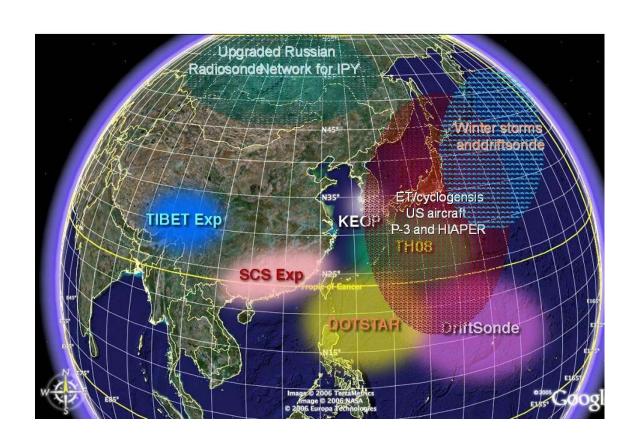
## NCAR/ EOL Project Information

for

## T-PARC

# THORPEX Pacific-Asian Regional Campaign 23 July 2008



## **Project Information**

## **Project Overview**

Weather accounts for nearly 75% of the global incidence of disasters, nearly 66% of the property damage, ~90% of the number of people impacted and nearly 98% of the fatalities. The majority of weather disasters are due to flooding and wind storms (i.e., typhoons, hurricanes and other cyclonic storms). Weather disasters can also trigger other natural disasters, such as disease, famine, and even the destabilization of governments when developing nations try to cope with major meteorological disasters. Over the past several decades, there has been slow steady progress in mid-latitude forecasting skill with a rate of improvement of ~1 day per decade. The rate of advancement is even slower for many parameters of critical interest to society, such as the prediction of heavy precipitation. This slow, linear increase in forecast skill is being outstripped by an increased demand driven by i) an exponential growth of the world's population, ii) economies that are becoming increasingly global in nature, iii) an urbanization of society that often includes dramatic increases in population densities in areas at risk, iv) modern technological infrastructure that can be brought to a standstill with major weather disasters. Consistent with society's need for improved forecast skill, the 14<sup>th</sup> Congress of the World Meteorological Organization, representing approximately 180 nations, initiated THORPEX (The Observing System Research and Predictability Experiment) as a research program of the World Weather Research Program to accelerate the current rate of improvement in forecast skill for high-impact weather and to increase the utilization of weather products for the benefit of society, the economy and environmental stewardship.

One aspect of THORPEX is to develop research plans to meet the regional forecast needs for Asia, North America, the EU, and the Southern Hemisphere. The THORPEX Pacific Asian Regional Campaign (T-PARC) is a multi-national field campaign planned by the Asian and North American Regional Committees and their associated national science committees that address the shorter-range dynamics and forecast skill of one region (Eastern Asian and the western North Pacific) and its impact on the medium-range dynamics and forecast skill of downstream regions (eastern North Pacific, North America and perhaps stretching to Europe). The field phase of T-PARC is designed to leverage multi-national efforts to address these two overarching foci. A multi-scale approach is desirable as these two regions have strong dynamical links. For example, high-impact weather events over the western North Pacific and East Asia, such as persistent deep tropical convection and intense cyclogenesis, can trigger downstream responses over the eastern North Pacific and North America via upper-tropospheric wave packets on the primary Asian wave guides. These wave packets can, in turn, be invigorated by subsequent cyclogenesis events, which make the impacts farther downstream fast-spreading, farreaching, and associated with reduced predictability. The high-impact weather events over North American driven by these processes include intense extratropical cyclones, orographic precipitation, flooding, severe weather and the hot, dry winds that increase the risk of wild fires and the severity of droughts.

## NRL P-3, ELDORA and Dropsonde Operations Andersen Air Force Base

**GUAM FACTS** 

#### THE ISLAND

Guam, an island territory of the United States, is located 900 miles north of the equator in the Western Pacific. The island is four to eight miles in width and 32 miles long. Guam covers approximately 220 square miles (549 sq. km) - the largest island in Micronesia and the gateway to the region. It is approximately 6,000 miles from San Francisco; 3,800 miles west of Honolulu; 1,500 miles south of Japan; 1,596 miles from the Philippines and 2,026 miles east of Hong Kong. The southernmost of the Mariana Islands, Guam shares a common culture with the rest of the group, which also includes Saipan, Rota, and Tinian. The island was created from the peaks of two ancient volcanoes that sank into the sea and were fused together millions years ago. The capital of Guam is Hågatña (Agana).



#### **POPULATION**

The population of Guam is approximately 166,090 (June 2004 est.) and can be divided into three ethnic groups. Chamorros, Guam's original inhabitants, make up approximately 37% of the population, Filipinos 26%, Caucasian (including military personnel and families) 10%, Korean, Japanese, Chinese, and others 27%. Age distribution: 1-14 years: 35.1%, 15-64: 58.4%, 65+ years: 6.4%. Population growth rate: 1.5%.

#### POLITICAL STATUS & FORM OF GOVERNMENT

Guam is characterized as organized, unincorporated territory of the U.S. The government has three branches as set up by Congress through the Organic Act in 1950, and one (1) non-voting Congressional delegate to the House of Representative.



#### **HISTORY**

The first inhabitants of Guam, the Chamorro people, are thought to have traveled to the Mariana Islands from Southeast Asia by canoe. They developed a clan and caste system as part of a matrilineal society and they lived isolated from the rest of the world. Ferdinand Magellan was the first westerner to set foot on Guam in 1521. Nearly 50 years later, Spain claimed the Marianas and controlled them for more than 300 years. Jesuit missionaries brought Catholicism and a western way of life to the island. Because of its location between the Philippines and Mexico, Guam became an important link in the Spanish empire and culture, with the church as the center of village life. A new era began 1898, when the island became a U.S. territory after the Spanish-American War. Japanese forces invaded in 1941 and assumed control of the island until July 1944, when U.S. troops reclaimed it. The Organic Act, signed by President Truman in 1950, made Guam an unincorporated territory and its people American citizens, as they remain today.

#### LANGUAGE

English and Chamorro are the official languages of Guam.

#### **CLIMATE**

Located in the tropics, Guam's average yearly temperature is 85 degrees Fahrenheit. The temperature rarely falls below 70 degrees or rises above 90 degrees. The average water temperature is also 85 degrees, providing excellent opportunities for a variety of water sports.

July through November is the rainy season and December through June the dry season. September and October are the wettest months, each averaging about 14 inches of rainfall.

#### **GENERAL INFORMATION**

**Health:** No vaccination certificates are required.

Time: Guam is 18 hours ahead of Pacific Time and 10 hours ahead of Greenwich Meridian

Time.

**Electricity:** The electrical current is the same as on the U.S. Mainland: 120 volts/60 cycles.

**Currency:** The U.S. Dollar

Main banks on island: Bank of Guam, Bank of Hawaii, First Hawaiian Bank, Bank Pacific Credit Cards: American Express, Diners Club, Visa, Mastercard, JCB, and other major credit

cards are widely accepted.

Media/Internet Services: Internet dial-up, broadband, Wi-Fi, cable tv, local & national

newspapers available

## TRAVEL INFORMATION

#### **GETTING THERE**

Guam is Continental Airlines' hub in Asia Pacific. The **Antonio B. Won Pat International Airport** is served by Continental Airlines from Guam to multiple points in Asia Pacific and to Hawaii and the mainland. Guam can also be reached via Manila, Tokyo, Osaka, Seoul, Taipei, or other Asian gateways. The average travel time from Guam to key Asian cities is 3.5 hours to 4.5 hours. Travel time to Hawaii is 7 hours.

