MAUNAKEA EMERGENCY PROCEDURES
June 2021

INTRODUCTION:
Maunakea is an isolated work location, many miles from the nearest professional Emergency Medical Service (EMS). It is important that everyone working on the mountain understand the procedures that should be followed in case of an emergency. This document describes how to access the various services available, and also describes the limitations of these services on Maunakea. **The most important aspect of working on Maunakea is to minimize accidents and injuries through the use of safe work practices and to protect the natural and cultural resources. This includes prudent driving and driving at or below the posted speed limits.**

PREPAREDNESS:
The bulk of this document deals with medical emergencies, but it also addresses many other emergency situations.
The primary source of first aid assistance must be the work location itself. Each facility should have staff trained in first aid and CPR and should maintain a stock of emergency first aid supplies and equipment. The equipment and supplies stored should be comparable to the level of training of the facility staff. It is suggested that each facility have quick access to an Automatic External Defibrillator (AED).
Each facility should establish a regular schedule for training, first aid drills, testing of emergency and safety equipment, and testing the use of the EEV (Emergency Evacuation Vehicle) and the equipment it contains.

MAUNAKEA RANGERS: When fully staffed, there are a minimum of two Rangers on duty daily from 7:00 a.m. to 10:00 p.m. Their offices are in the HP Common building. Their standard workday includes 4 x 2.0 plus hour summit patrols. The Rangers have emergency medical responder training and carry oxygen, backboards, AED, splints, and assorted 1st aid supplies in their vehicles. They are available for assistance in an emergency, however, *911 should still be called immediately and before contacting Rangers* for any serious emergency (i.e. cardiac arrest, altered level of consciousness, difficulty breathing, chest pain, severe bleeding, motor vehicle crash with significant damage, etc). The Ranger vehicles are clearly marked with "RANGER" on each side and have an emergency light on the roof.

RANGER CONTACT: 934-9244 (VIS priority line 9 a.m. to 7:00 p.m.) **969-9613** (HP Ranger office) **Note that the VIS is currently closed but reopening plans are in progress. Until the VIS reopens, follow the after-hours procedure for contacting Rangers)**
The Rangers work closely with the VIS staff and a call to the VIS Priority Line during the hours mentioned above is the most reliable means of contacting them. The VIS staff will know the cell phone number of the Ranger on summit patrol. Remember, reception for these phones is limited on the summit. If it's between 7:00 a.m. and 9 a.m. or from 5 p.m. to 10 p.m, first try the Ranger office, and if no answer, call the dining facility at 935-7606. The Cooks can use a radio to

see if any Rangers are around HP. *However, in an emergency, call 911 first.* Rangers will respond when contact is made. As more observatories get Ranger portable radios, the Public 1 channel is monitored by Rangers on the summit. If no Rangers are available, use the MK Emergency phone numbers to contact the duty supervisory Ranger.

EMERGENCY EVACUATION VEHICLE (EEV):
If facility vehicles are inadequate, and an accident victim needs to be transported to an EMS location, the EEV is available. The purpose of this vehicle is to provide a means of transporting an injured party down the mountain. The EEV is NOT equipped as an ambulance, but does have a portable stretcher that could make transport of a victim more comfortable. (Note: Because of the height of the van's floor, two people are needed to put the loaded stretcher into the van.) It's also stocked with basic emergency first aid supplies, but should not be considered as the primary source of these items. Each facility is responsible for their medical supplies. In most cases, when the injured party doesn't need to be put in a prone position, it will be more convenient and faster to take the patient down in a facility vehicle, rather than in the EEV.

Keys to the EEV and instructions on its use are kept at each facility -- the location should be made known to all staff members. The EEV is a dark-red Ford Van with white lettering "Mauna Kea Observatories Emergency Evacuation Vehicle". It's stored on the pavement outside the Caltech Submillimeter Observatory (CSO).

Every use of the EEV must be reported to MKSS. Please read the instructions located at each facility about the EEV. Facilities are urged to provide hands-on training with their staff on the operation of the EEV.

Since the EEV is a unique vehicle with unique equipment, it is suggested that each facility take the EEV to their facility for some hands-on training. To do this, simply send a message out to the "road-conditions@ifa.hawaii.edu" email to inform other summit staff where the vehicle is in case they have an emergency. Please report any maintenance issues directly to the MKSS General Manager and MKSS Utilities Manager.

LOGISTICAL CONSIDERATIONS:

COMMUNICATIONS:

911: The Island of Hawaii has a 911 emergency phone system. This number should be used for all emergency situations. It will connect you with the Hawaii County Police Department. After dialing 911, the 911 dispatcher will ask if you need police, fire, or ambulance. After relating your need, the 911 dispatcher will transfer your call to the appropriate agency. Make sure the extent of the emergency is made clear, so the appropriate resources are dispatched. The County Fire Department will co-respond with Pohakuloa Training Area (PTA) Fire Department units. Do not hesitate to call 911 during an emergency situation. The sooner you call, the sooner help can arrive. If in doubt, call 911.

