



Orientation for ORACLES 2017 Deployment
ObseRvations of Aerosols above CLouds and their intERactionS

Document updated: Aug 2, 2018

Red Text shows updated content from
 last year's 2017 São Tomé Orientation document.

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This orientation package is to help you become familiar with the area and to answer some of the questions you may have before you arrive. If you have questions regarding the contents of this package, please don't hesitate to contact a member of the ESPO team.

ABOUT São Tomé

Geographic Location

São Tomé and Príncipe is pronounced as Sow Toe Mae and Prince eh peh

São Tomé and Príncipe is the second smallest African country, larger only than the Seychelles. The islands of São Tomé and Príncipe are situated in the Atlantic Ocean about 200 and 150 miles respectively off the northwest coast of Gabon. Both islands, also known as Guinea Islands, are part of a volcano chain. The equator lies immediately south of São Tomé.



São Tomé is 31 miles long and 20 miles wide and the more mountainous of the two islands. Its highest peak reaches 6,640 feet. Príncipe is approximately 19 miles long and 4 miles wide. Its highest peak reaches 3,110 feet.

- São Tomé - capital city of São Tomé and Príncipe
- 964 sq km (372 sq mi) (San Jose, CA: 180 sq mi)
- Population ~200k, 537/mi² (in comparison San Jose, CA is 5700/mi²)
- Industries – Agriculture (cacao; historically sugar), Fishing, Tourism
- Language: Portuguese, Forro (Creole), CV Creole, Angolar

- Education compulsory for 4 years
- Independent since 1975; Portuguese before
- GDP per capita \$3,220 (USA \$57,200)



LANGUAGE

The official language of São Tomé and Príncipe is Portuguese. The majority of the population speaks a creolized version, called Forro Creole. Hotel staff knows a little English but overall some basic Portuguese will go a long way. ***See Appendix A for some common Portuguese words and phrases you can learn.***

PEOPLE

São Toméans are friendly, easy-going people but also very direct and to the point. Ask permission before taking pictures of people. Manners and etiquette are important. It is appropriate, when greeting someone, to ask about his or her health and about his or her family. Being invited into a person's home or garden is an honor. Read more:

<http://www.everyculture.com/Sa-Th/S-o-Tom-e-Pr-ncipe.html#ixzz4hwOz7VBW>

ANTI-HARASSMENT POLICY

It is also important to represent NASA appropriately such that **“Each of us is expected to conduct ourselves appropriately and to treat each other -- as well as our partners and stakeholders -- with professionalism, respect, and dignity, to avoid engaging in any harassing conduct.** The success of NASA's mission depends on having a safe and effective workforce, which requires an inclusive and respectful workplace where employees are empowered to perform their duties, voice their concerns and ideas about issues requiring correction or improvement, and report risks, problems, and wrongdoing.” NASA's anti-harassment policy, procedures, and resources (visit www.nasa.gov/offices/oeod/eoi/anti-harassment).

WEATHER

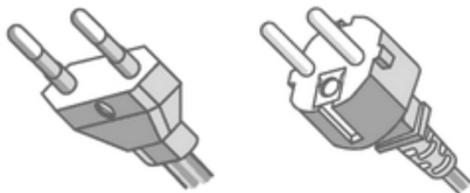
In October São Tomé experiences daily tropical rains, with occasional heavier fronts. Highs are around 30C (86F) and lows around 22C (71.6 F) 109 mm (4.29 inches) of rainfall. Historically, there have been 8-9 days that had rain/thunderstorms.

MONEY

- Local currency is São Toméan Dobra (STD)
- As many of you know from last year, São Tomé redenominated the nation's currency with new banknotes. 1 new dobra is equal to 1,000 of the previous dobras.
- After June 30, 2018, the only Institute accepting the old dobra is the Central Bank (government bank). If you have old dobra, you can go there and request them to change it for the new dobra.
- A cash economy
- Exchange rate as of May 30 2018 was 100 STN (100,000 STD) to 4.09 Euros or 4.74 Dollars
- New STN notes are available as 5/ 20 / 50/ 100 bills
- Euros are widely accepted; take along smaller bills such as 5, 10 and 20 euros
- You may want about 100-200 USD per week depending on how much you eat out, etc. Dining at the hotel can be charged to your room, or put on your credit card at the front desk.
- Dinner at the hotel ranges from 22-30 Euros. Breakfast is complimentary. Lunch costs 20-30 Euros at a restaurant near the airport and there is also a food truck nearby.
- Credit cards are not widely used in the country; the hotels accept them (Visa and Mastercard only).
- The hotel will act as our ATM. Notify them the day before how much you will need. They will charge your credit card (plus a fee, about 5%). Let your credit card company know of your travel plans.
- Traveler's checks are not accepted

