Kona, Hawaii

2016 ATom Deployment Guide

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Before Arrival

Travel Documentation

U.S. citizens traveling to Kona, Hawaii need nothing more than a valid form of identification. Non U.S. citizens traveling to Kona require no more travel documentation than is required in the continental U.S.

Schedule

Wednesday, August 3	Thursday, August 4	Friday, August 5	Saturday, August 6
≈ 16:16 arrival from Anchorage	Instrument Access	Instrument Access	≈ 08:00 departure for American Samoa

Daily Schedule

While work and aircraft access schedules will generally follow normal business hours (08:00-17:00), schedule details and updates will be sent to the list serve and posted on the ATom website - https://espo.nasa.gov/atom.

Site Orientation

Per Diem

2016 Per Diem rates as set by the Department of Defense
http://www.defensetravel.dod.mil/site/perdiemCalc.cfm

Locality	Maximum Lodging	Local Meals	Local Incidental	Maximum Per Diem	Effective Date
ISLE OF HAWAII: OTHER	189	118	30	337	04/01/2016

* All rates are in US Dollars

Lodging

ESPO has arranged a room block at the Courtyard King Kamehameha Kona Beach Hotel (75-5660 Palani Road, Kailua-Kona, HI, 96740), which is about eight miles from the Kona International Airport. The hotel rate is $149/night (plus tax). The rate includes free parking and complimentary in-room enhanced high speed internet. ATom participants are required to either call the hotel ((808) 329-2911 or toll free (800) 367-2111 and ask for the special group rate for NASA ATom) or e-mail 'reservations@konabeachhotel.com" with 'NASA ATom' as the subject line and supply their own credit card information. Everyone must check-in at the desk when they arrive and get their room key.

There are three washers and three dryers at the hotel ($2/wash and $2/dry).

Transportation

Rental Cars

ESPO will be arranging rental cars through Air Services Hawaii (the company that is going to perform our aircraft ground handling services) and cars will be waiting for you when you arrive in Kona. ESPO will have arranged for one rental car for each instrument group in response to the group's indication of their rental car requirement. One member of each group will pay for their group's rental car.

Taxis

Taxis in Kona are just like taxis anywhere else in the United States.

Communications

Internet

We've worked with the King Kamehameha Courtyard for enhanced internet to be included in the room rate. The enhanced internet provides download speeds of 7-10 Mbps.

Voice and Text

The voice and text on your phone will work just as it does in the continental U.S. The area code for Kona is 808.

Aircraft Access

The aircraft will be parked adjacent to the Air Services Hawaii building. Access to the aircraft will be through the gate next to the Air Services Hawaii building. Show your NASA ATom badge to an Air Services Hawaii representative and they will escort you through the gate and to the aircraft.

Shipping

Both FedEx and UPS have offices at the Kona airport. FedEx can deliver overnight from the continental U.S. to Kona. Coordinate all shipments to and from Kona with the ESPO site manager.

Health

Hospitals & Clinics

Kona Community Hospital

The Kona Community Hospital is located at 79-1019 Kaukapila Street, Kealakekua, Hawaii, and is about ½ hour drive from the Courtyard. The Hospital is open 24/7 and the emergency phone number is 808-322-9311. The phone number for general hospital information is 808-322-6970.

Hours: 24 hours a day, 7 days a week

STORES/RESTAURANTS

Kona has a very large selection of stores and restaurants. The names, addresses and phone numbers of a number of restaurants can be found in the following table. The table also includes stores, pharmacies, medical services and a laundromat.