The emergency units being dispatched can always be cancelled if not needed. Remember to stay on the line. Do not hang up until told by the dispatcher.

EMS RESPONSE:

Ambulances: Both the Hawaii County Fire Department and PTA have ambulances available. Since PTA is located at the 36-mile marker on Saddle Road, they can potentially arrive first at an accident scene (this has often been the case in actual emergencies). Hawaii County ambulance response time will vary depending on which ambulance is available to respond. PTA has a 4X4 ambulance that can reach HP or the summit if weather conditions permit. Personnel involved with an evacuation must always be prepared to drive the victim to Saddle Road or further. If the victim cannot be transported, and weather conditions are severe, arrangements may be needed to transport EMS personnel to the location of a victim. The Maunakea Rangers and MKSS Utilities staff can possibly help with this task.

Helicopters (911): Ideally, helicopters can provide the fastest service during a summit emergency. However, in most cases, due to weather or carrying capacity in the thin summit air, a helicopter will not be able to transport victims off the summit. For this reason, all emergency plans MUST focus on evacuation to lower altitudes. If a helicopter can meet the rescue team at the summit, or on the way down, professional assistance will be available sooner, but you MUST be prepared to handle the emergency using ground based transportation.

If a helicopter is to be utilized, ensure the landing area is cleared of possible wind blown hazards and provide a call to 911 to relay wind speed and direction. Updates on weather conditions should be relayed through the 911 Dispatcher. Possible helicopter landing sites include the hunter's check station at Saddle road (Pu'u Huluhulu), the roadway at Halepohaku, the first parking lot at the beginning of the paved road, and the 2nd parking lot, just below the 13,000 foot level. See the map on page 9.

Hawaii County Fire Department Helicopters: The County of Hawaii has two helicopters that are small, not instrument rated, and not ideal for high altitude flights. They may be available for transporting EMS personnel to the summit, but only under ideal conditions. Generally, the helicopters have been used to meet at Halepohaku or Saddle Road. Helicopter service is available 24 hours per day with limitations – weather, visibility and pilot discretion. If helicopter service is desired, inform the 911 dispatch when your emergency call is made.

Army National Guard helicopters: The Hawaii Island Army National Guard may have Blackhawk helicopters on site. If the emergency is serious, they can be requested through the County Civil Defense office (935-0031). If they are available and dispatched, the agency making the request may be billed for their expense/operational cost.

FIRE, SEARCH AND RESCUE RESPONSE:
Both the Hawaii County Fire Department and PTA have Fire Protection, Search and Rescue services available. The County Fire Department has dedicated

specialized Heavy Search and Rescue Teams and HAZMAT Teams. However, no organization in Hawaii has winter weather rescue capability.

ACTION PLAN:
The plan of action must take into account the seriousness of the accident, medical abilities of the on-site personnel, the first aid equipment available, and the limitations described in the previous sections.

If professional EMS is needed, the primary plan should be to evacuate the victim from the site in a vehicle and meet the EMS personnel somewhere down the road. EMS personnel are available from both the Hawaii County Fire Department and PTA. PTA is closer to Maunakea, and can potentially reach Maunakea quicker than the County Fire Department.

Once an accident or illness occurs, it is important to evaluate the seriousness of the problem and adopt a plan of action. The standard sequence or response is **CHECK, CALL, CARE** (**CHECK** the scene for safety, number of victims, seriousness of the injuries; **CALL** 911 and direct others to assist; Provide **CARE** to the level of your training). In order to provide the correct level of response, it is important to understand the services available, their limitations, and the means of contacting them.

1. CHECK THE SCENE AND THE VICTIM in order to determine the extent of the injury or illness, possible cause of the incident, and any hazard still present. Does the victim have any visible wounds, is there any bleeding, is the victim in a seizure, and is the victim conscious? When checking an unconscious victim, the standard 1st aid inspection sequence is A,B,C (Airway, Breathing, Circulation).

2. CALL 911, and be prepared to provide the following information:

a. **Your Name, Location, and contact phone number.** (summit of Maunakea, Halepohaku, etc.).

b. **The number of victims involved.**

c. **A description of the circumstances** surrounding the injury or illness.

d. **A description of the victim's symptoms.**

e. **Let the 911 Dispatcher know how urgently EMS personnel are needed.**

f. **Describe the weather conditions.** If a helicopter flight is being considered, wind speed, cloud cover, and visibility are the most important factors in determining if a helicopter can be sent.

g. **Establish the prime meeting location as the 28-mile mark on Saddle Road.** Contact may be possible further up the road depending on the availability of a helicopter and the time needed on sit to mobilize the victim. The EMS agencies have been sent a copy of the Access

Road Map for reference. See below for specific meeting place information.

h. **Describe the vehicle that will be driven to the meeting place.** If the EEV is used, it is a dark red Ford van, with white lettering on the side; "Mauna Kea Observatories Emergency Evacuation Vehicle". There is a flashing red light on the top. Give the 911 operator the cellular phone number of anyone in the vehicle.

