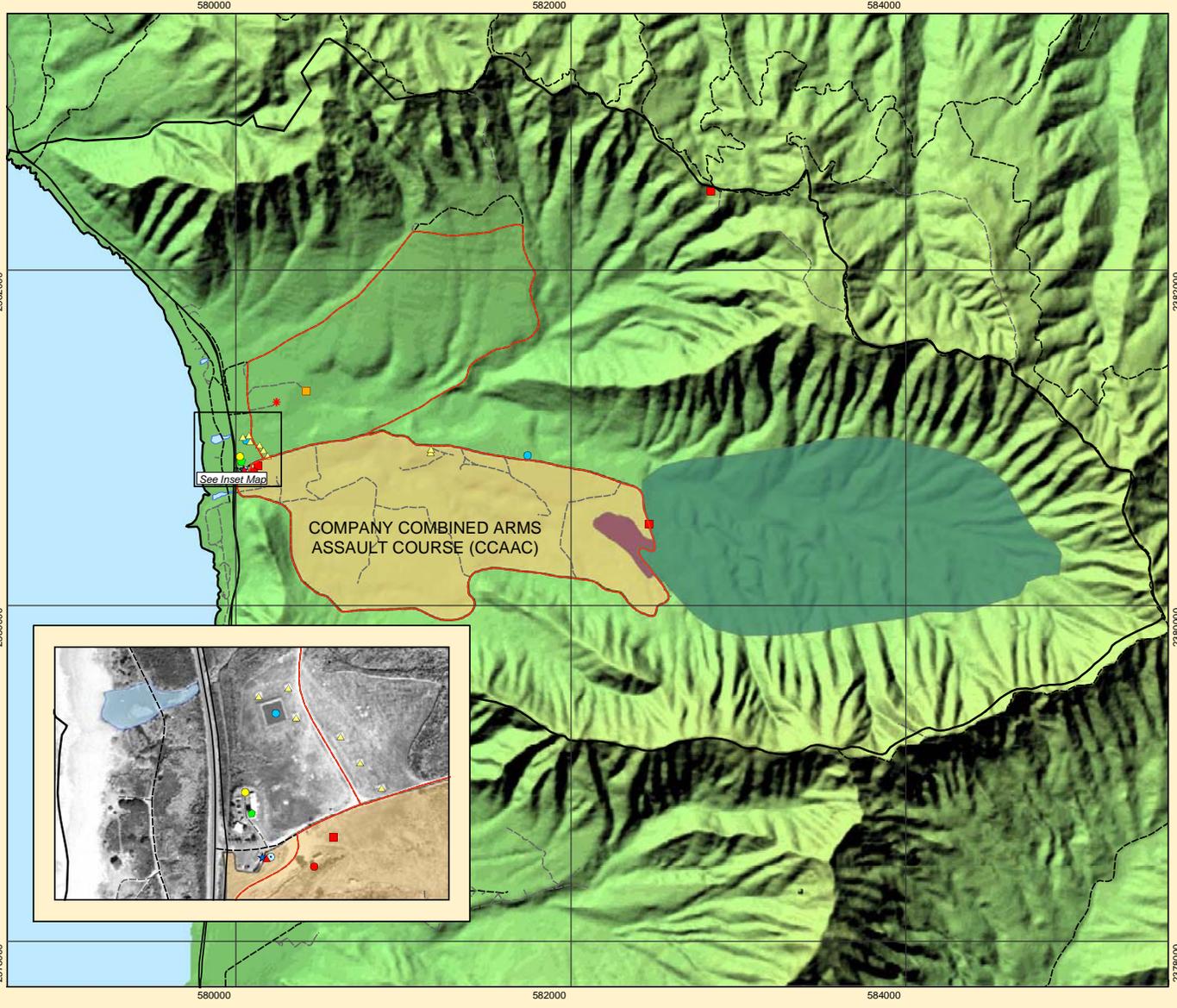
Figure MMR - 1

Legend

-  Installation Boundary
-  Training Areas
- ICM Areas**
-  Non-Waiver
-  Waiver Area
-  Ammo Storage Point
-  Dip Pond
-  Fire Cache
-  Fire Pump
-  Hummer
-  Firing Point
-  Helipads
-  Remote Auto Weather Station
-  Water Tank
-  Water Tender
-  Wet Standpipe System
-  Firebreak
-  Surface Water Body
- Roads**
-  Primary
-  Tertiary
-  Unimproved



Data Source: USARHAW IFSO



MAKUA MILITARY RESERVATION WILDFIRE SOP

Makua Military Reservation Protected Resources

Figure MMR - 2

Legend

Biological Sensitive Areas

- BSA-1
- BSA-2

Sensitive Archeological Areas

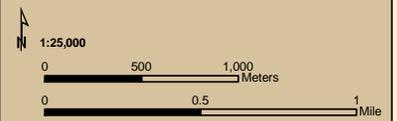
Federally Listed Species

Installation Boundary

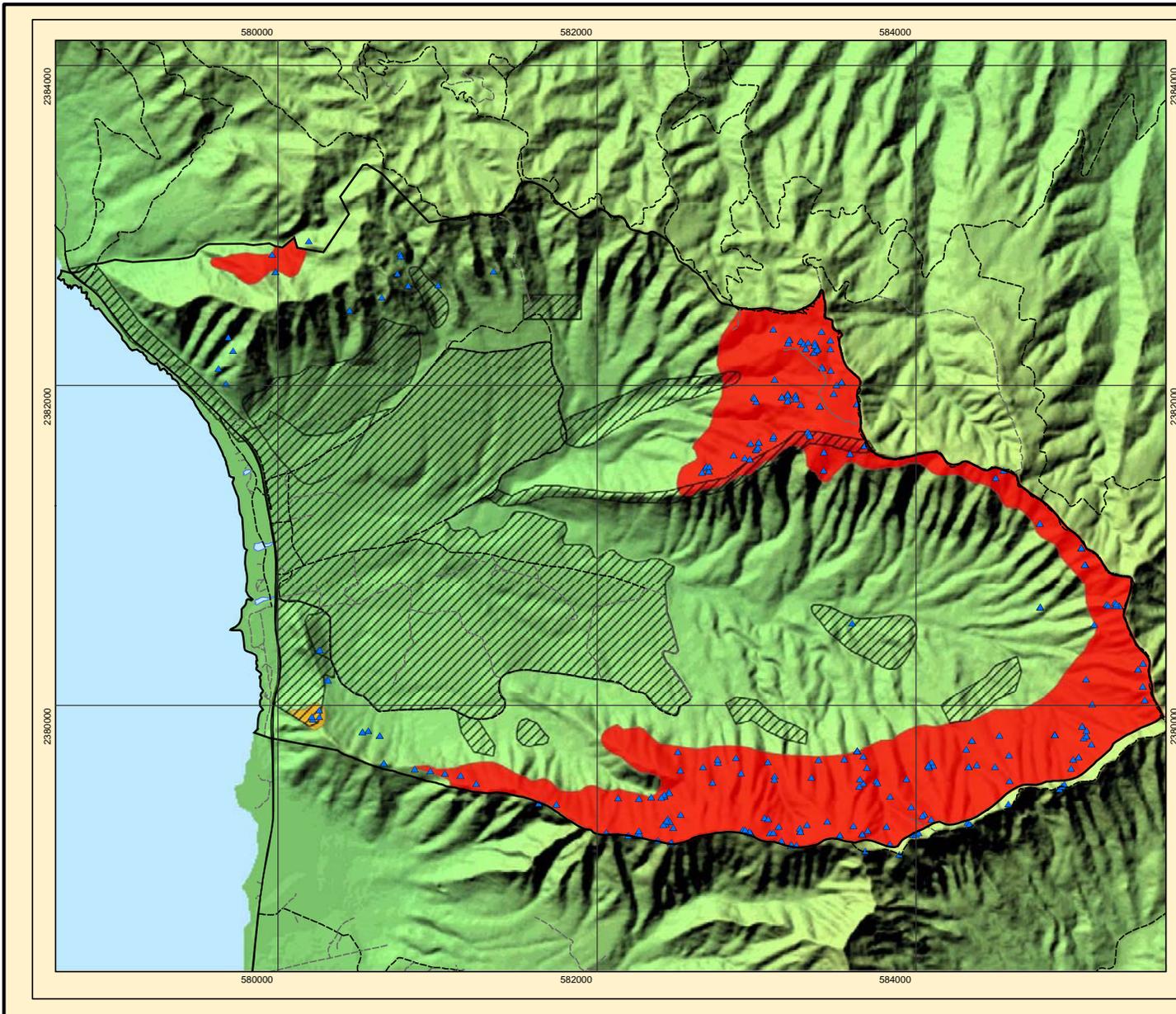
Surface Water Body

Roads

- Primary
- Tertiary
- Unimproved



Data Source: Biological Assessment for Endangered Species Act, Section 7 Consultation on Routine Military Training and Transformation of the Second Brigade to a Stryker Brigade Combat Team, 25th Infantry Division (Light), U.S. Army Hawaii, Various Sites, Island of Oahu, 21 March, 2003.
USAG HI DPW 2003.