#### **Guam International Airport**

Airport Code: GUM

Address: Guam International Airport Authority, Guam, PO Box 8770,

Tamuning, GU 96931 Country code: 671 Telephone: (0) 646-0300

Website: www.guamairport.com

Number of Terminals: 1 Time Zone: GMT + 10

#### **Direct Flight from DEN to GUAM**

Airline	Departure	Arrival	STOPOVER	
United	6:05 am DIA	11:48 am	Honolulu	
Continental	2:00 pm	5:40 pm (next day)		

#### From GUAM to DEN

Airline	Departure	Arrival	STOPOVER
Continental	6:25 am	5:40 pm (day earlier)	Honolulu
United	8:10 pm	6:53 am (day later)	

From DEN to HNL to GUAM (Overnight in Honolulu)

Airline	Departure	Arrival
United	11:42 am	2:45 pm
Continental	2:00 pm (next day)	5:40 pm (day later)

#### From GUAM to HNL to DEN

Airline	Departure	Arrival
Continental	6:25 am	5:40 pm (day earlier)
United	10:15 pm	9:03 am (next day)

#### ENTRY AND EXIT FORMALITIES

Entry requirements for Guam are the same as for any U.S. destination. Although U.S. citizens are required to possess a U.S. passport, on a case-by-case basis, photo I.D. and proof of citizenship may be required. Citizens of most other countries must have a valid passport with a U.S. visa. In October 1988, the U.S. Government implemented the Guam-only visa waiver program. Citizens of more than a dozen countries have been allowed entry to Guam without a visa for a period of up to 15 days; travel onward to other U.S. ports is not allowed.

## LODGING INFORMATION

#### **HONOLULU LODGING (Transit to Guam Accommodation)**

#### **Lodging:**

Ohana Honolulu Airport Hotel 3401 North Nimitz Highway Honolulu, HI 96819

Ph: 808-836-0661 Fax: 808-833-1738

The Ohana Honolulu Airport Hotel is half a mile from Honolulu International Airport. They provide a free 24-hour airport shuttle. The hotel is five miles from downtown Honolulu, and eight miles from Waikiki.

**EOL Staff Arrival and Departure Dates - Honolulu:** 

NAME	ARRIVAL	DEPARTURE	CONFIRMATION
			NUMBER
Baeuerle, Brigitte	8/21	8/22	22677591
Bruning, Greg	8/17	8/18	03677591
Bruning, Greg	9/10	9/11	03677591
Cowan, John	8/3	8/4	40449591
Cowan, John	8/20	8/21	81677591
Emmett, Jonathan	8/28	8/29	72677591
Golubieski, Chris	9/10	9/11	
Holden, Kyle	8/31	9/4	53677591
Irwin, Bill	8/17	8/18	92677591
Irwin, Bill	9/10	9/11	92677591
Korn, Errol	8/4	8/5	45200691
Munnerlyn, John	9/7	9/8	44677591
Munnerlyn, John	10/2	10/3	06677591
Murphy, Larry	9/7	9/8	24677591
Phinney, Al	9/11	9/12	75677591
Spowart, Kirk	8/4	8/5	75200691
Spowart, Mike	8/21	8/22	22677591
Strong, Mike	8/5	8/6	77200691
Strong, Mike	9/2	9/3	55297591
Ta, Hung	8/3	8/4	00449591
Ta, Hung	8/20	8/21	02677591
Vinson, Joe	8/14	8/15	11677591
Wolff, Cory	8/13	8/14	69577591

#### **GUAM LODGING**

All EOL staff will be staying at the Guam Marriott Resort & Spa. Amenities include a 24 hour fitness center, a business center, high speed internet access in all rooms and public areas, cable TV, coffee maker, complimentary on site parking, All rooms are non smoking, On site restaurants and lounges include the Manhattan Steakhouse Sunset BBQ, the Marriott Café and a Pool Bar. The hotel also has an on site, coin operated laundry service, an ATM and an on-site

spa. Check in is at 3 pm, check out at noon.



Guam Marriot Resort & Spa 627B Pale San Vitores Road Tumon, 96913 Guam

Phone: 1-671-649-7827 Fax: 1-671-646-9335

Contact: Cindy Churchin, Sales Manager

Phone: 1-671-648-1619

Email: Cindy.Churchin@marriotthotels.com

## **Driving directions from Guam International Airport Tamuning to the Marriot:**

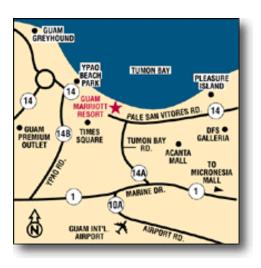
The hotel is 3.5 miles west of the airport. From A.B. Won Pat Guam International Airport

- Turn south onto Route 10A and go down to first intersection;
- Turn right onto Route 1 (Marine Drive).
- At first stop light (K-Mart Intersection), turn left onto Route 14A.
- At light, turn left onto Route 14 (San Vitores Road) and hotel is immediately to the right.

## GUAM STAFFING ARRIVAL AND DEPARTURE DATES

NAME	Confirmation	ARRIVE	DEPART
Ling, Frank	701165	7/24	8/9
Meitin, Jose	701159	7/24	8/26
Russ, Ted	701164	7/24	8/17
Bell, Michael	701181	8/17	8/29
Lee, Wen-Chau	701189	8/6	9/6
Cowan, John	701150	8/5	8/21
Ta, Hung Viet	709082	8/5	8/21
Korn, Errol	701156	8/6	10/2
Spowart, Kirk	701157	8/6	8/23
Gales, Bryan	701169	8/6	9/7
Loew, Eric	701168	8/8	8/28
Martin, Charles	701167	8/8	8/26
Strong, Michael	701170	8/7	9/3
Cai, Huaqing	701184	8/6	8/21
Vinson, Joseph	701166	8/15	9/9
Wolff, Cory	701186	8/15	9/8
Laura Tudor	701158	8/19	9/15
Irwin, William	701152	8/19	9/11
Bruning, Greg	701153	8/19	9/11
Baeuerle, Brigitte	701162	8/23	9/16
Spowart, Mike	701162	8/23	9/16
Weckwerth, Tammy	701183	8/27	9/15
Emmett, Jonathan	701177	8/30	10/2
Bell, Michael	701182	9/6	10/2
Holden, Kyle	701178	9/2	10/2
Ling, Frank	701187	9/6	10/2
Murphy, Larry	701154	9/9	10/3
Munnerlyn, John	701155	9/9	10/3
Golubieski, Chris	714765	9/12	10/2
Jensen, Jorgen	701163	9/11	10/2
Lee, Wen-Chau	701179	9/11	10/2
Cai, Huaqing	701185	9/13	10/2
Phinney, Al	701176	9/13	10/2

#### **TRANSPORTATION**



Staff arriving at Guam International Airport will either be picked up by other EOL staff or should take one of the following options to get to the hotel:

Marriott Hotel shuttle service, reservation required,

Fee: \$15 USD (one way)

Bus service, fee: \$15.00 USD (one way) Estimated taxi fare: \$15.00 USD (one way)

#### RENTAL CARS

Car rental arrangements have been made with:

#### **Blakes Car Rental**

Royal Orchid Hotel

Across the street from the Marriott on the 6<sup>th</sup> floor parking garage

Phone: 617-647-2525 Contact: Richard Kuntz

#### (Table to be updated)

EOL staff arriving with the first shift will have to pick up their car the morning after arrival. The cars are rented on a monthly basis and the company requires renewal on or before the start of the next month. To avoid confusion, especially with credit card information and billing, we recommend that departing staff together with his/her replacement go back to Blakes, officially close the old rental agreement and have a new one issues with the new name and credit card information. For example, once Vidal replaces Jose as the project manager, Jose will close his contract with Blakes. Vidal takes over the car but gets a new contract in his name using his credit card information. The next table shows the number of cars, assignments and time period the car is available. The rental agency has a list of all staff using the cars (you do not have to be in that specific car). PLEASE NOTE THAT INSURANCE HAS TO BE PURCHASED FOR EACH CAR.