Meeting Place: Once contact has been made with 911, it is important to establish a primary meeting location. Because of the uncertainty of the helicopter service, **the primary meeting place should be the hunter's check station (Pu'u Huluhulu) at the Saddle Road 28-mile marker or as instructed by the 911 operator.** This is at the bottom of the Maunakea access road, about 30 to 40 minutes from the summit. An ambulance from Hilo and a vehicle leaving the summit will meet there at about the same time. On scene personnel should always make this their basic plan. Once mobilized, the actual meeting place might change depending on the availability of a helicopter, and the source of an ambulance. The cellular phone in the EEV should be very helpful for making these changes. The color of the EEV and the flashing red light should make it easy to spot on the road. Whenever the EEV is parked during an emergency, the hazard lights and flashing roof light should be kept on so that it is visible to other traffic on the roads – especially in fog or rain.

Halepohaku is the secondary meeting place. This site can be chosen if mobilization from the summit allows the ambulance to get a head start, or if a helicopter is dispatched.

The First Parking Lot on the Summit Road pavement is the third choice of a meeting place. This location might be chosen if it is known that a helicopter has been dispatched, or if it is felt that the patient couldn't survive the rough cinder road. For instance, it is difficult to perform CPR on a patient while driving on the rough road.

The fourth choice for a meeting place would be the second parking lot on the access road. This might be chosen if the helicopter pilot feels that this is the best place to land under the current weather conditions.

The fifth choice of a meeting place is the accident site itself, and should only be chosen if there is no means of transporting the victim without professional assistance.

A worst-case scenario might be when the patient cannot be transported down the road, a helicopter unavailable, and the ambulance cannot drive above HP. In that case, a Ranger or MKSS Utilities staff person could be contacted to drive the EMS personnel to the victim.

EMERGENCY SITUATIONS:

ALTITUDE ILLNESS: The low atmospheric pressure experienced at the summit, and even Halepohaku, can cause medical problems, generally called Altitude

Sickness. The symptoms can include nausea, shortness of breath, headaches, and dizziness. Medical oxygen may help relieve the symptoms, but the best treatment for altitude sickness is to transport the victim down to a lower altitude. If this does not relieve the symptoms, the victim should be taken to a hospital, or 911 should be called. Severe cases of altitude sickness can result in pulmonary and cerebral edema, both life-threatening conditions.

OXYGEN: Most of the facilities and the EEV are equipped with oxygen. Oxygen can be useful to temporarily relieve some altitude related symptoms and to increase the blood oxygen for those under respiratory distress. The use of oxygen has been shown to markedly improve both physical and mental function while working at altitude and may be used at a low flow rate routinely by those who wish to improve their performance. If CPR is employed on a patient, the use of oxygen for the caregiver will help reduce the fatigue brought on by the stress and exertion at altitude. If the patient is on oxygen, the dispatcher may be able to connect you to EMS to help determine the appropriate oxygen flow rate.

FIRE: One little known effect of the altitude is that moderately combustible materials at sea level often become more easily flammable at 14,000 feet because they vaporize more readily. The observatories are equipped with fire extinguishers. A small fire may be extinguished if action is taken quickly. However, fires often become out of control much faster than anticipated. Once there is a fire, every effort must be made to protect personnel within the facility. Each facility will have an evacuation plan that should be followed. Call **911** in order to have fire fighting and medical personnel dispatched to the site as quickly as possible. Inform the Maunakea Rangers of the situation.

WEATHER HAZARDS: In spite of its proximity to the lush tropical coastline, Maunakea is exposed to severe weather at the summit. During the winter, the temperature can reach below –10 degrees Celsius (14 F) with winds in excess of 100 mph. During these conditions, snow can accumulate on the roads very quickly, preventing evacuation. A winter storm can last as long as a week. Entrapment on the summit during these conditions is life threatening as Emergency Responders on Hawaii Island do not have snow/winter weather rescue capability. CMS Rangers & MKSS Staff will not go to the summit during winter storms so it is imperative all Observatory personnel evacuate before road conditions deteriorate. Although snow and ice are more likely to occur in the winter, snow can occur at anytime of the year. The Maunakea Weather Center provides accurate forecasts so that these conditions can be anticipated. http://mkwc.ifa.hawaii.edu/

THREATENING SITUATIONS: In the recent past there have been incidents on Maunakea where individuals have blocked roads, trespassed, and created a variety of disturbances. If such an event or situation develops, avoid confrontations even when inconvenienced, and if confronted remain calm and cool and don't escalate the situation. Try to be observant and make mental notes that will help identify those involved. If vehicles are involved, the color, make, and license number will be very useful information. Call **911** immediately any time there is a threat or laws are being broken. Write notes at the earliest opportunity to assist in any follow-up investigations that may take place. Inform the Maunakea Rangers about the situation.