RESTAURANTS				
Place	**Address**	**Hours**	**Phone Number**	**Notes**
Kona Brewing Company	74-5612 Pawai Place, Kailua Kona, HI 96740	Sun - Thu, 1100 - 2100; Fri - Sat, 1100 - 2200	(808) 334-2739	pub & restaurant
Splashers Grill	75-5663 Palani Rd, Kailua-Kona, HI 96740	Sun - Thu, 0700 - 2100; Fri - Sat, 0700 - 2200	(808) 326-2212	restaurant
Fish Hopper	75-5683 Alii Drive, Kailua-Kona, HI 96740	Daily, 0730 - 2130	(808) 326-2002	restaurant
Pancho & Lefty's Cantina	75-5719 Alii Drive, Kailua-Kona, HI 96740	Daily, 0800 - 2200	(808) 326-2171	Mexican restaurant
Island Lava Java	75-5799 Alii Dr, Kailua-Kona, HI 96740	Daily, 0630 - 2100	(808) 327-2161	café (great breakfast)
Sushi Shiono	75-5799 Alii Drive, Kailua-Kona, HI 96740	Lunch: Mon - Sat, 1130 - 1400; Dinner: Sun - Thu, 1730 - 2100; Fri - Sat, 1730 - 2200	(808) 326-1696	Japanese restaurant
Humpy's Big Island Alehouse	75-5815 Alii Drive, Kailua-Kona, HI 96740	Mon - Fri, 1100 - 2300	(808) 324-2337	pub & restaurant
GROCERIES/GENERAL				
Place	**Address**	**Hours**	**Phone Number**	**Notes**
ABC Store	75-5660 Palani Rd, Kailua-Kona, HI 96740	Daily, 0700 - 2300		convenient store
Target	74-5455 Makala Blvd, Kailua-Kona, HI 96740	Sun - Fri, 0800 - 2200; Sat, 0800 - 2300		
Safeway	75-1027 Henry St, Kailua-Kona, HI 96740	Open 24/7		groceries
KTA Super Stores	Kona Coast Shopping Center, 74 Palani Rd, Kailua-Kona, HI 96740	Daily, 0500 - 2300		groceries
Sack N Save	75-5595 Palani Rd, Kailua-Kona, HI 96740	Daily, 0500 - 2400		groceries

Home Depot	73-5598 Olowalu St, Kailua-Kona, HI 96740	Mon - Sat, 0600 - 2100; Sun, 0800 - 1900	(808) 326-6013	hardware store
HARDWARE/OFFICE/ELECTRONICS				
Place	**Address**	**Hours**	**Phone Number**	**Notes**
OfficeMax	74-5448 Makala Blvd, Kailua-Kona, HI 96740	Mon - Fri, 0800 - 2100; Sat, 0900 - 1900; Sun, 1000 - 1800		office supplies
Island Tech	North Kona Shopping Center, 75-5629 Kuakini Hwy, Kailua-Kona, HI 96740	Mon - Fri, 0730 - 1700; Sat, 0900 - 1200	(808) 329-8124	computer hardware and cables
PHARMACIES/MEDICAL				
Place	**Address**	**Hours**	**Phone Number**	**Notes**
Target Pharmacy	74-5455 Makala Blvd, Kailua-Kona, HI 96740	Mon - Fri, 0900 - 1900; Sat, 0900 - 1700; Sun, 1100 - 1700		
Kona Community Hospital	79-1019 Haukapila St, Kealakekua, HI 96750	Open 24/7	(808) 322-9311	http://www.kch.hhsc.org
LAUNDROMAT				
Place	**Address**	**Hours**	**Phone Number**	**Notes**
Tyke's Laundromat	74-5483 Kaiwi St #135, Kailua-Kona, HI 96740	Daily, 0700 - 2100	(808) 326-1515	$1.25 per lb., minimum 10 lbs.

Upon Departure

Preflight for the departure to American Samoa will begin approximately three hours prior to takeoff. All rental cars may be left in the Air Services Hawaii parking lot.

You are responsible for obtaining the food you want to take on the outbound flight.

