KAILUA DISASTER RESPONSE PLAN

KAILUA CERT

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CERT COMMUNITY EMERGENCY RESPONSE TEAM

COMMUNITY EMERGENCY RESPONSE TEAM CERT HAWAII OAHU

December 8, 2015

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RECORD OF CHANGES

Date of Change	Pages Changed	Changes made by:
December 2, 2015	All	Kailua CERT Coordinator

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APPENDICES

ACRONYMS

4DEM	District IV Unified Command, DEM representative
CERFP	CBRNE (Chemical, Biological, Radiological, Nuclear and Explosive) Enhanced Response Force Package
CERT	Community Emergency Response Team
COMML	Communications Leader
COMM SECTION	Communications Section
D4UC	District IV Unified Command
DEM	Department of Emergency Management, City & County of Honolulu
DMO	Disaster Medical Operations
EOC	Emergency Operations Center
FRS	Family Radio Service
GMRS	General Mobile Radio Service
Ham	Licensed amateur radio
HESD	Honolulu Emergency Services Department
HF	High Frequency
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HSCD/HI-EMA	Hawai`i State Civil Defense/Hawai`i – Emergency Management Agency
IAP	Incident Action Plan
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
KDPSC	Kailua Disaster Preparedness Sub-committee
KDRP	Kailua Disaster Response Plan
KOC	Kailua Operations Center
LAFD	Los Angeles Fire Department
MTA	Medical Treatment Area
PMS	Pulse, Movement, Sensation
RPM	Respiration, Perfusion, and Mental Status
SAR	Search and Rescue
START	Simple Triage and Rapid Treatment
TL	Team Leader
UHF	Ultra-High Frequency
VHF	Very High Frequency
XTEZ	Extreme Tsunami Evacuation Zone

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INTRODUCTION

As a result of the Tohoku, Japan earthquake and tsunami on March 11, 2011, the Kailua Neighborhood Board's committee on Public Health, Public Safety, and Civil Defense designated the Kailua Disaster Preparedness Subcommittee (KDPSC) to address disaster preparedness. The KDPSC developed the Kailua Multi-Hazard Mitigation Preparedness, Response, and Recovery Plan (updated 2015) (http://www.honolulu.gov/cms-dem-menu/site-dem-sitearticles/18292-kailua.html). The purpose of this plan is "to educate and train the Kailua community about the all-hazard approach to disaster preparedness, mitigation, response, and recovery, and to reduce the impact of a disaster upon the community."

In September 2013, the Kailua Community Emergency Response Team (CERT) began meeting monthly to prepare for a disaster should one impact Kailua. The City and County of Honolulu, Department of Emergency Management (DEM) uses the Community Emergency Response Team (CERT) program to train community members in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations (DEM CERT. 2015. http://www.honolulu.gov/demvolunteer/cert.html).

Knowing that in the event of an island-wide or state-wide catastrophic disaster first responders may be overwhelmed and unable to immediately respond to emergencies in Kailua, Kailua CERT developed the first Kailua Disaster Response Plan (KDRP) in September 2014. The KDRP provides a strategy to mobilize CERTs into Kailua following a catastrophic tsunami or hurricane. Although other types of disasters may occur in Kailua, tsunami and hurricanes are the disasters most likely to cause catastrophic damage. Future efforts may be pursued to add additional disasters to this report.

In September 2015, **Kailua Alert & Prepared (KAP)** was organized as an Internal Revenue Service 501(c)(3) nonprofit organization. The objectives of KAP are to educate and train Kailua community members to be prepared for, respond to, and recover from natural or manmade disasters (such as catastrophic tsunami, hurricane or fire) that might impact Kailua. The function of Kailua CERT and all its activities falls under the "respond to" objective of KAP.

Community Emergency Response Teams

The CERT concept was developed and implemented by the City of Los Angeles Fire Department (LAFD) in 1985. They recognized that citizens would very likely be on their own during the early stages of a catastrophic disaster, such as a major earthquake. Accordingly, LAFD decided that some basic training in disaster survival and rescue skills would improve the ability of citizens to survive and to safely help others until first responders or other assistance could arrive.

The training model that the LAFD initiated was adopted by other fire departments around the country, including communities where the major threat is hurricanes rather than earthquakes. Building on this development, in 1994 the Federal Emergency Management Agency expanded the CERT materials to make them applicable to all hazards and made the program available to communities nationwide. Since that time, thousands of dedicated trainers, organizations, and citizens have embraced the responsibility to learn new skills and become prepared to execute safe and effective emergency response.

While first responders are the best trained and equipped to handle emergencies, they may not be immediately available in a catastrophic disaster. In such a situation, members of the community may be on their own for several days or longer, having to rely on their own resources for food, water, first aid, and shelter. It may be necessary for neighbors or coworkers to provide immediate assistance to those who are hurt or need other help.

The CERT Program can provide an effective first-response capability. Acting as individuals first, then later as members of teams, trained CERT volunteers can fan out within their assigned areas, extinguishing small fires, turning off natural gas at damaged homes, performing light search and rescue, and rendering basic medical treatment. CERTs also act as effective "eyes and ears" for first responders. Trained volunteers also offer an important potential workforce to service organizations in non-hazardous functions such as establishing community points of distribution, conducting damage assessments, and assisting in shelters.

While CERTs are a valuable asset in emergency response, CERTs are not trained to perform all of the functions or respond to the same degree as first responders. CERTs are a bridge to professional emergency responders until they are able to arrive (Federal Emergency Management Agency. 2012. "CERT Basic Training Participant Manual." http://www.fema.gov/media-library/assets/documents/27403?id=6137).

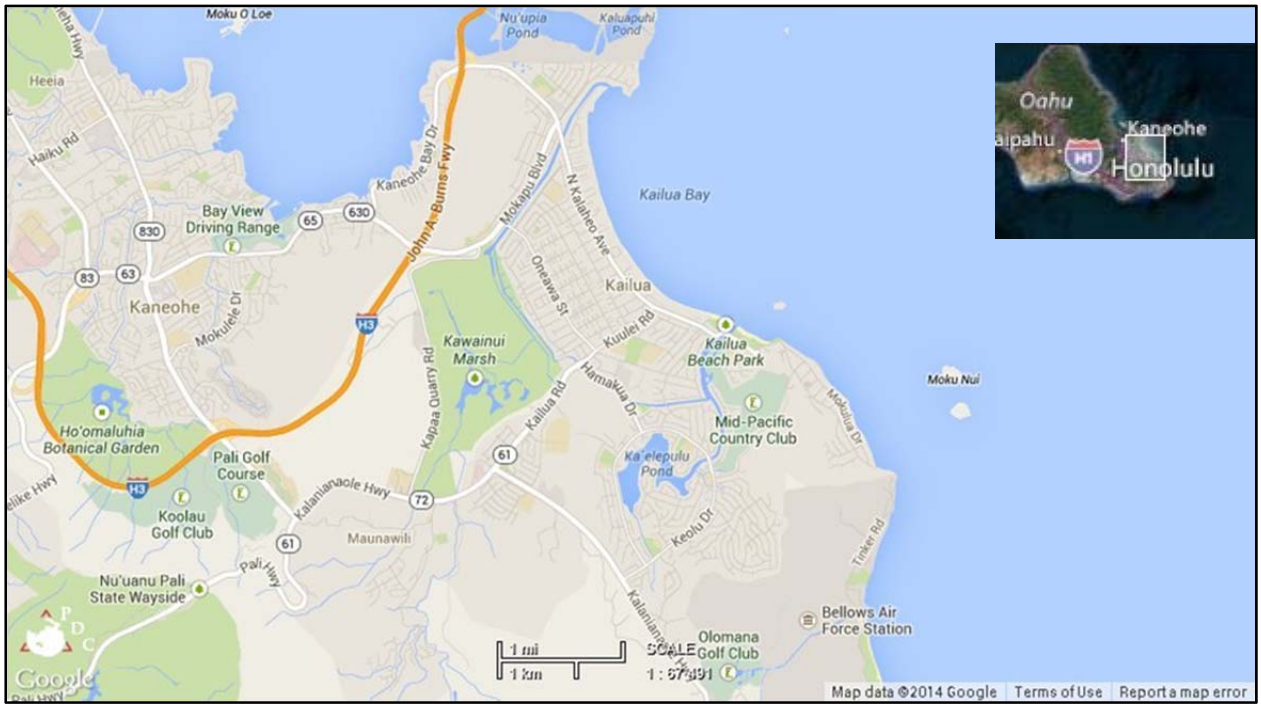
KAILUA INFORMATION

Demographics

Based on 2010 Census data, the total population of Kailua (96734 zip code) is 50,746, with 15,721 occupied housing units (U.S. Census Bureau, American Fact Finder. "Profile of General Population and Housing Characteristics: 2010." http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF).

Kailua Map

Kailua is located on the windward side of the island of O`ahu. See map below.



SITUATION

Tsunamis

A tsunami is a series of traveling ocean waves of extremely long length generated by earthquakes, underwater volcanic eruptions, or landslides below or near the ocean floor. In the deep ocean tsunami waves can travel 500 mph with a wave height of 1 foot or less. As the waves reach shallow waters of the coastline, the waves slow down and the water piles up into a wall of destruction. Wave heights can vary from a few inches to 100 feet. Crests of waves may arrive every 10 to 60 minutes; often the first wave may not be the largest (Intergovernmental Oceanographic Commission. 2008. "Tsunami, The Great Waves." http://tap.pdc.org/).

The force of some tsunamis is enormous. Large rocks weighing several tons, along with boats and other debris can be moved inland hundreds of yards by tsunami-wave activity, causing damage to homes and property, and loss of life. In addition, tsunamis can travel up rivers and streams from the ocean (Intergovernmental Oceanographic Commission. 2008. "Tsunami, The Great Waves." http://tap.pdc.org).

The Hawaiian Islands have a long history of destruction due to tsunamis and are the most vulnerable place in the world; particularly vulnerable to tsunamis originating in the north and the southeast Pacific Ocean. Twenty-six tsunamis with flood elevations greater than 3.3 ft (1 m) have made landfall in the Hawaiian Islands during recorded history, and 10 of these had significant damaging effects on O`ahu. This translates into a recurrence interval of tsunamis reaching Hawaiian shores every 7 years and one damaging tsunami reaching O`ahu every 19 years. Annual tsunami losses are estimated at $44 million (Department of Emergency Management. 2015. "Multi-Hazard, Pre-Mitigation Plan, Executive Summary." http://www.honolulu.gov/demresources/plans.html).

Hawai`i is at risk from tsunamis caused by both distant and local sources. A large (greater than magnitude 7.0), shallow (less than 40 miles deep) earthquake originating beneath the ocean floor has the potential to generate a tsunami (Pacific Tsunami Warning Center. 2009. "Tsunamis in Hawai`i." http://ptwc.weather.gov/ptwc/hawaii.php).

Tsunamis from Distant Sources

Most tsunamis that affect Hawai`i originate from seismically active areas around the Pacific. In particular, areas where tectonic plates are in collision (subduction zones), such as Alaska's Aleutian Island chain and the west coast of South America, generate most of the world's tsunami-producing earthquakes. When this occurs, residents of Hawai`i have ample time to prepare for an incoming tsunami (4-5 hours from Alaska, 14-15 hours from Chile). Distant tsunamis with runups (inland elevation reached by seawater) in Hawai`i exceeding 9 feet have occurred in 1868 (Chile), 1877 (Chile), 1896 (Japan), 1906 (Chile), 1923 (Kamchatka), 1933 (Japan), 1946 (Aleutians), 1952 (Kamchatka), 1957 (Aleutians), 1960 (Chile), and 1964 (Alaska).

Tsunamis with a runup of 5 to 6 feet in Kailua Bay were generated from the 1946 and 1960 earthquakes. Also, a tsunami could move up the Kawainui and Kaelepulu channels and drainage canals causing flooding in nearby homes and businesses.

Extreme Tsunami Evacuation Zones

The 2011 Tohoku earthquake and tsunami in Japan spurred interest by University of Hawai`i and state and county emergency management professionals to investigate other regions around the Pacific for potential to generate large tsunamis beyond the historical record. The intent of this research was to investigate and assess the extent of a large tsunami that may impact the State of Hawai‘i that exceeds the historical record of tsunami events in the region. The historical tsunami events affecting Hawai‘i occurred in 1946, 1952, 1957, 1960, 1964 and 2011, with other statewide warnings from 2010-2013 (University of Hawai`i, Sea Grant Program. http://seagrant.soest.hawaii.edu/tsunami-research-and-preparedness).

Geophysicists at the University of Hawai‘i have identified a possible source region in the Eastern Aleutian island arc, directly north of Hawai‘i, that has the potential for a very large magnitude 9+ earthquake that could produce a Great Aleutian Tsunami (GAT) (Butler, R. 2014. Great Aleutian Tsunamis. Hawai`i Institute of Geophysics and Planetology, HIGP-2014-1: p.1. http://seagrant.soest.hawaii.edu/tsunami-research-and-preparedness). Based on geophysical research and subsequent computer modeling of inundation, new tsunami inundation maps have been produced to indicate the maximum extent of the GAT inundation. The GAT inundation maps have been used to determine a new Extreme Tsunami Evacuation Zone (XTEZ). The XTEZ will serve as a second evacuation zone only for a GAT scenario; all other tsunami events will continue to use the existing updated 2010 tsunami evacuation maps. The XTEZ is for events with low probability, but having high impact “worst-case” inundations. The XTEZ maps are available for viewing and download at the DEM website (http://www.honolulu.gov/cms-dem-menu/site-dem-sitearticles/20717-etez-maps-final.html).

XTEZ and Kailua

Relative to historical tsunamis, significantly enhanced inundations are forecast for Kailua – where overtopping of the beach sandbar leads to extensive flooding into Kawainui Marsh and Enchanted Lake. The Marine Corps Base Hawai`i, which was marginally effected in the 1946 tsunami, is now substantially flooded in all modeling scenarios. XTEZ maps for Kailua are provided in Appendix A.

Tsunamis from Local Sources

Because Hawai`i is seismically active, a shallow undersea earthquake can reach sufficient size to generate a local tsunami. While destructive local tsunamis are less frequent, there is little time to react to such an event. Waves from the tsunami caused by the 1975 Kalapana earthquake killed two campers in the Halape area about a minute after they experienced the strong shaking. The travel time for a tsunami generated from the southeast coast of the Big Island will only take 5-10 minutes to reach Hilo or Kona, 15-20 minutes to reach Maui, and 30-40 minutes to reach O`ahu. Local tsunamis with runups exceeding 3 meters have occurred in 1868 (Ka`u) and 1975 (Kalapana).

The Pacific Tsunami Warning Center provides tsunami warnings for the Pacific basin and to almost every country around the Pacific rim.

Potential impacts on the population, infrastructure, and environment

Disaster impacts may include loss of life, injury, disease, damage to property, loss of services, environmental degradation, etc.

Based on the December 24, 2004, Sumatra, Indonesia and the March 11, 2011, Tohoku, Japan giant earthquakes, impacts to the Kailua population, infrastructure, and environment may include:

- Death to those who choose not evacuate.
- Displaced and houseless persons and families.
- Damaged/destroyed roads, delaying assistance from first responders and transportation of outside disaster relief assistance and supplies (to include food and water).
- Damage to utility infrastructure (electricity, water, telecommunications).
- Damage to buildings, businesses, houses, bridges, etc.
- Extensively flooded coastal areas.
- Large amounts of debris deposited along coastal areas.
- Debris dragged into the ocean by receding tsunami waters.
- Mixing of hazardous materials with damage debris.
- Salination of fresh water bodies such as Kawainui Marsh, Enchanted Lake, wells, and groundwater aquifers.
- Damage to Aikahi Park wastewater treatment plant.

Tropical Cyclones

A tropical cyclone is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere (National Oceanic and Atmospheric Administration, National Weather Service. 2014. "Tropical Cyclones: A Preparedness Guide." http://www.nhc.noaa.gov/prepare/).

The Saffir-Simpson Hurricane Wind Scale categorizes tropical cyclones based on sustained wind speed. The table below depicts hurricane categories along with their annual odds of occurrence for Hawai`i.

Hurricane Category (Saffir-Simpson)	Sustained Wind Speed mph	Odds of Occurrence Anywhere in Hawai`i	Odds of Occurrence O`ahu Only
1	74-95	1 in 25	1 in 80
2	96-110	1 in 50	1 in 320
3 or 4	111-155	1 in 75	1 in 400
Any Hurricane	>74	1 in 15	1 in 55

Department of Emergency Management. 2014. "Multi-Hazard, Pre-Mitigation Plan, Executive Summary. August 2, 2012. " http://www.honolulu.gov/demresources/plans.html

In the Central Pacific basin tropical cyclone /hurricane season is officially from 1 June to 30 November with peak season from August through September.

Hurricanes not only pack high winds, but can also cause torrential rains that lead to flash flooding and abnormally high waves and storm surge. Known as "the triple threat," each of these alone can pose a serious threat to life and property. Taken together they are capable of inflicting a large loss of life and widespread destruction (Central Pacific Hurricane Center. 2012. "Hurricane – A Dangerous Triple Threat." http://www.prh.noaa.gov/cphc/pages/pr3.php).

High waves and storm surge

Large ocean swells ahead of the hurricane may reach island shores while the storm is several hundred miles away. As the hurricane nears the coastline, rapidly rising water levels from the wind-driven waves and storm surge will inundate coastal areas, erode beaches, and undermine waterfront structures and roadways.

In 1992, Hurricane Iniki's high waves and storm surge devastated the south shore of Kauai to elevations over 20 feet above sea level.

High Winds

In Hawai`i, mountainous terrain accelerates hurricane and tropical storm winds causing extremely high winds that can destroy buildings, structures, trees, vegetation and crops. Ridge tops and exposed locations downslope from the mountains are at greatest risk. There will be a momentary calm that occurs with the passage of the hurricane's eye. Wind speed will then increase rapidly from the opposite direction as the center of the hurricane moves forward.

Most of the existing residential structures in Hawai`i are under-designed for high winds, depending on their construction type and location. Terrain or topographic amplification of wind speed has been a significant additional contributing factor in the past hurricane loss experiences of Hawai`i (Department of Emergency Management. 2014. "Multi-Hazard, Pre-Mitigation Plan, Executive Summary." http://www.honolulu.gov/demresources/plans.html). Amplification of wind speeds are a particular concern for Kailua residents, as they live downslope of the Ko`olau Mountain range.