CAR Number	Users	PICKUP	FINAL DROPOFF
CAR#1	Project Management	7/24	10/2
	Jose Meitin		
	Brigitte Baeuerle		
	Jorgen Jensen		
CAR#	ELDORA DM and CDS SA	8/7	10/2
	Huaqing Cai		
	Michael Bell		
	Ted Russ		
	Frank Ling		
CAR#3	ELDORA Science	8/7	10/2
	Wen-Chau Lee		
	Cory Wolff		
	Tammy Weckwerth		
CAR#4	RAF Tech	8/6	10/3
	John Cowan		
	Hung Ta		
	William Irwin		
	Greg Bruning		
	Larry Murphy		
	John Munnerlyn		
CAR #5	<b>ISF Dropsonde Operations</b>	8/7	10/2
	Errol Korn		
	Kirk Spowart		
	Laura Tudor		
	Chris Golubieski		
CAR #6	ELDORA Tech	8/7	10/2
	Mike Strong		
	Bryan Gales		
	Jonathan Emmett		
	Kyle Holden		
	Al Phinney		
CAR #7	<b>ELDORA Engineering</b>	8/7	10/2
	Eric Loew		
	Charlie Martin		
	Mike Spowart		
	Phinney/Strong		



The map above shows the location of Blake's Rental Car with respect to the location of the Marriott hotel.

## **GUAM AIRCRAFT COORDINATION CENTER**

T-PARC Ops Center Phone: (671) 653-0235 and -0236

**T-PARC Ops Center Fax: T-PARC Operations Coordinator Cell Phone:**Andersen AFB Operator

(671) 653 - 0236
(671) 689-1468
(671) 366-1110

**T-PARC Operations Center Address:**Bldg 1557A/B Plumeria Blvd.

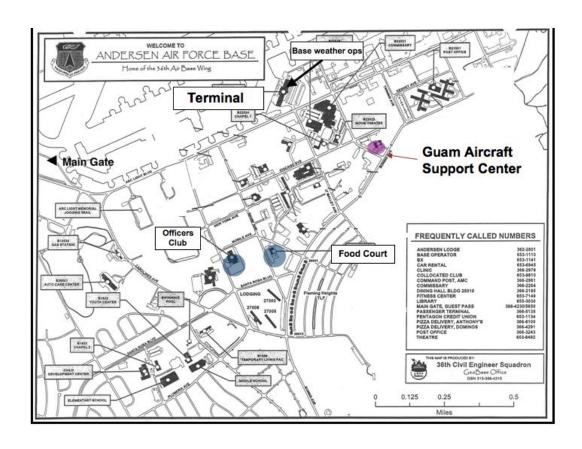
Anderson Air Force Base

The Guam Operations Center will be located at Andersen Air Force Base on the north end of Guam, approximately 15 miles from the capital, Agana. Andersen AFB is in the village of Yigo, pronounced "Geego." The host wing is the 36th Wing (36 WG) of the Pacific Air Forces (PACAF), which includes an operations group, a maintenance group, a mission support group, a medical group, and a contingency response group. Andersen's current role is that of a forward-based logistics-support center for exercise and contingency forces deploying throughout the Southwest Pacific and Indian Ocean regions.

Lodging for project participants will be at the Guam Marriott in the hotel area on Tumon Bay in west central Guam. It is approximately a 30-minute drive from Tumon Bay to the Main Gate at Andersen AFB. Participants will need to clear security and vehicle inspection before proceeding into the base. Foreign nationals may need to be escorted by a U.S. citizen in order to gain access to the base.

#### ANDERSEN AIR FORCE BASE LOCATION







Research aircraft will be parked on the apron behind Hangar 4. We expect a limited amount of office space for military aircrews inside Hangar 4. The aircraft hangar and flight line are accessible through a gate at the end of Vandenberg Avenue, past the control tower. It is a sturdy 20-min walk in the tropical sun between the support center and the hangar.

## NRL P-3 CERTIFIED FLYERS

NAME	AFFILIATION	NAME	AFFILIATION
Bell, Michael	NPS/RSF	Lopez, Carlos	NM Tech
Brown, Erin	ISF	Lussier, Louis	NPS
Bruning, Greg	RAF	Martin, Charlie	CDS
Cai, Huaqing	RSF	Montgomery, Mike	NPS
Cowan, John	RAF	Munnerly, John	RAF
Emmett, Jonathan	RSF	Murphy, Larry	RAF
Gales, Bryan	RSF	Raymond, Dave	NM Tech
Golubieski, Chris	ISF	Riemer, Michael	NPS
Hawkins, Jeff	NRL	Sanabia, Beth	NPS
Holden, Kyle	RSF	Sanger, Neil	NPS
Hung, Viet Ta	RAF	Spowart Mike	RAF/RSF
Irwin, Bill	RAF	Spowart, Kirk	ISF
Jorgensen, Dave	NOAA	Strong, Mike	RSF
Korn, Errol	ISF	Tudor, Laura	ISF
Lee, Wen Chau	RSF	Weckwerth, Tammy	RSF
Lim, Tim	ISF	Wolff, Cory	RSF
Liu, Ching-Hwang	Taiwan U.	Zrubek, Kurt	RAF
Loew, Eric	RSF		

## **HEALTH INFORMATION**

#### Medicines you may need

- The prescription medicines you take every day. Make sure you have enough to last during your trip. Keep them in their original prescription bottles and always in your carry-on luggage. Be sure to follow security guidelines, if the medicines are liquids.
- Medicine for diarrhea, usually over-the-counter.

Note: Some drugs available by prescription in the US are illegal in other countries. Check the US Department of State <u>Consular Information Sheets</u> for the country(s) you intend to visit or the embassy or consulate for that country(s). If your medication is not allowed in the country you will be visiting, ask your health-care provider to write a letter on office stationery stating the medication has been prescribed for you.

#### Other items you may need

- The recommended insect repellent for clothing and for skin can be purchased through Passport Health. However, this does contain DEET.
- Iodine tablets and portable water filters to purify water if bottled water is not available.
- Sunblock and sunglasses for protection from harmful effects of UV sun rays.
- Antibacterial hand wipes or alcohol-based hand sanitizer containing at least 60% alcohol.
- To prevent insect/mosquito bites, bring:
  - o Lightweight long-sleeved shirts, long pants, and a hat to wear outside, whenever possible.
  - Flying-insect spray to help clear rooms of mosquitoes. The product should contain a pyrethroid insecticide; these insecticides quickly kill flying insects, including mosquitoes.

#### **Medical Facility (Andersen Air Force Base)**

\*\* Will need to present passport for Medical Treatment\*\*

Andersen Air Force Base The 36<sup>th</sup> Medical Group

Clinic Hours: 0800 - 1700 Mon - Fri

Appointment Line: 0700 – 1600 Mon – Friday (366-9355)

#### **Medical Facility (U.S. Naval Hospital Guam)**

\*\* Will need to present passport for Medical Treatment\*\*

US. Naval Hospital Guam

Helpful Numbers:

Appointment Line: (671) 344-9202; Chief of the Day: (671) 344-9340

Pharmacy Refill Line: (671) 344-9620

## TYPHOON PREPAREDNESS AND SAFETY

The typhoon season usually lasts from 1 June through 30 November.

Weather information including watches, warnings and advisories, is available from the Guam National Weather Service Forecast Office at http://www.prh.noaa.gov/guam/

Most buildings in Guam are built to withstand typhoons. While people die or are seriously injured every year due to typhoon related weather, most cases are avoidable. The greatest potential for loss of life related to a typhoon is from the storm surge, which claims nine out of ten typhoon victims. Do not sightsee, surf or swim under COR (see below) conditions.

**Tropical Cyclone Condition Of Readiness (COR):** The Guam Conditions of Readiness are based on the onset of damaging winds of 39 mph (or 50 knots) or higher sustained to the island. A YouTube movie made by Anderson Air Force describing Typhoon Preparedness can be found at <a href="http://www.youtube.com/watch?v=FggxuACJBv8">http://www.youtube.com/watch?v=FggxuACJBv8</a>

#### COR 4

- Damaging winds may arrive within **72 hours**
- Normal Day to Day activities

#### COR 3

- Damaging winds may arrive within 48 hours
- Buy supplies for a Typhoon disaster supply kit (emergency rations/food, water, flashlight, batteries, tape, candles)
- Fill up car with gas
- Secure outdoor objects
- Prepare for long term power & water loss (laundry, outdoor cooking, etc.)
- Tune into radio and / or television

#### COR 2

- Damaging winds may arrive within **24 hours**
- Close & secure shutters
- Fill containers with water
- Move vehicles to a secure & protected area
- Seek Emergency Shelter if home is not fully concrete or prepared to withstand damaging winds.
- Tune into radio and / or television.