LOCAL POWER

- Electricity in São Tomé is 220V, with a frequency of 50Hz
- European 2 pin plug types (Type C plug)
- The hotel may have a 110V low-amp plug in the bathroom



LOCAL TIME

The local time in São Tomé and Príncipe is UTC +1. US West Coast is UTC -7 hours. **On November 4, 2018, US changes to Daylight Savings Time and become UTC -8.**

LAWS

It is strictly forbidden to take photos of the Presidential Palace, military or other government buildings. If you are arrested or detained, ask police or prison officials to notify the U.S. Embassy in Libreville immediately. Penalties for illegal drugs are severe. Crimes such as burglary and pick-pocketing can be prevalent in markets or near hotels. **Some ORACLES people had their backpacks stolen when they were at a beach.** Don't display large amounts of cash, carry minimal cash, avoid wearing flashy jewelry and put valuables/cash in hotel safe. **We had asked the hotel to provide in-room safes but they had not arrived on island to be installed in time for our visit in 2017. We hope they will be in place for our trip in 2018. It is recommended to have a photocopy of your passport when traveling. You can leave your passport in the safe and take the photocopy with you on excursions.**

If you are a victim, you are encouraged to surrender your property to avoid injury and report all incidents to the police and embassy.

<https://travel.state.gov/content/passports/en/country/sao-tome-principe.html>

Our In-foreign country Point of Contact (POC) is:

Diana Costa, Political/Economic Officer
US Embassy in Gabon
Address: Sablière B.P. 4000, Libreville, Gabon
Telephone: +241-01-45-7118

BEFORE YOU TRAVEL

See Appendix B – To Do Checklist to verify you are prepared for this deployment.

COMMUNICATIONS PREPARATION

MAILING LISTS

Review the following ORACLES mailing lists and compare to your ESPO profile. Let ESPO know if you want to be added to any mailing list.

- ORACLES
- ORACLES-Flight-Planning
- ORACLES-P3-All
- ORACLES-P3-Investigators
- ORACLES-P3-Team
- ORACLES-PIs

You can self unsubscribe or subscribe to the mailing list by sending an empty email to LISTNAME-leave@espo.nasa.gov or LISTNAME-subscribe@espo.nasa.gov as shown in the example for the ORACLES mailing list below:

Unsubscribe by sending an empty email to: oracles-leave@espo.nasa.gov

Subscribe by sending an empty email to: oracles-subscribe@espo.nasa.gov

GROUP TEXTS

We will use WhatsApp on WiFi for our immediate communications to supplement emails. ESPO will set up a dedicated ESPO wireless network at the hotel conference room and Internet at the airport hangar. **See Appendix C for information about WhatsApp.**

There are many other apps in addition to WhatsApp that will be handy to have on your smartphone such as Google Maps and Google Translate. ***See Appendix D for a list of suggested smartphone applications and instructions.*** You will want to download and set these up before you leave.

INTERNET

The hotel rooms are wired so bring an Ethernet cable to use their 20Mbps download. The wireless signal in the rooms is weak, possibly due to the heavy doors. You may also want to bring a small Wi-Fi access point (pocket router) for your personal use in your room at your own expense. If you don't travel enough to justify buying a pocket router, you can turn your own laptop into a wireless access point. All you need is a live Ethernet cable, a visit to the System Preferences panel (for OS X), or a quick third-party app download (for Windows).

See Appendix E for instructions on how to setup a hotspot so you can share your laptop network connection with your other devices like cell phone or tablets.

PHONES

The country code for São Tomé is +239. Coverage for mobile telephone varies from very good to non-existent, depending on the area on each island. (If calling home, the USA country code is 011 **or +1**)

Dual band cell phones and phones that support GSM 900 standard work.