Weather

Weather on all of the Hawaiian Islands is consistent, offering only minor changes in temperature throughout the year. There are really only two seasons: the summer months that extend from May to October and the winter months that run from November to April. The average daytime summer temperature at sea level is 85 degrees F. (29.4 C), while the average daytime winter temperature is 78 degrees (25.6 C). Temperatures at

night are approximately 10 degrees F. lower. However, at higher elevations, temperatures can drop dramatically.

Natural Hazards/Emergency Plans

Earthquakes, hurricanes, tsunamis, volcanic activity, extreme heat, and tornadoes are potential natural hazards in Kona in the summer.

Following any natural hazard incident, all team members must check in with the ESPO site manager when it is safe to do so (either in person or by phone). The ESPO site manager will do a head count to ensure that everyone on the team is safe and accounted for.

Earthquakes

If a major earthquake occurs during the mission,

- At airport - The team will follow the instructions of airport management and local law enforcement.
- At hotel or elsewhere - Shelter in place using the CDC guidelines.

During an Earthquake (from cdc.gov)

Indoor Safety

If you are inside, stay inside. DO NOT run outside or to other rooms during shaking.

In most situations, you will reduce your chance of injury from falling objects and even building collapse if you immediately:

- DROP down onto your hands and knees before the earthquake knocks you down. This position protects you from falling but allows you to still move if necessary.

- COVER your head and neck (and your entire body if possible) under the shelter of a sturdy table or desk. If there is no shelter nearby, get down near an interior wall or next to low-lying furniture that won't fall on you, and cover your head and neck with your arms and hands.

HOLD ON to your shelter (or to your head and neck) until the shaking stops. Be prepared to move with your shelter if the shaking shifts it around.

DO NOT stand in a doorway. You are safer under a table. In modern houses, doorways are no stronger than any other part of the house. The doorway does not protect you from the most likely source of injury–falling or flying objects. Most earthquake-related injuries and deaths are caused by falling or flying objects (e.g., TVs, lamps, glass, bookcases), or by being knocked to the ground.

You can take other actions, even while an earthquake is happening, that will reduce your chances of being hurt.

- If possible within the few seconds before shaking intensifies, quickly move away from glass and hanging objects, and bookcases, china cabinets, or other large furniture that could fall. Watch for falling objects, such as bricks from fireplaces and chimneys, light fixtures, wall hangings, high shelves, and cabinets with doors that could swing open.
- If available nearby, grab something to shield your head and face from falling debris and broken glass.
- If you are in the kitchen, quickly turn off the stove and take cover at the first sign of shaking.

If you are in bed, hold on and stay there, protecting your head with a pillow. You are less likely to be injured staying where you are. Broken glass on the floor has caused injury to those who have rolled to the floor or tried to get to doorways.

Outdoor Safety

If you are outside, stay outside, and stay away from buildings utility wires, sinkholes, and fuel and gas lines.

The area near the exterior walls of a building is the most dangerous place to be. Windows, facades and architectural details are often the first parts of the building to collapse. Also, shaking can be so strong that you will not be able to move far without falling down, and objects may fall or be thrown at you. Stay away from this danger zone--stay inside if you are inside and outside if you are outside.

If outdoors, move away from buildings, utility wires, sinkholes, and fuel and gas lines. The greatest danger from falling debris is just outside doorways and close to outer walls. Once in the open, get down low (to avoid being knocked down by strong shaking) and stay there until the shaking stops.

HURRICANES

If a hurricane is coming, you may hear an order to evacuate. Never ignore an order to evacuate. Even sturdy, well-built structures may not hold up against a hurricane.

You may also hear an order to shelter in place. Sometimes, sheltering in place is safer than leaving.

If You Need to Evacuate:

- Only take what you really need with you, like your cell phone, medicines, identification (like a passport or license), and cash.
- If you have time, turn off the gas, electricity, and water. Also unplug your appliances.
- Follow the roads that emergency workers recommend even if there's traffic. Other routes might be blocked.

If You Need to Shelter in Place:

- Keep listening to the radio or TV for updates on the hurricane.

