



NOAA Ship *Ka'imimoana*

Welcome! We're glad to hear that you are coming to the NOAA Ship
Ka'imimoana!

Whether you are a veteran with us, or are coming out for the first time, please read this information – some things may have changed since your last cruise.

This is a preliminary document to help you in the planning stages of coming to the ship, which will aid in your packing and, if you are meeting us in our home port, inform you about getting access on base. Feel free to print this out to help you upon arrival. There is a second document that will be in your stateroom (**Welcome Aboard and Orientation Handbook**) which gives more detailed information once you are aboard.

ANCILLARY SCIENTISTS' POINT OF CONTACT

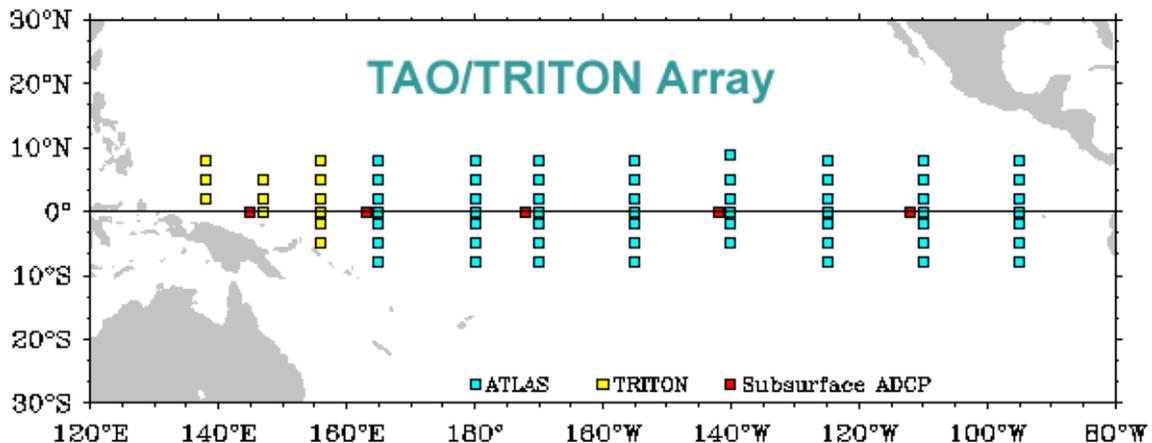
If you are an ancillary scientist/technician, you should be communicating with Brian Lake by now (brian.lake@noaa.gov). He serves as the liaison between you and the ship prior to your arrival. Any additional questions you have on topics or items not addressed in this document can be answered by him.



WHAT WE DO, AND WHERE

Ka'imimoana is NOAA's only vessel dedicated strictly to climate change research. There are two ways that the ship performs these studies. The more visible one is the array of buoys that we maintain along the Equatorial region of the Pacific Ocean, designed to observe conditions at each site. These buoys take oceanographic observations down to depths of 500 meters, and monitor sea-level atmospheric conditions.

The second and more subtle method of scientific study is by the continuous "in situ" atmospheric and oceanographic measurements we take with instruments mounted on the ship. Wherever we transit, these measurements are constantly being taken.

