

# MEMORANDUM FOR RECORD

SUBJECT: Kahuku Training Area Fires, Lightning Forge, Week of February 9th

## 1. Summary

### Impacts to Natural Resources:

A handful of small fires were observed in the Kahuku Training Area. These fires burned a combined total of 0.826 acres in Oio gulch in the Charlie 2 Area (Figure 1). The fires burned mainly non-native vegetation, ironwood (*Casuarina equisetifolia*) and strawberry guava (*Psidium cattleianum*) (Figure 2). The endangered *Eugenia koolauensis* occurs in Oio gulch at higher elevation and thus was unaffected by these fires. The specific cause of the fires is uncertain, however, they occurred during the Lightning Forge Training Event. There were pyrotechnics being used in forested areas where they are not authorized. Pyrotechnics are only authorized on bare soil so as not to ignite any vegetation. Trip flares were also used. The flare, mount and burn marks on the trees are shown in Figure 3. In addition, empty smoke grenades were found near one of the fire sites. Another possible ignition source discussed were unauthorized camp fires. The Army Wildland Fire response was exceptional, the crew managed to keep all of these fires at a relatively small fire by addressing them immediately and constructing fire line.

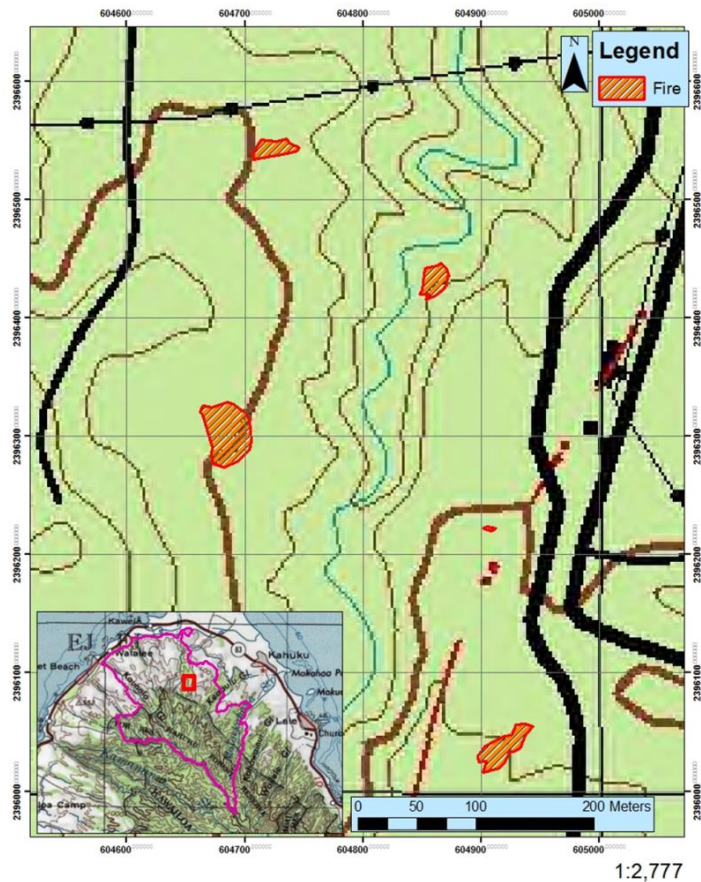


Figure 1. Topographic map showing the locations of the Kahuku Training Area fires. Inset: Kahuku Training Area outlined.



Figure 2. Burned ironwood (*Casuarina equisetifolia*) at one of the sites.



Figure 3. Evidence of unauthorized trip flare training.



Figure 4. The perimeter of one of the burn sites. The live material near the burn is strawberry guava (*Psidium cattleianum*), which is likely to colonize the area.

2. Plant species burned in the fire are listed in the table below. Some invasive tree species that occur along the perimeter of these fires are likely to colonize the newly disturbed habitat, which include *Psidium cattleianum*, *Casuarina equisetifolia* and *Leuceana leucocephala* (Figure 4). Evidence of this invasion was observed during the survey, when small *Psidium cattleianum* seedlings were found in the burned area.