MAKUA MILITARY RESERVATION WILDFIRE SOP

MAKUA MILITARY RESERVATION WILDFIRE SOP

2. FIRE PREVENTION.

One of the primary objectives of this SOP is to integrate fire management actions with military training requirements and range operations. The prevention of fires is the responsibility of every individual training and/or working at MMR. Fire prevention is critical for the continued survival of endangered plants, animals and native ecosystems, and the Army's continued use of the area as a live-fire range. Currently, there are many instance where military operations conflict with the management of these special natural resources. These conflicts often result in reduced training capability as "WILDLAND FIRES STOPS TRAINING". Fire management actions are designed to reduce existing conflicts between necessary military training activities and the conservation of natural and cultural resources found within KLOA.

2.1. Education

a. Soldiers will be briefed prior to training about fire prevention, and cultural and natural resource protection. The fire prevention briefing ensures that important information is provided to using individuals that may start wildfires.

b. Signs will be posted throughout various areas as reminders of prevention and awareness of the Fire Danger Rating System (FDRS).

c. Fire prevention and environmental pocket cards will be issued to users to increase individual's awareness of fire and environmental issues.

2.2. Enforcement.

a. The primary responsibility for enforcement of range directives falls on Range Control.

b. Secondary responsibility rests with the using unit commanders.

c. Failure to follow range protocols will result in termination of scheduled training and responsible individuals will be subjected to administrative disciplinary action in accordance with applicable regulations.

2.3. Engineering. There are no plans for additional firebreaks at MMR at this time.

2.4. Ignition Control.

a. All training will be subject to the fire danger rating system (see Section 3.1 and Enclosure 4 of this SOP).

b. Fuels management as described in Section 7.5.5 of the IWFMP will be implemented in part to reduce the chance of ignition.

MAKUA MILITARY RESERVATION WILDFIRE SOP

3. PRE-SUPPRESSION ACTIONS.

3.1. Fire Danger Rating System (FDRS).

a. Range control will be responsible for retrieving weather data from the MMR RAWS and archiving it into the “WeatherPro” software program. The BI, as determined by the NFDRS, will be used to rank fire danger based on known ignition sources.

b. The BI’s will be monitored every hour, on the hour, and prior to projected “hot” range status. Range control will notify the training unit every hour, and on the hour, of any training restrictions being imposed as a result of unfavorable fire danger ratings. Additionally, at any time that the BI changes from one category to another, the training unit will be notified.

c. Hourly fire danger ratings will be posted on the wallboard in the Range Control office. This data will be used as the basis for making decisions concerning limiting the use of selected weapon systems or ammunition.

d. While training at MMR, units must use caution during training exercises. Soldiers must be aware of and adhere to fire danger-rating restrictions of incendiary ammunition, pyrotechnics, smoking, and other ignition sources (see Enclosure 8). Strict compliance with training restrictions set forth herein will reduce the number of fire starts. The FDRS for MMR is as follows:

<i>Flame Length (ft)</i>	<i>Burning Index</i>	<i>Fire Index Color</i>
0-6	0-20.9	Green
6-11	21-47.9	Yellow
11+	48+	Red

e. OIC’s in charge of training will allow training to commence only after ascertaining that the training restrictions are in effect and adopting the appropriate fire prevention measures.

f. Tracers are currently prohibited at MMR. See Enclosure 8 of this SOP for a full list of FDRS restrictions.

3.2. Minimum Staffing Requirements.

a. MMR Staff.

(1) Proper staffing of MMR Range Control operations requires a minimum of five trained firefighters during any scheduled live-fire training operation. This requirement is based on the safety and complexity of the fire fighting organization during initial attack operations. These individuals can be assigned other RDH duties until a fire is reported. During a fire operation, one individual will stay with the radios/telephones (radio dispatcher), one will supervise the entire operation and the 20-man detail from the training unit, while the other three individuals man the HUMMER Brush Engine and Water Tender.

(2) The Range Officer and MMR Range Operations Supervisor will arrange work schedules to allow flexibility while ensuring that minimum staffing levels are met to include overtime authorizations. In the event of a wildfire, fire fighting duties take precedence over other work assignments.

MAKUA MILITARY RESERVATION WILDFIRE SOP

b. Military Training Unit.

(1) The training unit will augment the MMR staff with a twenty man wildfire suppression detail, consisting of personnel present at the range. These personnel must be immediately available to the MMR staff should a fire start for any reason. One of the individuals will be a NCO to provide unit supervision of the detail.

(2) The unit OIC is responsible for submitting a twenty man fire fighting detail roster to Range Control. Personnel will be identified and trained in proper use of the fire equipment prior to live-fire commencing. Range control will be responsible for issuing all Personal Protection Equipment (PPE) and fire suppression equipment to training units for fighting fires.

(3) A trained wildland firefighter or crew boss will provide direct supervision of the twenty-man detail.

c. Helicopter Unit.

(1) One helicopter aircrew, trained in aerial fire bucket for wildland fire operations, will be on site at MMR during any live-fire training exercises. The number of aircraft crew members is determined by the minimum crew for the specific aircraft being used.

(2) The aircrew shall remain in an alert status and located in the Range Control building. Upon notification of a fire, the aircrew shall respond immediately as part of the initial attack response.

(3) The second standby aircraft will be on station at the airfield that supports the first aircraft. Upon notification of a fire at MMR, this aircraft must be capable of responding to MMR within one-hour.

3.3. Training.

a. MMR staff. Of the five minimum individuals: The two manning the HUMMER Brush Engine must be trained at the Firefighter Training (FFT) 1/2 level. The one person acting as the fire supervisor must be trained at FFT1/2 and Crew Boss Single Resource (CRWB) level. The dispatcher may be in training for FFT, but still must have a MMR fire orientation by the MMR Range Operations Supervisor.

b. Individuals will not be assigned to duties for which they lack training and/or certified experience. All Range Control personnel dispatched or assigned to wildfires or prescribed fires will be qualified for the fire position assigned, unless assigned as trainees and under direct supervision of higher qualified personnel at all times.

c. The 20-man detail must have an equipment familiarization and one hour fire suppression orientation by the MMR staff prior to assuming duties. This course is intended to provide basic safety and fire skills necessary to assist the MMR staff with fire suppression.

c. Aircrews must have completed a unit aerial fire bucket orientation class/course with qualifications established by the unit (See Section 5.7, Aviation Plan).

MAKUA MILITARY RESERVATION WILDFIRE SOP

3.4. Fire Equipment and Supplies. If at any time the required fire suppression equipment is not operational, fire suppression personnel are not present, or aerial fire buckets are not operating properly, live-fire training will be suspended until all equipment is operational again. Live-fire training will only be conducted when fully trained/certified personnel and functioning equipment is readily available for fire suppression.

a. Fire Cache Supplies.

(1) Range control personnel will maintain a forty firefighter cache of fire equipment in a constant state of readiness. The cache will contain a supply of:

- (1) Fire hand tools
- (2) Chain saws
- (3) Pumps
- (4) Forestry hose
- (5) Class A foam concentrate
- (6) Hose appliances
- (7) PPE. The fire cache shall be equipped to outfit firefighters with appropriate PPE.
- (8) Portable radios
- (9) Aerial fire buckets
- (10) Foam proportioner units (vehicle and aircraft)

b. The MMR Range Operation Supervisor and the Wildland Fire Program Manager will conduct periodic checks to ensure all resources are in place and will identify and immediately correct any deficiencies.

c. Range control shall be responsible to coordinate with the Wildland Fire Program Manager for replacement of equipment.

3.5. Personal Protective Equipment (PPE).

a. All fire fighting personnel assigned to MMR must be issued proper PPE necessary for fighting wildfires (See Reference 4.2.2 of the IWFMP). Fire fighting personnel will ensure that proper PPE is worn at all times when on the fireline or in the fire area. Personal safety and prevention of injuries is the first priority in every fire management activity.

b. To ensure operational readiness during live-fire training operations, MMR staff personnel designated to fill the mandatory fire positions will be required to wear Nomex pants and leather boots as part of their daily attire while training is being conducted. This action will prevent delays and enhance response times to fire incidents at MMR.

MAKUA MILITARY RESERVATION WILDFIRE SOP

c. PPE for the 20-man detail from the training units, or other auxiliary response personnel, will be issued from the MMR fire cache supplies.