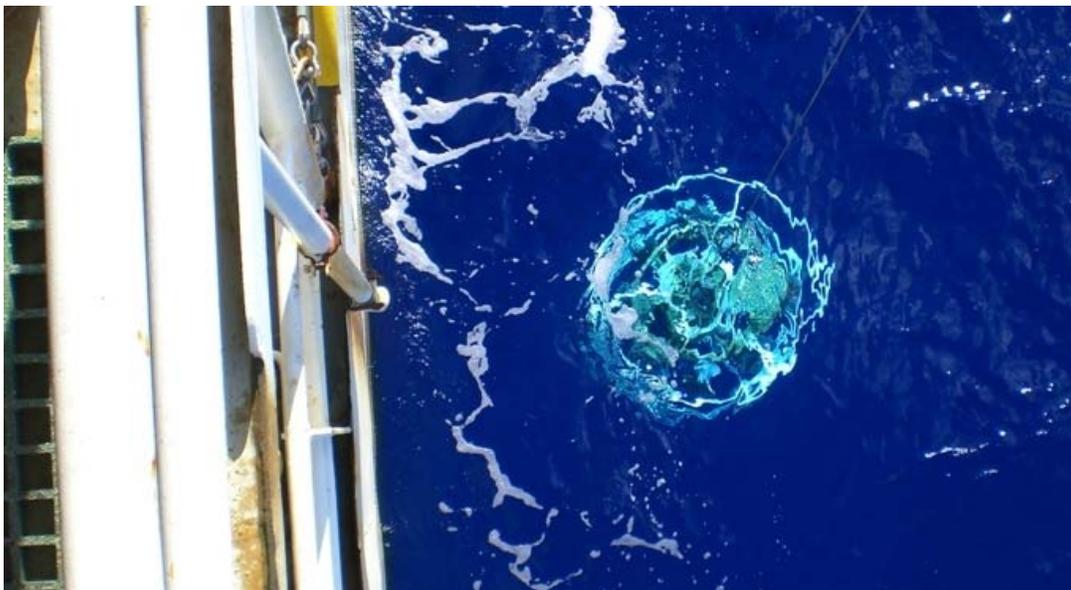


ADDITIONAL STUDIES

In addition to ship-mounted instruments, we periodically deploy ocean-study drifters, such as the ARGO float shown here.



We also lower deep-ocean instruments (CTD) for more substantial data while working on the buoy lines. We conduct one of these ocean casts at each buoy site, as well as at many other locations between the buoys on each TAO line.



HOW OFTEN WE GO OUT TO SEA

On each cruise, we work two adjacent longitude lines of buoys. Each cruise lasts on the order of 30 days. We typically leave Hawaii and do two cruises (four buoy lines), with a port call in between. This means we are away from Hawaii for approximately 65-70 days at a time. The number of days at sea varies from year to year. Not long ago, we spent 240 days a year out on cruises. In more recent years, those days have been more on the order of 215 days.

During the winter, the ship usually spends a three-month period of time on the west coast mainland of the United States for repairs.

PROTECTION FROM THE SUN

As mentioned before, we are NOAA's only vessel dedicated strictly to climate change research. In doing so, we work on the equator of the Pacific Ocean, where the tropical sun can be of concern. It will burn you more quickly and more harshly than it will in other parts of the world. Furthermore, sunlight reflects off the water, the hot decks and the white structure of the ship, making it even more intense. When planning what to pack for your visit with us, please take precautions to include items to protect yourself from the punishing rays.



WHAT TO BRING AND NOT BRING

(* indicates required items to bring):

- * **Emergency contact info**, in case of accident or medical emergency
- * **Medications** you are currently taking. Please bring enough medication to cover 60 days (or perhaps more) out at sea. Also, if you are prone to sea-sickness, bring some form of sea-sickness medication. For any medical questions, contact the ship's Medical Officer, CDR Karen Cook, at medical.kaimimoana@noaa.gov
- * **Passport**
- * **Other Photo ID** (driver's license)
- * **Long sleeve shirt, pants, and a hat**. These are for your "Abandon Ship Kit," which you will want to assemble before the voyage begins. Feel free to roll these items up and stick them in a small bag to stow with your immersion suit.
- * **Closed-toe shoes** for working on deck or in engine room
- * **A Hat** for shade from sun
- * **Shorts & T-shirts** that you don't mind getting dirty
- * **Sunglasses** (polarized w/ UV protection are best). The Sun reflects off the water and the white ship, making it more intense than usual.
- * **Checkbook** to pay bills to the ship store before you disembark
- * **Cash**: Some merchants in our ports of call do not accept debit or credit cards, so bring cash for meals ashore, gifts, etc. Many of our ports of call have souvenirs worth buying, such as Micronesian carvings you won't see on the mainland or even in Hawaii. You may find great gifts for yourself and others.