Native Plants	
Scientific Name	Common Name
<i>Carex wahuensis</i>	carex
<i>Metrosideros polymorpha</i>	‘ōhi‘a lehua
<i>Osteomeles anthyllidifolia</i>	‘ūlei
<i>Psydrax odorata</i>	alahe‘e
<i>Sphenomeris chinensis</i>	pala‘ā
<i>Wikstroemia oahuensis</i>	‘ākia

Non-Native Plants	
Scientific Name	Common Name
<i>Andropogon virginicus</i>	broomsedge
<i>Ardisia elliptica</i>	shoebuttan ardisia
<i>Arundina graminifolia</i>	bamboo orchid
<i>Bidens alba</i>	Spanish needle, beggartick
<i>Casuarina equisetifolia</i>	ironwood
<i>Chamaechrista nictitans</i>	Japanese tea, partridge pea
<i>Clidemia hirta</i>	clidemia, Koster’s curse
<i>Conyza bonariensis</i>	hairy horseweed
<i>Cyclosorus parasiticus</i>	woodfern
<i>Desmodium incanum</i>	Spanish clover
<i>Emilia sonchifolia</i>	Flora’s paintbrush
<i>Eucalyptus spp.</i>	eucalyptus
<i>Ficus spp.</i>	ficus
<i>Grevillea robusta</i>	silk oak
<i>Lantana camara</i>	lantana
<i>Leuceana leucocephala</i>	haole koa
<i>Lindsaea ensifolia</i>	lindsaea
<i>Macaranga mappa</i>	bingabing
<i>Macaranga tenarius</i>	small-leaved macaranga
<i>Passiflora edulis</i>	passion fruit, liliko‘i
<i>Passiflora suberosa</i>	huehue haole
<i>Phymatosorus grossus</i>	laua‘e
<i>Pimenta dioica</i>	allspice
<i>Pinus luchuensis</i>	Luchu pine
<i>Polygala paniculata</i>	bubble gum plant
<i>Psidium cattleianum</i>	strawberry guava
<i>Pteridium aquilinum</i>	kīlau

Non-native Plants	
Scientific Name	Common Name
<i>Schinus terebinthifolius</i>	christmas berry
<i>Spermacoce assurgens</i>	button weed
<i>Sphagneticola trilobata</i>	wedelia
<i>Sporobolus indicus</i>	smut grass
<i>Stachytarpheta dichotoma</i>	ōwī
<i>Stachytarpheta urticifolia</i>	ōwī
<i>Syzygium cuminii</i>	java plum
<i>Syzygium jambos</i>	rose apple
<i>Urochloa maxima</i>	guinea grass

### 3. Miscellaneous Observations

- DPW Environmental Natural Resource staff observed incredible amounts of trash during our fire surveys (Figure 6). Used MRE wrappers, toilet paper, and other trash were littered around the area. A small roadblock of Concertina wire was left partially in the roadway (Figure 5). Near the Concertina wire was a large grid of barbed wire that ran in a crisscross pattern through the trees. The barbed wire was set at ankle height and covered an area of about 0.5 acres.
- Three UXO were found near the fires. They were reported to EOD by DPW Environmental staff and were found to be old bazooka rounds. They were disposed of on site (on 3/1/16).
- Cultural Resource staff observed units departing Kahuku following Lightning Forge without visiting the washrack which is a mandatory requirement per Army Biological Opinions and 25<sup>th</sup> ID policy.



Figure 5. Concertina wire left partially in the roadway.



Figure 6. Boxes of MRE trash were littered near the sites of the fires.

#### 4. Lesson Learned

- The unauthorized use of pyrotechnics needs to be addressed. Officers in charge attend a briefing from range control and should know what is permissible on site. More enforcement is needed on site during training operations and prior to range clearing. Soldiers should have their RSO/OIC cards pulled when disobeying the training SOP.
  - DES fire reports needs more information on cause of the fire. The military grids used are not accurate enough to find small fires in the field, they are only accurate to within one kilometer.
  - Trash and training materials should not be left anywhere in Kahuku Training Area. They should be disposed of immediately. This is basic sanitation and personal hygiene.
  - Response from the Army Wildland fire was excellent. Fires lines were dug and all fires were kept to small localized areas. In total, there were five fires with only 0.826 acres burned in total. Many of the fires did not get large enough to burn the canopy. At many of the sites, scorch marks were below 15 feet and several of the large trees were still living.
5. POC for this post fire survey is Kapua Kawelo, Acting Natural Resource Manager, 655-9189, [hilary.k.kawelo.civ@mail.mil](mailto:hilary.k.kawelo.civ@mail.mil).