3.6. Fire Vehicles.

a. One operational HUMMER Brush Engine, equipped with 300 gallon slip-on pump unit (Class A foam capable) and one 6x6 Water Tender (1200-gallon capacity) shall be on site and assigned for initial attack response at MMR.

b. Range control personnel operating fire response vehicles must be qualified firefighters (FFT 1/2) licensed to operate the vehicle. The Wildland Fire Program Manager shall monitor vehicle qualification and training program for Range Control staff.

c. Range control personnel will perform daily preventive maintenance inspections of vehicles and equipment to ensure operational readiness. All discrepancies shall be identified and annotated on DA Form 2404, Vehicle Discrepancy Inspection Checklist. The MMR Range Operations Supervisor will review all 2404's and coordinate maintenance and repairs with the Wildland Fire Program Manager.

d. Back-up and extended attack vehicles:

(1) One operational HUMMER Brush Engine equipped with a 300 gallon slip-on unit (Class A foam capable) will be on standby at MMR for back-up or use during extended attack. If the one mandatory HUMMER Brush Engine is not operational, and this back-up is not available, training will cease until another engine can be brought on site.

(2) If the Water Tender is not operational then another Tender or two HUMMERS with slip-on units must be at MMR.

e. There are several refill locations at which HUMMERS and Water Tenders may refill.

(1) Two 300,000 gallon dip ponds, one near the Range Control building, the other near objective Deeds.

(2) Two freshwater standpipes at the Range Control building.

3.7. Helicopter Fire Bucket Support.

a. During the initial scheduling and coordination for the use of MMR, the using training unit must arrange for a dedicated primary and a standby helicopter support for aerial fire bucket operations. No live-fire will occur until a utility helicopter and trained aircrew is on station at MMR for aerial fire bucket operations. See Section 5.7 of the IWFMP for general aviation requirements.

b. There is a requirement for two aircraft, with all aircrews trained in aerial fire bucket operations, dedicated to support wildfire suppression operations at MMR.

(1) One utility aircraft, with an aircrew trained in aerial bucket operations will be dedicated to the initial attack and must be physically on site at the helicopter parking area in front of the MMR Range Control building. This aircraft must be parked with bucket hooked up (and already tested) before any training using pyrotechnics, including blank ammunition, or live-fire training

MAKUA MILITARY RESERVATION WILDFIRE SOP

commences. The aircrew shall be located at the Range Control building on alert status and respond within 10-15 minutes upon detection of a wildfire at MMR.

(2) Second standby aircraft, identified as the back-up for wildfire suppression mission at MMR, will be on station at the airfield that supports the first aircraft (Wheeler AAF or Kaneohe MCBH). This aircraft must be preflight/run-up, with aircrew ready to respond immediately upon notification of a fire, and respond to MMR within 1 hour. This aircraft is intended to be a back-up to the first aircraft in case of an extended attack, mechanical failure, or to relieve the MMR aircraft on site should a fire continue beyond the flight time capability of the initial aircraft.

c. At no time will the dedicated helicopter depart MMR without notifying the MMR staff. If a helicopter is to depart the range, live-fire training will be suspended and the area visually checked for fires prior to its departure.

d. MMR staff is responsible to ensure that a serviceable primary and a reserve BAMBI fire bucket is available for use at all times. Upon arrival of the assigned helicopter at MMR the staff will assist the aircrew in attaching the control head unit to the helicopter's pendant cargo hook and confirm that the fire bucket is fully operational.

e. The helicopter crew will conduct two successful fire bucket operation test drops prior to the firing of any live ammunition or pyrotechnic training. A successful test drop is defined as the ability to submerge the fire bucket in the dip pond, filling water to its capacity, lifting the fire bucket out of the dip pond, maintaining hover over the dip pond to check for leaks (15 seconds), and activating release dump while dispersing the water back into the dip pond. If a fire bucket is not operational, a replacement fire bucket will be obtained and tested. Training will not commence until a serviceable fire bucket is operating properly. The MMR staff will immediately note all discrepancies and status of inoperable fire buckets and report them to the Wildland Fire Program Manager to coordinate immediate replacement or repair.

f. Air-to-ground radio communication must be established between the aircraft, Range Control, the IC, and other units involved in fire suppression activities. Coordination and direction of air resources with ground fire fighting crews is essential for safe and effective application. Range control and fire crews will use the MMR Range Control frequencies and air-to-ground portable radios to communicate with the aircrew when directing initial attack fire bucket operations. Radio frequency is VHF 123.975 MHz (Primary) and FM 38.30 (Secondary).

g. Water locations.

(1) There are two 300,000 dip ponds at MMR. One is located 200 meters to the northeast of the Range Control building (Makua Lower Dip Pond #1) and other dip pond is located 2000 meters down range (east) along the fuelbreak road (Makua Upper Dip Pond #2).

(2) If the dip ponds should be emptied as a result of extended attack operations, salt water from the ocean may be substituted.

(3) MMR staff will ensure that the upper and lower dip ponds are filled at a minimum of 75% (above the 7-foot mark) of its maximum capacity prior to any live-fire training. The lower dip pond #1 is filled using the waterline into MMR. The upper dip pond #2 has no water line and can only be filled by water tender delivering water from another off site location. The Wildland Fire Program Manager will be notified immediately to coordinate service contracts as necessary

MAKUA MILITARY RESERVATION WILDFIRE SOP

to repair or refill the upper dip pond in the event the water level falls below the minimum water capacity required.

3.8. Other Resources. For a complete listing of other resources that can be made available for MMR, see Section 2.4 of the IWFMP.

4. FIRE SUPPRESSION ACTIONS.

4.1. Fire Reporting and Notification Procedures.

a. Early fire detection and prompt reporting is critical for effective initial attack of wildfires on MMR. All fires, regardless of size, will be reported immediately to Range Control and in turn, to the FFD. Units will follow the fire reporting procedures below:

a. Upon detection of a fire, the unit Officer in Charge (OIC) will immediately initiate a “cease fire” order and notify Range Control, giving the location and size of the fire. The unit OIC will immediately place himself and all unit personnel under the operational control of the MMR staff or IC for fire fighting operations.

b. A unit that discovers or causes a fire will immediately take adequate measures to contain or extinguish small fires within the immediate vicinity. The primary mission of the unit commanders will shift from training objectives to fire control.

c. All training is suspended immediately when a fire is discovered. Training will remain suspended until the IC or MMR Range Operations Supervisor determines that the fire is extinguished.

d. Failure to notify Range Control of any fire will result in termination of scheduled training and responsible individuals may be subjected to administrative disciplinary action in accordance with applicable regulations. Personal fines may also be issued by outside regulatory agencies, if an investigation determines that negligence caused unwarranted damages to protected resources.

e. The MMR radio dispatcher will immediately mobilize the MMR wildfire ground crews and the helicopter aircrew on alert status at MMR. The dispatcher will also notify the Schofield Barracks Range Control and the Federal Fire Department (FFD). The FFD will dispatch the Area 2, Assistant Fire Chief and a fire company from Fire Station 11, Lualualei and/or additional fire fighting units, if warranted.

f. The MMR Range Control will immediately notify the Installation Operations Center (IOC) upon determination by the MMR Range Operation Supervisor, the IC, or FFD that a potential extended attack exists and that the second standby helicopter and/or additional fire fighting support is required.

g. Other personnel or agencies will be notified, time permitting. Notification of the using unit’s higher headquarters is the responsibility of the using unit.

h. If the fire has escaped the firebreak road system, the MMR staff will immediately contact the DPW Environmental Division, Conservation staff. If the fire has escaped the firebreak and is

MAKUA MILITARY RESERVATION WILDFIRE SOP

threatening BSAs, and the MMR staff cannot contact the DPW Environmental Division office, the MMR staff will immediately contact the USFWS directly.

i. If a fire has started outside the firebreak road, training will be suspended until an internal investigation has been completed and the DPW Environmental Office has conducted a survey of the fire area. The DPW Environmental Office will reinitiate consultation with the USFWS before any training is allowed to resume. This consultation with the USFWS may take several days or weeks.

j. In the event Range Control becomes aware of a fire that has started outside of MMR, or a fire on MMR is moving out of the MMR boundary, Range Control will immediately call 911 for the City and County of Honolulu Fire Department (HFD). Fires started outside the MMR installation is the responsibility of HFD. The MMR staff will respond to confirm exact location of that fire and monitor the fire's progress. If a fire situation off MMR presents imminent threat to MMR, Range Control will implement notification and fire response procedures as outlined in this SOP. Range control personnel will position available fire fighting resources to assist in controlling the fires and to prevent fires from coming onto MMR.

k. Immediate notification of RDH or FFD supervisors must be initiated to request additional personnel or overtime, or to recall additional qualified wildland fire personnel, in the event minimum staffing is inadequate.