#### COR 1

- Damaging winds are occurring or expected within 12 hours
- Only Mission Essential Personnel & Vehicles Allowed Outside
- Tune into radio and / or television

#### What to do:

#### Before a Typhoon

Make plans to secure property incl. rental cars; stock up on food, drinking water and other essential supplies; fill bathtubs with drinking water; set refrigerator to coldest setting; coordinate and communicate with other EOL staff on safety procedures.

#### **During a Typhoon**

- Secure your home, close storm shutters, and secure outdoor objects or bring them indoors.
- Listen to radio or TV for information
- Turn off utilities if instructed to do so. Otherwise, turn the refrigerator thermostat to its coldest setting and keep its doors closed.
- Turn off propane tanks, Avoid using the phone, except for serious emergencies.
- Ensure a supply of water for sanitary purposes such as cleaning and flushing toilets. Fill the bathtub and other large containers with water.

If you are unable to evacuate, go to your wind-safe room. If you do not have one, follow these guidelines:

- Stay indoors during the typhoon and away from windows and glass doors.
- Close all interior doors—secure and brace external doors.
- Keep curtains and blinds closed. Do not be fooled if there is a lull; it could be the eye of the storm winds will pick up again.
- Take refuge in a small interior room, closet, or hallway on the lowest level.
- Lie on the floor under a table or another sturdy object.

#### **Know your categories:**

#### **Tropical Depression**

An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 MPH (33 knots) or less. Sustained winds are defined as one-minute average wind measured at about 33 ft (10 meters) above the surface.

#### **Tropical Storm**

An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39-73 MPH (34-63 knots).

#### **Cyclone**

An intense tropical weather system of strong thunderstorms with a well defined surface circulation and maximum sustained winds of 74 MPH (64 knots) or higher.

#### **Storm Surge**

A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50-100 miles wide.

#### **Storm Tide**

A combination of storm surge and the normal tide (i.e., a 15-foot storm surge combined with a 2-foot normal high tide over the mean sea level creates a 17-foot storm tide).

## **Cyclone/Tropical Storm Watch**

Cyclone/tropical storm conditions are possible in the specified area, usually within 36 hours. Tune in to NOAA Weather Radio, commercial radio, or television for information.

## **Cyclone/Tropical Storm Warning**

Cyclone/tropical storm conditions are expected in the specified area, usually within 24 hours.

## T-PARC Operations Center (MOC) Naval Postgraduate School, Monterey, CA

#### LOCATION

The Naval Postgraduate School (NPS) is located on the grounds of the former Del Monte Resort Hotel. Classes are currently in session for the thousand or so United States and foreign military officers who are pursuing graduate degrees in academic disciplines ranging from business to engineering.

#### General Address: Fed Ex Address:

Naval Postgraduate School Attn: Pat Harr or Jim Moore
1 University Circle Naval Postgraduate School

Root Hall, Rm 117 Meteorology Department, Rm. 254

Monterey, CA 93943 589 Dyer Road

Root Hall

Monterey, CA 93943-5114

#### **CONTACT INFORMATION:**

Operations Center: (831) 656-3569 T-PARC Operations Director (Jim or Dick) (303) 818-9400

Beth Sanabia: Email <u>ersanabia@mps.edu</u> (831) 656-1116 (o); (831) 917-1579 (c)
Pat Harr: Email <u>paharr@nps.edu</u> (831) 656-3787(o); (831) 915-2317(c)
Meteorology Office (Michael or Charlie) (831) 656-2516; (831) 656-1129

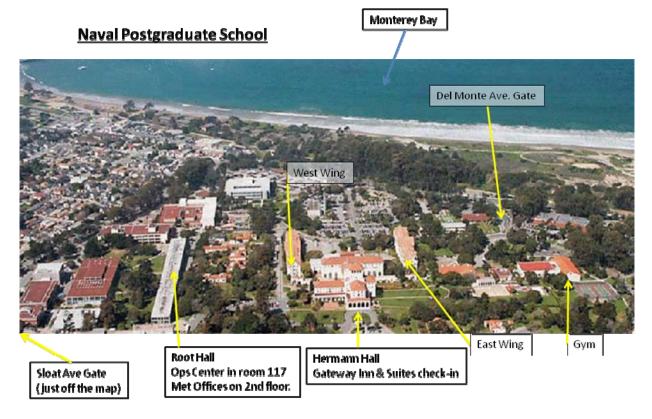
Ken Wallace: (831) 392-5342

Gateway Inn & Suites (Herrmann Hall): (831) 656-2060; (831) 656-2069

## TRAVEL INFORMATION

#### MONTEREY STAFFING ARRIVAL AND DEPARTURE DATES

NAME	ARRIVE	DEPART
Moore, Jim	7/24	9/2
Stossmeister, Greg	7/26	8/12
Burghart, Chris	7/27	8/12
Salazar, Vidal	7/29	8/6
VanAndel, Joe	8/10	8/28
Kate Young	8/17	8/21
Dirks, Dick	8/25	10/1



As a note: You can walk straight out a side door of Hermann Hall and into the Ops Center in Root Hall in about 3 minutes.

#### ARRIVING BY AIR

Monterey is serviced by most major airlines, to include United, American, Delta, and US Airways. All flights arriving in Monterey connect through either San Francisco or Los Angeles.

#### **Travel to/from the airport:**

**Rental Cars**: All rental car companies, except Enterprise, are located in the terminal building.

- After picking up your car, follow the exit signs to "Garden Road"
- Turn right on Garden Road
- Stay on Garden Road until it dead-ends at Mark Thomas Drive
- Turn Left on Mark Thomas Drive
- Stay on Mark Thomas Drive until the first traffic light (Sloat Ave)
- Turn right on to Sloat Avenue, then right into NPS at the 10th Street Gate
- Turn left on University Way
- Park in the large parking lot located on your right as you approach the main building (Herrmann Hall)
- Check in at the BOQ office located to the right, just inside the main entrance

*Taxis:* Persons taking a taxi should direct the driver to take them to "NPS", to "the main building", and/or to "the flagpole circle". Metered rates apply.



*T-PARC Pick-Up:* If you are flying into Monterey and would like a ride to NPS from the airport, please e-mail Pat Harr and Beth Sanabia your itinerary (see contact information). They will make sure someone is there to pick you up. At the end of your stay, they will be happy to arrange a ride for you back to the airport.

*Monterey Airbus Shuttle:* If you are flying into San Francisco or San Jose and are not renting a car, arrange for the Monterey/Salinas Airbus shuttle service (<a href="http://www.montereyairbus.com/">http://www.montereyairbus.com/</a>), which is \$30/person each way. Shuttle departure and arrival dates are available on line. The Phone number for reservations is (831) 373 7777.

#### **ARRIVING BY CAR:**

*San Francisco* - Take Hwy 101 South to Prunedale, then Hwy 156 West to Hwy 1. Take Hwy 1 South to Monterey. Take the Del Monte Avenue Exit for approximately 7 blocks. NPS is on your left.

*Sacramento* - Take I-5 South to Hwy 152 West to Hwy 156 West. Take Hwy 101 South to Prunedale, then Hwy 156 West to Hwy 1. Take Hwy 1 South to Monterey. Take the Del Monte Avenue Exit for approximately 7 blocks. NPS is on your left.

*Fresno* - Take Hwy 99 North to Hwy 152/33 West to 156 West. Take Hwy 101 South to Prunedale, then Hwy 156 West to Hwy 1. Take Hwy 1 South to Monterey. Take the Del Monte Avenue Exit for approximately 7 blocks. NPS is on your left.

**Bakersfield** - Take I-5 to Hwy 46 West to Hwy 101 North to Salinas. Take Hwy 68 West (Monterey Peninsula Exit) to Airport Road. Right on Airport Road, then left on Garden Road. Follow directions for rental car detailed above.

Los Angeles - Take I-5 North to Hwy 46 West to Paso Robles. Take Hwy 101 North to Salinas, then Hwy 68 West (Monterey Peninsula Exit) to Airport Road. Right on Airport Road, then left on Garden Road. Follow directions for rental car detailed above.