Marine grade power strips: If you bring power strips, only marine grade power strips are allowed. For example: *Surge Stopper* By Brooks Power Systems is a good product. But anything marked "Approved for Shipboard Use" can be found at most hardware stores. **PLEASE DO NOT BRING HOUSEHOLD POWER STRIPS.**

"Slippers" or flip-flops for bumming around the beach or your stateroom.

For safety reasons, open toes are not allowed in most areas of the ship.

Clothing for shore – bring enough for a few days ashore – island casual is fine.

Sweater or sweatshirt – it can get chilly below decks, even when it's hot outside

Sunscreen – even if you tan or are dark to begin with, you will need it out here!

Aloe vera gel or lotion – for the days you think it might be fun to end up as a fine leather handbag; everybody burns at least once, so be ready for it.

Comforter or warm blanket – some of the staterooms get chilly, and while we do provide linens, you might enjoy having your own extra layer of warmth.

Scented gel or plug-in room scent – some people prefer to smell Glade rather than barnacle guts and sailor funk; if you are one of them, you might want to pick up a **non-burning form** of room freshener. Remember, no candles or incense are allowed on the ship (fire hazard).

What to bring (continued):

Optional sports equipment you might want to bring include:

snorkel gear

small knife (folding type)

Fishing pole, reel, line, lures: We fish off the ship, and frequently catch squid, Ahi (yellow fin tuna), Ono (wahoo), Mahi Mahi, snapper, and jacks. Some of these fish make great eats, and our steward is no stranger to slicing up a nice plate of sashimi, or grilling a mean Ahi steak.



Large items:

Surfboards – You must be able to stow these in your stateroom; most surfers have been able to find space; some rig the board to the overhead.

Bicycles – You must gain prior approval from the XO to bring one. It must fit in your stateroom, which will make it pretty crowded. There are rental bikes available for \$5 per day in Kwajalein, RMI. In other ports, it's easy to walk, rent a car, or use local transportation.

SCUBA gear – You must gain prior approval from the Executive Officer (XO) to bring this. If approved, this gear may be stored in the ship's dive locker.

BERTHING

Living quarters: You will be assigned to a stateroom. If you have any special requests, please contact the XO prior to your arrival. Your room may be a single or a double. Your room will contain: an Extra Long Twin bed, carpeted deck, sink and medicine cabinet w/ mirror, small closet w/ shelves, dresser, mini-fridge, telephone, desk, two small book shelves above desk, fluorescent overhead lighting, chair, power outlets. Some rooms have further amenities such as TVs, but these are not guaranteed. Staterooms are various shapes and sizes, but they average about 110ft².

OTHER ITEMS YOU MAY WANT TO BRING

Entertainment:

CD player/iPOD & other music players

DVDs (we have a movie library provided by the Navy, but it is limited, so feel free to bring your own)

Books (the ship has a library, which is basically a bookcase of revolving selections, most left by previous or current crew members for the enjoyment of others)

Musical instruments: if you play an instrument, such as a guitar, which can comfortably fit in your stateroom, feel free to bring it. Keep in mind that while the ship is underway, somebody is always sleeping, so volume must be kept at a courteous level.

Camera & film: Digital photos can be saved on the ship's computer, and burned to CD (blank CDs available in ship's store @ .50 each)

Phone numbers of friends & family: You can call them from sea; phone information is on the ship's intranet site, which you can view on board at any time.

Bring e-mail addresses: Crew members and chief scientists will have a NOAA email account at sea. But you can also use a land-based account via our 24-hour internet access VSAT.

ITEMS THE SHIP PROVIDES

Cleaning products & supplies

Bath towels

Bed linens

Free laundry facilities, including detergent, bleach, and fabric softener.

Small refrigerator in each room

SANITATION & GARBAGE

The ship is equipped with a marine sewage treatment system. Only **biodegradable waste** (toilet paper and human waste) should be placed down any sink/shower drain or toilet. Feminine products should be disposed of in the appropriate trash container, never flushed!