EARTHQUAKE: Earthquakes strike without warning. If you are indoors:

- Drop to your hands and knees to avoid being knocked down and cover your head & neck with your arms. Only move if you need to get away from the danger of falling objects.
- If you can move safely, crawl for additional cover under sturdy furniture or an interior wall corner.
- Stay where you are until the shaking stops.

If you are outdoors:

- Move away from buildings, streetlights and utility wires.
- Drop, cover and stay there until the shaking stops.

If you are in bed:

- Stay there and cover your head and neck with the pillow.
- Don't attempt to move in the dark until the shaking stops.

If you are in a moving vehicle:

- Stop as quickly as possible and stay in the vehicle.
- Avoid stopping near any buildings, trees or utility wires or areas where a landslide may occur.

Post-Earthquake Safety Tips:

- Watch out for unsafe roads or buildings.
- There will be after-shocks.
- Don't touch electrical equipment
- Look out for landslides and any falling rocks on the summit access road.
- Inspect your area to make sure there are no leaks (propane tanks, gasoline & diesel tanks, water).
- Check for any building damage that might impact operations of the facility.

HURRICANE: Storm watches and warning are issued by the Central Pacific Hurricane Warning Center in Honolulu. All facilities staff should be familiar with this site and pay attention to area weather forecasts. All staff should know where the island storm shelters are located and be prepared to evacuate their facilities well before storm conditions exist.

Note that the buildings at Halepohaku are not to be used as hurricane shelters. In the event a hurricane/tropical storm watch is issued, actions by MKSS will depend upon the forecast and range from watchful normal operations to the closing and evacuation of all facilities at Halepohaku. If HP is to be closed, the F&L Manager will ensure all HP guests are informed well before storm conditions exist and given directions and the location of island storm shelters.

ACTIVE SHOOTER: If there is an active shooter in your vicinity, quickly determine the most reasonable way to protect your own life. Remember, others in the vicinity are likely to follow your lead. Take the following steps as appropriate:

- Evacuate if there is an accessible escape path.
- If evacuation is not possible, find a place to hide.
- Blockade doors with heavy furniture
- Silence your cell phone
- Turn off any source of noise (radio, television)

- If evacuation or hiding out are not possible, call 911 and alert police to the shooter's location. If you cannot speak, leave the line open to allow the dispatcher to listen.
- As a last resort, and only when your life is in imminent danger, take physical action against the active shooter. Fight for your life.
- When law enforcement arrives, put down anything in your hands, remain calm and follow officer's instructions.

EVACUATION AT HALEPHAKU: Should a sudden evacuation be required, the following assembly areas will be used:

- Should evacuation of the main dining facility or dorms be required, the assembly area is the Visitor Information Station. If the Visitor Information Station or construction camp & cabins are evacuated, the assembly area is the main dining facility at Halepohaku. If the entire mid-level facilities at Halepohaku are evacuated, the assembly area will be the MKSS warehouse & office in Hilo. If the Halepohaku mid-level facilities are to be evacuated and the Maunakea Summit Access road below Halepohaku is blocked, evacuation up to any of the summit observatories should be considered.
- Two people will remain nearby after the site has been evacuated (if safe) to assist local responders and advise them of the nature and location of the incident.
- Designate one person to account for personnel in the onsite assembly area.
- A designated person will account for personnel at alternate assembly area(s).

HAZARDOUS MATERIAL SPILL: Each organization is responsible to maintain a hazardous material spill plan for their facility and provide appropriate training and equipment for their staff. Key principles to use in the event of a spill are:

- If you feel you or others are in danger, evacuate the area and call 911.
- Put on safety equipment.
- Stop the spill if it is still ongoing.
- Isolate the area and prevent the spill from spreading.
- Contact Rangers and MKSS staff. If after normal working hours, contact the MKSS General Manager and the Chief Ranger.
- Clean up the spill if you are safely able to do this.

There is an emergency fuel pump shutoff button on the outside of the Utilities building directly across from the Halepohaku fuel pumps. A spill kit is located on the side of the fuel pumps at Halepohaku. It contains absorbent booms, gloves and goggles. A second spill kit is located in front of the water tank at the Utility Shop has more absorbent booms, absorbent pads and Floor-Dry, which looks like "kitty litter." MKSS Utilities staff vehicles and road maintenance heavy equipment also contain portable spill kits.

MISSING PERSON/LOST HIKER: Locating a missing person or lost hiker starts with receiving relevant and pertinent information. If the lost hiker is making the report, have him/her keep their current position if safe to do so then contact 911 with the location. After contacting 911, contact the Rangers or VIS staff. If unable to contact any Rangers or VIS staff, use the Emergency Contact list and contact the Chief Ranger and the MKSS General Manager.