*Santa Barbara* - Take Hwy 101 North to Salinas, then Hwy 68 West (Monterey Peninsula Exit) to Airport Road. Right on Airport Road, then left on Garden Road. Follow directions for rental car detailed above.

## NPS SECURITY AND GATE INFORMATION

NPS is a military base. There are two gates - Sloat Ave. and Del Monte Ave. - with armed guards at each. The Sloat Gate will have a list with everyone's names associated with T-PARC and the dates of your stay. You will need to present identification (driver's license, passport, etc.) when you enter the base (so take your with ID if you go for a walk or a run off the base). If asked, your point of contact is Pat Harr in the Meteorology Department. If you get stuck at the gate (forgot your ID, etc.), call one of the numbers listed earlier in this Chapter and one of the T-PARC Operations Center staff will come out and escort you through.

\*\*Note: If your spouse will be joining you while you are at NPS, please send Pat Harr an e-mail so he can make sure that she/he is added to the gate access list.

#### **BADGES:**

Everyone will be issued a badge once they arrive at the Ops Center (incl. spouses). Please wear them at all times on campus, as they will identify you as part of the T-PARC group.

#### **VEHICLES:**

Rental cars are allowed on base. The gate guard will check your rental agreement against your ID card, so please have the rental agreement ready when you pass through the gate. Also, once

you are through the gate, place the rental agreement on the dash, as this will act as your vehicle permit. Taxis are also allowed on the base (and can take you to the door of your hotel), although again you will need to have your ID ready for the guards to check as you pass through the gate.

## T-PARC DAY-TO-DAY OPERATIONS

#### **SCHEDULE:**

From the start, two key meetings will be held each day and will be standard throughout the experiment. The Daily Science Meeting and Ops Planning Meeting will be held in the Ops Center at 2:00pm and 4:00pm, respectively (local time). Many more meetings will transpire, especially as missions are flown, but those will be on a rolling timeline. The Daily Science Meeting and Ops Planning Meeting will remain at 2:00pm and 4:00pm.

#### **WORK SPACES:**

Many people will use the Ops Center as a work center throughout the day. Root 121 (2 to the left of the Ops Center) will also be open, and is equipped with study carrels, tables, PCs, a Linux workstation, as well as a refrigerator, microwave and coffee. Wired and wireless internet is available in both those spaces. The forecast center will be upstairs in room 236. There will be some other office space available on the second floor if you would prefer a quiet place to work.

#### **METEOROLOGY OFFICES:**

The Meteorology Department occupies about 1/3 of the second floor of Root Hall (toward the end with the elevator). Pat's office is in room 244. The Ops Director (Moore/Dirks) will be in 236B. The Met Office is in 254. Michael and Charlie work there and should be able to help answer any questions you may have.

#### **ATTIRE:**

The student body is required to dress in business casual attire, so during the day (8:00am-5:00pm), collared shirts and khaki-style pants are best. Jeans are acceptable. On Tuesday everyone is in their dress uniforms.

#### **WEATHER:**

As a general note, summers on the Monterey Peninsula typically entail foggy mornings, and cool temperatures (50-650 F) prevail through the early afternoon (after which it may reach 75°F. Most people in Monterey wear jackets, sweaters or sweatshirts at night - even in the summer.

ACCOMMODATIONS

#### ON SITE HOTEL:

Gateway Inn & Suites (Herrmann Hall) (831) 656-2060; (831)656-2069 Group # 30470100694: "Tropical Cyclone Research Project" The "Gateway Inn & Suites" is located in Herrmann Hall, which is the old Hotel Del Monte - an historic hotel first built in the late 1800's. The NPS campus is undergoing a general renovation. The hotel renovation is complete and the reserved rooms are in the renovated wings (all rooms have kitchenettes). Most regular rooms will be in the west wing and most of the suites will be in the east wing. The hotel check-in is up the steps from the flagpole, through the doors, at the first desk on your right.

#### **FOOD:**

Herrmann Hall has a regular dining hall (the El Prado Dining Room) as well as a restaurant/bar combination (the Trident Room). Just outside of Root Hall there is a small outdoor café (the Del Monte Café) that serves breakfast, lunch, snacks, Starbucks coffee, etc. For the purpose of stocking your fridge, however, the closest (regular) grocery store is about a mile away; the closest liquor store is across the street from the Sloat Gate and the closest convenience store is the Valnizza Market on Ocean Avenue a few blocks from the Sloat Gate.

#### **GYM:**

There is a full gym on campus (aerobic & weight machines, racquetball, basketball and tennis courts), and miles of very nice running/biking paths are accessible from the campus (head out the Del Monte Gate, cross the street, hit the path, turn left and you can go along the coast for miles).

#### LOCAL INFORMATION:

The lobby of Hermann Hall has an area stocked with pamphlets on local things to do in the area. We'll have maps and other local information on hand once you arrive.

## <u>Driftsonde Operations – Big Island of Hawaii</u>

August 15 through September 30, 2008



Near Space Corporation (NSC) Balloon Launch Site

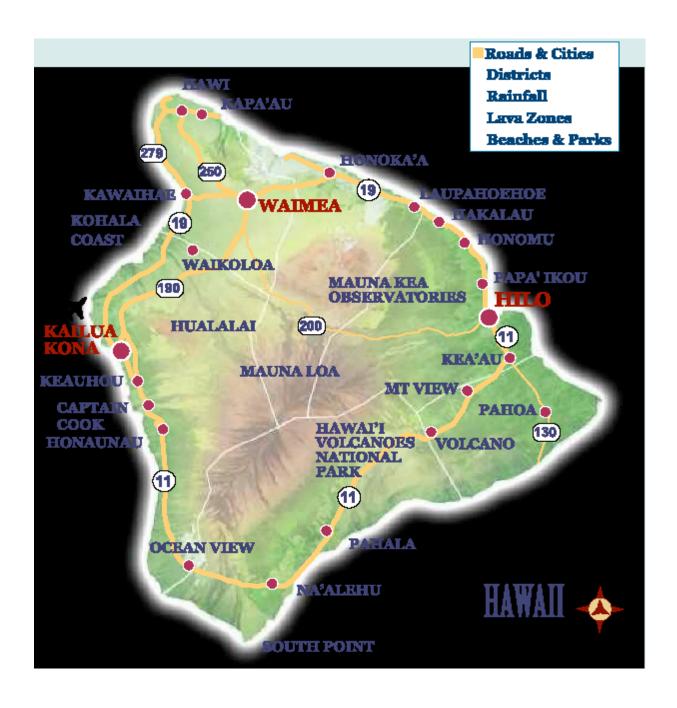
92-8951 Bougainvillea Drive Hawaiian Ocean View, HI 96737 Phone: (808) 929-9073 (HANGAR) Fax: (808) 929-9084

#### **NSC Staff**

Tim Lachenmeier - NSC President: (503) 816-2196 Wert Russert - NSC Technician: (503) 984-2789

#### **NCAR Staff**

<u>Name</u>	<u>Title</u>	Cell Phone	NCAR Phone
Terry Hock	Program Manager	(303) 817-0910	(303) 497-8767
Jack Fox	Engineer	(303) 579-7302	(303) 497-8781
Hal Cole	Engineer	(303) 817-4034	(303) 497-8753
Dean Lauritsen	Engineer	(303) 319-8603	(303) 497-8772
Keith Romberg	Software Eng	(303) 579-1534	(303) 497-2039
Mary Hanson	Administrator	(303) 907-1855	(303) 497-8768
Maureen Donovan	Administrator	(303) 263-7274	(303) 497-8678

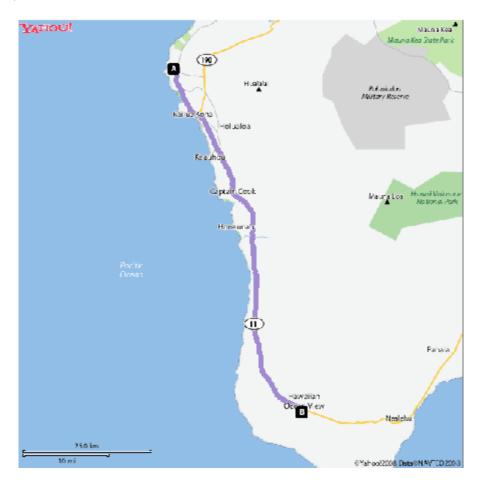


## **Driving Directions from Airport to NSC project site**

## **Near Space Corporation**

92-8951 Bougainvillea Drive Hawaiian Ocean View HI 96737

Phone: (808) 929-9073



Distance
go <b>0.24</b> mi
go <b>0.28</b> mi
go 6.88 mi
go 1.19 mi
go 42.73 mi
go <b>211</b> ft
go 0.17 mi

8. Arrive at KONA GARDEN DR, HAWAIIAN OCEAN VIEW

NOTES: Kona Garden Drive is just past HWY 11 mile marker 79. Turn right just past the big white sign "KONA GARDEN ESTATES".