Please be sure to use the correct container for appropriate waste. The ship exercises a trash separation habit daily. It is requested that you **separate paper from plastic products** in separate containers in your stateroom as we are required to separate trash prior to disposal on shore.

PROHIBITED ITEMS

BE ADVISED:

When you board the ship, the rules of land do not apply – you have entered the domain of the United States government. The command **HAS THE RIGHT** to search any space on the ship, including your stateroom, at any time.



These items are not allowed aboard our ship:

Alcohol

Illegal drugs & paraphernalia

Prescription medication without a prescription

Pets

Candles, incense or any other item that produces a flame (other than cigarette lighters or matches)

These items are strictly prohibited aboard all NOAA vessels. There are penalties for possessing and/or using intoxicating substances on board.

This is not a draconian measure – it is for the safety of the entire crew, and ensures our ability to respond safely to emergencies at all times. Life at sea can get stressful, and some days we'd all enjoy a nice cold adult beverage, but please save those cravings for our port calls.

Every time we enter a port, we are boarded & inspected by customs agents, and possibly their dogs. Do not bring illegal drugs aboard, as they are easily detected, and you will be subject to prosecution. NOAA has a "Zero Tolerance" policy regarding drugs, and the US Government is not a legal opponent you want to face.

MEALS ABOARD THE SHIP

We have an excellent steward department – no doubt that you will be well-fed. The galley does not serve soda, so if you have a favorite soda or sports drink that you cannot live without for a month, bring some with you. Limited selection is available for purchase from the ship's store.

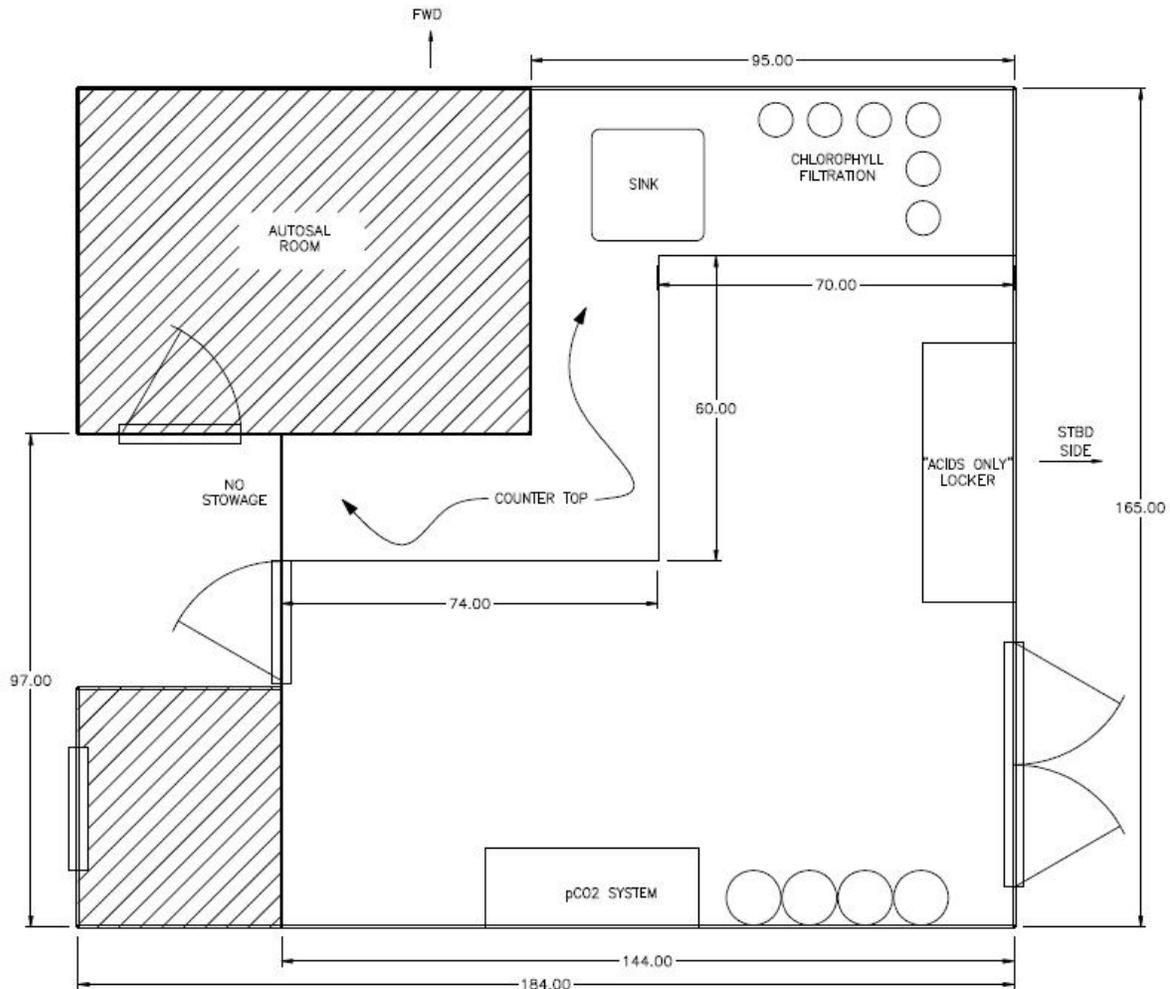
Meals are served three times a day. For lunch and dinner, three entrees are usually served, one of which is a vegetarian dish.