The key principles and duties of anyone receiving a report of a missing person/lost hiker are:

- Ensure the lost hiker form is properly completed.
- Call 911.
- If missing person is in communication, have them stay put unless it is unsafe to do so. Using a sounding devise (vehicle horn) can be beneficial in helping someone find his or her way.
- When EMS arrives, update them with any additional information.
- Rangers and MKSS staff will assist and follow the lead of the 911 SAR Team.

ENVIRONMENTAL AND CULTURAL CONCERNS: Maunakea is located in a conservation district area. Every effort should be made to prevent damage to the environment and to protect cultural sites. Any time vehicles are seen driving off existing roads, or people are hiking off trails, the State Department of Conservation and Resource Enforcement (DOCARE) should be informed. (974-6208 during weekdays, ask operator for Enterprise 5469 after hours and on weekends/holidays. The Maunakea Rangers should also be informed. Should there be any damage to archaeological sites, SHPD should be informed.

COMMUNICATING WITH OTHER OBSERVATORIES: Page 14 lists the **Maunakea Observatories Emergency Phone Numbers**. This contains contacts for all of the Observatory offices, summit facilities and includes after-hours numbers personal phone numbers. Please call the other observatories when you become aware of a condition that may be a peril to them. An easy way is to send an email to road-conditions@ifa.hawaii.edu A message sent to this address sends an email to each Observatory. This email is then distributed to selected Observatory staff. This email should be used to warn others about a hazard when an unsuspected condition has been encountered, such as an icy spot on the road or snowdrifts. The HP whiteboard should also be used to warn other staff and personnel about dangers / hazards.

DISTRIBUTION: This memo will be updated and redistributed every year to all facilities, the County Fire Department, Hawaii Police Department, Civil Defense, and PTA. Please make copies and distribute among your staff. If you have suggestions for improving this document, please contact the MKSS Hilo office.

Phone: 974-4205, fax: 974-4215, email: eshunter@hawaii.edu

EMERGENCY EVACUATION CHECK LIST

1. EXAMINE THE VICTIM AS PER FIRST AID TRAINING

2. CALL 911 WITH THE FOLLOWING INFORMATION

- **A. YOUR NAME, LOCATION [AND CONTACT PHONE NUMBER]**
- **B. THE NUMBER OF VICTIMS**
- ***C. DESCRIBE HOW THE ACCIDENT OR ILLNESS OCCURRED***
- **D. DESCRIBE THE VICTIM'S SYMPTOMS**
- **E. INDICATE THE URGENCY NEEDED FOR TREATMENT**
- **F. DESCRIBE THE WEATHER CONDITIONS**
- **G. ESTABLISH THE PRIMARY MEETING PLACE (see below)**
- **H. DESCRIBE THE VEHICLE USED TO TRANSPORT VICTIM**

IMPORTANT PHONE NUMBERS:

911	**Island Wide Emergency Services (Police/Fire/EMS)**
(808) 430-7720	**EEV Cellular Phone**
961 – 8336	**Hawaii County Fire Department Non-Emergency Line**
969 – 2448 **969 - 2447**	**PTA Fire Department (24 hrs/day)**
969 - 2429 **969 – 2430**	**PTA Police (Department of Army) (24 hrs/day)**
969 – 2400 **969 – 2401**	**PTA Post Headquarters**
961 – 2180	**Visitor Information Station (10 a.m. – 7:30 p.m.)**
934 – 9244	**Visitor Information Station priority line (9:00 a.m. – 7:30 p.m.)**

EMERGENCY MEDICAL SERVICES MEETING SITES:

1 - SADDLE ROAD (This is the most reliable site.)