9-1-1 in São Tomé is 2-22-22-22

We recommend turning off data completely on any mobile device (**or use airplane mode**) before arriving, unless you have an unlimited international data plan, because data roaming rates are very high. You will pay international rates when calling or sending text messages.

International roaming agreements currently exist with one company, CST, which has the monopoly on local cell phones. It is recommended that you set up an international plan with your carrier before you leave home. For example AT&T Passport is \$40/60/120 depending on data and cost per minute plan you want to be on. Another

option is that you can buy a local phone or use the WiFi (email, text message , WhatsApp, Skype) to communicate. **WhatsApp used over WiFi is free!** Note: Skype to skype is free but Skype to a landline is \$1.19 a minute.

You can also purchase a sim card (if your phone is unlocked) or a local phone. Sim cards are about \$7.00. You can add data and minutes. A local phone may not have data but you should be able to get texts. ***See Appendix F for steps to take on your phone when abroad.***

ESPO will have 11 non-smart phones that can be borrowed. **These will not be useful for WhatsApp texts as they cannot run the application. But the phones can be used for texting to a specific person. Texts can be slow to type as a number is pressed multiple times until the correct letter appears.**

TRAINING

HTSOS is required of all **civil servant** travelers to Africa. **It is also required if you are an onsite contractor to NASA. For 2018, the agency has decided that HTSOS training is not required of grantees.** The training is valid for 5 years. Send your certification of completion to your Center's International Services Office. If you are not from a NASA Center **and you have taken the training**, upload the certificate to the ESPO database. If you are not a Civil Servant, **ESPO can provide some guidance on how to obtain this training.** If it is required, we suggest that you do the training 4-5 months ahead of travel, as there can be a delay the processing of your request by the Foreign Service Institute if they receive a large number of requests.

VACCINATIONS

Medical facilities in São Tomé are not equivalent to those in the U.S. For serious health concerns or issues, you will likely be evacuated. Do not assume you can procure common medications locally. Prevention and preparation are important. You should prepare medically so you can remain healthy for your stay. Civil Servants should seek advice from their Center's Health Unit staff. It is also advisable to read the CDC guidance for travel to São Tomé. Recommended vaccinations, malaria meds and medical evacuation insurance will be reimbursed for those traveling via SSAI. Information below is our collected, best guidance, but your provider is your best source of advice.

You should be up to date on routine vaccinations (measles-mumps-rubella (MMR), diphtheria-tetanus-pertussis, chickenpox, polio and yearly flu shot) while traveling to any destination. CDC also recommends Hepatitis A and Typhoid to protect against contaminated food. See

<https://wwwnc.cdc.gov/travel/destinations/traveler/none/sao-tome-and-principe>

Keep your immune system strong. The following are some of the things that are possible:

- Malaria - use insect repellants or anti-malarial medicine
- Yellow fever - consider getting vaccination (see below)
- Diarrheal illness - bring over the counter and prescription medicine (see Appendix F)
- Rabies - thoroughly clean bite and contact local health authorities for post-exposure treatment
- Tuberculosis - only consume pasteurized milk products; avoid exposure to those with active TB, coughing in cramped overcrowded areas
- **Sand Fleas – We had a few reported cases within our group last year of burrowed sand flea on their feet (tungiasis). They have to be removed by a doctor. Don't visit the beach when it has been raining or when the air is cool like in the morning or evening. Use insect repellent and cover yourself up when sitting or lying down to avoid bites on your back, legs and feet. Wear shoes.**
- Schistosomiasis - avoid swimming or bathing in fresh water
- Chikungunya - avoid bug bites
- Cellulitis – practice good hygiene; keep skin clean and moisturized to avoid a break in the skin; prevent broken skin by wearing appropriate clothing and footwear; wash wounds properly; use gloves when necessary; trim fingernails and toenails without breaking skin; avoid insect/animal bites

CONSIDER YELLOW FEVER (YFV) SHOT

“Required for Gabon” per CDC. Gabon is divert site for the P-3 flights.