Heavy rain and flash flooding

Heavy and prolonged rains can accompany all types of tropical cyclones including hurricanes, tropical storms, and tropical depressions. Even the weakest tropical depressions can bring torrential rains and flash flooding to the Hawaiian Islands.

High waves from hurricanes most often hit the eastern shores as hurricanes approach the islands from the east, and south- and west-facing shorelines as the storm passes to the south and west. Projected average hurricane losses on O`ahu are $216 million per year (Department of Emergency Management. 2014. "Multi-Hazard, Pre-Mitigation Plan, Executive Summary." http://www.honolulu.gov/demresources/plans.html).

Historical hurricanes in Hawai`i occurred in 1957 (Nina), 1959 (Dot, category 4), 1986 (Estelle), 1982 (Iwa, category 1), 1992 (Iniki, category 4), and 2014 (Iselle on Hawai`i Island).

Potential impacts on the population, infrastructure, and environment

Impacts to the Hawai`i population, infrastructure, and environment from a hurricane may include:

- Serious injury or death may occur to those who trapped in under-designed structures.
- Displaced and houseless persons and families.
- Damaged/destroyed harbors, coastal airports, and roads, prohibiting transportation of outside disaster relief assistance and supplies (to include food and water).

- Hurricane-strength winds can destroy buildings, topple trees, bring down powerlines, and blow vehicles off roads. Flying debris, such as signs, roofing material, building siding, and small items left outside, can also add to infrastructure damage.
- Coastal flooding due to storm surge, waves, and tides. This results in damaged/flooded homes and large amounts of debris being deposited along coastal areas.
- Widespread torrential rains, which cause massive flooding and triggering of landslides and debris flows. Flash flooding can occur quickly due to intense rainfall over a relatively short period of time, threatening lives and property.
- Mixing of hazardous materials with damage debris.
- Salination of water bodies such as rivers, wells, inland lakes, and groundwater aquifers.
- Damage to water and sanitation systems.

MISSION

The mission of Kailua CERT is to activate the Kailua Operations Center and mobilize CERTs and licensed amateur radio operators to save lives in response to a catastrophic tsunami or hurricane should one impact Kailua.

O`AHU CERT ADVISORY COMMITTEE GUIDELINES

DEM, with recommendations from the O`ahu Community Emergency Response Team (CERT) Advisory Committee, established guidelines under which DEM supports the actions and spontaneous response of CERTs in accordance with the Federal Volunteer Protection Act of 1997. Kailua CERT agrees to abide by these guidelines, which are provided in Appendix B.

ORGANIZATIONAL STRUCTURE

In the event of a catastrophic tsunami or hurricane, the Kailua Operations Center (KOC) will be established to manage the CERT response. The organizational structure for the KOC follows the Federal Emergency Management Agency's, Incident Command System (ICS) of which the ICS is a standardized, on-scene, all-hazard incident management approach. The ICS is a flexible structure that allows emergency responders to adopt an integrated organizational structure that matches the complexities and demands of the incidents without being hindered by jurisdictional boundaries. It can grow or shrink to meet different needs. The flexibility of ICS makes it a very cost-effective and efficient management approach for both small and large incidents.

The KOC organizational chart, along with roles and responsibilities for each position are provided in Appendix C.

EXECUTION

This section details the execution of the Kailua Disaster Response Plan.

Concept of Operation

The concept of operations for a tsunami or hurricane response in Kailua will be conducted in three phases: pre-disaster, disaster, and post-disaster. The pre-disaster phase includes the activation of the KOC. The disaster phase includes evacuation, sheltering and care for families of Kailua CERT members. During the post-disaster (response and recovery) phase CERTs will be mobilized to perform duties.

Pre-Disaster Phase

Kailua Zones

To effectively and efficiently mobilize CERTs into the community, Kailua is divided into nine disaster response zones. A map of the nine disaster response zones, along with a description of the zone boundaries and their associated attributes are provided in Appendix D.

The vision is to establish at least one CERT in each zone. In a disaster, each CERT may activate within their designated zone. Once Kailua CERT has a sufficient number of volunteers to form these teams, this section will be further developed.

Notifications

The following agencies will issue watches, advisories and warnings, depending on the type of expected threat:

- Tsunami - The Tsunami Pacific Tsunami Warning Center, in conjunction with the Hawai`i State Civil Defense/Hawai`i - Emergency Management Agency (HSCD/HI-EMA) and DEM, will issue a tsunami watch, advisory, or warning via the Emergency Alert System.
- Hurricane - The National Weather Service, in conjunction with HSCD/HI-EMA and DEM, will issue a hurricane watch (within 48 hours of the onset of tropical cyclone winds) or warning (within 36 hours of the onset of tropical cyclone winds).

The Kailua CERT Incident Commander (IC) will notify members of possible activation using text messaging and email.

Action Alert Levels

<u>Action Alert Level 1 – Advance Notice</u>

- Kailua CERT IC is warned of a potential major disaster and will give Kailua CERT members a "heads up" notice.
- Members may reply as to their availability to respond, if requested.
- Equipment, supplies, vehicles, and personal disaster supplies kits should be checked and readied.
- If the major disaster is more than likely to occur, then the IC will go to *Action Alert Level 2*.
- If the major disaster is unlikely to occur, then the IC will stand down the CERT.

<u>Action Alert Level 2 - Standby</u>

- Kailua CERT IC notifies the Kailua CERT members to be ready to mobilize within 2-4 hours for a tsunami or based on the expected hurricane arrival time.
- The IC will determine how many members are available to mobilize and assess the level of team response based on member availability.
- If the major disaster occurs, then the IC will go to *Action Alert Level 3*.
- If the major disaster passes without catastrophic consequences, then the IC will stand down the CERT.

Action Level 3 – Immediate Deployment

- The Kailua CERT IC notifies Kailua CERT members to proceed without delay to the KOC.
- Once Kailua CERT is operational the IC will attempt to notify DEM or the on-scene IC of their activation by any means available.

The KOC Disaster Action Matrix is provided in Appendix E.

Location of KOC

The KOC will be set up at Kailua High School, U.S. Air Force Junior Reserve Officer Training Corps building. The IC will follow pre-established protocols to contact the Kailua High School principal for access to facilities.

Evacuation of Kailua

It is incumbent upon all Kailua CERT members to evacuate, shelter, and care for themselves and their families. Kailua CERT members should encourage their neighbors to do the same.

In the event Kailua needs to be evacuated:

- Honolulu Police Department (HPD) and Honolulu Fire Department (HFD) will announce evacuations in siren-gap areas and for at-risk populations (i.e. homeless).
- HPD may setup road blocks to keep people from entering Kailua at the following locations:
    - Kailua Road & Hāmākua Drive
    - Kailua Road & Wana`ao
    - Mokapu Saddle Road & Oneawa
    - Kaneohe Bay Drive & H-3 Highway
    - Other roads deemed necessary by emergency response personnel.

Disaster Phase

While at the KOC, the IC and any other available Incident Management Team (IMT) members will be monitoring the disaster. Methods for obtaining information include:

- Monitoring local radio and television stations for reports from DEM, National Weather Service, Pacific Tsunami Warning Center, etc.
- Nixle text alerts from DEM.
- Telecommunications (text, cell, Internet) with DEM and Kailua CERT members, if cell phone service is working.
- Ham radio and Family Radio Service (FRS) operators
- Visual observations

Post-Disaster (Recovery) Phase

The overarching objective of response activities is life safety, followed by protecting property and the environment.

Conduct a Sizeup

The IMT will conduct a size up to determine the impacts of the disaster on Kailua. Sizeup is a 9-step continual process that enables responders to make decisions and respond appropriately in the areas of greatest need. The CERT sizeup form is provided in the *Search and Rescue, Standard Operating Guidelines,* located in Appendix E.

Note: CERTs will not be mobilized until the ALL CLEAR signal has been given by DEM.

Incident Action Plan

With facts collected from the sizeup and availability of personnel and resources, the IMT will develop the Incident Action Plan (IAP) using ICS forms (see Appendix J). The IAP will detail the mobilization of Kailua CERTs and include:

- Objectives as established by the IC.
- What must be done.
- Who is responsible.
- How information will be communicated.

The IAP will be updated at the beginning of each operational period (usually each morning before CERTs are mobilized).

The Kailua CERT will conduct its search and rescue operations in accordance with its *Search and Rescue, Standard Operating Guidelines*, located in Appendix F.

The Kailua CERT will conduct its disaster medical operations in accordance with its *Disaster Medical Operations, Standard Operating Guidelines*, located in Appendix G.

Memorandums of Understanding

The IAP will take into account services offered by partners. Memorandums of Understanding with the following partner organizations are provided in Appendix H.

- Windward O`ahu Amateur Radio will provide emergency communications via licensed amateur radio (Ham) operators to the KOC, Red Cross shelter, and other locations as necessary.
- Blue Knights motorcycle club will provide courier service between the KOC, designated hub and satellite shelters, and other locations as necessary.

Demobilization

The KOC will demobilize once its IAP objectives are accomplished.

COMMUNICATIONS

In the event a disaster disables established communication links (i.e. cell phone, Internet, landline, etc.), the KOC will operate with two forms of communication, Ham operators and Family Radio Service (FRS) communications. *Communications Standard Operating Guidelines* are provided in Appendix I.

ADMINISTRATION AND LOGISTICS

KOC Forms

The KOC General Staff (Operations, Planning Logistics, and Administration) personnel may complete the forms listed below as part of performing their appropriate functions. Forms are provided in Appendix J.

- Safety Briefing Checklist
- Damage Assessment Survey
- Personnel Resources Sign-In Form
- Incident/Assignment Tracking Log
- Briefing Assignment (instructions to team)
- Team Action Log
- Communications Log
- Equipment Inventory
- General Message Form

In addition, ICS forms may be used, as deemed necessary.

- ICS 201 – Incident Briefing
- ICS 202 – Incident Objectives
- ICS 203 – Organization Assignment List
- ICS 213 – General Message
- ICS 214 – Activity Log
- ICS 215 – Incident Planning Worksheet

KOC Supplies and Equipment

KOC and Kailua CERT list of supplies and equipment are provided in Appendix K.

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APPENDIX A – Extreme Tsunami Evacuation Zone Map for Kailua

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APPENDIX B – O`ahu CERT Advisory Committee Guidelines

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City and County of Honolulu
Community Emergency Response Team Guidelines

References

- Public Law 105-19, June 18, 1997, the Volunteer Protection Act of 1997
- Hawaii Revised Statutes §663-1.5, Exception to Liability "Good Samaritan Law"
- City and County of Honolulu Emergency Operations Plan, April 2007
- Community Emergency Response Team, Basic Training Instructor Guide, January 2011

Authorization

The City and County of Honolulu, Department of Emergency Management (DEM) with recommendations from the Oahu Community Emergency Response Team (CERT) Advisory Committee establishes these guidelines under which DEM supports the actions and spontaneous response of CERTs in accordance with the Federal Volunteer Protection Act of 1997.

Definitions

CERT Volunteer – A volunteer is an individual who has completed the CERT Basic Training and intends to individually respond in a major disaster to help themselves, their family and neighbors.

CERT Member – A member is a CERT volunteer who joins or forms a community, organization, or business-based team that intends to respond in a major disaster as an organized team to help their respective community.

Major Disaster – A disaster that exceeds the capacity and capability of first responders to respond to all emergency needs. Examples of major disasters may include damage caused by a tsunami, hurricane, or earthquake.

Purpose

These guidelines are intended to provide guidance to emergency response *teams* (here on out referred to as CERTs), describing their activities before, during, and after major disasters. This includes training, exercises, activities, and meetings. CERT volunteers, however, will benefit from reviewing and following these guidelines, where appropriate.

Duty to Act

No CERT volunteer has a legal duty to act and is not required to respond to major disasters nor to calls for team activation. Once responding, however, volunteers should follow safe and effective CERT practices at all times.

Liability and Good Faith
In accordance with federal and state law, any CERT volunteer/member that responds in good faith and within their scope of training and responsibility is not liable for harm caused by an act or omission. Volunteers/members risk losing liability protection if they:

- Act beyond the scope of their training or responsibilities
- Act with willful, reckless, or criminal misconduct
- Act with gross negligence
- Act with a conscious, flagrant indifference to the rights or safety of individuals.

Volunteers who carry personal health insurance and meet all requirements to legally operate a motor vehicle in the state of Hawaii will maximize their protection.

Training
The CERT Basic Training Course, as defined by Federal Emergency Management Agency curriculum and refined by DEM, is the foundation of the Oahu CERT program. Additional training made available to CERT members by partner organizations is intended to increase awareness, knowledge, skills, and abilities. DEM may offer advance or refresher training in the future.

Formation of Teams
The benefits of organizing a CERT in your community include:

- Mutual support and assistance from those trained in CERT.
- Familiarity with your community members so that you may come to each other's aid!
- Support and assistance from DEM.
- Support and assistance from other CERTs around the island.
- Keep your training and information updated from CERT leaders and DEM.

A CERT volunteer who desires to use their CERT skills as a member of an organized team are encouraged to join an existing CERT or to form a new CERT.

<u>Join an Existing CERT</u>
To join an existing CERT, a CERT volunteer should contact DEM to find out whether a CERT already exists in their community. DEM will assist you in contacting CERT leadership.

<u>Form a new CERT</u>
To form a new CERT, a CERT volunteer should:

- Decide whether your CERT is based on:
  - Your neighborhood/community (geographical)
  - Your common interests (organization or club)
  - Your workplace (corporate CERT)

- Contact DEM and notify them of your intention to organize a CERT.
- Organize your specific CERT based on the criteria listed under *Organization of Teams*.
- Maintain contact with your regional CERT leadership (through DEM).

Organization of Teams
This section provides guidance to those CERT volunteers who choose to join an existing or form a new CERT.

- Select a CERT leader, assistant leader, and other team leaders.
- Develop a list of roles and responsibilities for leaders and members.
- Develop a CERT response plan, describing conditions in which your CERT will respond to major disasters (consult with DEM for recommendations).
- Determine a primary and alternate muster location to set up an Incident Command Post (ICP) and mobilize teams.
- Determine a location and time for regular meetings to practice CERT skills and maintain communication.
- Consider purchasing or fundraising for additional equipment and supplies.

CERT Functions (not all-inclusive):
Major Disaster Operations

- Light search and rescue
- Damage assessment
- Light fire suppression
- Logistical support
- Disaster medical operations
- Communications and coordination
- Documentation

Non-Disaster Operations

- Training
- Exercises
- Public education and outreach
- Assist partner organizations
- Service and community projects

CERT volunteers are an effective and informative resource in promoting disaster preparedness and public education information. CERT volunteers are encouraged to participate in events, activities, and presentations sponsored by the CERT Program or partner organizations.

Equipment and Supplies
CERT equipment and supplies may be issued to volunteers or teams by DEM. CERT volunteers are encouraged to supplement their equipment and supplies with items they feel are useful and appropriate. Avoid using anything that is dangerous/life-threatening or considered outside of the CERT scope.

CERT volunteers should maintain their equipment and supplies in proper working order and replace any expired items. Volunteers should be encouraged to bring equipment and supplies to all necessary training sessions, exercises, and incidents. Volunteers are responsible for replacing equipment that is lost, stolen, or broken.

Spontaneous Response
DEM recognizes that a CERT volunteer may suddenly find themselves involved in a major disaster that is likely to exceed the capability of first responders. In such spontaneous instances, CERT volunteers should:

- Identify themselves as a CERT volunteer to first responders.
- Relinquish command of the scene to the first on-scene first responder.
- Render assistance as requested by the on-scene incident commander.

Membership, training, or experience in other organizations does not allow the volunteer to respond as a CERT volunteer, since this would exceed the authorized scope of CERT.

Self-Activation in Routine Emergencies
CERT volunteers are discouraged from self-activating for routine emergencies in which they are not immediately involved or requested. If the volunteer does so, they risk losing all liability protections afforded by federal and state law. Routine emergencies are those handled by first responders and may include (but aren't limited to):

- Traffic accidents
- Structure fires
- Localized flooding

If coming upon a small scene or accident where immediate first aid or assistance is required, you may respond as a <u>non-CERT citizen</u> and have liability protection under Hawaii Revised Statutes §663-1.5, the "Good Samaritan Law".

CERT Activation
DEM does not exercise direct control over CERTs. CERTs, therefore, self-activate and mobilize after the all clear signal is given following a major disaster in accordance with their established response plans. To activate their members, It is recommended CERTs using the following Action Alert Levels:

Action Alert Level 1 – Advance Notice

- CERT leaders are warned of a potential major disaster and will give CERT members a “heads up” notice.
- Members may reply as to their availability to respond, if requested.
- Equipment, supplies, vehicles, and personal disaster supplies kits should be checked and readied.
- If the major disaster is more than likely to occur, then the CERT leaders will go to *Action Alert Level 2*.
- If the major disaster is unlikely to occur, then the CERT leaders will stand down the CERT.

Action Alert Level 2 - Standby

- CERT leaders notify members to be ready to mobilize within 2-4 hours (or as the specific disaster situation dictates).
- CERT leaders to determine how many members are available to mobilize and assess the level of team response based on member availability.
- If the major disaster occurs, then CERT leaders will go to *Action Alert Level 3*.
- If the major disaster passes without catastrophic consequences, then CERT leaders will stand down the CERT.

Action Level 3 – Immediate Deployment

- CERT leaders notify members to proceed without delay to the designated incident command post (ICP).
- Once the CERT is operational CERT leaders will attempt to notify DEM or the on-scene incident commander of their activation by any means available.

Team Activation Process and Deployment Protocols

- CERT leaders activate their members in accordance with their established response plans using Action Alert Levels 1, 2, or 3.
- Leaders notify their members to meet at their designated ICP.
- Leaders are to use understandable addresses or common landmarks (such as parks, fire stations) to designate the ICP location.
- If the designated CERT leader(s) are not on scene, or do not show up, then the first CERT members on scene will designate a leader amongst themselves. Do not wait for leaders who may not arrive or who may be delayed.
- CERTs should not leave the ICP and go into response until adequate personnel and equipment are assembled…safety first!
- While activated, leaders are to keep communications with all members, the ICP, and DEM.
- Always follow your established response plan protocols and checklists during activation.

National Incident Management System and CERT
All CERT activities should follow the principles of the National Incident Management System and the Incident Command System (ICS). This will keep your CERT organized and make it easier to integrate with responders. CERT members should always work with first responders, the incident commander, or their CERT leader when present.