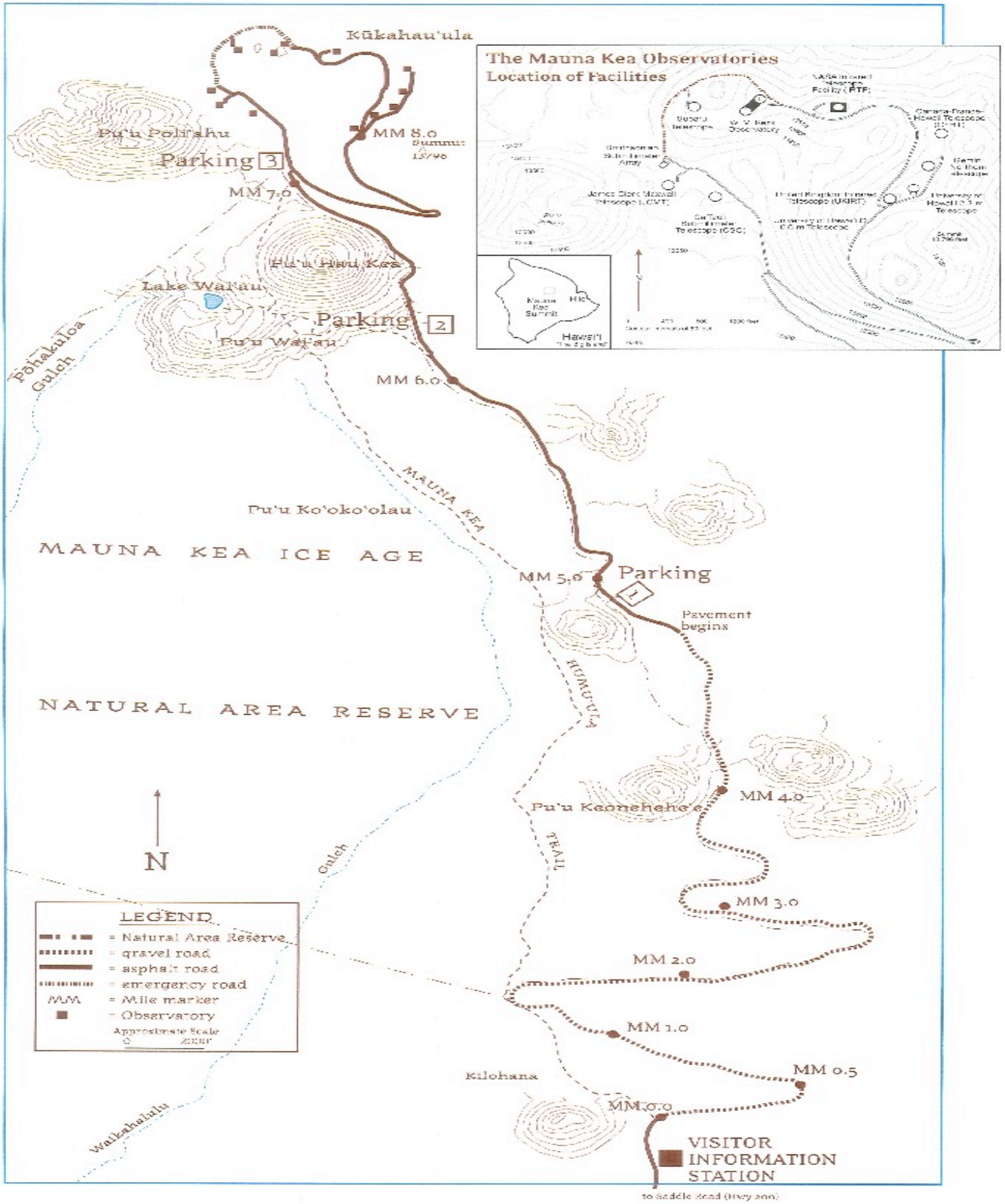
2 - HALEPOHAKU

3 - 1ST PARKING LOT (Park 1)

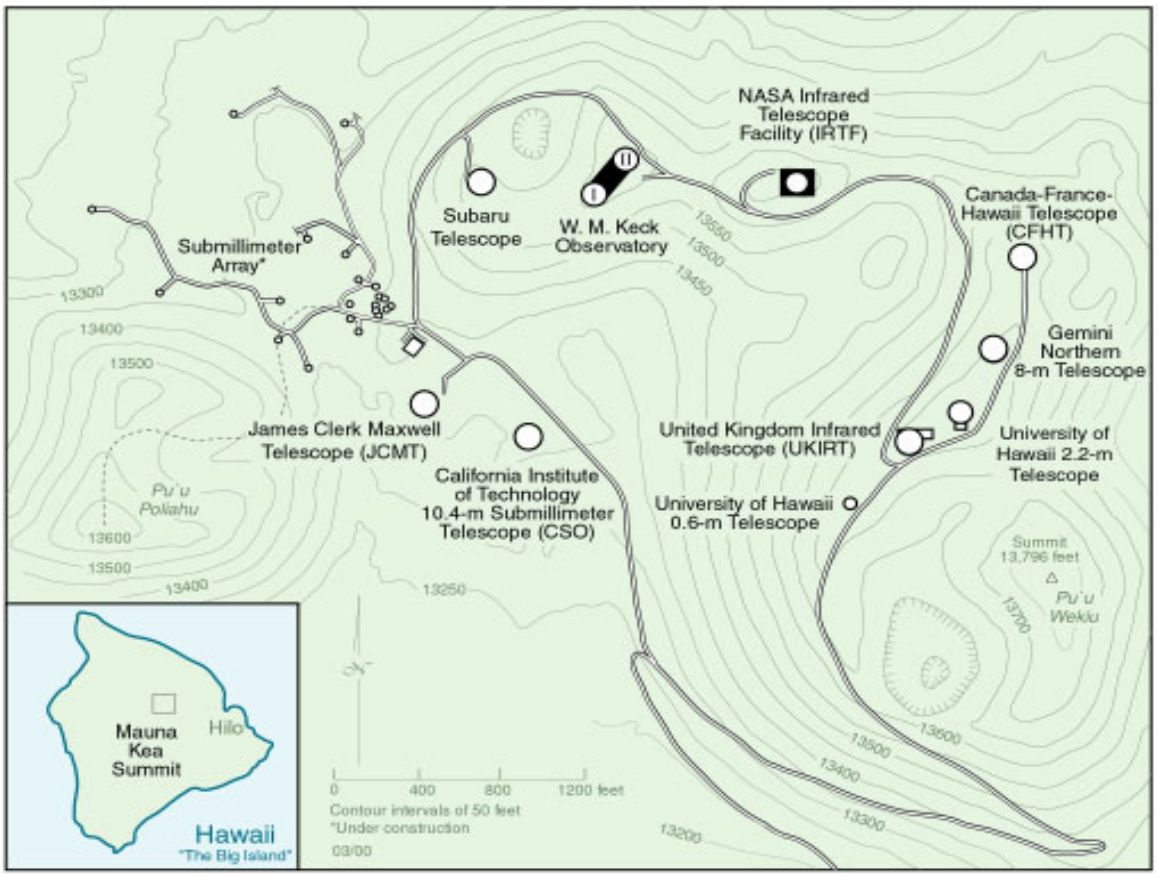
4 - 2ND PARKING LOT (Park 2)