From CDC website about São Tomé:

<https://wwwnc.cdc.gov/travel/destinations/clinician/none/sao-tome-and-principe>

*“**Generally not recommended** - Vaccination generally not recommended in areas where the potential for YFV exposure is low, as determined by absence of reports of human yellow fever and past evidence suggestive of only low levels of YFV transmission. **However**, vaccination might be considered for a small subset of travelers who are at increased risk for exposure to YFV because of prolonged travel, heavy exposure to mosquitoes, or inability to avoid mosquito bites.”*

*“**Required** if traveling from a country with risk of YFV transmission, including transit in an airport located in a country with risk of YFV transmission.”*

If you are transiting through Accra, Ghana or Libreville, Gabon or Luanda, Angola or Malabo, Equatorial Guinea then you need the yellow fever vaccination. Full list of countries with risk of yellow fever transmission is found on this CDC website:

<https://www.cdc.gov/yellowfever/maps/africa.html>

Note: The CDC website specifies “transit >12 hours in an airport located in a country with risk of yellow fever transmission” for many countries **but** for São Tomé, it just

says “transit in an airport located in a country with risk of yellow fever transmission”. So proof of yellow fever vaccination may be required even if you stay on the plane for re-fueling. Also there is risk if you have to de-plane and stay over due to plane issues, you could be denied entry to São Tomé.

If you decide to get the vaccination, bring your yellow fever vaccination certificate with you when travelling and upload to the ESPO website.

CONSIDER MALARIA MEDICATION

São Tomé has been making great strides in reducing incidences of malaria. See the following research article:

<http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2016/02/15/end-of-malaria-in-sight-for-s-o-tom-and-pr-ncipe.html> The estimated relative risk of malaria for US travelers is very low. Malaria species include: *P. falciparum* 85%; *P. malariae*, *P. ovale*, and *P. vivax* 15% combined. The recommended chemoprophylaxis includes Atovaquone-proguanil, doxycycline, or mefloquine. *P. falciparum malaria* is resistant to Chloroquine, so Chloroquine is not recommended.

<https://wwwnc.cdc.gov/travel/yellowbook/2016/infectious-diseases-related-to-travel/yellow-fever-malaria-information-by-country/sao-tome-and-principe#seldyfm707>

Prevent mosquito bites

Zika virus is a concern in Barbados and **Cabo Verde, which are both transit sites for the P-3. Zika is also a concern in Gabon, which is a potential divert site for transit and science flights.**

Permethrin is insect repellent for clothing. It may be needed if you spend a lot of time outdoors. Clothing can also be treated at home in advance. Don't put permethrin directly on skin.

Use insect repellents that contain at least 20% DEET like Cutter Backwoods and Off! Deep Woods. Higher percentages last longer but over 50% is not any more effective. Do not spray DEET on the skin if the skin will be under clothing.

Wear long-sleeved shirts, long pants, socks and a hat. Tuck your shirt into your pants and tuck pants into socks for maximum protection.

INSURANCE

Procure medevac/travel insurance. See the ESPO ORACLES Logistics webpage for more information.

https://espo.nasa.gov/home/oracles/content/ORACLES_Medical_Evacuation_Insurance

Check your medical insurance to find out how foreign incidents are covered.

Get a pre-deployment checkup. Also get a letter from your doctor for any prescriptions

that you take so you can pass through customs easily. It is a good idea to bring along extra prescription medicines and medicines for severe diarrhea such as azithromycin (there has been some Cipro resistance there). You will want to bring medicines for any recent health issues in case they re-occur when you are deployed. It will be difficult to get medicines there. Keep prescription in your carry-on luggage. Pack medication in original containers with clearly labeled with names that match your ID. It is recommended you carry a signed, dated letter from your primary physician describing all your medical conditions and listing all medications, including generic names.

Bring along items that you use to keep you healthy, like vitamins. Also bring over-the-counter medicines. ***Appendix G has the CDC Healthy Travel Packing List with suggested items to bring so you can stay healthy while abroad.*** We have added to this list with information from the Embassy.

Carry an emergency contact card. A template can be found on the ESPO shared files: <https://espo.nasa.gov/home/oracles/node/50569>

MEDICAL FACILITIES IN SÃO TOMÉ

Medical facilities in São Tomé and Príncipe are extremely limited. There is one hospital in the country on the island of São Tomé, Hospital Central Ayres de Menezes, phone number 239 2-221-222.

A few clinics also exist, but the service provided is very basic. **Some ORACLES travelers visited ARS Medica in 2017 and were happy with the service. It is a clinic in town, which is also recommended by Pestana hotel management to all guests.** There are additional clinics around.