CERT Leadership
If a CERT is activated and designated leader(s) are not available, those first to arrive on scene will designate a leader and assistant leader amongst those present. Leader responsibilities include (not all inclusive):

- Conduct response planning activities.
- Act as the single point of contact between their CERT and first responder(s).
- Sizeup the situation with assistance from CERT members.
- Determine capabilities and limitations of their members on scene (especially with respect to safety).
- Organize teams and assign tasks as members arrive.
- Coordinate resources and activities.
- Establish a system to account for all members at all times.
- Establish on-scene communications.
- Check availability and condition of members' equipment.
- Ensure the overall safety of the CERT.
- Ensure all members have a "buddy" assigned for safety.
- Rotate and replace personnel as needed.
- Establish demobilization procedures after all activities are completed.
- Conduct post-disaster debriefing with members.

Communications
CERTs are encouraged to maintain communications among its members, the ICP, and DEM. CERTs may use the Radio Amateur Civil Emergency Services (e.g. ham radio operators), DEM Emergency Management Reserve Corps members, Family Radio Service, Multi-Use Radio Service, cellular telephone and/or texting services, or any other available means to communicate. Each CERT is encouraged to develop a communications plan.

Documentation
CERT leaders should keep the following documents as time allows:

- Up-to-date team rosters
- Communications log and message forms
- ICS logs and forms
- Casualty tracking logs
- Damage assessment data

Do not hold up care of casualties to document!

Identification and CERT Logo Products
Vests, identification cards, and CERT patches are means of readily identifying CERT volunteers. Remember that first responders often restrict access to areas because of safety. You should never expect that you can use your CERT items to bypass police road blocks. Consider the following guidelines:

- Wear your CERT vest with Oahu CERT patch and other identifying items during spontaneous response. This will assist responders in knowing of your presence.
- Present your identification card to your CERT leader(s) when reporting to a major disaster.
- Wear your CERT vest to be easily identified by your leader(s) for assignment.
- Wear your CERT helmets for identification and for safety at all times while responding.
- Do not wear CERT items or identification unless officially representing CERT.

If your team produces local CERT shirts or other wear, be mindful of where and when you wear these items.

Safety
The safety of yourself, responders, and the public are of primary importance. CERT members must avoid situations with potential for injuries or dangerous conditions. For safety purposes, members will:

- Wear personal protective equipment, such as vests, long pants, closed-toe shoes/boots, helmets, goggles, N95 mask, work gloves, and non-latex gloves (while caring for casualties) at all times while responding.
- Report all unsafe conditions, activities, or practices to your CERT leader immediately and take appropriate protective actions.
- Report any injuries or accidents of CERT members immediately to your CERT leader(s).

Every CERT volunteer is responsible for safety and is empowered to stop a dangerous act!

Media Contact
CERTs may encounter members of the media, such as newspaper or television reporters and photographers. In order to remain focus on response actions, CERT members are encouraged to redirect the media representative to responders or other public officials. CERT volunteers/members do not have the authority to represent any government organization. Should you decide to engage the media, consider the following recommendations:

- Do not give out any personal information about casualties.

- Do not give out any numbers or information of dead persons, as you are not qualified to declare someone dead.
- Do not speculate or guess.
- Do not assume you are “off the record,” even if they tell you so.
- Do not say “no comment.”
- Do not allow media into the ICP, shelters or morgues.

Restricted Activities

Many CERT volunteers have skills beyond what is taught in CERT courses. Some examples are heavy equipment operators and chain saw operators. While these skills are helpful during a major disaster, they are not part of your CERT training and therefore, should not be part of CERT response.

If you are licensed, and have a statutory authority to respond or act as part of your licensure, please consult your licensing board or authority about responding as a CERT volunteer. Examples include nurses or physicians.

Be aware that if you are excessively incapacitated by alcohol or drugs that it may affect your response and reflexes. Be honest with yourself and your CERT leader(s) and refrain from responding in such circumstances. *Responding while intoxicated or under the influence will pose an extreme hazard to you, your teammates, and casualties you may be trying to save!*

While responding to a major disaster CERT volunteers/members:

- Shall not be in possession of non-prescribed medications or illegal substances.
- Shall not consume alcoholic beverages while training or during an activated incident.
- Shall not take pictures of any casualties.
- Shall not remove property from an incident as a souvenir.

APPENDIX C – KOC Organization Chart and Position Responsibilities

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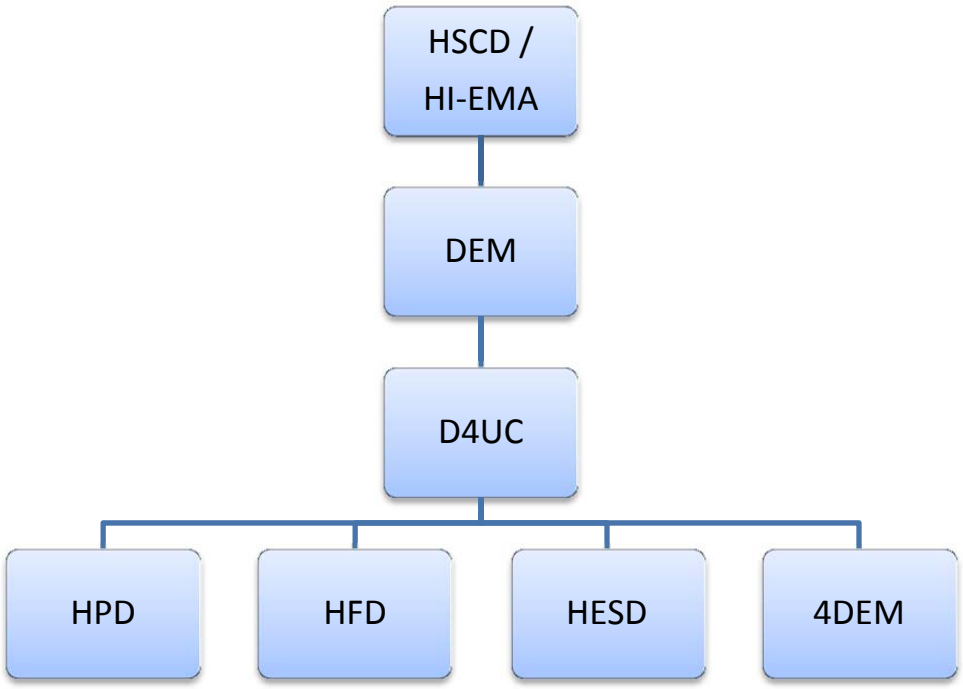
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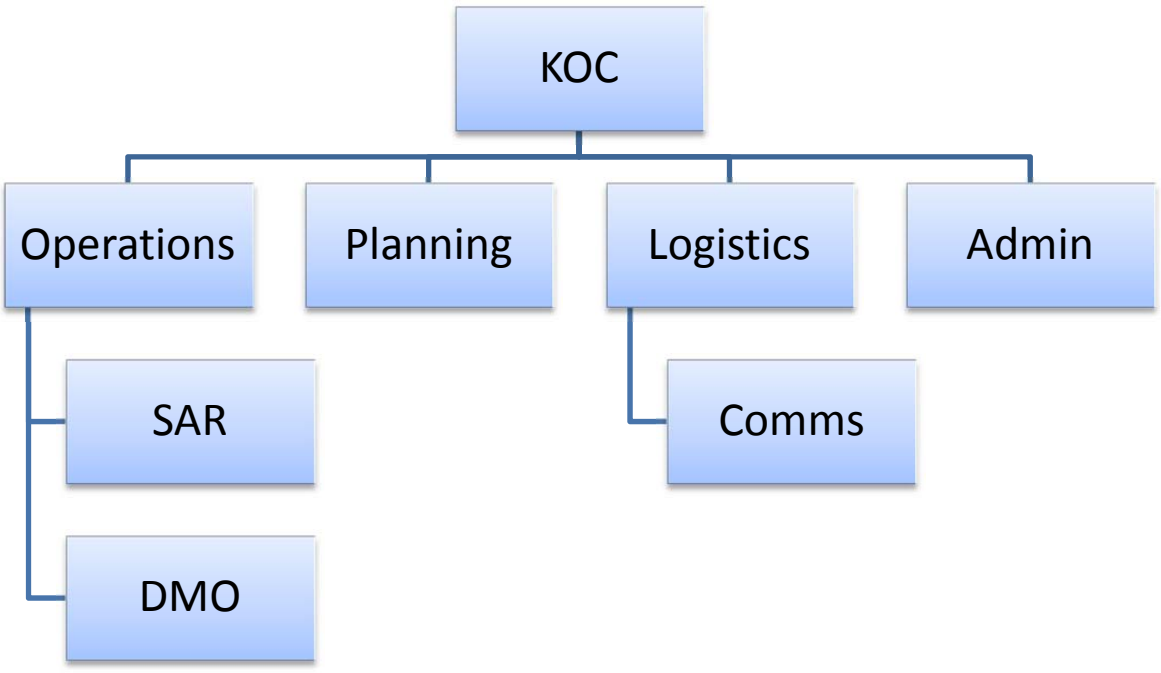
KOC
Operations
Planning
Logistics
Admin
SAR
DMO
Comms

HSCD, DEM and D4UC Roles and Responsibilities

HSCD/HI-EMA - Hawai`i State Civil Defense/Hawai`i – Emergency Management Agency

- Headed by the governor, HSCD/HI-EMA leads the state in prevention, protection and rapid response during disasters with a full range of resources and effective partnerships.

DEM – City & County of Honolulu, Department of Emergency Management

- Mission is to plan and prepare for, respond to, and recover from disasters to protect the public's health, safety and welfare.
- Responds to natural disasters (e.g. hurricanes, earthquakes, tsunamis, flooding, high surf, wild fires and high winds) and man-caused disasters (e.g. aircraft crashes, radiological and hazardous material releases, and marine and inland oil spills).
- Oversees the city's Emergency Operations Center (EOC) where disaster response and recovery are coordinated. The EOC brings together state and federal government agencies, along with the private sector.
- Responsible for the City and County of Honolulu Incident Management Team for incidents of significance to the County of Honolulu.

D4UC – District IV Unified Command

- Responsible for coordinating responses to incidents or emergencies within the windward area of O`ahu (Makapu`u Point to Kawela Bay).
- Commanding officers from Honolulu Police Department (HPD), Honolulu Fire Department (HFD), Honolulu Emergency Services Department (HESD), DEM and other agencies share responsibility for the incident or emergency.
- In an island-wide incident, D4UC will work under the authority of the DEM, providing critical information about conditions in the windward area.
- Should the D4UC ask for Mutual Aid Support (request for manpower and or resources), DEM will be responsible for requesting help from city, county, state, and federal partners.

KOC Roles and Responsibilities

NOTE: There is no command relationship between the DEM or D4UC and the KOC. The DEM and/or D4UC and KOC, however, will communicate information regarding on-the-ground assessments, in addition to needed resources and personnel.

In response to a catastrophic tsunami or hurricane, the KOC will activate and mobilize KCERTs and amateur licensed radio (Ham) operators to save lives in the Kailua community. The Incident Management Team (IMT), made up of the KOC IC, Deputy IC and General Staff, will work in cooperation with the DEM and/or D4UC to fulfill its mission.

KOC – Kailua Operations Center

- Is the physical location in Kailua where coordination of information and resources to support incident management activities takes place.
- Functions as a communication center where all information is received and analyzed.
- All information is documented, prepared and posted as reports, maps, and forecasts.

- The KOC staff includes the Incident Commander (IC), Deputy IC, and General Staff (Operations, Planning, and Logistics).

Incident Commander

- Should have training in the Incident Command System (ICS), offered by the Federal Emergency Management Agency. Courses include IS 100, 200, 300, 400, 700, and 800 (http://training.fema.gov/IS/crslist.aspx).
- Has overall incident management responsibility for Kailua.
- Develops incident objectives to guide the incident planning process.
- Approves the Incident Action Plan (IAP) and all requests pertaining to the ordering and releasing of incident resources.
- Will perform all major ICS Command Staff responsibilities (Public Information Officer, Liaison Officer, and Safety Officer) and General Staff responsibilities (Operations, Planning, and Logistics) unless these functions are activated and/or qualified personnel are available to fill these duties.
    - Public Information Officer - Responsible for interfacing with the public and media and/or with other agencies with incident-related information requirements.
    - Safety Officer – Monitors incident operations to ensure health and safety of responder personnel.
    - Liaison Officer - Point of contact for representatives of other governmental agencies, nongovernmental organizations, and/or private entities.

Deputy Incident Commander

- Should have training in the ICS, offered by the Federal Emergency Management Agency. Courses include IS 100, 200, 300, 400, 700, and 800 (http://training.fema.gov/IS/crslist.aspx).
- Perform specific tasks as requested by IC.
- Perform IC function in a relief capacity (i.e. taking shifts).

Operations

- Should have training in the ICS, offered by the Federal Emergency Management Agency. Courses include IS 100, 200, 300, 400, 700, and 800 (http://training.fema.gov/IS/crslist.aspx).
- Directs and coordinates all incident tactical operations.
- Is typically one of the first organizations to be assigned to the incident.
- Expands from the bottom up.
- Is responsible to the IC for the direct management of all incident-related operational activities.
- Establishes tactical objectives for each operational period.
- Has direct involvement in the preparation of the IAP.

Search and Rescue (SAR) Team

- Directed by the KOC Operations Chief.
- Consists of a Team Leader, a Ham operator, 2-person Triage Team(s), and 2-person Extraction Team(s).

- Conducts SAR operations in accordance with the *Search and Rescue Standard Operating Guidelines* (Appendix F) and the IAP.

Disaster Medical Operations (DMO) Team

- Directed by the KOC Operations Chief
- Consists of the Medical Treatment Area Team Leader, Immediate, Delayed, Minor and Morgue Care Team Leaders, First aid workers, intake person, and a Ham operator.
- Triage Teams are members of the SAR Team.
- Conducts DMO operations in accordance with the *Disaster Medical Operations Standard Operating Guidelines* (Appendix G) and the IAP.

Planning

- Should have training in the ICS, offered by the Federal Emergency Management Agency. Courses include IS 100, 200, 300, 400, 700, and 800 (http://training.fema.gov/IS/crslist.aspx).
- Maintain resource status.
- Maintain and displaying situation status.
- Prepare the IAP.
- Develop alternative strategies.
- Provide documentation services.
- Prepare the Demobilization Plan.
- Provide a primary location for Technical Specialists assigned to an incident.
- One of the most important functions of the Planning Section is to look beyond the current and next operational period and anticipate potential problems or events.

Logistics

- Should have training in the ICS, offered by the Federal Emergency Management Agency. Courses include IS 100, 200, 300, 400, 700, and 800 (http://training.fema.gov/IS/crslist.aspx).
- Provides supplies, facilities, and ground support for incident personnel.

Communications

- Team Leader responsible for setting up Ham operations.
- All Ham and Family Radio Service (FRS) operators are to provide their own radio equipment.
- See *Communications Standard Operating Guidelines* in Appendix I.

Radio

- The Ham operator(s) assigned to the KOC will set up and establish communication with the DEM and/or D4UC. In addition, the KOC Ham will gather information from other windward O`ahu Hams.
- Each SAR and MTA team will have a Ham operator assigned to them to communicate back to the KOC.

- FRSs will be used for intra- and inter-communication among the SAR and MTA teams.

Additional Personnel (as needed)

- Administrative support to maintain records for the IMT.
- Map Recorder who plots on the map all incidents reported by KCERTs.
- Couriers (Blue Knights or others) who deliver messages to/from various locations.
- Security personnel to help protect property and keep out unauthorized personnel.

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APPENDIX D – Kailua Disaster Response Zones

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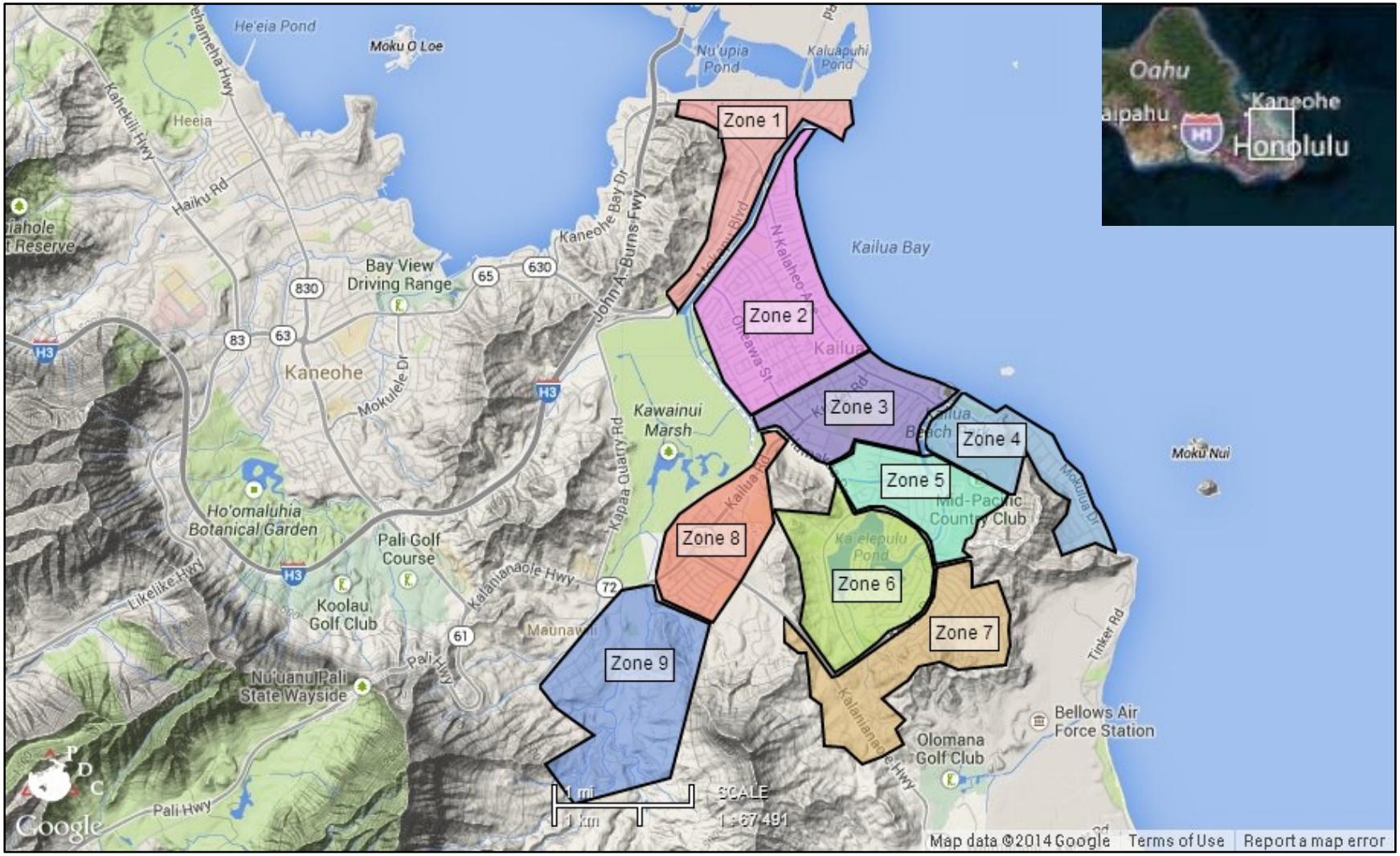

Map of Kailua divided into nine disaster response zones.