WET LAB AND SCIENTIFIC STORES

Ancillary scientists may want to make use of our wet lab for sampling, and our scientific stores for the storage of empty boxes. Please note that these spaces are rather small. There is also a freezer located in scientific stores dedicated for holding science samples until you disembark. **For any hazardous materials that you plan on bringing, read the HAZMAT section toward the end of this document.**

Another consideration regarding the wet lab is the availability of power receptacles for any equipment you set up in this space. Note that the overhead area is limited by air conditioning ventilation ducts running in various parts of the room. The photos on the next page should help illustrate the inherent problems for storage or setting up your equipment.

WET LAB LAYOUT



KAIMIMOANA WET LAB

AutoCAD Drawing/Sketch:
Printed Copies May Be Obsolete:
Validate Prior to use.

WET LAB PHOTOS



Revised August 22, 2008

SCIENTIFIC STORES



Storage in this space is tight. Please contact Brian Lake prior to packing your gear, to verify that space is available for everything you plan on bringing. There is a freezer in this space to store samples.



Revised August 22, 2008

ARRIVAL TO THE SHIP

Reporting aboard in Hawaii: Our home port is at Ford Island, in the middle of the Naval Base in Pearl Harbor. New crew members only need to show your NOAA ID to get onto Ford Island. Scientists and technicians arriving or departing in Honolulu will need passes to get onto Ford Island. An after-hours or weekend arrival can be problematic at the Navy's Pass and ID Office. Contact Brian Lake, so that your name can be given to the Pass and ID Office ahead of time for issuing a pass covering all the dates of your stay. Their best hours for getting a pass are from 7:30am to 3:30pm, Monday through Friday. It is strongly encouraged you arrive during those times. If you arrive at the office any other time, you can still get on the base, but you will only get a pass for that day.

Though a weekend arrival is strongly discouraged, even a weekday arrival has proven to be frustrating when dealing with the Pass and ID Office. Please plan on snags there, and keep handy the ship's cell number in case the paperwork from us has not gone through or was lost. That number is (808) 220-1267.

Arrival/Embarkation in any port: If you arrive during ship's working hours (7:30am-4:00pm M-F), come aboard and report to the ship's office on the O-2 deck. If you arrive after working hours or on a federal holiday, report to the Officer On Duty (OOD), or security watchstander. Keep in mind that they may be patrolling below deck, but will be done shortly. It is important that you check in with the watchstander or the OOD, as you must be officially logged aboard.