- Stay inside. Even if it looks calm, don't go outside. Wait until you hear or see an official message that the hurricane is over. Sometimes, weather gets calm in the middle of a storm but then gets worse again quickly.

- Stay away from windows. You could get hurt by pieces of broken glass during a storm. Stay in a room with no windows, or go inside a closet. You can even protect yourself by getting in a bathtub and covering it with a sheet of plywood.

- Be careful. Winds can blow debris — like pieces of broken glass and other objects — at high speeds. Flying debris is the most common cause of injury during a hurricane. You're also at a higher risk of breaking a bone or cutting yourself on loose nails, metal, or other objects.

- Be ready to leave. If emergency authorities order you to leave or if your home is damaged, you may need to go to a shelter or a neighbor's house.

TSUNAMIS

If a tsunami warning takes effect during the mission,

- At airport - The team will follow the instructions of airport management and local law enforcement.
- At hotel - Shelter in place. Move to higher floor if necessary.
- Elsewhere - If you are at the beach or near the ocean and you feel the earth shake, move immediately to higher ground. DO NOT wait for a tsunami warning to be announced. Stay away from rivers and streams that lead to the ocean, as you would stay away from the beach and ocean in the event of a tsunami. A tsunami from a local earthquake could strike some areas before a tsunami warning could be announced.

VOLCANOES

If a lahar, pyroclastic flow, or lava flow is headed toward you

- Leave the area immediately. If you are warned to evacuate because an eruption is imminent, evacuate.

- If you can drive rather than walk, use your vehicle to evacuate. When driving keep doors and windows closed, drive across the path of danger if you can or away from the danger if you can not, and watch for unusual hazards in the road.

If you are indoors

- Close all windows and doors.

- Turn off all fans and heating and air conditioning systems.

If you are outdoors

- Seek shelter indoors.

- If caught in a rockfall, roll into a ball to protect your head.
- If near a stream or river, be aware of rising water and possible mudflows in low-lying areas. Move up-slope as quickly as possible.
- Seek care for burns right away. Immediate care can be life saving.
- If your eyes, nose, and throat become irritated from volcanic gases and fumes, move away from the area immediately. Your symptoms should go away when you are no longer in contact with the gases or fumes. If the symptoms continue, consult your doctor.

Protecting yourself during ashfall

- Stay inside, if possible, with windows and doors closed.
- Wear long-sleeved shirts and long pants.
- Use goggles to protect your eyes. If ash is continually falling, you may not be able to shelter indoors for more than a few hours, because the weight of the ash could collapse the roof of your building and block air intakes into the building. Listen to authorities for advice on leaving the area when ashfall lasts more than a few hours.
- Exposure to ash can harm your health, particularly the respiratory (breathing) tract. To protect yourself while you are outdoors, a disposable particulate respirator (also known as an "air purifying respirator") may be considered. An N-95 respirator is the most common type of disposable particulate respirator and can be purchased at businesses such as hardware stores. It is important to follow directions for proper use of this respirator. For more information, see NIOSH-Approved Disposable Particulate Respirators (Filtering Facepieces) . If you don't have a particulate respirator, you can protect yourself by using a nuisance dust mask as a last resort, but you should stay outdoors for only short periods while dust is falling. Nuisance dust masks can provide comfort and relief from exposure to relatively non-hazardous contaminants such as pollen, but they do not offer as much protection as a particulate respirator. Cleanup or emergency workers may need a different type of breathing protection based on their work activity. Note that disposable particulate respirators do not filter toxic gases and vapors.
- Keep your car or truck engine switched off. Avoid driving in heavy ashfall. Driving will stir up ash that can clog engines and stall vehicles. If you do have to drive, keep the car windows up and do not operate the air conditioning system. Operating the air conditioning system will bring in outside air and ash.

Extreme Heat

Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.

Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults and those who are sick or overweight are more likely to succumb to extreme heat.