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Zone 1 Boundaries

- North - Marine Corps Base Hawai`i southern boundary line
- South - Mokapu Boulevard
- East – Kawainui Channel
- West – Oneawa Hills
- Includes Kalāheo Hillside, `Aikahi Gardens, `Aikahi Park, Kaimalino communities

Attributes

- `Aikahi Elementary School and Community Park
- `Aikahi Waste Water Treatment Plant
- `Aikahi Park Shopping Center (grocery, gas, restaurants)
- Kalāheo High School

Zone 2 Boundaries

- North and west - Kawainui Channel
- East - Kailua Beach
- South - Kawainui and Makawao Streets

Attributes

- Kainalu Elementary School
- Ali`i Academy
- Kailua Mission School
- St. Anthony School
- Kaha Park
- Kalāheo Park
- Kalama Beach Club (private)

Zone 3 Boundaries

- North – Kailua Beach
- South – Kawainui Channel to Aoloa Road, and Kailua – Wana`ao Roads
- East - Drainage Canal to Kailua Beach Park
- West – Kawainui and Makawao Streets and Kawainui Channel

Attributes

- Kailua Intermediate School
- Kailua Elementary School
- Kailua District Park with swimming pool
- Kaiser Permanente Medical Clinic
- Honolulu Police Department (HPD) Kailua Station
- Honolulu Fire Department (HFD) Kailua Station
- Library
- Kailua Beach Park
- Kailua Town (grocery, gas, restaurants)

Zone 4 Boundaries

- North and East – Lanikai Beach
- South – Mid-Pacific Country Club
- West - Drainage Canal to Kailua Beach Park
- Includes Lanikai Community

Attributes

- Lanikai Elementary School
- Kailua Beach Park
- Lanikai Beach Park
- Kailua Beach Center (grocery, rentals)
- Mid-Pacific Country Club
- Buzz's Steakhouse

Zone 5 Boundaries

- North – from Aoloa Road east along Wana`ao Road
- South – Keolu Drive (ocean side)
- East – Mid-Pacific Country Club
- West – Aoloa Road - Hāmākua Drive

Attributes

- Mid-Pacific Country Club

Zone 6 Boundaries

- North, South and East – Keolu Drive (Ka`elepulu Pond side)
- West – Properties on both sides of Keolu Drive

Attributes

- Ka`elepulu Pond
- Ka`elepulu Elementary School
- Enchanted Lake Elementary School and Park
- Keolu Elementary School and Park
- St. John Vianney School
- Enchanted Lake Shopping Center (grocery, gas, restaurants)

Zone 7 Boundaries

- North – Mid-Pacific Country Club
- East - Keolu Hills and Kailua Heights communities
- South – Old Kalaniana'ole Highway
- West – Keolu Drive

Attributes

- Shopping Center (gas, restaurants)
- The Church of Jesus Christ of Latter-day Saints

Zone 8 Boundaries

- North – Kawainui Marsh
- South – Olomana Community
- East – Women's and Youth Correctional Facilities
- West – Ulukahiki Street (West of Castle Medical Center)
- Includes Olomana and Pōhakupu communities

Attributes

- Castle Medical Center
- Churches (North side of Kailua Road)
- Kailua High School
- Maunawili Elementary School and Park
- Le Jardin Academy
- Strip Mall (gas, food)
- Pōhakupu Park
- Upo Heiau Park
- Windward YMCA (swimming pool)

Zone 9 Boundaries

- North – Kalaniana`ole Highway
- South – Koolau Mountains
- East – Auloa Road/Royal Hawaiian Country Club
- West – Lunaai Street
- Includes the Maunawili Community

Attributes

- Trinity Church and School
- Maunawili Park
- Royal Hawaiian Country Club (adjacent to zone)

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APPENDIX E – KOC Disaster Action Matrix

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KOC Disaster Action Matrix

Event	Conditions		KOC Action	Kailua CERT Action
Tsunami Watch	**Danger level not yet known**. Automatically declared by the Pacific Tsunami Warning Center for any earthquake magnitude 7.5 or larger (7.0 or larger in the Aleutian Islands) if the epicenter is in an area capable of generating a tsunami.		Monitor information from DEM and media outlets. Issue an *Action Alert Level 1* notice to members.	Monitor information from DEM and media outlets.
Tsunami Advisory	Issued when a tsunami with the potential to generate strong currents or waves dangerous to those in or very near the water is imminent, expected, or occurring. The threat may continue for several hours after initial arrival, but significant inundation is not expected for areas under an advisory.		Monitor information from DEM and media outlets. Issue an *Action Alert Level 2* notice to members.	Monitor information from DEM and media outlets. Be on standby for activation.
Tsunami Warning	Issued when a **tsunami has been detected** with the potential to generate widespread inundation and is imminent, expected, or occurring. Warnings alert the public that dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after initial arrival.		The CERT Incident Commander (IC) may activate the KOC.* Notify KOC property point of contact to open facility. Possibly issue an *Action Alert Level 3* notice to members.*	Report to the KOC with disaster preparedness supplies. Once the ALL CLEAR signal is given, follow KOC IC instructions for mobilization.
Tropical Cyclone Watch	Hurricane conditions are *possible* within the specified area	Issued 48 hours in advance of the anticipated onset of tropical-storm-force winds.	Monitor information from DEM and media outlets. Issue an *Action Alert Level 1* notice to members.	Monitor information from DEM and media outlets.
Tropical Cyclone Warning	Hurricane conditions are *expected* within the specified area	Issued 36 hours in advance of the anticipated onset of tropical-storm-force winds	The IC may activate the KOC at a shelter or other safe location.** Issue an *Action Alert Level 2 or 3* notice to members.	Shelter until the ALL CLEAR signal is given. Then mobilize to KOC.
Extreme Wind Warning	Extreme sustained winds of a major hurricane (115 mph or greater), usually associated with the eyewall, are **expected to begin within an hour**.		The IC may activate the KOC at a shelter or other safe location. Issue an *Action Alert Level 2 or 3* notice to members.	Shelter until the ALL CLEAR signal is given. Then mobilize to KOC.

***Watch* lets you know that weather conditions are favorable for a hazard to occur.**
***Warning* requires immediate action.**

*Activation of the KOC will depend on the location and strength of the earthquake that generates the tsunami warning. Kailua is particularly vulnerable to tsunamis generated from the north (Alaska) or northeast (Cascadia subduction zone).

**Depending on expected hurricane conditions, the IC and Kailua CERT may:

- Shelter in place until the hurricane passes. Depending on the severity and extent of damage, the KOC may or may not be activated, but Kailua CERTs respond to assist their neighbors.
- Activate the KOC.

APPENDIX F – Search and Rescue Standard Operating Guidelines

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SEARCH AND RESCUE
STANDARD OPERATING GUIDELINES

SOURCE MATERIAL

This Search and Rescue (SAR), Standard Operating Guideline was developed using the following manuals/training:

- Community Emergency Response Team, Basic Training Instructor Guide, dated January 2011 (https://www.fema.gov/media-library/assets/documents/27368?id=6135)
- Air National Guard CERFP (CBRNE [Chemical, Biological, Radiological, Nuclear and Explosive] Enhanced Response Force Package) wide area search and rescue training conducted in April 2015.

All actions performed by Kailua CERT are conducted in accordance with CERT training.

DEFINITIONS

Ambulatory	Walking or able to walk
Casualty	A person who is hurt or killed in a war, disaster or accident.
Extract	To remove or take out.
Rescue	The process of removing individuals from danger and providing medical care, if necessary.
Search	The process of locating, lost, missing or overdue individuals.
Transport	To carry from one place to another.
Wide area search	Covers a large geographic area, usually in response to a major disaster, where the number and identity of casualties is unknown. May be urban or rural.

INTRODUCTION

Search and rescue (SAR) operations consist of three separate operations:

1. Sizeup, which involves assessing the situation and determining a safe action plan (using the 9-step sizeup model).
2. Search, which involves locating casualties and documenting their location.
3. Rescue, which involves the procedures and methods required to extract casualties.

The decision to attempt a rescue should be based on three factors:

- The risks involved to the rescuer.
- The overall goal of doing the greatest good for the greatest number of people.
- Resources and manpower available.

The goals of SAR operations are to:

- Rescue the greatest number of people in the shortest amount of time.

- Get the walking wounded and ambulatory casualties out first.
- Rescue lightly trapped casualties next.
- Keep the rescuer safe.

SAFETY DURING SAR OPERATIONS

Like every other CERT operation, search and rescue requires a sizeup be conducted at the beginning of the operation. As the operation progresses, the sizeup is continually conducted to evaluate for changes in conditions. Below are the nine steps of the Continual Sizeup process:

1. Gather facts
2. Assess damage
3. Consider probabilities
4. Assess your situation
5. Establish priorities
6. Make decisions
7. Develop a plan of action
8. Take action
9. Evaluate progress

See the attached *CERT Search and Rescue Sizeup Checklist*.

CERT Mission and Types of Damage

The CERT mission for interior searches depends on how much a building is damaged. CERTs only enter lightly or moderately damaged buildings to rescue trapped and injured casualties. To determine whether CERT members should enter a building, conduct a sizeup and evaluate each building based on the following conditions for lightly, moderately and heavily damaged buildings.

<u>Lightly Damage Buildings</u>

- Superficial or cosmetic damage.
- Broken windows.
- Superficial cracks or breaks in the wall surface (the tip of pencil will fit into the crack).
- Minor damage to the interior contents.

The CERT mission in a lightly damaged building is to:

- Conduct voice triage, tagging walking wounded / ambulatory casualties and directing them to a safe location.
- Locate injured and trapped casualties.
- Triage casualties and tag RED, YELLOW, GREEN, or BLACK, according to their injuries (treat airway obstruction, excessive bleeding, and shock prevention).
- Stabilize for transport and extract severely injured casualties first, beginning with *Immediate* (RED tag) casualties, followed by *Delayed* (YELLOW tag) casualties. Do not remove those tagged DEAD.
- Continue sizeup process.

Moderately Damaged Buildings

- Visible signs of damage.
- Decorative work damaged or fallen.
- Many visible cracks or breaks in the wall surface (a pencil will fit into the crack).
- Major damage to interior contents.
- Building still on foundation.

The CERT mission in a moderately damaged building is to:

- Conduct voice triage, tagging walking wounded / ambulatory casualties and directing them to a safe location.
- Locate injured and trapped casualties.
- Triage casualties and tag RED, YELLOW, GREEN, or BLACK, according to their injuries (treat airway, major bleeding, and shock).
- Stabilize for transport and extract casualties as quickly as possible, based on the order found. Do not remove those tagged DEAD.
- Continue sizeup process while minimizing the number of rescuers and time spent inside the structure.

Heavily Damaged Building

STOP! CERT members are not to enter a building with heavy damage under any circumstance.

- Partial or total collapse
- Tilting
- Obvious structural instability
- Building off foundation

The CERT mission in a heavily damaged building is to secure the building perimeter and warn others of the danger in entering the building.

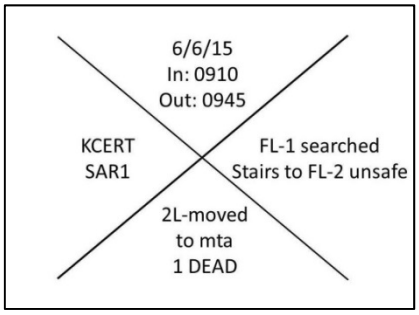
CONDUCTING INTERIOR SEARCH OPERATIONS

The search operation involves two processes:

1. Employing search techniques based on the sizeup.
2. Locating any casualties.

Search Markings

Once the continual sizeup process is completed and the decision has been made to enter a building, the first team to enter the building (usually Triage Team) shall add search markings next to the door (not on the door), using a marker, spray paint, chalk, etc.



When entering the building:

- Make a slash from the upper left to the lower right.
- In the "9 o'clock" position, write your CERT identification, consisting of:
    - KCERT for Kailua CERT

  - SAR Team number, as assigned in Incident Action Plan.
- In the "12 o'clock" position, write date and time team entered the building.

When exiting the building:

- The last team to exit the building completes the X by making a slash from the upper right to the lower left.
- In the "12 o'clock" position, write the time the last team exited the building.
- In the "3 o'clock" position, write the areas of the building searched and any specific information on hazards.
- In the "6 o'clock" position, write the number of live casualties found (e.g. 4L) and the number of Dead (e.g. DEAD – 1).

Search Methodology

The following methodology shall be followed by the Triage Team while conducting interior search operations.

1. Before entering the building or individual rooms, use the back of your non-dominant hand to check door for heat and visually observe for smoke (indicating a fire).
2. Conduct a VOICE TRIAGE by saying,

> "This is Kailua Emergency Response Team.
> If you can hear me, walk toward the sound of my voice."

3. Direct ambulatory casualties to a safe area or medical treatment area (MTA).
4. Use a systematic search pattern
    a. While searching for casualties place right hand on the wall and walk around the interior in a counter-clockwise direction. When exiting the building turn around 180 degrees and place left hand on the wall, walking in a clockwise direction.
    b. In a multi-level building, start from the bottom and work way up or vice versa.
    c. Consecutively number each room searched.
    d. Check four walls, ceiling and floor for hazards. Report hazards to SAR Team Leader.
5. Report essential elements of information for each casualty to SAR Team Leader, to include:
    a. Room number. If searching in a multi-story building, include floor number (e.g. Floor 2, Room 1).
    b. Gender / adult or child
    c. Shirt and pants color
    d. Main injury
    e. Triage tag color

The Extraction Teams shall follow the same systematic search pattern while searching for and extracting casualties.

SEARCH AND RESCUE
STANDARD OPERATING GUIDELINES

CONDUCTING EXTERIOR / WIDE AREA SEARCH OPERATIONS

CERT members may need to search for casualties in wide open areas, outside of buildings. Wide area search patterns include grid, line, quadrant or zone, and spiral. Grid searches are the most basic search method, and are particularly useful following a hurricane or tornado. Basic guidelines for conducting a grid search include:

- Delineate the area to be searched, as defined by roads, terrain or landmarks. The size of the search area is dependent on the number of SAR personnel available.
- Divide the search area into smaller, more manageable sections (grid).
- Position searchers at one side of the grid.
- The distance between the searchers should be set according to visibility and debris. The more the debris or vegetation, the closer the searcher spacing. In all cases, searchers must remain within line of sight and voice contact with searchers on either side of them.
- It is also critical that the area to be covered by each searcher overlaps that of the searchers on either side of them.
- As each searcher moves across the area, they conduct a thorough search for casualties within their designated lane of the grid.
- Conduct voice triage, calling ambulatory casualties to walk toward the searchers.
- To ensure full coverage, record each area that has been searched.

A variety of search configurations may be used, depending on the extent of the disaster zone and the amount of debris/obstacles in the zone. See the attachment for the *Wide Area Search and Rescue Diagrams*, provided by Air National Guard CERFP.

CONDUCTING RESCUE OPERATIONS

Rescue operations involve three primary functions:

- Moving objects and debris to free casualties and to create a safe rescue environment.
- Triaging casualties by checking for the "three killers:" 1) airway obstruction, 2) excessive bleeding, and 3) shock prevention.
- Extracting casualties as safely and as quickly as possible.

Casualties may need to be rescued from buildings or in wide open areas where they may be trapped by debris.

Moving Objects and Debris

Rescuers (Triage and Extraction Teams) may need to remove debris as needed to minimize risk to themselves and to free entrapped casualties. Heavy and large debris may be removed through the use of leveraging and cribbing techniques.

Triage

Triage Team will triage casualties. Guidelines are provided in the *Disaster Medical Operations Standard Operating Guideline,* Appendix G of the *Kailua Disaster Response Plan*.

Extracting Casualties
The Extraction Teams shall extract casualties and prepare for transport to the MTA. The type of extrication method selected should depend on the:

- General stability of the immediate environment.
- Number of rescuers available.
- Strength and ability of the rescuers.
- Condition of the casualty.

There are two basic types of casualty extrication:

1. Casualty does a self-removal or is assisted by the rescuer.
2. Rescuer uses a variety of techniques to lift and drag casualties.

Note that it is usually best to allow an ambulatory casualty to extricate himself/herself. Once free from entrapment, the rescuer shall assist the ambulatory casualty to the structure exit. If conducting a wide area search, the rescue shall assist the casualty to the MTA.

All CERT members shall follow safety procedures and always use the proper safety equipment required for the situation, including:

- Work in pairs.
- Triage and treat only in lightly damaged buildings.
- In moderately damaged buildings, triage and extract casualties as quickly as possible.
- Never enter an unstable structure.
- Lift by bending the knees, keeping the back straight, and pushing up with the legs.
- Carry the load close to the body.
- Lift and carry no more than is reasonable for your body size and strength.

The Kailua CERT medical treatment area shall be located near the Kailua CERT SAR Team. The SAR and medical treatment area teams must be mobile, flexible, and nimble, responding and relocating positions as needed.

KAILUA CERT SAR ORGANIZATION

Decentralize control
In a catastrophic or large scale response, it is not practical for the Incident Commander (IC) and/or Operations Chief to control every task of multiple SAR teams. Once the IC has briefed the SAR Team Leader (TL) on the Incident Action Plan, the IC may delegate authority to the SAR TL to conduct operations based on conditions on the ground and within his/her CERT training.