Kapua Kawelo  
Biologist/Acting Natural Resource Manager  
USAG-HI





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
US ARMY INSTALLATION MANAGEMENT COMMAND, PACIFIC REGION  
HEADQUARTERS, UNITED STATES ARMY GARRISON, HAWAII  
745 WRIGHT AVENUE, BUILDING 107, WHEELER ARMY AIRFIELD  
SCHOFIELD BARRACKS, HAWAII 96857-5000

DEC 01 2015

Office of the Garrison Commander

Mary Abrams  
Field Supervisor  
US Fish and Wildlife Service  
300 Ala Moana Blvd., Room 3-122  
Honolulu, Hawaii 96850

Dear Ms. Abrams:

This letter is to inform you of a fire that occurred on Schofield Barracks, East Range, on October 29, 2015. The fire burned a total of 5.78 acres; fortunately, much less than the 15 acre estimate that was originally reported in Michelle Mansker's email of November 5, 2015. The fire occurred in an area designated as Critical Habitat for the Oahu Elepaio (Enclosure 1). The Army Wildland Fire Program coordinated fire-fighting actions and resources which included Aviation Brigade helicopters. The fire was deemed extinguished on November 6, 2015. Please find enclosed the fire report from the Directorate of Emergency Services (Enclosure 2). The fire burned primarily native koa forest with staghorn fern understory and some introduced forestry plantings along the ridgeline. See illustrative photos at Enclosure 3. Also, please find enclosed, a list of plants which were burned in this fire (Enclosure 4).

The fire appears to have been caused by human activity. Although the fire occurred on Army controlled lands, the area at issue is also frequented by unauthorized local hunters and hikers. The Army utilizes this part of East Range primarily for Jungle Training Exercises. Jungle training is designed to prepare Soldiers for successful tactical operations in a jungle environment, including survival skills, land navigation, waterborne operations, rope-assisted movements, and jungle combat techniques. Additionally, units often practice skills at night and sometimes over an extended period in simulated jungle warfare scenarios.

The use of this portion of Schofield Barracks, East Range, for jungle training is essential for developing jungle survival skills for our soldiers. The Army takes this fire very seriously, especially as it impacted Elepaio Critical Habitat. Thus, prior to units being approved for jungle training on East Range in Critical Habitat, experienced trainers will review exercise plans to ensure that all planned activities are consistent with safe and proper use of these lands. As an additional precautionary measure, the Army will ensure that all soldiers receive education and instruction on the Elepaio Critical Habitat and the types of activities and conduct that are permissible when operating in these sensitive areas.

As you should now be well aware, the Army will be reinitiating Section 7 Consultation on all Oahu Army Training Lands. As such, the Biological Assessment