Immediately, make another right onto the frontage road. Go a short distance and you will see the



gated entrance. The magic code for the gate is 1990. PLEASE DRIVE ONLY 10 MPH down the road a little bit, turn right on Bougainvillea Drive. You will see a blue metal building on the left which means that you have arrive





## Driving Directions from Airport to Keauhou Beach Resort (run by

## Outrigger)

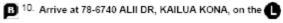
Keauhou Beach Resort 78-6740 Alii Drive, Kailua-Kona, Hawaii, 96740

Phone: 800-326-6803 or 808-322-3441

Fax: 808-322-3117



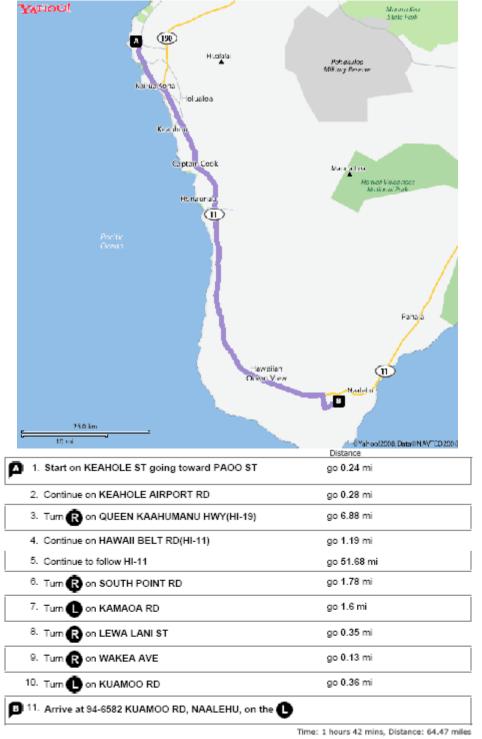
	Distance
Start on KEAHOLE ST going toward PAOO ST	go 0.24 mi
2. Continue on KEAHOLE AIRPORT RD	go 0.28 mi
3. Turn R on QUEEN KAAHUMANU HWY(HI-19)	go 6.88 mi
Continue on HAWAII BELT RD(HI-11)	go 1.19 mi
5. Continue to follow HI-11	go 3.7 mi
8. Turn R on KAMEHAMEHA III RD	go 1.49 mi
7. Turn 🕞 on ALII DR	go <b>0.2</b> mi
8. Turn  on ALII DR	go <b>0</b> .63 mi
9. Turn R on ALII DR	go <b>0.1</b> 6 mi



## **Driving Directions from Airport to The Parrot House**

94-6582 Kuamoo Road Mark Twain Estates Naalehu, HI

Contact: Sharon M. Madsen, Pacific Horizons Properties, Inc. Property Management Division P.O. Box 104, Na'alehu Shopping Center, Suite B, 95-5657 Mamaloha Hwy 5A, Naalehu, HI 96772 Phone: (800) 359-6089, (808) 939-7368, (808) 936-8207 (this one she responds to most) sharmad@fastnethi.com Sharon@SharonMadsen.com www.kaurental.com



NOTE: Kuamoo Road is not labeled. You will see a house on the corner with a chainfenced yard and two barking white & black pit-bulls in the yard. Sometimes a little peach colored yapping dog is out there with them. The road has ruts and you may hit bottom, but continue on until you see the house number "94-6582." The driveway is a bit steep.

## **Driving Directions from Airport to The Shining House**

94-1510 Hekau Street Discovery Harbour Naalehu, HI

Contact: Sharon M. Madsen, Pacific Horizons Properties, Inc. Property Management Division P.O. Box 104, Na'alehu Shopping Center, Suite B, 95-5657 Mamaloha Hwy 5A, Naalehu, HI 96772 Phone: (800) 359-6089, (808) 939-7368, (808) 936-8207 (this one she responds to most) sharmad@fastnethi.com Sharon@SharonMadsen.com www.kaurental.com

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1. Start on KEAHOLE S     2. Continue on KEAHOL		Distance go 0.24 mi
1. Start on KEAHOLE S     2. Continue on KEAHOL	LE AIRPORT RD KAAHUMANU HWY(HI-19)	Distance go 0.24 mi go 0.28 mi
1. Start on KEAHOLE S 2. Continue on KEAHOL 3. Turn  on QUEEN 4. Continue on HAWAII 5. Continue to follow HI-	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi
10 mi  1. Start on KEAHOLE S 2. Continue on KEAHOL 3. Turn on QUEEN 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn on SOUTH 6	LE AIRPORT RD KAAHUMANU HWY(HI-19) BELT RD(HI-11) 11 POINT RD	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi
1. Start on KEAHOLE S 2. Continue on KEAHOL 3. Turn  on QUEEN 4. Continue on HAWAII 5. Continue to follow HI-	LE AIRPORT RD KAAHUMANU HWY(HI-19) BELT RD(HI-11) 11 POINT RD	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi
10 mi  1. Start on KEAHOLE S 2. Continue on KEAHOL 3. Turn on QUEEN 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn on SOUTH 6	LE AIRPORT RD KAAHUMANU HWY(HI-19) BELT RD(HI-11) 11 POINT RD A RD	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.78 mi
10 mi  1. Start on KEAHOLE S 2. Continue on KEAHOLE S 3. Turn  on QUEEN S 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn on SOUTH S 7. Turn on KAMAO	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11  POINT RD  A RD  LAI ST	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.78 mi go 1.2 mi
10 ml  1. Start on KEAHOLE S 2. Continue on KEAHOLE 3. Turn  on QUEEN I 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn  on SOUTH I 7. Turn  on KAMAO 8. Turn  on HOLOKE	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11  POINT RD  A RD  LAI ST  E LOOP	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.78 mi go 1.2 mi go 317 ft
10 ml  1. Start on KEAHOLE S 2. Continue on KEAHOLE S 3. Turn R on QUEEN I 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn R on SOUTH I 7. Turn 1 on KAMAO 8. Turn R on HOLOKI 9. Turn R on HAEHAE	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11  POINT RD  A RD  LAI ST  E LOOP	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.2 mi go 317 ft go 0.23 mi
1. Start on KEAHOLE S 2. Continue on KEAHOLE S 3. Turn R on QUEEN S 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn R on SOUTH S 7. Turn D on KAMAO 8. Turn R on HOLOKL 9. Turn R on HAEHAE 10. Continue on HAEHAE	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11  POINT RD  A RD  LAI ST  E LOOP  E ST	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.78 mi go 1.2 mi go 317 ft go 0.23 mi go 0.54 mi
10 ml  1. Start on KEAHOLE S 2. Continue on KEAHOLE S 2. Continue on HAWAII 4. Continue on HAWAII 5. Continue to follow HI- 6. Turn  on SOUTH S 7. Turn  on KAMAO 8. Turn  on HAEHAE 10. Continue on HAEHAE 11. Turn  on KAHIKI S 12. Turn  on HEKAU	LE AIRPORT RD  KAAHUMANU HWY(HI-19)  BELT RD(HI-11)  11  POINT RD  A RD  LAI ST  E LOOP  E ST	Distance go 0.24 mi go 0.28 mi go 6.88 mi go 1.19 mi go 51.68 mi go 1.78 mi go 1.2 mi go 317 ft go 0.23 mi go 0.54 mi go 0.21 mi go 0.12 mi