4.2. Initial Attack.

a. Immediate, and aggressive response to all fires is an unconditional requirement for MMR. The high values of the natural and cultural resources in MMR justify the fullest commitment, within the confines of personnel safety, to expeditious containment and control of all fires. The difficult and often hazardous fire conditions warrant total initial attack effort to arrest fires in the early stages. In reality, the savings to be realized from a successful initial attack will offset the cost of many so called "over reactions".

b. A unit that discovers or causes a fire will immediately cease its operations or training, notify MMR Range Control, and take adequate measures to contain or extinguish small fires within the immediate vicinity. The primary mission of the unit commanders will shift from training objectives to fire control.

c. The HUMMER Brush Engine will immediately proceed to the scene of the fire. The standby helicopter will be launched as required. An IA Crew Boss will respond and organize and equip the 20-man detail from the training unit. The MMR dispatcher will start notifications.

d. Upon arrival at the site, MMR Range Control IA Crew Boss will assess the fire conditions and determine fire control equipment and personnel requirements necessary to execute initial attack operations. At this time, the fire will be evaluated. Definitions for evaluation are:

(1) ROUTINE Wildfires. Wildland fires that are within the firebreak and can be handled by the MMR staff, the standby helicopter and the 20 man detail (on site IA resources only, no threat to BSA).

(2) SERIOUS Wildfires. Large wildland fires that are within the firebreak or any fire that may escape the firebreak and/or may require the assistance of additional off site assets. The FFD and the Wildland Fire Program Manager will respond and additional resources may be

MAKUA MILITARY RESERVATION WILDFIRE SOP

alerted but not used. (Off site IA resources may be required, fire may be outside the firebreak but not yet seen as threatening BSA at this time).

(3) CRITICAL Wildfires. Wildland fires that have escaped the firebreak and will require off site resources and possibly assistance of mutual aid and pose a critical threat to loss of high value resources and/or potentially may leave the MMR installation boundary. (Off site IA or Extended Attack resources required, fire is outside the firebreak and is threatening BSA).

e. In the event fire escapes the initial attack, the IC will implement an extended attack plan or fire escape contingency plan. (Refer to Enclosure 4, 5, and 6, Operational Decision Charts, of this SOP).

f. The IC will coordinate with the MMR staff for requesting military assistance for combating major fires.

g. Fires in the UXO high hazard area with potential for escape and/or fires that have potential to carry fire into high resource value areas (BSA) on MMR justify the fullest commitment to aggressive containment and control of fires. The Army shall notify adjacent landowners before the fire escapes the MMR boundary.

h. Due to the possibility of UXOs, under no circumstances will firefighters or troops enter a high hazard impact area to fight a fire. Aerial fire bucket operations will be utilized to control fire in contaminated areas that are inaccessible by ground fire fighting teams.

i. Attack Methods.

(1). Types of Attack.

i. Direct Attack. Direct attack is the use of manpower to directly fight a fire, on a fireline at the fire itself. Direct initial attack by trained MMR staff assisted by the using unit twenty man detail at the onset can suppress fires at the point of origin or prevent fires from spreading. However, fuel loads, UXO, and terrain conditions outside of the fire/fuelbreaks at MMR currently limit safe and effective direct attack by fire crews in much of the area. Ground fire fighting hand crews or brush engines can be effective for containing, or at least retarding the spread of fires until water/retardant drops from helicopters can be used. Direct attack with helicopter water drops can be very effective. Aerial fire bucket operations will be utilized to control fire in areas that are inaccessible by ground fire fighting teams.

ii. Indirect Attack. Indirect attack is the use of ground crews or aircraft to create control lines in front of fires before the fire arrives. In areas with UXOs or heavier fuel loads, indirect attack incorporating offset hand lines roads and pre-constructed firebreaks can be used as an approach. Unless conditions of the particular incident determine otherwise, fuel within compartments isolated by barriers or control lines should be expeditiously back fired (burned out to cause fuel starvation) to reduce chances of fire escape.

(2) Recommendation for suppression within the firebreaks. The direct attack method is considered the best method within firebreaks. Hand crews, brush engines and aerial buckets can be used in this area. Since it is desired to suppress a fire as quickly as possible using crews with hand tools and engines/buckets with water/foam directly on a fireline is recommended. Black lines/backfiring can also be used as a control measure for fuel starvation. Due to the rough terrain and the presence of cultural sites, bulldozer lines are considered a last resort and

MAKUA MILITARY RESERVATION WILDFIRE SOP

should be only sited (unless used to clear old paths) with the recommendation of the DPW Environmental Division. However, several internal access roads reduce the necessity to cut tractor lines. The firebreaks and these internal access roads provide excellent control lines to black line/backfire off of. The HUMMER Brush Engine can maneuver on all of these roads. The 6x6 Water Tender and other Type 50/60 Brush Engines should stay on the firebreak road. Structural engines/tenders should only be allowed on the center firebreak road as far as the upper dip pond #2. Several Escape/Safety zones can be designated along the firebreaks, in mowed areas, and in previously burned areas.

(3) Recommendation for suppression outside the firebreaks. Both the direct attack and indirect attack method can be used outside the firebreaks. Hand crews and brush engines can only be used in areas along the firebreaks and a few access roads along the north firebreak. Personnel are not to leave these roads due to the presence of UXOs. The desire to suppress a fire is subordinate to personnel safety. Use of aerial buckets with water/foam directly on a fireline or indirectly to establish foam or retardant lines in front of, or around a fire, is recommended. Black lines/backfiring should only be used as a last resort and only with a control line. Due to the rough terrain and the presence of UXOs, bulldozer lines are not normally practical and should be considered as a last resort and should only be sited with the use of Explosive Ordnance Disposal personnel. There is one jeep trail access road on the north rim of MMR. The Air Force and the State DOFAW controls the access to this trail. This trail offers the only established control lines to black line/backfire off of along any perimeter of MMR. There are a few helicopter landing sites along the central (east) rim of the valley. These spots have been used to fly in hand crews to establish hand lines. Caution should be exercised in determining escape routes and safety zone prior to employing crews in these areas. During an extended attack, DPW Environmental Division personnel can assist with establishing protection priorities.

4.3. Command and Control.

- a. Upon notification of a fire by the training unit, the MMR Range Control staff will immediately close the range for any other operation except for fire suppression resources responding down range.
- b. A trained MMR staff wildland fire Crew Boss will immediately proceed to the scene of the fire and assume command and control of all fire fighting activities.
- c. The unit OIC will direct any unit fire suppression actions until relieved by the arriving MMR Initial Attack (IA) Crew Boss. Command and control of the fire incident will be extended to the MMR Range Operations Supervisor, the Wildland Fire Program Manager, or the Senior Fire Officer (SFO) of the FFD as the incident commander (IC).
- d. Implementing the Incident Command System (ICS) designates the highest trained individual as the IC.
- e. The IC will establish a command post when it is anticipated the fire incident is of a serious or critical nature.
- f. The IC will initiate action requesting mutual aid support from other fire agencies in accordance with established Cooperative Agreements, if required.

MAKUA MILITARY RESERVATION WILDFIRE SOP

g. The use of military personnel will only be authorized under controlled circumstances. When utilized, military personnel will be under the direct supervision and control of a qualified wildland firefighter from the RDH staff or the FFD.

h. Once resources have been committed to fire fighting, they are under the operational control of the IC. The IC directs the overall employment of fire fighting resources to contain and extinguish the fire. This does not preclude unit commanders from rotating personnel and equipment as necessary. The IC will release fire fighting resources only after determination that they are no longer required.

5. POST- FIRE ACTIONS.

5.1. Records and Fire Reports.

a. General wildfire reporting is covered in Chapter 6.1. of the IWFMP.

(1). MMR Range Control personnel will maintain a log of actions during all fires on DA Form 1594, Daily Staff Journal or Duty Officer's Log. All fire incidents will also be assigned a fire number and officially recorded on the standard Fire Incident Report form for all Army training lands. A sample Wildland Fire Incident Report (WFIR) form is included at Enclosure 8 of this SOP.

(2) The MMR Range Operations Supervisor will review all fire reports for accuracy and proper completion of the Fire Incident Report. A copy of each report will be faxed to the Wildland Fire Program Manager and the DPW Environmental Division at the earliest opportunity. DPW Environmental Division will forward copies of all fire incident reports of fires that escape outside the fire/fuelbreak road to USFWS.

(3) Fire records will be kept on an automated computer database and maintained by the Wildland Fire Program Manager necessary for fire history and fire trend analysis. The Wildland Fire Program Manager and DPW Environmental Division will coordinate submission of semi-annual MMR WFIR's to USFWS NLT 10 July and 10 January of each calendar year.

c. It is important that all fire incidents are documented to ensure that accurate fire history of all fires at MMR is maintained. Fire reports are used for fire trend analysis on location, size, cause, frequency, and use in Geographical Information System (GIS). If available, a Global Positioning System (GPS) should be used to plot burn areas.