Elements and Responsibilities of 6-person SAR Team
The SAR team shall consist of, as a minimum, a 6-person team, to include:

- SAR TL
- Communications (Ham radio operator)
- 2-person Triage Team

- 2-person Extraction Team

Span of Control
The span of control of any individual with incident management supervisory responsibility should range from three to seven subordinates. The size of the SAR team may expand and contract as conditions on the ground dictate, as long as it stays within the recommended span of control.

Team Leader

- Reports to Incident Commander or Operations Chief in the Kailua Operations Center (KOC).
- Responsible for command and control of assigned SAR team.
- Responsible for the safety and accountability of all team members.
- Responsible for mission completion, as directed by the IC / Operations Chief.
- Ensures team members sign in and sign out with KOC Administration Chief, and have proper equipment, personal protective equipment (PPE), water, food, etc., for their operation.
- Responsible for make sure communication equipment, FRS channels, and Ham frequencies are operational.
- Responsible for conducting damage assessments of disaster area and reporting information back to KOC.
- Responsible for conducting a sizeup to ensure safety of team before entering a building, conducting a wide area SAR, or other situation.
- During a SAR operation, record casualty information as called in by triage team. Then direct extraction team to extract casualty.
- Direct the transportation of casualties to the MTA.

Communications

- Responsible for communicating via amateur radio with the KOC, under the direction of the SAR TL.
- Additional responsibilities provided below under Communication and Documentation.

Triage Team

- Normally consist of a two-person team.
- Search for casualties.
- Triage each casualty, treating only the “three killers” – 1) airway obstruction, 2) excessive bleeding and 3) shock prevention.
- Tag the dead and leave in place.
- Report location, gender/adult/child, clothing color, injury and triage tag color to TL.
- Once all survivors have been triaged, may assist with extraction and transport of casualties, as directed by SAR TL.

Extraction Team

- As directed by the SAR TL, search for casualties based on information received from Triage Team.

- Provide first-aid to stabilize for transport.
- Transport casualties to MTA and report status to TL.

Communications

- SAR TL communicates with Triage and Extraction Teams using Family Radio Service (FRS) radios. Each person on the SAR team shall have a FRS radio to allow for intra-team communication.
- The Communications person is required to be a licensed amateur radio operator, and will use an amateur radio to communicate with the KOC (under the guidance of the SAR TL).
- Channels/frequencies and call signs to be provided during operations briefing.
- Keep the IC / Operations Chief informed of location and activities.

DOCUMENTATION

- The SAR Team Leader and/or Communications person are responsible for documenting all activities using either the Incident Command System (ICS) form 214 Unit Log (provided in Appendix J of the *Kailua Disaster Response Plan*) or a notebook. The following information shall be documented and turned into the Administration Chief at the end of the operational period:
    - Date and time
    - Location
    - Activity/event
    - Personnel involved.
    - Use bullet points and focus on basic facts.
- Document the location of critically injured or trapped personnel that cannot be rescued or treated by SAR team and report to KOC.

PERSONAL PROTECTIVE EQUIPMENT

See Appendix K of the *Kailua Disaster Response Plan* for a more detailed list of supplies.

- Long pants, Kailua CERT T-shirt, socks, closed-toe shoes (preferably steel-shank boots)
- CERT Backpack
- Helmet
- Green CERT vest with Oahu CERT patch
- Goggles
- N95 mask
- Work gloves
- FRS and/or Ham radio
- First aid supplies
- Food and water

ATTACHMENTS

CERT Search and Rescue Sizeup Checklist
Wide Area Search and Rescue Diagrams

CERT Search and Rescue Sizeup Checklist

Step 1: Gather Facts		
Time		
Does the time of day or week affect SAR efforts? How?	Yes	No
Type of Construction and Terrain		
• What type(s) of structure(s) is (are) involved? • What type(s) of construction is (are) involved? • What type(s) of terrain is (are) involved?		
Occupancy		
• Are the structures occupied? If yes, how many people are likely to be affected?	Yes	No
• Are there special considerations (e.g., children, elderly)? If yes, what are the special considerations?	Yes	No
Weather		
• Will weather conditions affect your safety? If yes, how will your safety be affected?	Yes	No
• Will weather conditions affect the search and rescue situation? If yes, how will the search and rescue situation be affected?	Yes	No

CERT Search and Rescue Sizeup Checklist

Hazards		
• Are hazardous materials involved? If yes, at what location?	Yes	No
• Are there other hazards involved? If yes, what other hazards?	Yes	No
Step 2: Assess and Communicate the Damage		
• For structural searches, take a lap around the building. Is the damage beyond the CERT's capability? If yes, what special requirements or qualifications are required?	Yes	No
• Have the facts and the initial damage assessment been communicated to the appropriate persons?	Yes	No
Step 3: Consider Possibilities		
• Is the situation stable?	Yes	No
• Is there great risk or potential for more disaster activity that will impact personal safety? If yes, what are the known risks?	Yes	No
• What else could go wrong?		
Step 4: Assess Your Own Situation		
• What resources are available with which you can attempt the search and rescue		

CERT Search and Rescue Sizeup Checklist

• What equipment is available?		
Step 5: Establish Priorities		
• Can a search and rescue be *safely* attempted by CERT members? If no, do not attempt a search and rescue.	Yes	No
• Are there other, more pressing needs at the moment? If yes, list.	Yes	No
Step 6: Make Decisions		
• Where will deployment of available resources do the most good while maintaining an adequate margin of safety?		
Step 7: Develop Plan of Action		
• Determine how personnel and other resources should be deployed.		
Step 8: Take Action		
• Put the plan into effect.		
Step 9: Evaluate Progress		

• Continually size up the situation to identify changes in the:
  • Scope of the problem
  • Safety risks
  • Resource availability		

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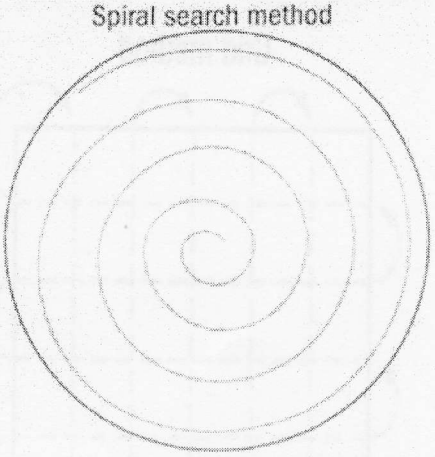
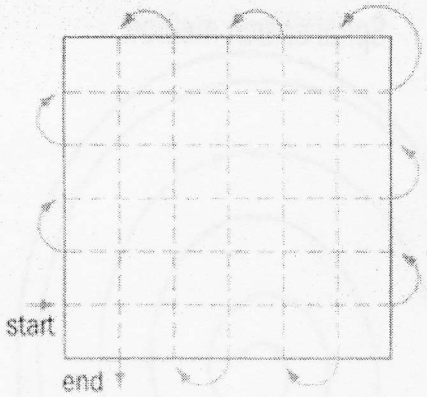
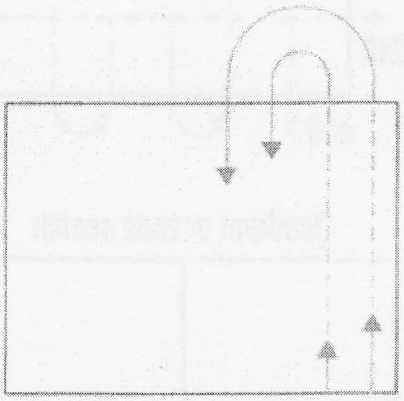
Spiral search method



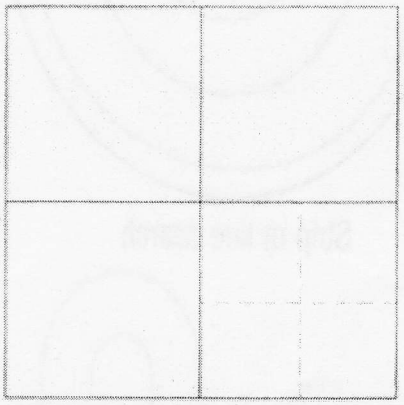
Grid method



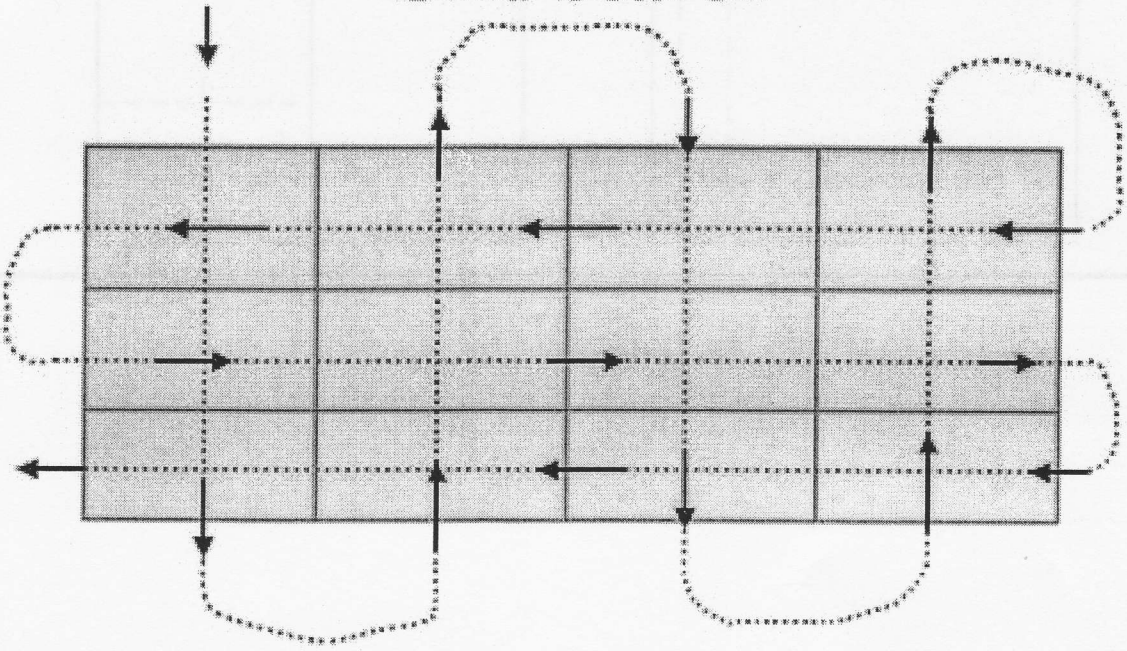
Strip or line search



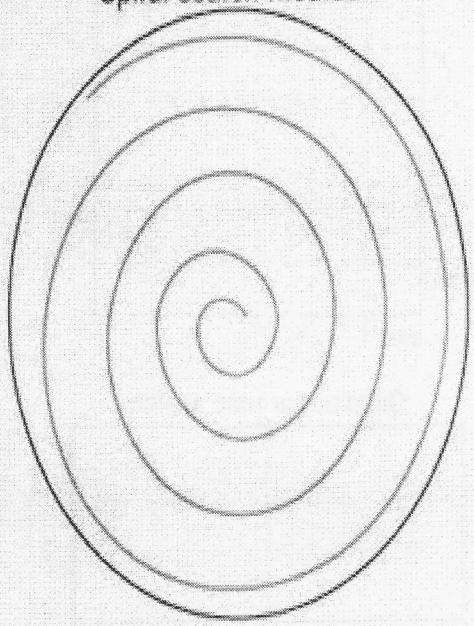
Quadrant or zone search



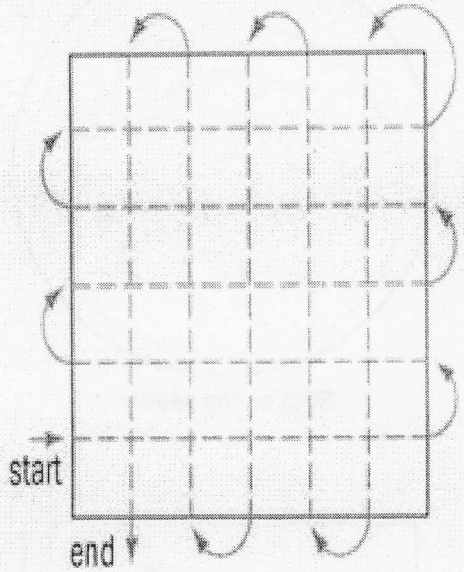
Grid Search



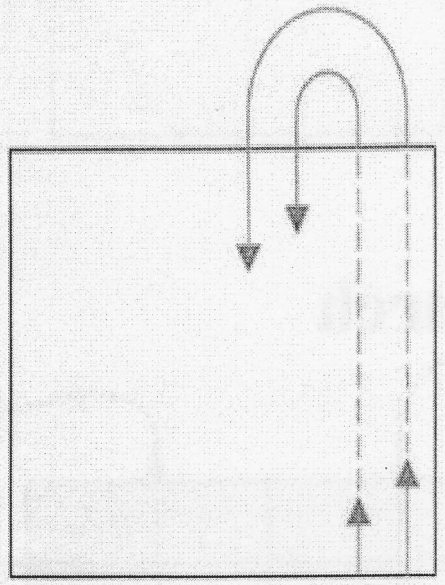
Spiral search method



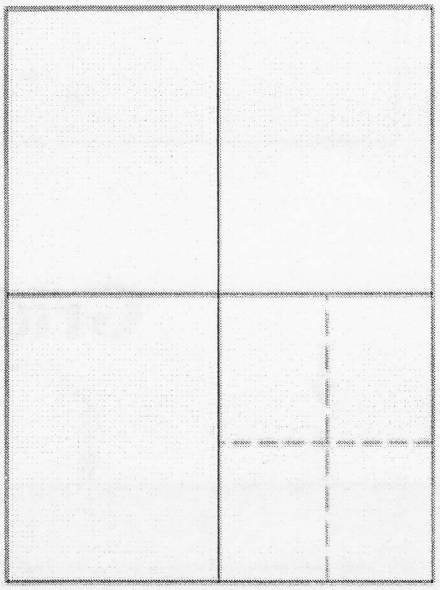
Grid method



Strip or line search



Quadrant or zone search



APPENDIX G – Disaster Medical Operations Standard Operating Guidelines

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DISASTER MEDICAL OPERATIONS
STANDARD OPERATING GUIDELINES

SOURCE MATERIAL

This Medical Treatment Area (MTA), Standard Operating Guideline was developed using the following manuals/training:

- Community Emergency Response Team, Basic Training Instructor Guide, dated January 2011 (https://www.fema.gov/media-library/assets/documents/27368?id=6135)
- Advanced Care in Pre-hospital Medical Care for Community Groups, Special Workshop, August 25, 2015. Provided by Healthcare Association of Hawaii Emergency Services, in partnership with City and County of Honolulu, Department of Emergency Management (DEM).

All actions performed by Kailua CERT are conducted in accordance with CERT training.

DEFINITIONS

Ambulatory – walking or able to walk
Casualty – a person who is hurt or killed in a war, disaster or accident.
Extract – to remove or take out
First Responders – Includes fire, police and ambulance
Transport – to carry from one place to another

INTRODUCTION

CERT medical operations can play a vital role in limiting deaths from trauma. The phases of death from trauma are:

1. Phase 1: Death within minutes as a result of overwhelming and irreversible damage to vital organs.
2. Phase 2: Death within several hours as a result of excessive bleeding.
3. Phase 3: Death in several days or weeks as a result of infection or multiple-organ failure (i.e., complications from an injury).

These phases underlie why disaster medical operations are conducted as they are - by identifying and treating those with the most serious injuries first. Some disaster casualties in the second and third phases of death could be saved by providing medical care.

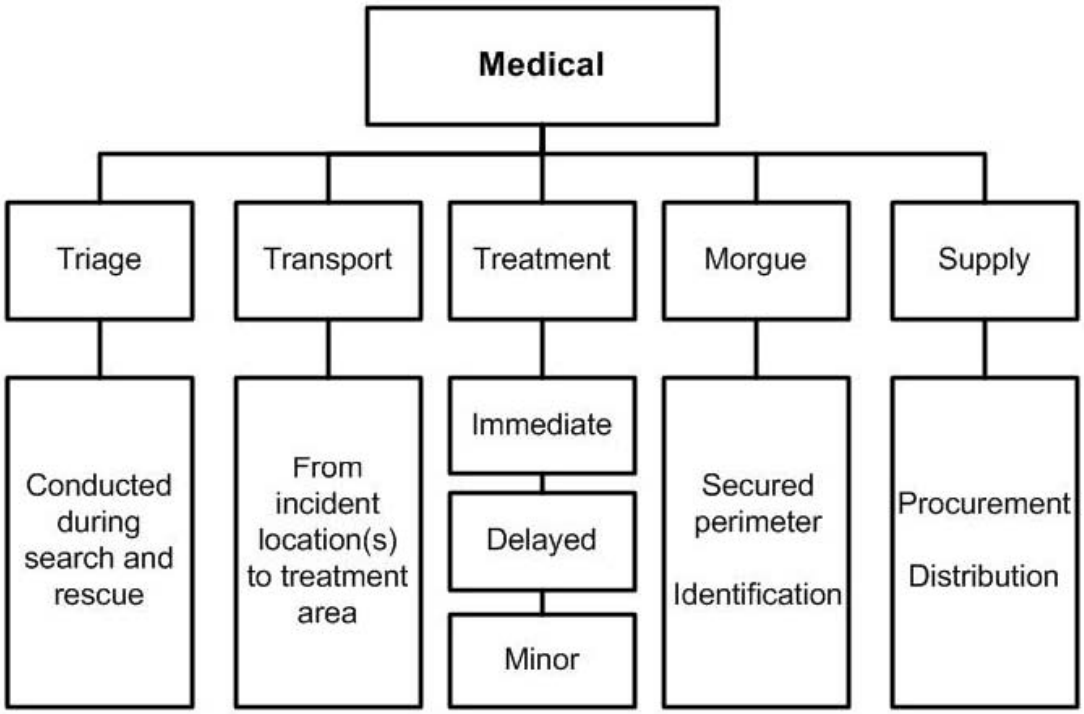
In a disaster there may be more casualties than rescuers, and assistance from first responders may not be immediately available. CERT personnel are trained to be part of disaster medical operations and to provide:

- Treatment for life-threatening conditions — airway obstruction, excessive bleeding, and shock prevention.
- Treatment of other, less urgent conditions.
- Doing the greatest good for the greatest number of people by conducting simple triage and rapid treatment (START).