Time: 1 hours 40 mins, Distance: 64.4 miles

## Directions from Naalehu to <u>Urgent Care</u> in Kailua-Kona

**Keauhou Urgent Care Ctr** Address: 78-6831 Alii Dr # K9, Kailua Kona, HI 96740

Phone: (808) 322-2544

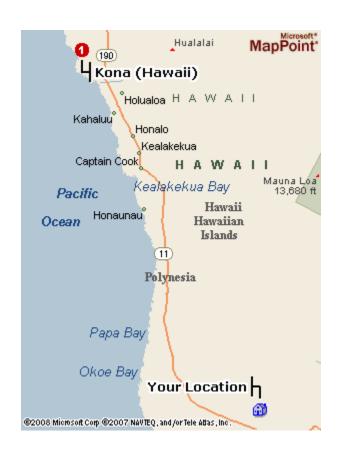


		Distance
ß	Starting at the center of zip code 96772 on MAMALAHOA     HWY go toward KUKUI ST	go 2.11 mi
	2. Turn on MAMALAHOA HWY(HI-11)	go 4.6 mi
	3. Continue to follow HI-11	go 47.1 mi
	Turn  on KAMEHAMEHA III RD	go 1.49 mi
	5. Turn 🕞 on ALII DR	go 0.2 mi
	6. Turn R on ALII DR	go 53 ft
ø	7. Arrive at 78-6831 ALII DR, #K9, KAILUA KONA, on the	
	_	

Time: 1 hours 23 mins, Distance: 55.52 mile

## **Directions to Costco Warehouse from Houses**

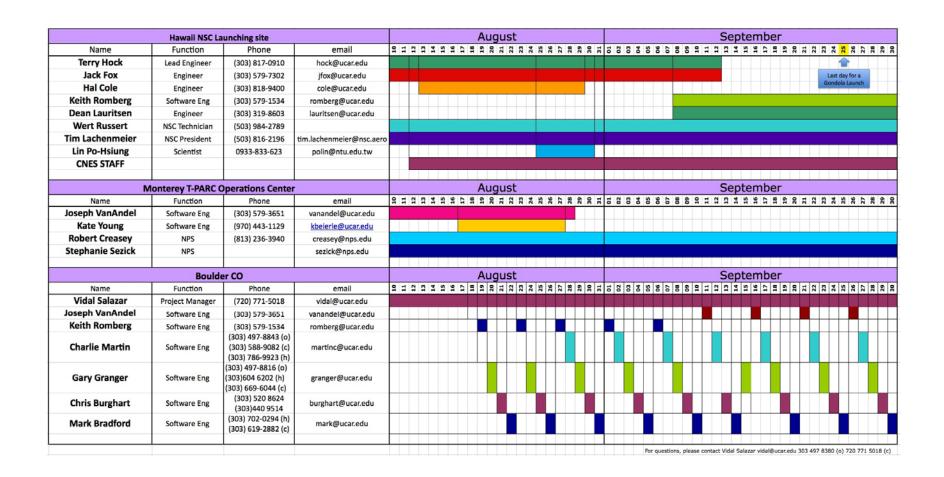
73-5600 Maiau Street Kailua-Kona (Hawaii), Hawaii 96740



1: Start out going WEST on HEKAU ST toward KAHIKI ST.	0.1 mile
2: Turn LEFT onto KAHIKI ST.	0.2 mile
3: Turn RIGHT onto HAEHAE ST.	0.5 mile
4: Stay STRAIGHT to go onto HAEHAE LOOP.	0.2 mile
5: Turn LEFT onto HOLOKLAI ST.	0.1 mile
6: Turn LEFT onto KAMAOA RD.	1.2 miles
7: Turn RIGHT onto SOUTH POINT RD.	1.8 miles
8: Turn LEFT onto MAMALAHOA HWY/HAWAII BELT RD/HI-11.	44.3 miles
9: Turn SLIGHT LEFT onto HAWAII BELT RD/KUAKINI HWY/HI-11. Continue to follow HI-11.	8.6 miles
10: HI-11 becomes QUEEN KAAHUMANU HWY/HI-19.	3.7 miles
11: Turn SLIGHT RIGHT onto HINA LANI ST.	0.1 mile
12: Turn RIGHT onto KANALANI ST.	0.3 mile
13: Turn LEFT onto MAIAU ST.	0.1 mile
14: End at 73-5600 Maiau St Kailua Kona, HI 96740-2630	

Estimated Time: 1 hour 40 minutes Estimated Distance: 61.19 miles

## Schedule for General Support during Driftsonde Activities



## Laboratory Contact Information

Last Name	First Name	Ext	Div	Email	Cell Phone
Aguilar	Shannon	1030	raf	aguilar@ucar.edu	303-652-7014
Albee	David	1019	raf	allbee@ucar.edu	
Albright	Gerry	1039	raf	albright@ucar.edu	303-817-4497
Allison	John	2633	cds	jallison@ucar.edu	
Anderson	Scott	2043	eol	scotta@ucar.edu	
Baeuerle	Brigitte	2061	fps	baeuerle@ucar.edu	303-579-1601
Beasley	Robert	1056	raf	beasley@ucar.edu	
Beaton	Stuart	1038	raf	beaton@ucar.edu	
Bell	Michael	2058	rsf	mbell@ucar.edu	
Bobka	Jeff	2030	dfs	jbobka@ucar.edu	
Boynton	Henry	1057	raf	boynton@ucar.edu	303-818-2087
Bradford	Mark	8169	cds	mark@ucar.edu	
Brown	Bill	8774	isf	wbrown@ucar.edu	
Bruning	Gregory	1076	raf	bruning@ucar.edu	
Burghart	Christopher	8836	cds	burghart@ucar.edu	
Campos	Teresa	1048	raf	campos@ucar.edu	303-396-2605
Cheeseman	Geoff	8806	eol	geoff@ucar.edu	
Cohn	Steve	8826	isf	cohn@ucar.edu	
Cole	Hal	8753	isf	cole@ucar.edu	
Cooper	William	1600	raf	coooperw@ucar.edu	303-579-3398
Cowan	John	1064	raf	jcowan@ucar.edu	
Craig	Kelly	8825	eol	kcraig@ucar.edu	
Cully	Linda	8163	cds	cully@ucar.edu	
Cusack	John	1082	raf	cusack@ucar.edu	
Daniels	Mike	8793	cds	daniels@ucar.edu	
Deierling	Wiebke	8760	asp	deierlin@ucar.edu	
Dirks	Dick	8151	eol	dirks2@ucar.edu	303-818-1108
Dong	Ling	1014	raf	dongl@ucar.edu	
Donovan	Maureen	8678	eol	mdonovan@ucar.edu	303-263-7274
Eagan	Kip	1035	raf	eagan@ucar.edu	
Ellis	Scott	2076	rsf	sellis@ucar.edu	
Emmett	Jonathan	2053	rsf	jemmett@ucar.edu	
Farquharson	Gordon	2011	rsf	gordonf@ucar.edu	