5.2. Surveys.

a. In addition to the reports and reviews that are done immediately after a wildfire, a post-fire analysis survey of the burned area may be required depending on the fire's location and vegetation damaged. The post-fire analysis may be combined with any of the informal or formal investigations. A post-fire analysis will need to determine either all or part of the following:

(1) The affect the fire may have had on native or alien natural flora and fauna resources and cultural resources.

(2) The effectiveness of the pre-suppression measures including fuels modifications.

MAKUA MILITARY RESERVATION WILDFIRE SOP

- (3) The effectiveness of the suppression resources and measures used.
 - (4) The effectiveness of the ICS.
 - (5) The effectiveness of fire/fuel models used.
 - (6) A safety review of suppression actions.
 - (7) A UXO contamination survey or potential UXO clean up operations.
- b. A post- fire survey of the fire area will be conducted with the coordination of the DPW Environmental and ITAM office.
- c. The effects of fire on threatened and endangered species or effects from catastrophic fire events must be surveyed at the earliest opportunity.
- d. If during the survey it becomes evident that a wildfire has occurred outside the perimeter of the firebreak and/or affected a BSA/SEA, or threatened any endangered species, the USFWS and the State of Hawaii DOFAW will be notified. If the wildfire was determined to be caused by military activities then the Army will reinitiate Section 7 consultation under the ESA.
- e. If a UXO survey or clearing operation is desired, then coordination with the Explosive Ordnance Disposal (EOD) unit is necessary. Surveys or clearing operations must be planned, coordinated, and should be carried out immediately after a fire.

5.3. Investigations and Accident Reporting.

- a. After Action Reports (AAR) will be conducted for fires of four hectares (ten acres) or more and/or during which unusual events occurred, including failure to follow instructions.
- b. The RDH will request a formal investigation for fires involving any of the following:
 - (1) Training related caused fires escaping or starting outside the MMR boundary.
 - (2) Damage or loss of valuable property exceeding \$1000.00.
 - (3) Damage of loss to Biological Sensitive Area (BSA) or incidental take of plant or animal specie.
 - (4) All entrapments of fire shelter deployments.
 - (5) Major injury or fire fatality.

MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 1 FIRE PREVENTION BRIEFING

The following verbiage will be included in a general safety, environmental and fire prevention briefing to be given to all personnel before training at MMR.

The purpose of this brief is to educate users of the range about the dangers of fire on the range. Fire prevention is the responsibility of every person working or training on the range. There are several reasons that fire prevention is so important. Fire poses a grave threat to endangered plants and animals at MMR. Fires also pose a danger of damage to archaeological sites. If a fire starts, all training must cease, and training downtime will result. For these reasons, every effort must be made to prevent range fires. In order to prevent fires, you must follow the following rules:

1. No lighted tobacco smoking materials will be discarded on the range. Smoking on the ranges is prohibited except in the designated smoking areas at the bivouac area of MMR.
2. Open fires are not authorized.
3. Heat tabs and similar commercial products must be used inside metal containers.
4. The use of smoke grenades or simulators is authorized, but must be used in such a manner that will not cause fires to ignite. This means do not place smoke grenades or simulators in vegetated areas. Place them in the dirt or in metal cans provided by Range Control. Units are required to use metal barrels provided by Range Control in which to place grenades.
5. White Phosphorus or aerial pyrotechnics are not authorized under any circumstances in MMR.

In the event a fire is started, cease training immediately. Range Control must be notified immediately. Every safe effort must be made to put the fire out, and to do so as quickly as possible. Every resource available on the Range must be committed to this effort. These resources include the helicopter with fire bucket, HUMMER Brush Engine fire trucks, and those of you that have been designated as part of the fire fighting team. Your unit leaders will advise you if you are on this team. In the event this fire fighting team is required, a trained safety technician will direct your work to put the fire out. The fire fighting team must be knowledgeable of safety and the proper use of backpacks and hand tools for fire fighting. When needed, this fire equipment will be issued at a site near the weather station. (Demonstrate the use of water backpack and fire swatter). Water for fire fighting is available in the two dip ponds on the range. One north of the operations building, and the other is located near objective deeds. Additional water is available from the large blue tank near the tower.

MAKUA MILITARY RESERVATION WILDFIRE SOP

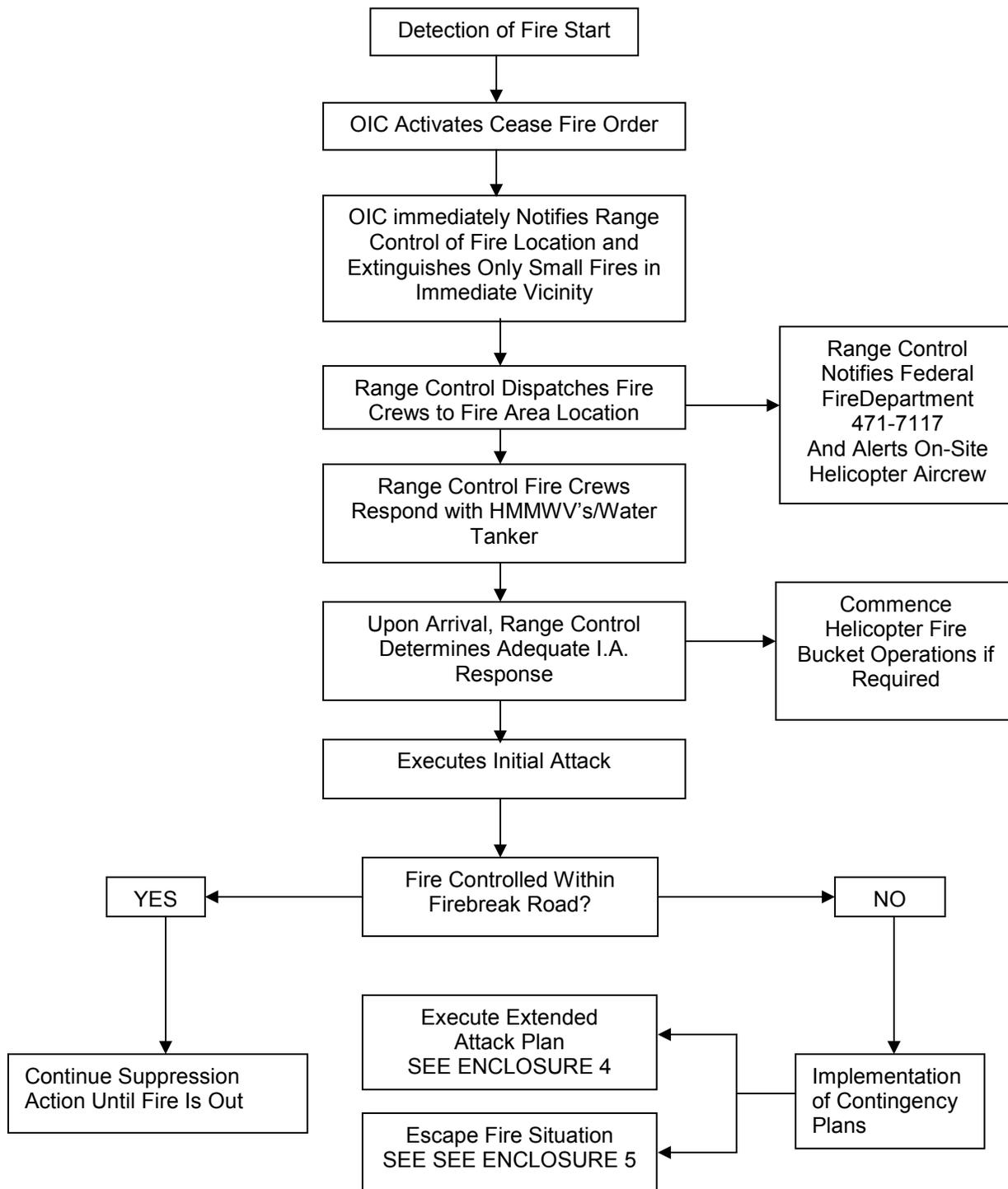
ENCLOSURE 2 NOTIFICATION LIST

<u>AGENCY NAME</u>	<u>PHONE NO.</u>
FEDERAL FIRE DEPARTMENT (Emergency)	471-7117
Communications Center & Dispatch	474-2222
Honolulu Fire Department (Emergency)	911
25th ID(L) & USARHAW	
Installation Operations Center (IOC)	655-8763/8764
	655-2962 (Fax)
<u>G3/DPTM, Range Division Hawaii</u>	
Range Division Officer	655-1404
Range Operations Manager SB	655-5243/9509
Schofield Range Control	655-2292
ITAM	655-0582/8463
<u>Installation Safety and Fire Protection</u>	
Director	655-3350
Fire Chief	656-1331
Wildland Fire Program Manager	656-0615
	286-5818 (Cell)
<u>DPW, Environmental</u>	
Chief	656-2878, x-1062
Natural Resource Manager	656-2878, x-1050
Cultural Resource Manager	656-2878, x-1052
Oahu Biologist	656-7641/7741
U.S. AIR FORCE	
Kaena Point Satellite Tracking Station	697-4210
Makua Cable Head (DISAPAC)	696-2380
U.S. FISH & WILDLIFE SERVICE	
Field Supervisor	541-3441
Fax	541-3470
STATE OF HAWAII, DEPARTMENT OF LAND & NATURAL RESOURCES	
Division of Forestry and Wildlife	
Oahu District Forester	973-9787
State Protection Forester	587-4173
OHIKILOLO RANCH	
Mr. Albert Silva	696-6778/7910

MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 3

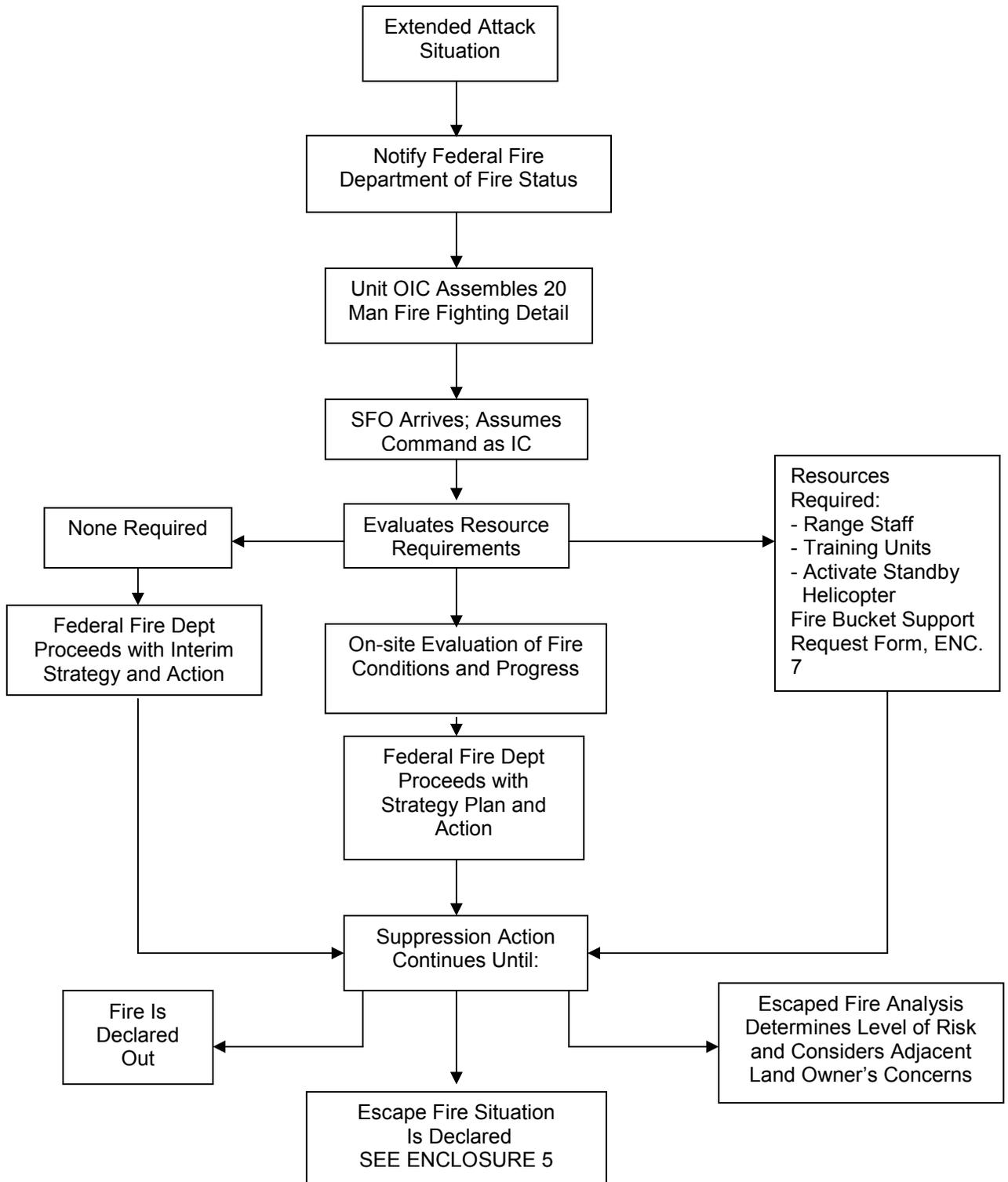
MAKUA MILITARY RESERVATION (MMR) OPERATIONAL DECISION CHART INITIAL ATTACK PLAN



MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 4

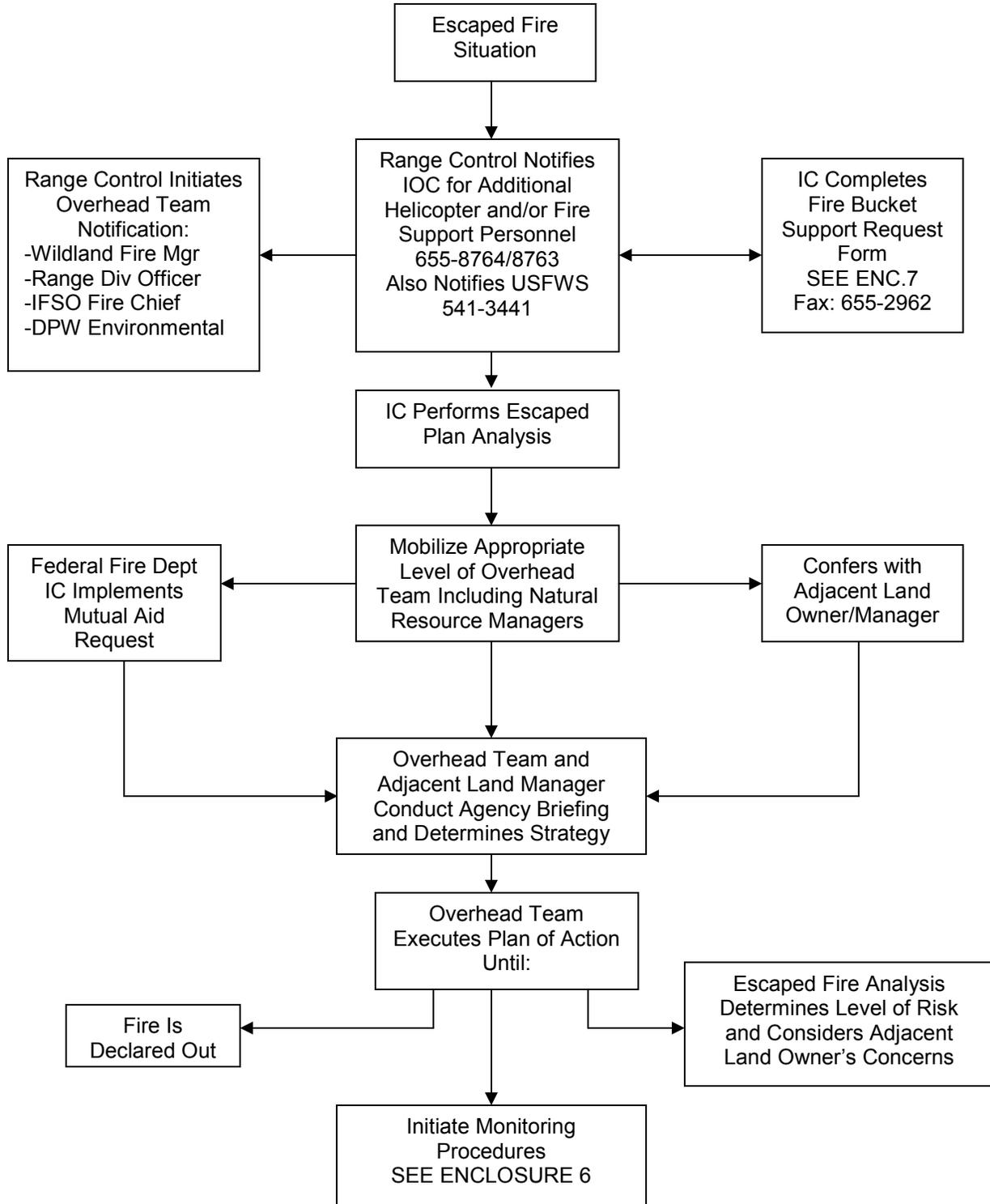
MAKUA MILITARY RESERVATION (MMR) OPERATIONAL DECISION CHART A, EXTENDED ATTACK PLAN



MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 5

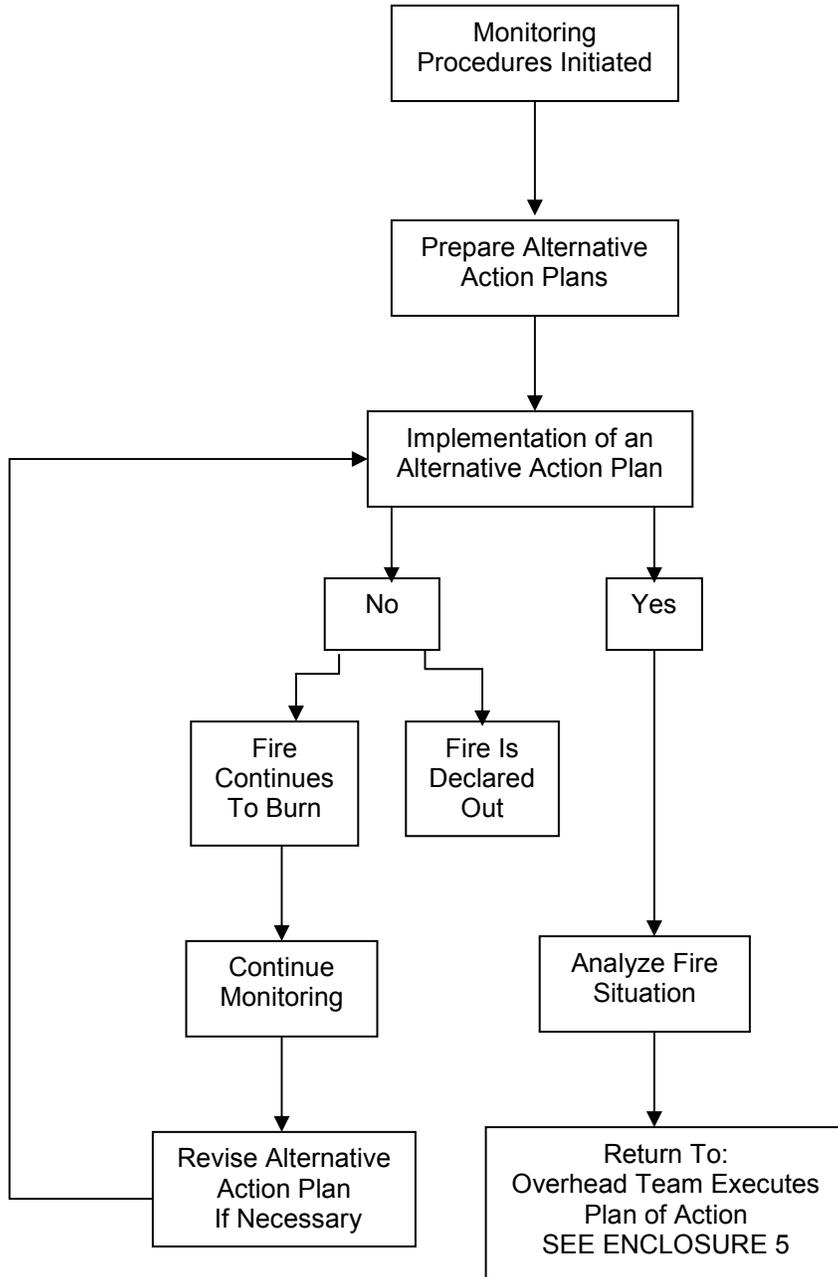
MAKUA MILITARY RESERVATION (MMR) OPERATIONAL DECISION CHART B ESCAPE FIRE SITUATION (OUTSIDE FIREBREAK ROAD)



MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 6

MAKUA MILITARY RESERVATION (MMR) OPERATIONAL DECISION CHART C MONITORING PROCEDURES (FIRES OUT OF CONTROL BEYOND MMR BOUNDARY)



MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 7

25th ID(L) & USARHAW Reg 350-1

Request for Rotary Wing Aircraft Support

Date of Request:

REQUEST FOR ROTARY-WINGED AVIATION SUPPORT	
Proponent of this Form is G3, 25 ID(L) May 97	
2. Requesting Unit:	3. POC and Ph# or Freq and Call Sign:
5. Date(s) Required:	4. Submitted or Coord at AMAC/G3 Conf? <input type="checkbox"/>
<input type="text"/>	If Yes, Date: <input type="text"/>
5a. Unit's Cycle: <input type="text"/>	6. Number and Type of Aircraft Requested:
	1x UH 60
7. MSC or SEP BN S3 AIR:	
8. Pick-Up Point(s)/PZ(s):	9. Destination(s)/LZ(s):
<input type="text"/>	<input type="text"/>
10. Contact at PZ: <input type="text"/>	11. Contact at LZ: <input type="text"/>
12. Pick-Up Time: <input type="text"/>	13. Release Time: <input type="text"/>
14. Passengers: <input type="text"/>	
15. Cargo: (type, number, weight) <input type="text"/>	
16. Special Instructions or Mission Equipment: (e.g. Headphones, Cargo Hook, C2 A/C etc.) <input type="text"/>	
17. Mission Description: (who, what, when, where, why)	
<input type="text"/>	
18. Initial Planning Coordination: (when and where) <input type="text"/>	
AVIATION USE ONLY	
19. Mission Received From: (name, unit, date, time) <input type="text"/>	20. Mission Number <input type="text"/>
21. Mission Passed To: (name, unit, date, time) <input type="text"/>	<input type="text"/>
22. Mission Passed To: (name, unit, date, time) <input type="text"/>	
23. Mission Passed To: (name, unit, date, time) <input type="text"/>	
24. Number of Aircraft Assigned to Mission:	
AH-1 ____ CH-47 ____ EH-60 ____ OH-58 ____ UH-1 ____ UH-60 ____ OTHER ____	
25. Estimated Number of Hours for Mission:	
AH-1 ____ CH-47 ____ EH-60 ____ OH-58 ____ UH-1 ____ UH-60 ____ OTHER ____	
26. Remarks: <input type="text"/>	

MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 8

FIRE DANGER RATING SYSTEM (FDRS) FOR MMR

<u>FIRE DANGER RATING</u>	<u>BURN INDEX</u>	<u>CAUTION TO BE EXERCISED</u>	<u>NECESSARY PRECAUTIONS</u>	<u>HAZARD</u>
GREEN	0-20.9	Use Normal Caution	Weather conditions favorable for all authorized munitions at MMR. Smoking is permitted.	LOW
YELLOW	21-47.9	Use Caution. Fires will start easily.	Yellow is the beginning of the danger period. Only ball ammunition, mortar, artillery, hand grenades (HE), and smoke grenades are allowed. Smoking is permitted only in designated areas.	MEDIUM
RED	48+	Use extreme caution. Fires are difficult to control.	No munitions or pyrotechnics are allowed. Smoking is not permitted on the ranges	HIGH

Burning Index Warning Table Makua Military Reservation

		1 HOUR FUEL MOISTURE																
		4	5	6	7	8	9	10	11	12	13	14	15	17	19	21	23	25
W I N D S P E E D	0	27	26	24	23	22	21	20	19	17	16	15	12	7	6	4	2	0
	1	33	31	29	28	27	25	24	22	21	19	18	15	9	7	5	3	0
	2	40	38	36	34	32	30	29	27	25	23	21	18	11	9	6	3	0
	3	46	44	41	39	37	35	33	32	30	27	25	21	13	10	7	4	0
	4	52	50	47	45	42	40	38	36	34	31	28	24	14	11	8	4	0
	5	58	55	52	50	47	45	42	40	37	34	31	27	16	13	9	5	0
	6	64	60	57	54	52	49	46	44	41	38	34	29	17	14	10	5	0
	7	69	65	62	59	56	53	50	47	44	41	37	32	19	15	11	6	0
	8	74	70	67	63	60	57	54	51	47	44	40	34	20	16	11	6	0
	9	79	75	71	67	64	61	57	54	51	47	42	36	21	17	12	6	0
	10	84	79	75	71	68	64	61	57	54	50	45	38	23	18	13	6	0
	11	88	84	79	75	71	68	64	60	56	52	47	41	24	19	14	6	0
	12	93	88	83	79	75	71	67	63	59	55	50	43	25	20	15	6	0
	14	101	96	91	86	82	77	73	69	65	60	54	46	27	22	16	6	0
	16	109	103	98	93	88	84	79	75	70	65	58	50	30	24	17	6	0
	18	117	111	105	99	94	89	85	80	75	69	62	54	32	25	17	6	0
	20	124	118	111	106	100	95	90	85	79	73	66	57	34	27	17	6	0

Fuel Model N
 10 Hr fuel Moisture = 1 Hr fuel moisture + 1
 Live woody fuel moisture = 100 percent
 Slope class = 1
 State of weather = 0
 Temperature = 80 deg F