FUNCTIONS OF DISASTER MEDICAL OPERATIONS

There are five major functions of disaster medical operations:

1. Triage: The initial assessment and sorting of casualties for treatment based on the severity of their injuries.
2. Transport: The movement of casualties from the disaster area to the local hospital.
3. Treatment: The basic first aid and/or professional medical services provided to casualties.
4. Morgue: The temporary holding area for casualties who have died at the MTA. Those who are tagged as "DEAD" during triage are not removed from the disaster area.
5. Supply: The hub for critical supply procurement and distribution.



Note: In accordance with Healthcare Association of Hawaii protocols, hospitals cannot provide the following to CERTs:

- Use of hospital vehicles
- Storage of equipment or supplies
- Staff support or deployment of staff into the field
- Provision of supplies or equipment
- Food services
- Sheltering of evacuees
- Staging sites
- Receive decedents from the field

TRIAGE

The purpose of CERT triage (START) is to identify those casualties that need priority transportation to the local hospital. Clinical triage (Sort-Assess-Lifesaving Interventions [SALT]) is performed at the hospital.

The Triage Team is a member(s) of the Search and Rescue (SAR) Team, and not the MTA Team. See the *Search and Rescue Standard Operating Guidelines* in Appendix F of the *Kailua Disaster Response Plan* for additional information.

Six Steps of Triage

Steps of triage in a disaster environment include:

Step 1: Conduct a Sizeup, as described in the *Kailua CERT Search and Rescue Standard Operating Guidelines, Safety During SAR Operations* in Appendix G of the *Kailua Disaster Response Plan.*

Step 2: Conduct a voice triage by saying,

> "This is Kailua Emergency Response Team.
> If you can hear me, walk toward the sound of my voice."

Step 3: Search for casualties. Start where you stand, and follow a systematic route, as described in the *Search and Rescue Standard Operating Guidelines, Search Methodology* in Appendix F *of the Kailua Disaster Response Plan.*

Step 4: Evaluate each casualty and tag according to severity of injury.

- If using a triage tag, remove appropriate portions of tag at perforations and place tag around casualty's neck. Place removed category tag in pocket for collection at the MTA.

> Kailua CERT shall use the Disaster Management Systems triage tag, which is the State of Hawaii recognized triage tag. In the event triage tags are not available, then survey tape will be used.

- If using survey tape, tie appropriate color of tape to casualty's uninjured wrist.
  - To save on the use of triage tags, DEAD found in the disaster area may be tagged with black survey tape.
- If any casualty (injured or uninjured) refuses assistance, the Triage Team does not need to tag that individual.

Step 5: Treat only those casualties with life threatening conditions (airway obstruction, excessive bleeding and shock prevention).

Step 6: Document triage results using triage tag.

Kailua CERT Triage Team does not need to provide any documentation of casualty on triage tag. Additional documentation will be completed at the MTA.

Tagging of Casualties

During triage, the medical condition of each casualty is evaluated and then prioritized into one of four categories:

- Immediate (I): The casualty has life-threatening injuries (airway obstruction, excessive bleeding, or shock prevention) that demand immediate attention to save his or her life; rapid, lifesaving treatment is urgent. These casualties are marked with a RED tag or labeled "I."

- Delayed (D): Injuries do not jeopardize the life of the casualty. The casualty may require professional care, but treatment can be delayed. These casualties are marked with a YELLOW tag or labeled "D."

- Minor (M): Walking wounded and generally ambulatory. These casualties are marked with a GREEN tag or labeled "M."

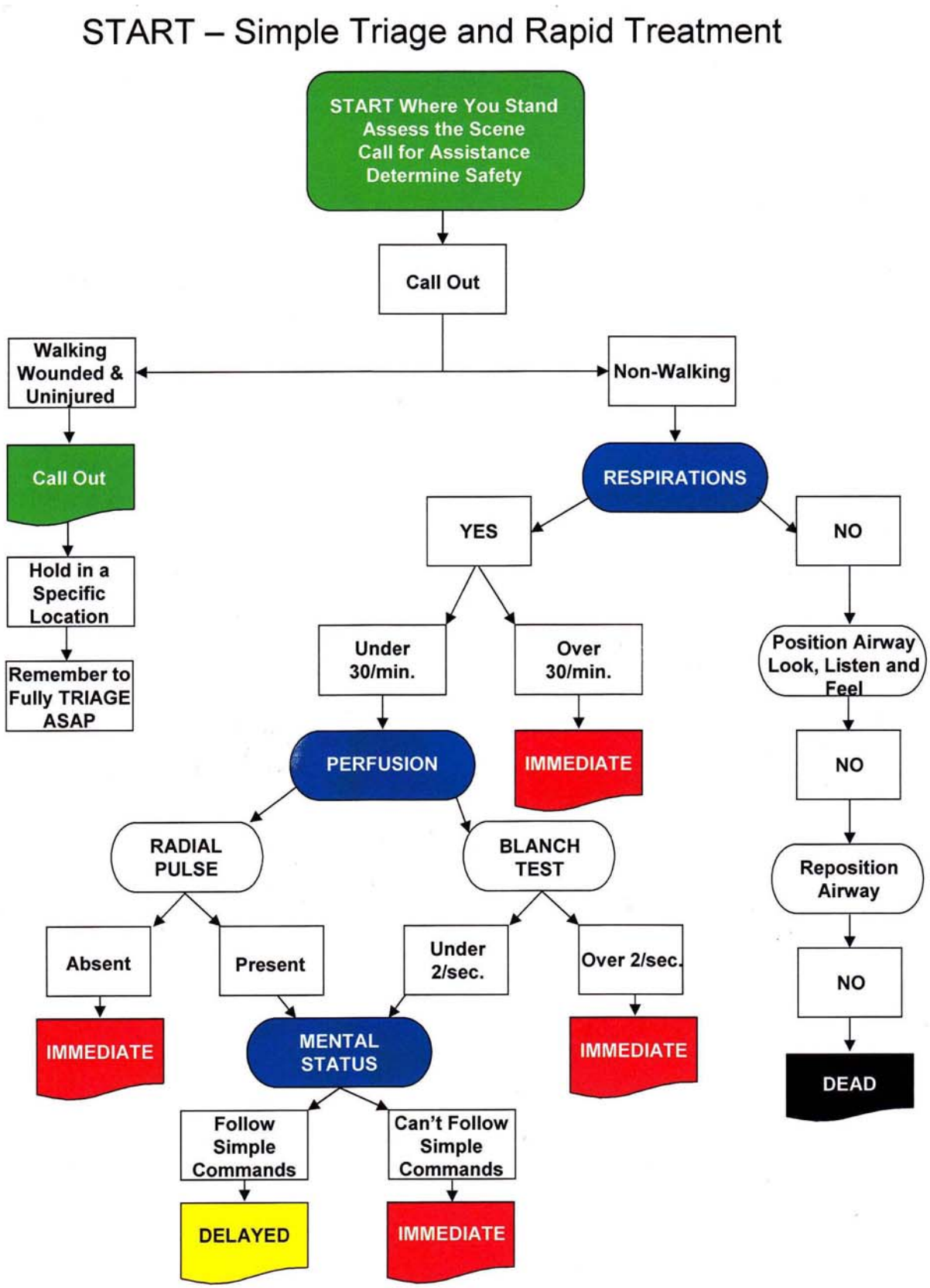
- Dead (DEAD): No respirations after two attempts to open the airway. These casualties are marked with a BLACK tag or labeled "DEAD."
    - The DEAD are left in place - in the disaster area - for later removal by first responders.

Per the City & County of Honolulu Medical Examiner, "bodies can be moved if they create a hazard, impair rescue efforts, or at the request of first responders."

START – Simple Triage and Rapid Treatment

The Simple Triage and Rapid Treatment (START) system was developed to allow first responders to triage multiple casualties in 30 seconds or less, based on three primary observations: Respiration, Perfusion, and Mental Status (RPM).

The Triage Team will follow the START process, as detailed in the diagram below.


START – Simple Triage and Rapid Treatment
START Where You Stand
Assess the Scene
Call for Assistance
Determine Safety
Call Out
Walking Wounded & Uninjured
Non-Walking
Call Out
Hold in a Specific Location
Remember to Fully TRIAGE ASAP
RESPIRATIONS
YES
NO
Under 30/min.
Over 30/min.
Position Airway Look, Listen and Feel
PERFUSION
IMMEDIATE
NO
RADIAL PULSE
BLANCH TEST
Reposition Airway
Absent
Present
Under 2/sec.
Over 2/sec.
NO
IMMEDIATE
MENTAL STATUS
IMMEDIATE
DEAD
Follow Simple Commands
Can't Follow Simple Commands
DELAYED
IMMEDIATE

TRANSPORT

In a catastrophic disaster, first responders may not be available to transport casualties from the disaster area to area hospitals (Castle Medical Center, Kailua). In addition, roads may be blocked by debris, preventing vehicles from accessing casualties.

Within the disaster area, the Kailua CERT MTA shall be located near the Kailua CERT Search and Rescue (SAR) Team. The SAR Extraction Team will extract and transport the triaged casualties, by walking, to the MTA. Transportation of casualties to Castle Medical Center will be coordinated by MTA workers and the Kailua Operations Center.

To transport casualties with *Immediate* or *Delayed* injuries out of the disaster area to Castle Medical Center, Kailua CERT may use the following forms of transportation:

- Personal vehicles driven by CERT members or spontaneous volunteers.
- Non-profit or faith-based organizations' vans or buses.

Note: Kailua CERT personnel or spontaneous volunteers may need to walk or carry casualties from the MTA to a road accessible to transportation.

To maintain order within the MTA, casualties with *Minor* or no injuries (tagged GREEN), will have two options:

- If willing and able and as needed, assist MTA workers with treatment of *Immediate* and *Delayed* tagged casualties.
- Walk out of the disaster area to a place of safety.

For those casualties whose injuries are such that movement or transport would cause further harm, stabilize in place and notify Kailua Operations Center (KOC) of need for assistance from first responders.

TREATMENT

As previously stated, **the Kailua CERT MTA shall be located near the Kailua CERT Search and Rescue (SAR) Team.** The SAR and MTA teams must be mobile, flexible and nimble, responding and relocating positions as needed.

Treatment of casualties will be conducted in the Kailua CERT MTA. CERT MTA Team Leader will need to select a site(s) and set up a treatment area as soon as casualties are confirmed.

Centralized Treatment Site

In a localized disaster area, the CERT may need to establish one central MTA.

- Includes treatment areas for *Immediate, Delayed,* and *Minor* casualties, and a morgue.
- Allows for effective use of resources to take care of a greater number of casualties.
- Allows for more efficient transport of casualties from the disaster area to Castle Medical Center.

Decentralized Treatment Sites

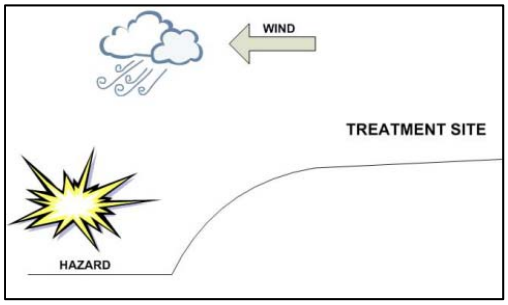
In a widespread disaster with many casualties, it may be necessary to set up and maintain more than one MTA.

- Each MTA team will be paired up with a search and rescue team. Each group will be positioned throughout the disaster area, based on greatest need, as directed by the KOC.
- Each area will include treatment areas for *Immediate*, *Delayed*, and *Minor* casualties, and a morgue.
- Casualties will remain under treatment at the decentralized location until they can be transported to Castle Medical Center or to the CERT's main treatment area.

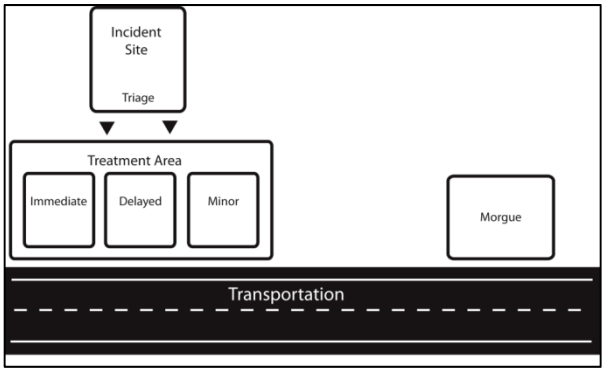
The Kailua CERT Incident Management Team will decide on whether to use centralized or decentralized treatment sites based on two criteria:

- The extent of disaster across the Kailua community.
- The number of available SAR and MTA workers.

MTA Site Selection



The MTA should be uphill, upwind and upstream of hazards.



In addition, the MTA should be located near a road free of debris and obstructions for easy transportation

of casualties from the disaster area to emergency medical services.

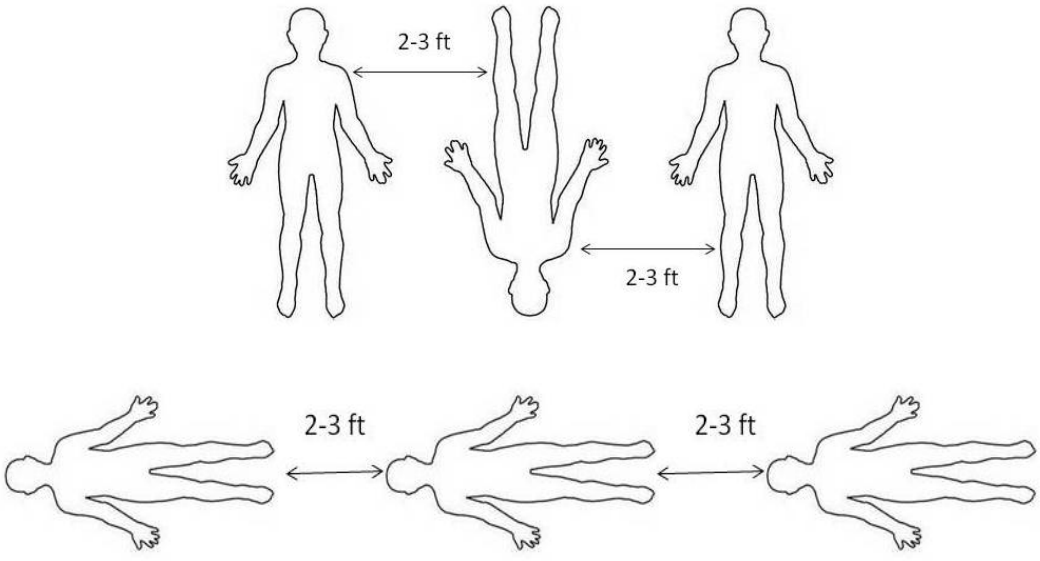
MTA Layout

The layout of the MTA shall include the following:

- Tape, rope or similar to demarcate the boundaries of the treatment area.
- An INTAKE area where casualties will be signed in and directed to the appropriate treatment area.
- Signage to identify the treatment areas for *Immediate*, *Delayed*, and *Minor* casualties, and a morgue.
- The *Immediate* and *Delayed* areas should be relatively close to each other to allow for:
    - Verbal communication among MTA workers.
    - Shared access to medical supplies.
    - Easy transfer of casualties should their medical condition change (e.g. RED to YELLOW).
- The morgue shall be secure, away from and not visible from the MTA. This minimizes traffic near the area, reduces the potential psychological impact on those in the treatment area, and provides privacy for people to grieve the loss of loved ones.
    - The morgue is for those individuals who die while in the MTA.
    - Dead found in the disaster area are to be tagged BLACK and left in place for removal by first responders.

Casualty Layout

Casualties in the MTA shall be placed in a head-to-toes configuration, with 2 to 3 feet between each casualty, as diagramed below.



Head-to Toe Assessments

MTA workers shall conduct a head-to-toe assessment of each casualty to determine the type and extent of injuries and the type of treatment needed.

- A rapid head-to-toe assessment may be conducted by the SAR Extraction Team to stabilize injuries prior to transport to the MTA.

- A more thorough assessment shall be conducted in the MTA to treat injuries prior to transport to Castle Medical Center.

If the casualty is conscious, always introduce yourself and ask permission to conduct the assessment. Casualties have the right to refuse the assessment and treatment. If the casualty is unconscious, MTA workers have implied consent to assess and treat.

The head-to-toe assessments should be:

- Conducted on all casualties, even those who seem all right.
- Verbal (if the patient is able to speak).
- Hands-on. Do not be afraid to remove clothing to look for injuries.

Check (LOOK, LISTEN and FEEL) body parts from the top to the bottom for continuity of bones and soft tissue injuries in the following order:

1. Head
2. Neck
3. Shoulders
4. Chest/Back
5. Arms
6. Abdomen
7. Pelvis
8. Legs

MTA workers shall look for DCAP-BTLS while conducting a head-to-toe assessment. DCAP-BTLS stands for the following:

- Deformities
- Contusions (bruising)
- Abrasions (superficial damage to the skin)
- Punctures
- Burns
- Tenderness
- Lacerations (deep cut or tear in the skin)
- Swelling

While conducting a head-to-toe assessment, always check for:

- PMS (Pulse, Movement, Sensation) in all extremities
- Medical ID emblems on bracelet or on neck chain

Provide immediate treatment for any life threatening conditions (airway obstruction, excessive breathing, and shock prevention); otherwise, fully conduct the head-to-toe assessment then treat injuries.

Closed-Head, Neck, and Spinal Injuries

When a casualty is suspected to have injuries to the head or spine, the main objective is to do no further harm. Movement of the head and spine should be minimized while treating any other life-threatening conditions. Keep the spine in a straight line when doing the head-to-toe assessment. Signs of a closed-head, neck, or spinal injury most often include:

- Change in consciousness
- Inability to move one or more body parts
- Severe pain or pressure in head, neck, or back
- Tingling or numbness in extremities
- Difficulty breathing or seeing
- Heavy bleeding, bruising, or deformity of the head or spine
- Blood or fluid in the nose or ears
- Bruising behind the ear
- "Raccoon" eyes (bruising around eyes)
- "Uneven" pupils
- Seizures
- Nausea or vomiting
- Victim found under collapsed building material or heavy debris

Documentation and Reporting Requirements

- Use the Casualty Tracking Log (see attachment) to track casualties as they enter the MTA via Intake.
- Use the Casualty Tally Log (see attachment) to track the number of RED, YELLOW, GREEN and BLACK casualties in the MTA.
    - Reports of casualty counts to DEM will be based on the number of casualties, by triage color, at the time of the report request. Total casualty counts for the day are not needed.
- Do not hold up care to document assessment and treatment of casualty. If time allows, then the following documentation may be completed:
    - If a casualty is in CERT care for a 1-2 hours, then use the traige tag to document care.
    - If a casualty is in CERT care long term, then use the Casualty Treatment Record (see attachment) to document care.
    - Send all documentation with casualty when transported to Castle Medical Center. Kailua CERT MTA workers do not need to keep copies of treatment records.
- Triage Tag – record injury and treatment information on triage tag.
    - To avoid conflicts with The Health Insurance Portability and Accountability Act of 1996 (HIPPA) http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/) do not record personal information such as name and date of birth.
    - Triage tag will remain on casualty and is not to be removed when casualty is transported to Castle Medical Center. Each first responder transporting or caring for a casualty will add their respective triage tag (e.g. Kailua CERT to ambulance to hospital). The triage tags will provide history of care for that casualty from the disaster area to the hospital.