The watchstander or OOD will show you to your room, and give you one complete set of linens. Your room will contain a more detailed **Welcome Aboard and Orientation Handbook**. Please read through it as soon as you can, as it will not only tell you about more specifics of ship-board life, but it will explain how to handle an emergency while in port. Your room will also contain one survival suit and one life vest per bunk. Please try your survival suit on the day you arrive, and notify the OOD or the Operations Officer (also called the FOO) if you need a different size, or have any questions pertaining to wearing them.

The OOD should give you a brief tour of the ship. **Please note emergency muster locations, fire response equipment, your life raft location, and where to find emergency equipment listed on your bunk card (you may be responsible for bringing something to a drill or emergency.)** When in doubt, ask! Any officer aboard will be happy to answer your questions. The OOD will also advise you of the Plan of the Day (POD), posted in various public spaces.

If you will be on board for more than 30 days, you must complete the NOAA Online Security Briefing prior to the ship getting underway. The website for the briefing is <http://noaa.learnsecuritywith.us/>. The course is also available aboard the ship on CD-ROM.

COMMUNICATIONS

Internal Phones:

Each stateroom is equipped with a telephone for room-to-room calls.

External Phones:

In addition to room-to-room calls, these phones are connected to the Iridium phone system, therefore allowing you to make a call to shore. We ask that calls are limited to 15 minutes. More detail about the phone system is provided in the handbook in your room. The most efficient method we have to call ashore is the VOIP (voice-over I.P) Internet phone located in the computer lab.

Email:

As mentioned before, crew members and chief scientists will have a NOAA email account at sea. But our 24-hour internet access with the VSAT allows you to use a land-based account as well.

U. S. Mail:

The ship sends and receives mail on a regular basis while in port. Some mail is delivered to the ship during port calls away from Honolulu. The ship's mailing address is:

NOAA Ship *Ka'imimoana*
c/o NOAA Honolulu Port Office
1897 Ranger Loop
Honolulu, HI 96818

HAZARDOUS MATERIAL (HAZMAT)

The hazardous material (HAZMAT) reference library is located in the crew's lounge. The MSDS are in binders in the HAZMAT library. Material Safety Data Sheets (MSDS) for any item you bring aboard should be given to the Medical Officer (who serves as the HAZMAT Officer) for filing in the binder.

There are several storage areas aboard for different types of hazardous material. Please check with the HAZMAT Officer if you are unsure about where a suspected hazardous material should be stored. **Please bring proper stickers/labels to identify your hazardous items (enough for every container).** The Chief Scientist on each cruise will provide the HAZMAT Officer an inventory of all HAZMAT brought aboard along with the appropriate MSDS prior to sailing. **Before returning to port, the Chief Scientist shall be responsible for ensuring that all the HAZMAT they brought aboard is completely used, or fully off-loaded in port, and that the inventory is updated to reflect this.**

MEDICAL CARE

This ship is currently staffed by a USPHS Medical Officer (CDR Karen Cook) and an MPIC qualified crew member (DU Chris Kaanaana).

If you are **part of the guest scientific party**, a NOAA Health Service Questionnaire needs to precede you. Please check with the Medical Officer at your earliest convenience to make sure a current one is on file for you. If there is not one on file, **you are not qualified to sail**, and you will need to complete the questionnaire and have it reviewed by the Medical Officer prior to sailing.

If you are reporting aboard as a **permanent crew member**, please bring all health records and related documents to the Medical Officer as soon as possible. Upon receiving these, the Medical Officer can create a permanent health record.

*Note: Respirator and SCBA use require medical clearance and must be individually fitted by the USPHS Officer in order to ensure a proper fit.

WHAT WE DO FOR FUN

Board games

Card games

Madden Football™ (Playstation™)

Wii™

Fishing (handlines and poles)

Darts (electronic board)

Line Crossing Ceremony (if you don't know what this is, then you haven't done it). You will want to bring clothes you don't mind getting dirty for this.

ONE FINAL THOUGHT FOR CREW MEMBERS

Those who do not have a Merchant Marine Document (MMD) card who want sea-time credit for sailing with us should get a card. Contact the U.S. Coast Guard for information regarding the MMD.