5 - ACCIDENT SITE

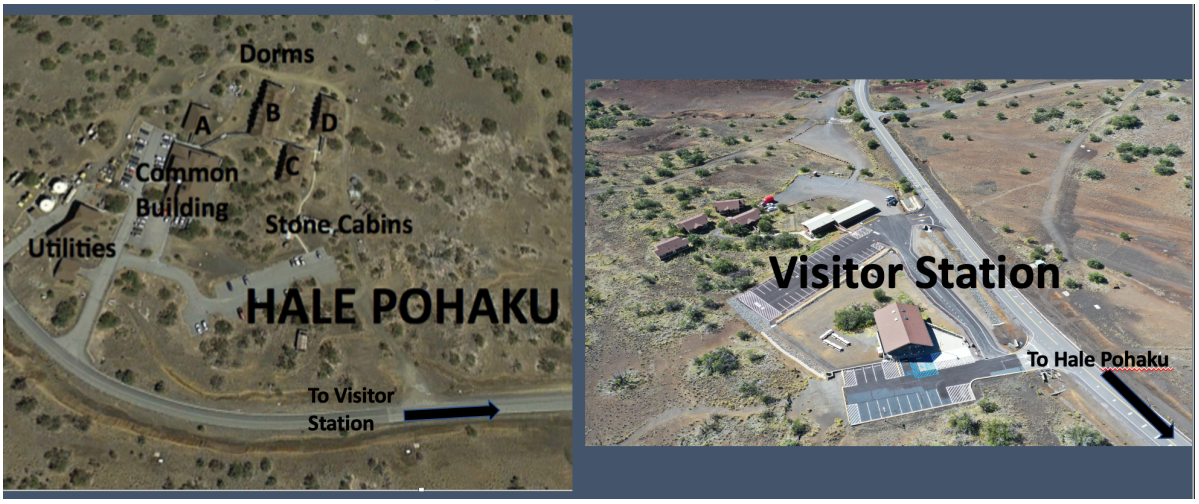
MAUNAKEA ACCESS ROAD MAP



MAUNAKEA OBSERVATORIES SITE MAP



Site Map of Mid-Level Facilities



MAUNAKEA WINTER HAZARDS

Along with all of the general hazards encountered at the high elevation of Maunakea, there are additional hazards during the winter months.

WEATHER

Near the summit, winter weather can produce temperatures below 10 degrees. High winds create chill factors as low as 40 degrees below 0. Snow and ice can rapidly make the road hazardous or impassible. Winter storms can last for over a week, and anyone trapped on the upper roads is in a life-threatening situation. **DO NOT GET TRAPPED ON THE MOUNTAIN. EVACUATE BEFORE ICE OR SNOW BEGIN TO FORM ON THE ROAD.**

SNOW PLAY

Snow on the slopes of Maunakea often becomes covered with ice and there is little control of speed or direction when sliding. The bottoms of the steep slopes generally end in rocks. Striking these rocks will/has caused serious injury and can be fatal. Anyone engaged in snow play should be very cautious and always use equipment that is designed for this purpose and is controllable, such as a sled, snowboard or snow skis. The use of a boogie-board, inner tube or a car hood is strongly discouraged as these items are not controllable.

ALWAYS BE CAUTIOUS WHEN SKIING, SNOWBOARDING OR HIKING ON THE STEEP SLOPES.