What you should do when the weather is extremely hot:

- Eat well-balanced, light, and regular meals.
- Drink plenty of water; even if you do not feel thirsty. Avoid drinks with caffeine. Persons who have epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Limit intake of alcoholic beverages.
- Dress in loose-fitting, lightweight, and light-colored clothes that cover as much skin as possible. Avoid dark colors because they absorb the sun's rays.
- Protect face and head by wearing a wide-brimmed hat.
- Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.

Tornadoes

Signs of an Approaching Storm

Some tornadoes strike rapidly, without time for a tornado warning, and sometimes without a thunderstorm in the vicinity. When you are watching for rapidly emerging tornadoes, it is important to know that you cannot depend on seeing a funnel: clouds or rain may block your view. The following weather signs may mean that a tornado is approaching:

- A dark or green-colored sky
- A large, dark, low-lying cloud
- Large hail
- A loud roar that sounds like a freight train

Sighting a Funnel Cloud

If you see a funnel cloud nearby, take shelter immediately (see the following section for instructions on shelter). However, if you spot a tornado that is far away, help alert others to the hazard by reporting it to the newsroom of a local radio or TV station before taking shelter as described later. Use common sense and exercise caution: if you believe that you might be in danger, seek shelter immediately.

Taking Shelter

Your family could be anywhere when a tornado strikes--at home, at work, at school, or in the car. Discuss with your family where the best tornado shelters are and how family members can protect themselves from flying and falling debris.

The key to surviving a tornado and reducing the risk of injury lies in planning, preparing, and practicing what you and your family will do if a tornado strikes. Flying debris causes most deaths and injuries during a tornado. Although there is no completely safe place during a tornado, some locations are much safer than others.

Indoors

Pick a place in the home where family members can gather if a tornado is headed your way. One basic rule is AVOID WINDOWS. An exploding window can injure or kill.

The safest place in the home is the interior part of a basement. If there is no basement, go to an inside room, without windows, on the lowest floor. This could be a center hallway, bathroom, or closet.

For added protection, get under something sturdy such as a heavy table or workbench. If possible, cover your body with a blanket, sleeping bag, or mattress, and protect your head with anything available--even your hands. Avoid taking shelter where there are heavy objects, such as pianos or refrigerators, on the area of floor that is directly above you. They could fall though the floor if the tornado strikes your house.

On the Road

The least desirable place to be during a tornado is in a motor vehicle. Cars, buses, and trucks are easily tossed by tornado winds.

DO NOT TRY TO OUTRUN A TORNADO IN YOUR CAR. If you see a tornado, stop your vehicle. Do not get under your vehicle.

Outdoors

Do the following if you are caught outside during a tornado and there is no adequate shelter immediately available:

- Avoid areas with many trees.

- Protect your head with an object or with your arms.

Long-Span Buildings

A long-span building, such as a shopping mall, theater, or gymnasium, is especially dangerous because the roof structure is usually supported solely by the outside walls. Most such buildings hit by tornados cannot withstand the enormous pressure. They simply collapse.

If you are in a long-span building during a tornado, stay away from windows. Get to the lowest level of the building--the basement if possible--and away from the windows.

If there is no time to get to a tornado shelter or to a lower level, try to get under a door frame or get up against something that will support or deflect falling debris. For instance, in a department store, get up against heavy shelving or counters. In a theater, get under the seats. Remember to protect your head.

Office Buildings, Schools, Hospitals, Churches, and Other Public Buildings

Extra care is required in offices, schools, hospitals, or any building where a large group of people is concentrated in a small area. The exterior walls of such buildings often have large windows.

Do the following if you are in any of these buildings:

- Move away from windows and glass doorways.
- Go to the innermost part of the building on the lowest possible floor.
- Do not use elevators because the power may fail, leaving you trapped.
- Protect your head and make yourself as small a target as possible by crouching down.