MAKUA MILITARY RESERVATION WILDFIRE SOP

ENCLOSURE 9 WILDLAND FIRE INCIDENT REPORT

WILDLAND FIRE INCIDENT REPORT 25TH ID(L) & USARHAW				1. INSTALLATION		2. INCIDENT NUMBER (YY-000)		
3. DATE (YYMMDD)			4. FIRE LOCATION (Grid Coordinates 6 digits only) EJ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			5. RANGE OCCUPIED BY UNIT		
6. TIME FIRE REPORTED		7. TIME FIRE OUT	8. TIME RANGE OPS RESPONDED			9. TIME FIRST SFO AT SCENE		
10. AGENCY NOTIFICATION (<i>If applicable</i>)		PHONE	TIME CALLED	AT SCENE	REMARKS			
<input type="checkbox"/> FEDERAL FIRE DEPARTMENT		471-7117						
<input type="checkbox"/> G3/RDH WILDLAND PROGRAM MGR		286-5818						
<input type="checkbox"/> INSTALLATION OPS CENTER (IOC)		655-8763						
<input type="checkbox"/> RANGE OFFICER		655-1404						
<input type="checkbox"/> RANGE OPERATIONS SUPERVISOR		655-9509						
<input type="checkbox"/> DPW NATURAL RESOURCE MGR		656-2878						
<input type="checkbox"/> U.S. FISH & WILDLIFE SERVICE		541-3441						
<input type="checkbox"/> (Other)								
<input type="checkbox"/> (Other)								
11. FIRE DANGER RATING		BURN INDEX (BI)		15. FIRE ESCAPE ANALYSIS		CHECK ONE		
<input type="checkbox"/> GREEN						YES NO		
<input type="checkbox"/> YELLOW		13. EST. ACRES BURNED?		15a. FIRE STARTED OUTSIDE FIREBREAK ROAD?				
<input type="checkbox"/> RED		14. > 10 ACRES? (AAR)		15b. FIRE ESCAPED FIREBREAK ROAD?				
16. HELICOPTER SUPPORT			16b. Aircraft Call Sign	Tail No.	16c. Arrived On Scene	Departed		
<input type="checkbox"/> UH-60 <input type="checkbox"/> CH-53 <input type="checkbox"/> CH-46 <input type="checkbox"/> CH-47 <input type="checkbox"/> OTHER								
16a. BUCKET SIZE (<i>BAMBI</i>)								
<input type="checkbox"/> 240-Gal <input type="checkbox"/> 660-Gal <input type="checkbox"/> 2000-Gal <input type="checkbox"/> Other								
17. FIRE CAUSE (<i>Narrative</i>)				18. AMMUNITION TYPE		19. WEAPON SYSTEM		
				<input type="checkbox"/> Tracer		<input type="checkbox"/> AT-4		
				<input type="checkbox"/> Mortar		<input type="checkbox"/> TOW		
				<input type="checkbox"/> Artillery		<input type="checkbox"/> SAW / M-16		
				<input type="checkbox"/> HE / WP		<input type="checkbox"/> SMAW		
				<input type="checkbox"/> Pyrotechnics		<input type="checkbox"/> LAW		
				<input type="checkbox"/> Grenade		<input type="checkbox"/> Rocket / Missile		
				<input type="checkbox"/> Demo / Mines		<input type="checkbox"/> M240/M60		
				<input type="checkbox"/> Other		<input type="checkbox"/> Other		
20. TRAINING UNIT		21. UNIT OIC		22. TELEPHONE		23. AAR REQUIRED?		
24. REMARKS (<i>Narrative</i>)								
25. FIRE REPORT COMPLETED BY:			DATE		26. FIRE REPORT REVIEWED BY:		DATE	

WILDLAND FIRE INCIDENT REPORT FORM GENERAL INSTRUCTIONS

PURPOSE AND USE: Used in the administration of the Wildland Fire Management Program. The purpose of this form is to document all wildfire incident(s) on Army training lands under the jurisdiction of the 25th ID(L) and USARHAW within the state of Hawaii. This form will also be used to document when Army assets respond to any wildland fire incident outside of its jurisdiction in support of mutual aid requests. Documentation of all wildfires is necessary to ensure accurate fire history and trend analysis to assist fire managers in future fire management planning. The form becomes part of the permanent record file for each Fire Management Area (FMA). Fire records may be kept on an automated computer database as part of long term land management records. n

DISPOSITION OF FILES: The maintenance and disposition of all wildland fire incident reports shall be in accordance with Army record management policy. Disposition: a) OCE: Destroy after 25 years in CFA. b) Other Offices: Destroy after 5 years.

PROPONENCY: The proponent of this form is the Installation Fire & Safety Office (IFSO). Action Officer is the Wildland Fire Program Manager.

COMPLETION INSTRUCTIONS

- Item 1 -** Enter appropriate name of military installation where the fire occurred.
- Item 2 -** Fill in incident number. Enter 2 digit calendar year followed by 3 digits in numbered in sequence for the number of fires occurred during that calendar year.
- Item 3 -** Enter date of incident. Year, month, day (YYMMDD).
- Item 4 -** Fire location. Enter 6-digit grid coordinates that indicate where the fire started. Provide 6-digits only in blocks provided. (*Right, then Up*)
- Item 5 -** Enter range, firing point, or maneuver area the training unit causing the fire occupied at the time the fire started.
- Item 6 -** Enter the time of day the fire was first reported to Range control.
- Item 7 -** Enter the time of day the fire was reported extinguished.
- Item 8 -** Enter the time of day the first Range control fire crew/unit responded to the fire location.
- Item 9 -** Enter the time of day the first Range control fire crew/unit arrived at the fire scene.
- Item 10 -** Notification. Enter the time of day that Range Control first notified each agency or individual listed and enter the time each agency or individual arrived at the fire scene.
 - Federal Fire Dept: Must be notified of all fires.
 - Wildland Fire Mgr: Must be notified of all fires.
 - Installation Ops Ctr: Notified if helicopter support or additional fire assets are required.
 - Range Officer: Notified of all major fires only.
 - Range Ops Supv: Must be notified of all fires.
 - Natural Res Mgr: Notified if fires are potential threat to T&E plant or animal species.
 - USFWS: Must be notified of all fires that escape firebreak road or installation boundary.
 - Remarks: Enter appropriate comments if any.

- Item 11 -** Enter daily Fire Danger Rating.
- Item 12 -** Enter current Burn Index (BI) at the time of the fire start.
- Item 13 -** Enter total estimated number of acres destroyed by fire.
- Item 14 -** Enter YES if fire area is greater than 10 acres. The training unit OIC must submit an After-Action-Report (AAR) if fire area exceeds 10 acres. OIC must complete the AAR before clearing the range.
- Item 15 -** Fire Escape Analysis.
 - 15a. Check Yes or No if fires started outside firebreak road.
 - 15b. Check Yes or No if fires escaped the firebreak road.
- Item 16 -** Helicopter Support. Enter type of aircraft used on fire.
 - 16a. Enter fire bucket size used on fire.
 - 16b. Enter aircraft call sign tail number. (i.e., Hillclimber 150)
 - 16c. Enter time of day aircraft arrived on scene and time aircraft departed.
- Item 17 -** Fill in narrative form any information as to the cause of the fire, ignition sources, or item known to have started the fire. DO NOT speculate. Validate with training unit OIC. Conduct fire investigation as required.
- Item 18 -** Indicate ammunition type used that caused the fire.
- Item 19 -** Indicate weapon system used that caused the fire.
- Item 20 -** Enter name of training unit that caused the fire.
- Item 21 -** Enter name of the OIC responsible for the training unit.
- Item 22 -** Enter the telephone number of the OIC of the training unit where he may be contacted in the event additional information is required.
- Item 23 -** Indicate if an AAR is required. If yes, AAR must be completed by the unit OIC and submitted to Range control prior to release or range clearance.
- Item 24 -** Remarks. Enter appropriate comments pertaining to subject wildfire incident, if any.
- Item 25 -** Enter date and name of individual filling out the fire report.
- Item 26 -** Enter date and name of the range supervisor reviewing the fire report. Range supervisor will review all fire incident reports for adequacy prior to submission to the wildland fire program manager.

FAX INSTRUCTIONS

A COPY OF ALL FIRE REPORTS WILL BE FAXED TO THE WILDLAND FIRE PROGRAM MANAGER WITHIN 24 HOURS AFTER THE FIRE INCIDENT IS REPORTED. ALL ORIGINAL WILDLAND FIRE INCIDENT REPORTS WILL BE MAINTAINED IN THE CURRENT FILE AREA OF EACH RESPECTIVE RANGE CONTROL OFFICE. A MAP MUST BE ATTACHED TO THE FIRE REPORT THAT IDENTIFIES AREAS BURNED.