SUNLIGHT

The already strong ultraviolet (UV) sunlight at the summit is intensified by reflections off the snow on the ground. The cool air temperature masks the sensation of sunburn. Even short exposure times can result in severe sunburn and snow blindness. **WEAR SUNSCREEN AND USE SUNGLASSES!**

FALLING ICE

In the winter, ice regularly forms on the observatory buildings and other structures. This ice melts in the daytime and large chunks fall to the ground without warning. In the past, vehicles have been completely destroyed by ice falling from buildings. **DO NOT APPROACH OBSERVATORY BUILDINGS AND OTHER STRUCTURES WHEN ICE IS PRESENT.**

TRAFFIC

Stopping distances are greatly increased when there is snow or ice on the road. Drivers should expect to see a lot of vehicles and pedestrians on the road. **DRIVE SLOWLY AND WATCH FOR PEDESTRIANS. LIKEWISE, PEDESTRIANS MUST LOOK FOR VEHICLES BEFORE STEPPING OUT ONTO THE ROAD.**

Maunakea Emergency Phone Numbers

CFHT (Canada France Hawaii Telescope)	885-7944
Summit	961-2630
After Hours: Andy Sheinis	885-3136
	c: 365-2574
After Hours: Ivan Look	885-3168
	c: 936-0752
Casey Elizares	961-2630
	c: 443-7149
Tracy Yost	885-3118
	c: 937-0856
Remote Observer Office	885-3137
	c: 217-7410
Virgina Aragon-Barnes	885-3158
	c: 345-2793
CSO (Caltech Submillimeter Observatory)	935-1909
Summit	935-9853
After Hours: Diana Bisel	c: 936-0884
EAO (East Asian Obs) **JCMT**	961-3756
Summit	935-0852
Remote Operations Center	969-6558
	969-6586
After Hours: Jessica Dempsey	c: 640-4243
GEMINI (Gemini Northern Telescope)	974-2500
Summit	974-2650
Remote Ops	974-2553
	974-2554
After Hours: Steve Hardash	c: 938-6402
After Hours: John Vierra	c: 640-4371
IRTF (NASA Infrared Telescope Facility)	932-2300
Summit	974-4210
After Hours: Darryl Watanabe	c: 981-2981
KECK (W.M. Keck Observatory)	885-7887
Summit	935-8643
Keck 1 Remote Ops	881-3878
Keck 2 Remote Ops	881-3883
After Hours: John Baldwin	c: 640-8392
After Hours: Rich Matsuda	c: 987-1251
After Hours: Erin Petrosian	c: 989-2823
SMA (Submillimeter Array)	961-2920
Summit	933-6990
Simon Radford	961-2924
After Hours	c: 333-4871
Rob Christensen	961-2928
After Hours:	c: 938-2253
SUBARU (Subaru Telescope)	934-7788
Summit	935-5861
After Hours: Hideki Takami	c: 940-7557
After Hours: Eiji Kambe	c: 365-6502

c = cell, all other #s = office, 808 area code unless indicated

TMT (Thirty Meter Telescope)	
Office: Michael Sheehan	319-2225
After Hours:	c: 238-2959
Diana Bisel	319-2220
After Hours:	c: 936-0884
UKIRT Observatory	
Summit	961-6091/961-6092
Remote Ops	932-2397
Office	969-6589
TSS General, Hilo	932-2397
After Hours: Tom Kerr	c: 987-0059
UH 88 (Univ. of Hawaii 2.2m Telescope)	
Summit	974-4200
Mark Chun	932-2317
After Hours: Mark Chun	c: 934-7003
Remote Ops: Hilo	932-2394
Remote Ops: Manoa	956-8017
After Hours: Bob Calder	c: 419-0719
After Hours: Luke McKay	c: 987-0161
UHH–Hoku Ke`a (Univ. Hawaii Hilo Educ. Teles.)	
Pierre Martin	932-7028
John Coney	932-7187
Kathy Cooksey	932-7195
VLBA (Very Long Baseline Array)	
Summit	935-6719
Socorro NM Office	575-835-7250
After Hours: Simeon Johnson	c: 854-4784
After Hours: Tony Sylvester	c: 896-8574
CMS (Center for Maunakea Stewardship)	933-0734
RANGERS	464-
Ranger Supervisor Cell Phones	960-3754 or 464-3753
HP Ranger Office	969-9613
MKSS (Maunakea Observatories Support Services)	
VIS Priority (when VIS reopens)	934-9244
Office – Hilo MKSS (7am-4pm)	974-4205
Halepohaku Facility	
HP Dining Room/Office	935-7606
Kitchen Only (Cooks)	934-4417
Utilities Dept.	935-0193
VIS (Visitor Information Station)	934-4550
After Hours: Stewart Hunter	c: 936-5569
F&L After Hours: Robin Hayes	c: 936-6816
Utilites After Hours: Alika Toledo	c: 756-1282
Police, Fire, Emergency	911
County Police Information/Asst.	935-3311
HELCO Trouble Desk	969-6666
After Hours: Amanda Lee	c: 345-4073
DOCARE (DLNR Law Enforcement)	974-6208

SEPTEMBER 2021