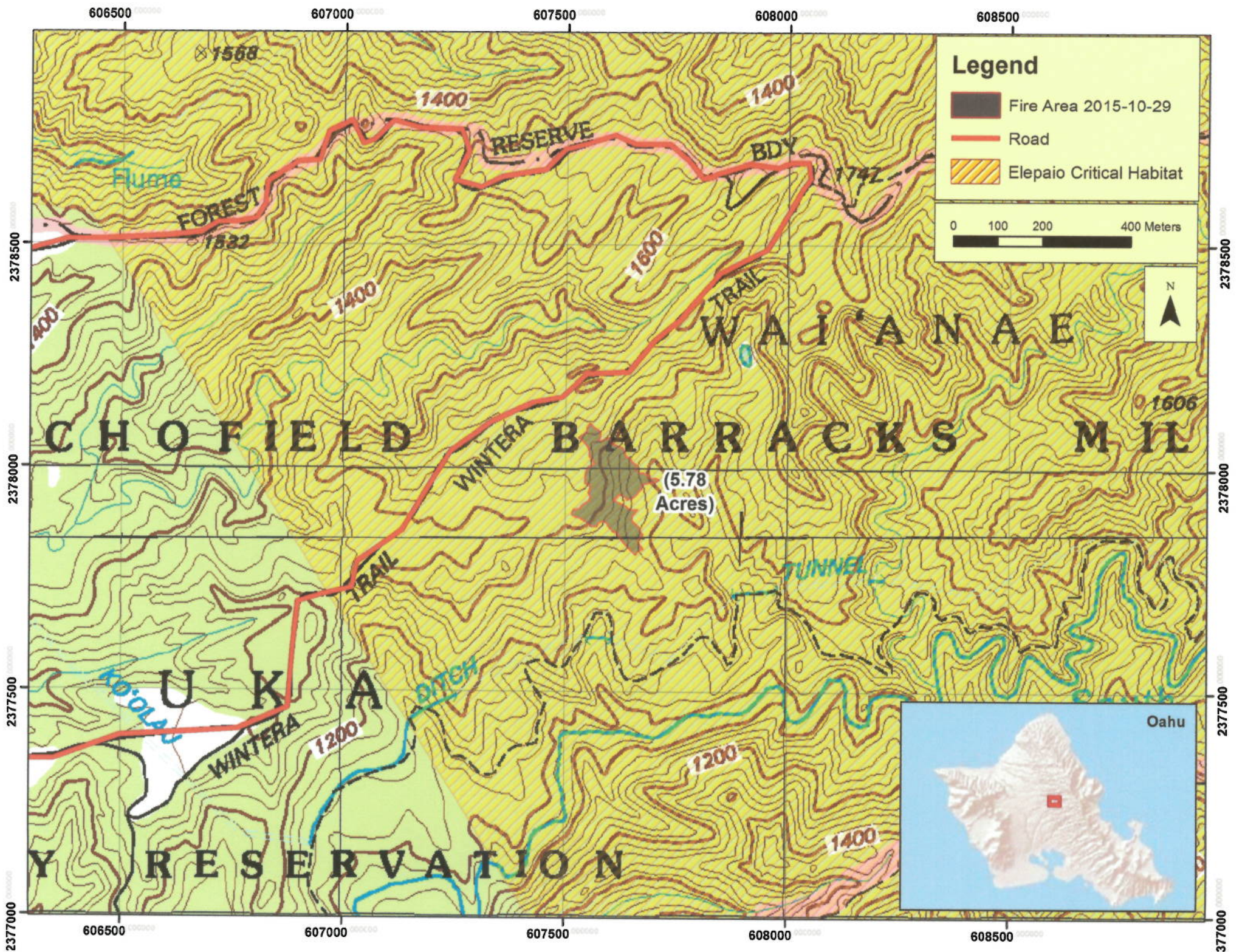
that is currently being prepared will certainly include measures to reduce risk of adversely impacting critical habitat and environmental damage. If you have any questions, please contact Ms. Kapua Kawelo, Biologist, DPW Environmental Division at (808) 655-9189 or by email, [hilary.k.kawelo.civ@mail.mil](mailto:hilary.k.kawelo.civ@mail.mil).

Sincerely,




A handwritten signature in black ink, appearing to read 'Richard A. Fromm', with a stylized flourish at the end.

Richard A. Fromm  
Colonel, US Army  
Commanding

Enclosures



### Legend

-  Fire Area 2015-10-29
-  Road
-  Elepaio Critical Habitat

0 100 200 400 Meters



(5.78 Acres)



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IR/CCIR # 150976 ADD-ON 9

REPORTING IOC, EOC, EAC: USAG-HI IOC/SSG Cassells/TOR: 021806WNOV15

Subject: Incident Report 150976

1. Category: 3-21(i)
2. Type of Incident: Range Fire
3. Date and Time:
  - a. DTG of Incident: 291541WOCT15
  - b. DTG of Receipt: 291541WOCT15
4. Location of Incident: East Range (Grid FJ 07517802), Schofield Barracks, HI
5. Personnel Involved:
  - a. Subject:
    - (1) Name: N/A
    - (2) Rank or Grade: N/A
    - (3) SSN: N/A
    - (4) Race: N/A
    - (5) Sex: N/A
    - (6) Age: N/A
    - (7) Position: N/A
    - (8) Security Clearance: N/A
    - (9) Unit and Station of Assignment: Directorate of Emergency Services
    - (10) Duty Status: N/A
    - (11) Drugs/Alcohol: N/A
    - (12) Did the Service Member return from support of OND/OEF within the last 365 days? N/A
6. At 061530WNOV15, FESD reported that the East Range (ER12) burn site has been under observation for more than 72 hours without any evidence of hotspots. FESD has declared this fire extinguished.

This is a final report.

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This report contains personal information, which is subject to the privacy act (AR 340-21). Information contained herein may only be used for official purposes only. Do not release to third parties.