Flanigan	Dennis	2038	cds	dennisf@ucar.edu	
Fox	Jeff		dfs	jfox@ucar.edu	303-579-7302
Fried	Alan	1475	tdf	fried@ucar.edu	
Friesen	Dick	1047	raf	rbf@ucar.edu	
Gerleman	Julie	8831	eol	gerleman@ucar.edu	
Goldstein	Janine	8691	cds	janine@ucar.edu	
Golubieski	christopher	2059	isf	golub@ucar.edu	
Granger	Gary	8816	cds	granger@ucar.edu	
Grenzlinger	Lowell	1059	raf	grenzling@ucar.edu	
Haggerty	Julie	1090	raf	haggerty@ucar.edu	303-475-0049
Hanson	Mary	8768	eol	mhanson@ucar.edu	303-907-1855
Heizer	Cliff	1070	raf	cheizer@ucar.edu	
Hock	Terry	8767	isf	hock@ucar.edu	303-817-0910
Holden	Kyle	2074	rsf	kholden@ucar.edu	
Horst	Tom	8838	isf	horst@ucar.edu	
Hubbert	John	2041	rsf	hubbert@ucar.edu	
Hurst	Jean	8808	rsf	hurst@ucar.edu	
Irwin	Bill	1094	raf	birwin@ucar.edu	303-916-7581
Jensen	Jorgen	1028	raf	jbj@ucar.edu	
Keeler	Jeff	2031	rsf	keeler@ucar.edu	
Kidd	Brent	1089	raf	kidd@ucar.edu	
Kidd	Patty	8175	eol	pkidd@ucar.edu	
Knudson	Kurt	8733	isf	kknudson@ucar.edu	
Korn	Errol	8730	isf	korn@ucar.edu	
Lai	Hsiao-wei	8792	rsf	hwlai@ucar.edu	
Lauritsen	Dean	8772	isf	lauritsn@ucar.edu	303-319-8603
Lee	Wen Chau	8814	rsf	wenchau@ucar.edu	
Lim	Tim	8734	isf	tdlim@ucar.edu	
Lindseth	Brad	8742	isf	lindseth@ucar.edu	
Ling	Feng	8799	cds	ling@ucar.edu	
Loehrer	Scot	2631	cds	loehrer@ucar.edu	
Loew	Eric	2068	rsf	ericloew@ucar.edu	
Lord	Mark	1046	raf	lord@ucar.edu	303-325-6104
Maclean	Gordon	8794	cds	maclean@ucar.edu	
Martin	Charlie	8843	cds	martinc@ucar.edu	
Martin	Pierce	8746	cds	pmartin@ucar.edu	
McClain	Scotty		raf		
Meitin	Jose	8168	fps	meitin@ucar.edu	720-352-0839
Metz	Sara	8166	eol	smetz@ucar.edu	

Militzer	John	8807	isf	militzer@ucar.edu	
Moore	James	8635	fps	jmoore@ucar.edu	303-818-9400
Morley	Bruce	2035	rsf	bruce@ucar.edu	
Morris	Jason	1069	raf	jmorris@ucar.edu	
Munnerlyn	John	1034	raf	munnerly@ucar.edu	
Murphy	Larry	1068	raf	lmurphy@ucar.edu	
Newbery	Santiago	8762	cds	newbery@ucar.edu	
Nilsson	Sandra	8822	eol	snilsson@ucar.edu	
Norris	Ken	8754	isf	knorris@ucar.edu	
Olson	Robert	1071	raf	oslonb@ucar.edu	
Oncley	Steve	8757	isf	oncley@ucar.edu	
Owens	James	8804	isf	owensj@ucar.edu	
Phinney	Al	2009	rsf	phinney@ucar.edu	
Pratte	Frank	2033	rsf	pratte@ucar.edu	
Randic	Velimir	1066	raf	rundic@ucar.edu	
Richter	Dirk	8748	tdf	dr@ucar.edu	
Rilling	Bob	8842	rsf	rilling@ucar.edu	
Ringleman	Edward	1073	raf	ringlema@ucar.edu	
Roberts	Steve	2637	cds	sroberts@ucar.edu	
Rogers	David	1054	raf	dcrogers@ucar.edu	720-480-8388
Romashkin	Pavel	1027	raf	pavel@ucar.edu	303-885-6155
Romberg	Keith	2039	cds	romberg@ucar.edu	303-579-1534
Russ	Ted	2639	cds	truss@ucar.edu	
Ruzanski	Evan	2005	rsf	ruzanski@ucar.edu	
Salzar	Vidal	8380	fps	vidal@ucar.edu	720-771-5018
Sawyer	Karyn	8681	eol	karyn@ucar.edu	
Scannel	Janet	1093	cds	anstett@ucar.edu	
Schanot	Allen	1063	raf	schanot	303-579-0178
Semmer	Steve	8802	isf	semmer@ucar.edu	
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## T-PARC Risk Assessment

## Advance Notice of Field Project Facility Deployment and Safety/Security Review Field Project Risk Assessment and Mitigation Assistance with completing this portion of the form is available from HESS, x8625

Condition	Hazard	Control
Facilities/equipment deployed or used: NRL P3, ELDORA, dropsondes, driftsonde	1. Flying in heavy convection, developing typhoons	1. Aircraft safety training, flight guidance from ground
	2. Radiofrequency exposure from ELDORA     3. Air pollution from volcano	2. P3 operations staff monitor RF exposure prior to project, operate in accordance with safe operating procedures (SOP)
	eruption in HI	3. individuals with chronic respiratory disease should consult with physician prior to travel
Chemicals, compressed gasses, radioactive materials used:  1. Nitrogen, helium 2. Explosive charge line cutters for driftsonde	Pressure hazards     licensing of explosive charge	1. keep cylinders secured to immobile object while in use, protect regulator while in use, transport, and store with cap in place. HI operations under direction of NSC – follow NSC procedures  2. import and use licensing to be managed by the flight operations contract company, NSC
Mode of Shipping Facilities/equipment/ hazardous materials: Coordinated by UCAR Logistics Operations	Commercial shipping via ocean and land freight from Boulder to various operational places	n/a
Lodging: American chain hotels, coordinated by US Navy; airbase in Japan	None expected	n/a
Hours of project operation: 10 hour flights, about 14 hour days; 150 research hours	Fatigue related incidents and accidents     Deep vein thrombosis from long flights	1. Navy directed schedule, but RAF crew duty restrictions are expected to be followed by the P3 project manager 2. Regularly move about the aircraft whenever possible; exercise lower leg muscles while seated if other movement is not possible
Modes of transportation: Rental cars	No unusual hazards expected	Defensive driving
Communications – at project site(s) and with UCAR: Communication via email, satellite or cell phone	None expected	ATT cell phones are reported to work in Guam; SATCOM on the aircraft

Weather Expected:	Lightening	Evacuation plans needed:
Pre-typhoon conditions, heavy	Heavy winds	Evacuation plans needed:  Evacuation required when
convection	Strom surge and flooding	directed by local emergency
		response planners. Guam is a
		participant in NOAA Storm
		Ready and Tsunami Ready
		programs.
	Hot, humid weather	Drink adequate water to remain
		hydrated, sip water throughout
		day as opposed to drinking large
		volumes at a time. One gallon
		clean water per person per day is
		recommended. Avoid heavy
		labor during the hottest times of day. Seek shade or air
		conditioning for breaks
		throughout the day.
Security and political stability:		n/a
No political unrest in any of the	None expected	
operational areas		
Local health issues: Food –related issues such as	Food and water borne illness	Immunizations are available at
travelers diarrhea		Passport Health and on site clinics; drink bottled water and
travelers diarrica		eat well cooked foods when away
		from hotel or commercial
		restaurant facilities
Local customs/concerns:		Kulepbla (brown tree snakes) are
Snakes on Guam		poisonous. Several babies on
		Guam have nearly died after
		being bitten by it. This is why parents are advised to keep
		kulepbla away from infants and
		small children. Kulepbla are also
		constrictors which means they
		kill their prey by wrapping
		themselves around their prey and
		then squeezing. They also kill
		their prey by holding on to it and
		chewing, thus allowing the poison to slowly leak into the
		victim. These snakes will strike
		and bite if cornered, but people
		generally have little reason to fear
		them.
Student/volunteer participation:	Inexperienced decisions	Closely supervise student
2 UCAR hired students expected		activity. Train students on work
to support dropsonde operations		procedures, safety procedures, and other project expectations.
Medical Facilities:	Local clinics that need to be	Emergency medical
	checked out	services are dispatched by
		calling 911.
		GUAM SDA Clinic
		388 Ypao Road
		(671) 646-8881

	American Medical Center 1244 North Marine Corps Drive (671) 647-8262
	South Pointe Hawaii: Maps attached 35 Miles from Hawaiian Ocean View Kona Community Hospital 79-1019 Haukapila St Kealakekua, HI 96750-7920
	26 Miles from Hawaiian Ocean View Kau Hospital Kamani St. Pahala, HI
Other Conditions:	,