- Kailua CERT MTA workers are not responsible for tracking casualties and providing information to family members in search of missing people.

MORGUE

CERT members are not authorized to declare a person dead. This declaration can only be done by the Medical Examiner or their designee. In addition, CERT members are not authorized to make an identification of the deceased (e.g. name). CERT members are never authorized to go into a casualty's pockets or wallet looking for identification or valuables.

Should a casualty stop breathing while in the care of Kailua CERT MTA workers, attempt to open the airway using the head-tilt, chin-lift method. If after two attempts to open the airway the casualty does not start breathing again, then tag the casualty DEAD. Cover the deceased and move to the morgue, treating the deceased with respect at all times.

While in the morgue, the Morgue Team Leader or designee will make a detailed description of the deceased, to include general body features (e.g. gender, hair color, etc.), and clothing.

In the event a family member comes looking for a deceased relative, the Morgue Team Leader ***may*** allow one family member to view the deceased. The family member must be supervised at all times. Viewing of deceased is done at the discretion of the Morgue Team Leader.

In the event the MTA must relocate, the morgue with the deceased shall not be relocated; *however, per the City & County of Honolulu Medical Examiner, "bodies can be moved if they create a hazard, impair rescue efforts, or at the request of first responders."* Biohazard tape (preferable) or caution tape shall be placed around the morgue to discourage people from entering. A new morgue will then be established at the new MTA location.

The KOC Incident Management Team will provide DEM the following information:

- The location of the morgue
- The number of deceased in the morgue
- The physical descriptions of the deceased

MTA ORGANIZATION

Kailua CERT personnel assigned to the MTA include:

<u>MTA Team Leader</u>

- Oversee overall operations of the MTA.
- Identify the MTA site location.
- Assign workers to their area of responsibility.
- Keep the KOC informed of operational status, to include personnel and supply issues.

<u>RED (Immediate care) Team Leader</u>

- Oversee and coordinate the care of casualties.
- Report changes of casualty status to Intake.

- Ensure casualties receive priorty for transport to hospital.

YELLOW (Delayed care) Team Leader

- Oversee and coordinate the care of casualties.
- Report changes of casualty status to Intake.

GREEN (Minor care) Team Leader

- Oversee and coordinate the care of casualties.
- Report changes of casualty status to Intake.

BLACK / Morgue Team Leader

- Oversee the care of the dead.
- Document the number and physical descriptions of the deceased.

First aid workers

- Adminster first aid to casualties under the direction of their respective treatment area Team Leader.
- Document care of casualty on triag tag or Casualty Treatment Record.

Intake

- Log in each casualty on the Casualty Tracking Log.
- Direct casualties to appropriate treatment area.
- Provide casualty counts to the KOC, as requested. Use the Casualty Tally Log to record tally and time of report.
- Assist the MTA Team Leader as needed.

Amateur Radio Operator

- Provide communications between the MTA Team Leader and the KOC.

Use of Professionally Trained Medical Personnel

CERT members are expected to perform their skills, at a minimum, in accordance with their CERT training and team procedures.

Licensed healthcare professionals exercising their expanded professional skills may utilize those advanced skills as an individual professional without the expectation of material support (medical equipment, supplies, pharmaceuticals) or any expectation of immunity from medical liability from either the team or local government.

- Individuals licensed by the State of Hawaii as healthcare professionals are subject to a scope of practice defined in the Hawaii Administrative Rules.
- Licensed professionals operating in a disaster are not exempt from these rules, that includes their performance on local teams such as a CERT.
- When these professionals operate outside of an organization such as a hospital, those professionals could be held individually accountable for their performance in the field. This often gives rise to concerns regarding medical liability.

- Licensed professional should seek advice from their applicable licensing authority and insurance agent.
- Professionals must show their professional license as proof of their training and licensing, etiher to the MTA Team Leader or KOC.
- Professionally trained medical personnel,, such as a doctor, cannot direct CERT disaster medical operations. The MTA is under the authority of its assigned team leader.

PERSONAL PROTECTIVE EQUIPMENT

Each CERT member working in the MTA shall have, at minimum, the following supplies:

- CERT backpack
- CERT vest with Oahu CERT patch
- Long pants
- Kailua CERT t-shirt
- Closed-toe shoes
- Protective eye wear
- Non-latex gloves
- N95 mask
- First aid/medical supplies
- Food and water

MTA SUPPLIES

Medical supplies to be provided by Kailua CERT members. Basic supplies may include:

- Antibacterial ointment
- Antiseptic wipes (alcohol-based OK)
- Applicators
- Assorted adhesive bandages
- Bandage w/safety pins
- Benadryl cream
- Emergency/space blanket
- EMT scissors
- Finger splints
- Gauze pads (2x2, 3x3s, 4x4s, 5x9s and eye pads)
- Insect-sting relief treatment
- Instant cold compress
- Medical adhesive tape (1” or 1.5”, can cut thinner if needed)
- Mole skin
- Pain-relief medication (to be administered by the casualty, NOT the CERT worker)
- Roller bandage
- Safety pins
- Sheets may be cut into bandages
- Splinter (fine-point) tweezers
- Towels may be used as splints to immobilize injured body parts

MTA COMMUNICATIONS

A licensed amateur radio (Ham) operator will be assigned to MTA to provide communication between the MTA and the KOC. The *Communications Standard Operating Guidelines* are provided in Appendix I of the *Kailua Disaster Response Plan.* The Ham operator may relay information to include:

- Number of casualties
- Casualty issues such as language barriers, functional needs, medications. etc.
- Need for additional staff
- Need for additional supplies
- Location of critically injured who need professional-level extraction and care that CERT cannot give.

MTA workers may use family radio service (FRS) for intra-team communications, if needed.

UNACCOMPANIED CHILDREN

In the event unaccompanied children are found in the disaster area, the child shall remain in the care of MTA workers until he/she can be taken to the KOC. The KOC Incident Management Team will work with the Honolulu Police Department or DEM to get child to proper authorities.

ATTACHMENTS

Casualty Tracking Log
Casualty Tally Log
Casualty Treatment Record

CASUALTY TRACKING LOG				
CERT Name:		**Date:**		
Medical Treatment Area Location:				
Triage Tag Serial Number Or First Name	**Triage Color**	**Time In**	**Time Out**	**Relocated To**
	R Y G B			
	R Y G B			
	R Y G B			
	R Y G B			
	R Y G B			

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CASUALTY TALLY SHEET							
CERT Name:				**Date:**			
Team:				**Location:**			
Tally							
Start time of Tally							
Red							
Yellow							
Green							
Black							

Report to KOC @ time:	R	Y	G	B
Report to KOC @ time:	R	Y	G	B
Report to KOC @ time:	R	Y	G	B
Report to KOC @ time:	R	Y	G	B
Report to KOC @ time:	R	Y	G	B
Report to KOC @ time:	R	Y	G	B

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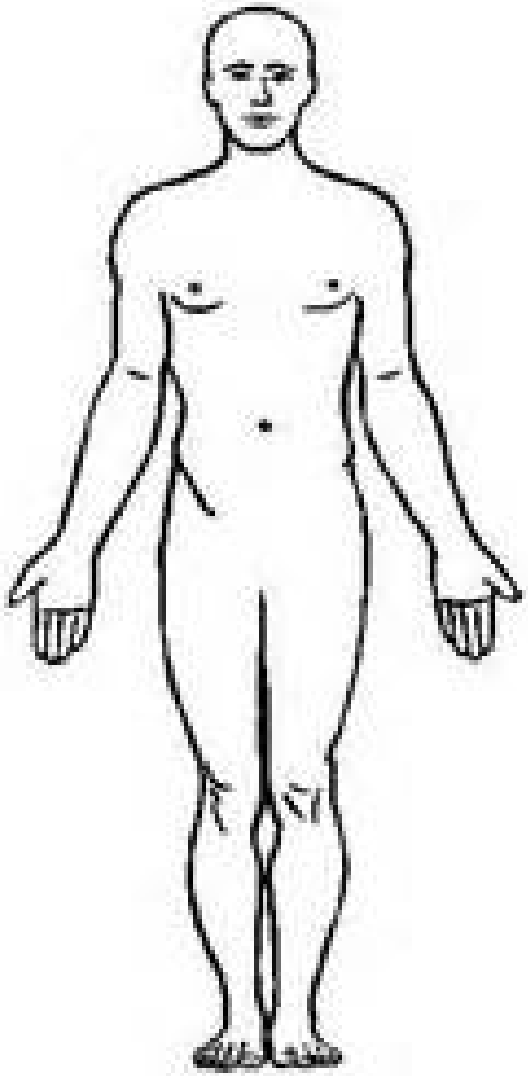
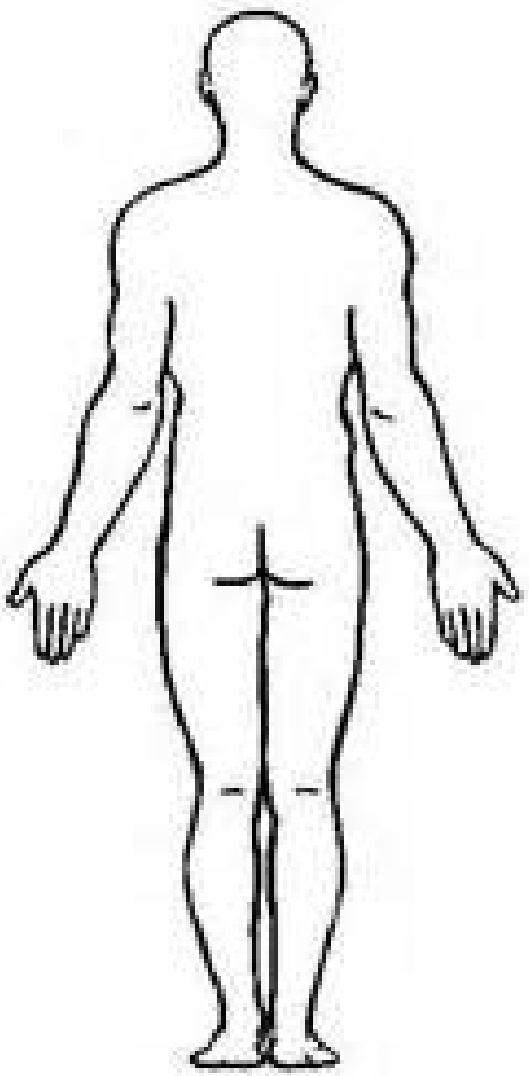
CASUALTY TREATMENT RECORD		
CERT Name:		**Date:**
Medical Treatment Area (MTA) Location:		
Time In	**Name & Description**	**Condition & Treatment**
	First Name: Gender: Male___ Female___ Adult___ Child ___ Clothing:	Triage: Red___ Yellow___ Green___ Black___ Medications: Medical Alert: Allergies: Respirations/Minute: *>30 breaths/min – Immediate care* Radial Pulse *Absent – Immediate care* Blanch Test: *>2 sec – Immediate care* Mental Status: *Can't follow simple commands – Immediate care*
Moved To (within MTA):		**Date & Time:**
Released To (outside MTA):		**Date & Time:**

HEAD-TO-TOE ASSESSMENT



FRONT



BACK

D - deformities
C – contusions/bruising
A – abrasions
(superficial damage)
P - punctures
B - burns
T - tenderness
L - lacerations
(deep, full skin penetration)
S-swelling

___ No visible signs of injury

APPENDIX H – Memorandums of Understanding

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Memorandum of Understanding
Between
Windward Amateur Radio Emergency Service
And
Kailua Community Emergency Response Team

PURPOSE

The purpose of this agreement between the Windward Amateur Radio Emergency Service® (ARES®) and the Kailua Community Emergency Response Team (CERT) is to establish a framework for cooperation between the two organizations for response to a disaster in Kailua. It is intended that coordination of our personnel may provide better service in Kailua's response in a major disaster.

RESPONSIBILITIES

The Windward ARES® is a group of volunteers who are licensed by the Federal Communication Commission as amateur radio operators (also called Hams). The ARES® members are trained to provide emergency/disaster communications when landline phones, cell phones, internet, and other normal communications have failed. "When all else fail" amateur radio operators have use of many communications modes and frequency bands to provide communications for the Kailua CERT in regards to damage assessments, situation reports, passing messages, requests for assistance and any other communication requests. The communication equipment utilized by the Hams is their own personal radio equipment.

The Kailua CERT is a group of community volunteers trained in CERT operations who are willing to assist Kailua when a disaster occurs. They can provide damage assessment, situation reports, light search and rescue, medical triage, medical operations, extractions, and other operations which they are trained to do as CERT members. Kailua CERT may request Windward ARES® to provide communications in their Kailua Operations Center or other communications requests as required in a disaster.

PRINCIPLES OF COOPERATION

In order that dependable communications might be maintained and that relief operations might be quickly expedited, the Windward ARES and the Kailua CERT agree that:

A. Each organization will encourage ongoing liaison with each other and to create and maintain adequate communications and effective relationships with each other.

B. Each organization will participate in cooperative pre-disaster planning, training and exercises.

C. Each organization hereby express agreement to all of the above and enter into a joint agreement until such time that either parties shall amend or revise said agreement in writing.

Clement H. M. Jung KH7HO
Oahu ARES® District Emergency Coordinator
Date 9/10/2014

Leslie R. Kahihikolo
Kailua CERT Coordinator
Date 9/10/14

Attachment:
ARES® and Kailua CERT POCs:

BLUE KNIGHTS STANDING OPERATING GUIDE (SOG)

I. PURPOSE

The purpose of this Standing Operating Guide (SOG) is to establish procedures for the members of Blue Knights (BK), a motorcycle club, and Windward Oahu Amateur Radio Emergency Service® (ARES®) upon the activations of hurricane evacuation shelters in Kailua. The activation of shelter communications will be by the Windward Oahu ARES® members. Many of the ARES® members are also C&C of Honolulu Department of Emergency Management (DEM) Radio Amateur Civil Emergency Service (RACES) members. The activation of shelter communications will be by the City & County of Honolulu Department of Emergency Management (DEM). DEM will notify DEM RACES. DEM RACES will notify the Windward Oahu ARES® Emergency Coordinator (EC) who in turn will notify the Windward Oahu amateur radio operators and the Blue Knight representative or alternate of the shelter activation.

II. GENERAL

- The Windward Oahu amateur radio operators and members of the BK are volunteers who are willing to assist their Kailua community in case of a disaster or emergency.

- The radio equipment utilized by the Windward Oahu amateur radio operators as well as the motorcycles operated by the members of the BK are owned by their respective owners and are operated at no cost to the City & County of Honolulu.

III. FUNCTIONS AND RESPONSIBILITIES

- DEM is the county emergency management agency responsible for public notification of any natural disasters and emergencies. DEM is also the agency which will receive shelter reports/situation reports by amateur radio operators when normal communications means are not available.

- DEM RACES is the organization of volunteer amateur radio operators who will assist with amateur radio emergency communications when normal communications fail or may fail.

- Windward Oahu ARES/RACES members and other amateur radio operators will provide emergency amateur radio communications and shelter communications in Kailua when activated. Emergency and shelter communication traffic, whether verbal or via digital ICS-213 formal messages, will be forwarded to DEM Emergency Operations Center (EOC).

- BK will provide courier service between hub shelters and satellite shelters working with the Windward Oahu amateur radio operators at the hub shelters. The BK will establish communications between hub shelters and the satellite shelter managers where there are no amateur radio operators.

IV. OPERATIONS

- Upon the receipt of a Hurricane Watch, amateur radio operators and BK personnel will start making preparation for deployment to their assigned hurricane evacuation shelters or hub shelters. At the present time, the hub shelters in Kailua are Kailua High School and Kalaheo High School. However, hub shelters designation may change. Preparations by amateur radio operators and BK members include but not limited to getting their emergency go kits ready, emergency preparations for their respective families, radio equipment, antennas, emergency power, and their respective cars and motorcycles topped with fuel and ready for deployment for up to three to seven days.

- Upon the receipt of a Hurricane Warning, hurricane shelters will be opened. Amateur radio operators will be notified to deploy to their assigned hub and/or satellite shelters. BK (see Blue Knight Call Down Tree attached) will be notified by the Windward ARES EC or Assistant EC (see Windward Oahu ARES/RACES Points of Contact attached) to deploy to their designated hub shelters. If not notified, they will shelf deploy and make contact with the amateur radio operators at the hub shelters for further instructions as to which satellite shelter the Blue Knights will need to establish contact or establish courier service.

- Once hub shelter radio operators have determined which satellite shelters do not have communications with the respective hub shelters, BK will be assigned to establish communications with the satellite shelter manager. Communications therefore will be established via BK and/or Family Radio Service (FRS) on designated channel per the Windward Oahu Emergency and Shelter Communications Plan dated September 30, 2012.

- After the hurricane winds have passed and the all clear is given by DEM, the hurricane evacuation shelters may be demobilized. Amateur radio communications and BK services may be discontinued.

- Congregate shelters may be established by the American Red Cross for those clients who have lost their homes and have no place to stay. Amateur radio operators and members of the BK may be redeployed to congregate shelters and establish communications services until demobilization is announced over the radio net.

- Both amateur radio operators and members of BK may become clients, having lost their homes to the hurricane. They may need to seek other shelters or operate from congregate shelters until relieved.

- Demobilization of amateur radio communications and the services of the BK will be via the amateur radio net by authority of the DEM RACES/Windward Oahu EC or his designee.

V. ADMININSTRATION AND SUPPORT

- The Windward Oahu ARES® EC will be responsible for maintaining a copy of this SOG.

- The Windward Oahu ARES® EC will work with the primary point of contact representative of the BK in making any changes or updates to this SOG.