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A request will be submitted for 1 x UH-60 to conduct aerial recon and buckets drops (if required) at 010900WNOV15

This is a final report for the day. The next update will be provided after the 010900WNOV15 recon.

The following bucket and flight hour information is from the 31 OCT 15 support.

UH-60M, Tail #510, 0 Buckets Dropped with .7 Flt Hours

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At 311000WOCT15, FESD conducted an aerial assessment of the fire and reported 80% containment with no change to acres burnt. FESD observed smoke from smoldering embers within the east/southeast fire containment area. A request has been submitted for 1 x UH-60 to return to the fire site for water bucket operations. FESD will establish an Incident Command on East Range road and will release the aircraft if heavy showers occur on the training area or if the fire is 100% contained. The next update will be provided prior to 1500 hours today.

The following bucket and flight hour information is from the 30 OCT 15 support.

UH-60M, Tail #547, 14 Buckets Dropped with 4.0 Flt Hours

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At 301730WOCT15, FESD reported that the fire at ER-12 is 70% containment with a total of 15 acres burned. The FESD crew and UH-60 aircraft have been able to prevent the spread of this fire by attacking perimeter hotspots and smoldering debris within the fire line. The UH-60 that was conducting water bucket operations was released from the fire site at 1715 due to favorable weather conditions. FESD personnel ceased active firefighting operations at 1730 hours. The Incident Commander (IC), Mr. Bryson Kamakura, will not require an overnight fire watch. FESD personnel will make an assessment of the fire site at 310900WOCT15. This fire will be declared extinguished if there have been no signs of fire activity over the next 72 hours. An Aviation Mission Request (AMR) has been submitted to have 1 x UH-60 conduct an aerial recon at 0900 and 1 x UH-60 to be on prepared to launch in support of fire suppression operations by 1000 hours. No injuries or damage to Govt. property was reported.

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Mr. Fred Makinney, Chief, DES Operations reports the following; on 291541WOCT15, local authorities reported a brush fire near East Range. Preliminary findings indicate the fire was 1000 meters south of East Range road. Wildland fire crews monitored the fire overnight and conducted an aerial recon at 300900WOCT15 and determined the fire was on Army property. 1 x UH-60 began water bucket drops at 301010WOCT15. Approximately 10 acres have been

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Panorama of burn site, South Kaukonahua, Schofield Barracks East Range



Burned Koa forest



Burned Eucalyptus/Paperbark forest

The following is a list of plant species burned in the fire are listed in the table below. Some aggressive invasive tree species occur along the perimeter of the fire and are likely to colonize the newly disturbed habitat. These include *Falcataria molucanna*, *Heliocarpus popayensis*, *Cecropia obtusifolia* and *Spathodea campanulata*.

<b>Native Plants</b>	
<u>Scientific Name</u>	<u>Common Name</u>
<i>Acacia koa</i>	koa
<i>Antidesma platyphyllum</i>	hame
<i>Bobea elatior</i>	ahakea
<i>Cibotium chamissoi</i>	hapu'u
<i>Dicranoptens linearis</i>	uluhe
<i>Freycinetia arborea</i>	ie'ie
<i>Gahnia beechii</i>	
<i>Huperzia phyllantha</i>	
<i>Ilex anomala</i>	kawa'u
<i>Metrosideros polymorpha</i>	ohi'a
<i>Nephrolepis exaltata</i>	kupukupu
<i>Planthonella sandwichensis</i>	'ala'a
<i>Psilotum nudum</i>	moa
<i>Psychotria manniana</i>	kopiko
<i>Scaevola gaudichaudiana</i>	naupaka kuahiwi
<i>Sphenomeris chinensis</i>	pala'a

<b>Non-Native Plants</b>	
<u>Scientific Name</u>	<u>Common Name</u>
<i>Ardesia elliptica</i>	shoebuttton ardisia
<i>Clidemia hirta</i>	Koster's curse
<i>Cordyline fruticosa</i>	Ti
<i>Corymbia citrodora</i>	lemon-scented gum
<i>Eucalyptus robusta</i>	Swamp Mahogany
<i>Lophostemon confertus</i>	Brush box
<i>Melaleuca quiquinervia</i>	Paperbark
<i>Nephrolepis brownii</i>	
<i>Phlebodium aureum</i>	
<i>Psidium cattleianum</i>	Strawberry guava
<i>Syncarpia glomulifera</i>	Turpentine Tree