- The Windward Oahu ARES® EC and the representative of the BK shall ensure all members from both organizations are familiar with this SOG.

- Recommendations for additions, deletions or modifications to this SOG shall be submitted to the Windward Oahu ARES® EC.

Approved By: Glen Kalani Kamanao **Date** 26 August 2013
Glen Kalani Kamanao, Treasurer
Blue Knights, Hawaii Chapter 1

Approved By: Clement H. M. Jung **Date** 8/26/2013
Clement H. M. Jung, KH7HO
Windward Oahu ARES® Emergency Coordinator

Attachments:
Blue Knight Memorandum of Understanding
Blue Knight Call Down Tree
Windward Oahu ARES/RACES Points of Contact

Memorandum of Understanding

This Memorandum of Understanding is made on June 18, 2012 between the Kailua Neighborhood Board's (KNB) Disaster Preparedness Sub Committee, and the Blue Knights Hawaii 1. It shall remain in effect until terminated by either party with 30 day written notice.

This Memorandum of Understanding is designed to reflect the understandings between the KNB's Disaster Preparedness Sub Committee and the Blue Knights Hawaii 1.

The KNB's Disaster Preparedness Sub Committee and the Blue Knights Hawaii 1, the parties to this memorandum of understanding, have the common overall objectives of providing effective and efficient alternative communication services to the Kailua community during a disaster.

The Blue Knights agree to provide courier service between designated hub shelters and satellite shelters in Kailua.

The KNB's Disaster Preparedness Sub Committee and the Blue Knights Hawaii 1 hereby express agreement to all of the above and enter into a joint agreement until such time that either parties shall amend or revise said agreement in writing.

Claudine Tomasa, Chair
for Kailua Neighborhood Board's Disaster Preparedness Sub Committee
Date 6/18/2012

Glen Kamanao
Blue Knights Hawaii 1
Treasurer
for Kailua Disaster Preparedness Sub Committee
Date 18 June 2012

APPENDIX I – Communications Standard Operating Guidelines

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COMMUNICATIONS
STANDARD OPERATING GUIDE

SITUATION

This Standard Operating Guide will assist the Communications Section (COMMS SECTION) in setting up and operating communications should Kailua Community Emergency Response Team (CERT) activate and mobilize to respond to a disaster.

ROLES AND RESPONSIBILITIES

Communications Leader (COMML)

- Responsible for setting up the COMMS SECTION to include amateur radios, antennas, coax and other necessary amateur gear needed to get communications operational.
- Responsible for assigning radio frequencies and repeaters to be used by the licensed amateur radio (Ham) operators in Kailua CERT.
- Assign Family Radio Service (FRS) channels to respective Search and Rescue (SAR) and Medical Treatment Area (MTA) Team Leaders within Kailua CERT.
- Responsible for the completion of all required forms.
- In the event of a power outage, provide power (e.g. generator) to enable continued radio operations over several operational periods.

Licensed Amateur Radio Operators

- In accordance with the Federal Communication Commission (FCC), Ham operators can operate on high frequency (HF), very high frequency (VHF), and ultra high frequency (UHF) amateur radio bands, depending on their type of licensing.
- Assist the COMML in setting up the radios, antennas, equipment, etc., enabling communications within Kailua CERT and among Kailua CERT and external agencies such as county or state emergency operations centers (EOC).
- Ideally, two Ham operators will be assigned to the COMMS SECTION, freeing up the COMML to coordinate and attend meetings.
- One Ham operator will be assigned to each SAR and MTA team, enabling communications between the field teams and the Kailua Operations Center (KOC).*

*The KOC is located at Kailua High School, U.S. Air Force Junior Reserve Officer Training Corps building.

Family Radio Service Operators

- Family Radio Service (FRS) are short range (about ½-mile effective range) radios which requires no license to operate.
- Each Kailua CERT member shall have their own FRS radio.
- FRS radios will be used for intra-team communications. For example, FRS radios will be used for the SAR TL to communicate with the Triage and Extraction Teams.
- Note: FRS channels will be used by the public and may cause interference with Kailua CERT operations. Alternate channels should be planned and assigned by the COMML.

COMMUNICATIONS
STANDARD OPERATING GUIDE

OPERATIONAL PROCEDURES

The COMML and assigned Ham operators will follow these operational procedures:

- Once the Kailua CERT Incident Commander (IC) issues the notice of activation, the COMML and assigned Ham operators will assemble the required equipment and transport it to the KOC.
- Setup the VHF/UHF and HF (if have time) antennas and coaxes. Use yellow caution tape, barricades or other materials to keep out non-COMMS SECTION personnel from the antenna area. The priority is to first set up the VHF/UHF antenna and be operational as soon as possible.
- Next, setup the radio station in the designated COMMS room within the KOC. This includes setting up the VHF/UHF dual mobile radio, as well as the HF radio attaching the coax to each radio through the jalousies.
- Turn on the radios and test to see whether they are operational.
- Setup laptops ready them for Fldigi and Flmsg use. MT63-1KL is the default mode and speed for all Flmsg. However, if propagation is good, the higher speed MT63-2KL may be used. If propagation is poor for HF, then use Olivia 8-500.
- Hook up printers so that Flmsg ICS-213 messages can be printed and distributed to addressee. Make sure there is paper for the printer(s).
- For each radio station, setup a clipboard with the following blank forms: Incident Command System (ICS)-213, Incoming Log, Outgoing Log, and Pending Log.
- Setup up admin supplies as needed.
- The goal is to have the COMMS SECTION operational within 30 minutes upon arrival at the KOC.
- Once everything if functioning and operational, inform the KOC IC that the COMMS SECTION is up and running.
- Determine the communications requirements for Kailua CERT and fill out the ICS-205 Incident Radio Communications Plan (Revised for Kailua CERT) as required.
- Designated tactical call signs will be used. In addition, Ham operators are required to use their FCC-issued amateur radio call sign every ten minutes and at the end of each transmission.
- Obtain approval on the ICS-205 from the IC. This ICS-205 will be included with the Incident Action Plan. The ICS-205 should include FRS channels (both primary and alternate channels) Ham VHF, and if needed UHF, simplex and/or repeater frequencies, and also HF frequency for voice and Fldigi communications. Normally, on HF, KOC will use 7.090 USB depending on propagation (7.080 USB, if SKYWARN is activated).
- Post the approved ICS-205 at each Ham radio station.

EQUIPMENT

- Amateur radio
- Antennas
- Coax

- Batteries
- Generator
- Laptops
- Printers
- Printer paper
- Forms (see list below)
- Administrative supplies

FORMS

The COMML is responsible for the completion of all forms. These forms will be given to the KOC Administration Chief upon demobilization, as part of the KOC record keeping system. If possible, it is suggested the COMML makes copies of all completed forms for future reference. The following forms will be used by the COMMS SECTION:

- ICS-205 Incident Radio Communications Plan (Modified for Kailua CERT use)
- ICS-213 General Message Form (Modified State Civil Defense RACES version)
- ICS-214 Unit Log
- Incoming / Outgoing / Pending Message Log (a log sheet for each incoming, outgoing and pending messages)
- Net Control Station Log (if the KOC becomes a Net Control Station (NCS))
- Any other forms as required that are not listed above.

REPORTING / STATUS UPDATES

The KOC Incident Management Team (IMT) may require status reports from the SAR and MTA teams. COMMS SECTION will transmit requests for reports/status updates to the designated team Ham operator. Also, the City and County of Honolulu, Department of Emergency Management (DEM) EOC may request situation reports from KOC on what is happening in Kailua and the surrounding areas. In addition, the KOC IMT may relay a request for assistance to the DEM EOC. If other agencies and first responders require amateur radio communications to talk to their members, seek approval from the IC first.

If the COMMS SECTION gets overwhelmed with messages and needs assistance, the COMML shall notify the IC to request for additional Ham operators within Kailua CERT to assist with radio communications. Spontaneous volunteers may assist with administrative duties, serve as message runners, collect reports, fill messages, logging, or as needed.

FREQUENCIES AND CHANNELS

Amateur Radios

The frequency assigned for this communications can be on VHF simplex or UHF simplex or a VHF or UHF repeater that is operational. These assignments will depend on where the various

SAR teams and MTA are located. See attachment of local VHF, UHF and HF frequencies and repeaters.

FRS

FRS users will also need to be assigned channel(s) for use in the field.

Channel	**Use**
1	Primary communications for monitoring what is happening in the community and as a calling channel.
2	Emergency messages to be relayed to neighborhood coordinator or designated communications coordinators.
3	Alternate calling channel
4	Primary channel between hub and satellite shelters (when no amateur radio operator is available at the satellite shelter).
5	Secondary emergency message channel; one side of the neighborhood that is close to another neighborhood using Channel 5 as the primary emergency channel.
6	Secondary emergency message channel
7	Alternate channel between hub and satellite shelters
8	Inter-family communications
9	**Neighborhood light search and rescue efforts for CERT**
10	Evacuation/relief/health/welfare communications.
11-13	Secondary channels for communications within a shelter or for other purposes or as alternate channels.
14	Primary communications within a shelter.

Notes:

Channels I - 7

- Can be used for both FRS and General Mobile Radio Service (GMRS). However, if used for FRS, you can only use ll2 watt power (small push-to-talk [PTT] button which is under or below the large PPT button). If you use the large PPT (it may put out 1-112 watts) and you do not have a GMRS license, you are operating illegally.
- Should be used for emergency communications that need to be relayed. Other channels can be used for other purposes or as alternate channels.

Channels 8 – 14

- Used only for FRS.
- FCC license is not required.
- 0.5 watts output.

Channels 15 -22

- Used only for GMRS.
- FCC license is required.
- Up to 5 watts output.

Do not use tones when using for communications between hub and satellite shelters. Some of the inexpensive FRS radios do not have tone capability.

Attachments:

- VHF, UHF and HF frequencies and repeaters
- ICS-205 Incident Radio Communications Plan (modified for Kailua CERT use)
- ICS-213 General Message Form (modified SCD RACES version)
- ICS-214 Unit Log
- Incoming / Outgoing / Pending Message Log (a log sheet for each incoming, outgoing and pending messages)
- Net Control Station Log (if the KOC becomes a Net Control Station (NCS)

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VHF, UHF and HF Frequencies

Simplex Frequencies:

- 146.450 – secondary simplex for Windward Oahu
- 146.505 – primary KOC simplex for Windward Oahu
- 446.000 – primary simplex

Repeaters:

- 146.660 PL 103.5 – EARC Olomana repeater
- 146.880 no PL – EARC Diamond Head repeater
- 146.980 PL 88.5 – DEM RACES linked repeater
- 147.000 PL 103.5 – primary KOC repeater for Windward Oahu
- 147.060 PL 103.5 – State RACES Diamond Head linked repeater
- 444.325 PL 103.5 – State RACES Waimanalo linked repeater
- 444.375 PL 114.8 – Waimanalo IRLP repeater

HF Frequencies:

- 7.080 USB – SKYWARN voice and Fldigi
- 7.088 LSB – State RACES voice and Fldigi
- 7.090 USB – primary KOC for voice and Fldigi

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INCIDENT RADIO COMMUNICATIONS PLAN	1. Incident Name	**2. Date/Time Prepared**	3. Operational Period Date/Time

4. Basic Radio Channel Utilization

Radio Type/Cache	Channel/Freq	Tone	Function	Assignment	Remarks
FRS HAM					
FRS HAM					
FRS HAM					
FRS HAM					
FRS HAM					
FRS HAM					
HAM					
FRS HAM					

5. Prepared by (Communications Unit)

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GENERAL MESSAGE

TO:	**POSITION**
FROM	**POSITION**
SUBJECT	**DATE/TIME**

MESSAGE:

DATE	**TIME**	**SIGNATURE/POSITION**

RECEIVED FROM	**DATE**	**TIME**	**RADIO POSITION/OPERATOR**	**MSG NUMBER**
SENT TO	**DATE**	**TIME**	**RADIO POSITION/OPERATOR**	**MSG NUMBER**

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UNIT LOG	1. Incident Name	2. Date Prepared	3. Time Prepared
4. Unit Name/Designators	5. Unit Leader (Name and Position)		6. Operational Period

7. Personnel Roster Assigned		
Name	ICS Position	Home Base

8. Activity Log	
Time	Major Events

9. Prepared by (Name and Position)

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INCOMING/ OUTGOING/ PENDING MESSAGE LOG for Event/Incident ______________________________

Date: ________________ Operator: ________________________________ Callsign: ____________________

MSG NO.	DATE/TIME	TO:	FROM:	SUBJECT

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NET CONTROL STATION LOG

EVENT / INCIDENT NAME	DATE	PAGE NUMBER
		OF
NET NAME	NET FREQUENCY	CALL SIGN OF OPERATOR-IN-CHARGE

TIME HST / UTC	RADIO CALL SIGN	CHECK IN	CHECK OUT	OPERATOR NOTES AND/OR TASK PENDING	TASK CLEARED

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APPENDIX J – KOC Forms

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APPENDIX K – List of Supplies and Equipment

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KOC Supplies and Equipment

- Tables and chairs
- Easel/paper
- Colored markers
- Maps of Kailua (ideal if laminated)
- First aid supplies
- Tarps (red, yellow, green & black for medical treatment area)
- Various tools (wrenches, crowbars, shovels, etc.)
- FRS radios
- Tent
- Flashlights/lanterns
- Generator(s)
- Extension cords
- Power strips

Kailua CERT Supply List

GREEN CERT BACKPACK CONTENTS (given at Diamond Head exercise)

- 4 in 1 tool
- 5 in 1 whistle
- All weather notebook
- CERT Field Operations Guide
- CERT vest
- Crescent wrench (adjustable wrench)
- Duct tape
- Emergency/survival blanket
- Goggles
- First Aid kit (assimilated into my first aid kit)
- Flashlight w/2 batteries (replaced with Duracell 500 lumen light)
- Folding shovel
- Hand sanitizer
- Hard hat
- Leather work gloves
- Light stick
- N95 Dust masks
- Paramedic/EMT scissors
- Poncho
- Sharpie pens/permanent markers
- Tarp
- Trash bag
- Triage tape

PACKING YOUR CERT BACKPACK

Use different color bags to group items in the main compartment: 1) first-aid bag, 2) hard hat bag and 3) tool bag. Using bags makes retrieving items fast and easy.
(*) Indicates additional items not originally included with CERT backpack.

First-Aid Bag

- Antibacterial ointment (i.e. bacitracin)*
- Antiseptic wipes (alcohol-based OK)*
- Applicators*
- Assorted adhesive bandages
- Benadryl cream*
- Emergency/space blanket*
- EMT scissors
- Finger splints*
- Gauze pads (2x2, 3x3s, 4x4s, 5x9s and eye pads)*
- Insect-sting relief treatment (i.e. AfterBite)*
- Instant cold compress*
- Medical adhesive tape* (1" or 1.5", can cut thinner if needed)
- Mole skin*
- Pain-relief medication*
- Roller bandage*
- Safety pins*
- Splinter (fine-point) tweezers*
- Triangle bandage w/safety pins (3)*
- Vinyl gloves*

Hard Hat Bag

- CERT vest
- Ear protection*
- Hard hat liner (sweat band, bandana, etc.)*
- Goggles
- Hard Hat
- Knee pads*
- Leather work gloves
- Mechanic gloves
- N95 dust mask (should have 2 or 3)
- Safety glasses*

Tool Bag

- 6 in 1 screwdriver*
- Channel lock pliers*
- Crescent wrench
- Duct tape
- Folding saw*
- Marking paint*
- Paracord*
- Rope*

TOOL CARRIED IN THE CAR

Tools add a lot of weight to the backpack. So to cut down on weight I carry additional tools in my car. The following tools are easily accessible from my car.

- 4 in 1 tool
- Bolt cutters*
- Drill and drill bits*
- Electric screwdriver and bits*
- Fat Max demo bar*
- Folding shovel
- Hammer*
- Handy rescue tool*
- Hatchet*
- Jumper battery (i.e. diehard 1150)
- Jumper cables*
- Machete*
- Extra duct tape*
- One wrap*
- Painters tool*
- Pry bar*
- Ratchet set*
- Staple Gun*

FITTING IT ALL IN THE BACKPACK

NOTE: Threading some colored paracord through the zipper tabs will make them easier to find and open or close.

Before you run out to buy supplies, check around the house. Most of the extras items can be found in your office supplies, garage and medicine cabinet.

Inside Main Compartment of Backpack
- Tarp-against the back
- Poncho/rain gear-on the bottom
- First-Aid Kit
- Hard hat bag
- Tool Bag

Outside Backpack
- Hand Sanitizer (w/snap link to hang on outside of bag)

Top Pocket - Outside
- Triage tape
- Medical gloves (vinyl, NOT latex) put a multiple pairs in a zip bag
- Ziplock bags (quart and gallon size)
- Trash bags (30-gallon or larger)

Little Pocket Inside Top Pocket
- Mirror*
- Emergency Poncho (leave wrapped until you need it)

- Emergency/space blanket

Mesh Pocket on the Front of the Top Pocket

- 5 in 1 Whistle (could also be attached to lanyard)
- Stick light (chemical)
- Stick light (battery)*
- Flasher*

Bottom Pocket

- All weather notebook
- CERT Field Operating Guide
- Emergency Response Guidebook (ERG)*
- Hand sanitizer
- Magnifying glass*
- Toilet Paper*
- Whistle and mini flashlight on a lanyard*

Organizer Pocket Inside the Bottom Pocket

- Car keys*
- Lumber Crayon (Orange or red to show up on various colors of house siding)*
- Pens and pencils
- Sharpies/Permanent markers

Little Pocket Outside of the Bottom Pocket

- Extra batteries
- Extra light

Webbing Across Front of Bottom Pocket

- CPR mask*
- Measuring tape*
- Multi-tool*
- Snap-links*

Right Side Mesh Pocket

- Bottle of drinking water*
    - Consider insulated container, good one keeps drink hot or cold all day

Left Side Pocket

- Container of quarters & singles for phone, snack/soda machine, etc.*
- Energy Bars, jerky, snacks*
- Eating utensils (spork, chopsticks, etc.)*
- Electrolyte replacement, flavor packets for water
- Fisher space pen*
- Gum*
- Sheath Knife*
- Lighter*
- Miniature LED Headlight*

- Personal needs (i.e.: Toothbrush/paste, floss, Vaseline, sunscreen. spare glasses, medications)*

Fully loaded (without water) the bag weighs about 22 pounds.

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