You will need to pay cash and seek reimbursement from your insurance afterwards. You will leave the country for major medical treatment. For all but minor medical needs, it is necessary to travel to Libreville (Gabon), Lisbon (Portugal), or elsewhere.

You should carry an ample supply of properly labeled prescription drugs and other medications with you; an adequate supply of prescription or over-the-counter drugs in local stores or pharmacies is generally not available.

<http://www.countryreports.org/travel/SaoTomeandPrincipe/health.htm>

PASSPORT AND VISAS

- Valid passport with at least 6 months of remaining validity and at least two blank visa pages.
- Remember to fill out the page inside your passport with the name, address and telephone of someone to contact in case of emergency.
- Visa will be required. ESPO will pay in advance for P-3 flyers and hopefully

those arriving commercially as well. If you are staying less than 15 days and from the certain countries including the United States, you will not have to get a visa. If you are staying over 30 days, we are working on an easier process for a visa extension. For stays 15-30 days, there is a fee of 20 €. We will let you know when to apply online. Then you can fill out an Application online through eVISAs <http://www.smf.st/virtualvisa/> Make sure all the information provided is as accurate and complete as possible as none of the information can be changed once it has been submitted. The data on the application must match the information in your passport. You will also need your passport scanned in pdf format less than 1MB. Information needed includes:

- Traveler Information (itinerary, address, etc.)
- Hotel information
- São Tomé and Príncipe contact (i.e., name of hotel/accommodation again)
- Type of visa – select **Tourist** not Business
- The arrival date you provide should be the **earliest** you plan to arrive, but you can arrive after that date. The departure date is the **last day you are permitted to be in the country**. Pad your departure date as long as the length of your visit does not exceed 14 days or 30 days, which will trigger a different fee.

Authorization to enter will be received within 7 business days via email from smfautorizacao@gmail.com. Check your Spam folder if you haven't received it in your inbox. You receive your visa stamp when you arrive and they verify the fee is paid.

Take along a copy of your Visa confirmation, which will be checked at the airline counter. Also upload your Visa confirmation letter to the ESPO database.

When you arrive and walk up to the immigration desk, tell them you are with NASA. We will put your number on the list on the ORACLES Google Sheet. You can give the number to the immigration official to assist them with finding your name. The list we give them is sorted alphabetically so you may help by pointing to your surname.

Important: Before you walk away from the immigration desk, make sure they have recorded your entry date correctly. They hand write the date in DD-MM-YY format.

- FYI: The departure procedures can be long – be prepared to stand in line for about 2 hours as all luggage can be hand-searched/inspected.

REGISTER YOUR TRAVEL PLANS

We highly recommend that all people participating in deployment to São Tomé take the time to register their travel with the proper in-country authorities.

US citizens and nationals can easily register their international travel itinerary with the US State Department's STEP program. The Smart Traveler Enrollment Program (STEP) is a free service that allows U.S. citizens and nationals traveling and living abroad to enroll their trip with the nearest U.S. Embassy or Consulate. Read more about it and enroll at <https://step.state.gov>.

For citizens of other countries, we recommend that you contact your Embassy in each of the countries to which you will be traveling with your travel dates.

PERSONAL SCHEDULE PLANNING

Don't plan a vacation to begin immediately after deployment. If a mission **before or after the** schedule slips **or if there are ORACLES schedule changes**, you may miss your vacation.

GOVERNMENT TRAVEL

- 30 day waiver in place for ARC
 - Include note on TA.
- If 'wheels up at home airport to wheels down at TDY airport' is > 14 hours (applies) then the traveler is entitled to one of the following:
 - Rest day upon arrival
 - Overnight hotel accommodation in transit
 - Airport lounge entry fee reimbursement
 - Next higher class of seat (subject to availability)
- Reimbursed: immunizations, travel insurance, visa fee

P-3 TRANSIT BAGGAGE REQUIREMENTS

- P-3 50 lb/flyer
- 50-lb limit includes everything - laptops, cameras, tools, clothes, souvenirs etc.
- Declare items appropriately
- Volume will be limited (no large sporting items)
- Nothing illegal, no firearms
- Bring copies of prescriptions

SITE ORIENTATION

SCHEDULE

Schedule details and updates will be sent to the list serve and posted on the ORACLES website - <https://espo.nasa.gov/ORACLES>.

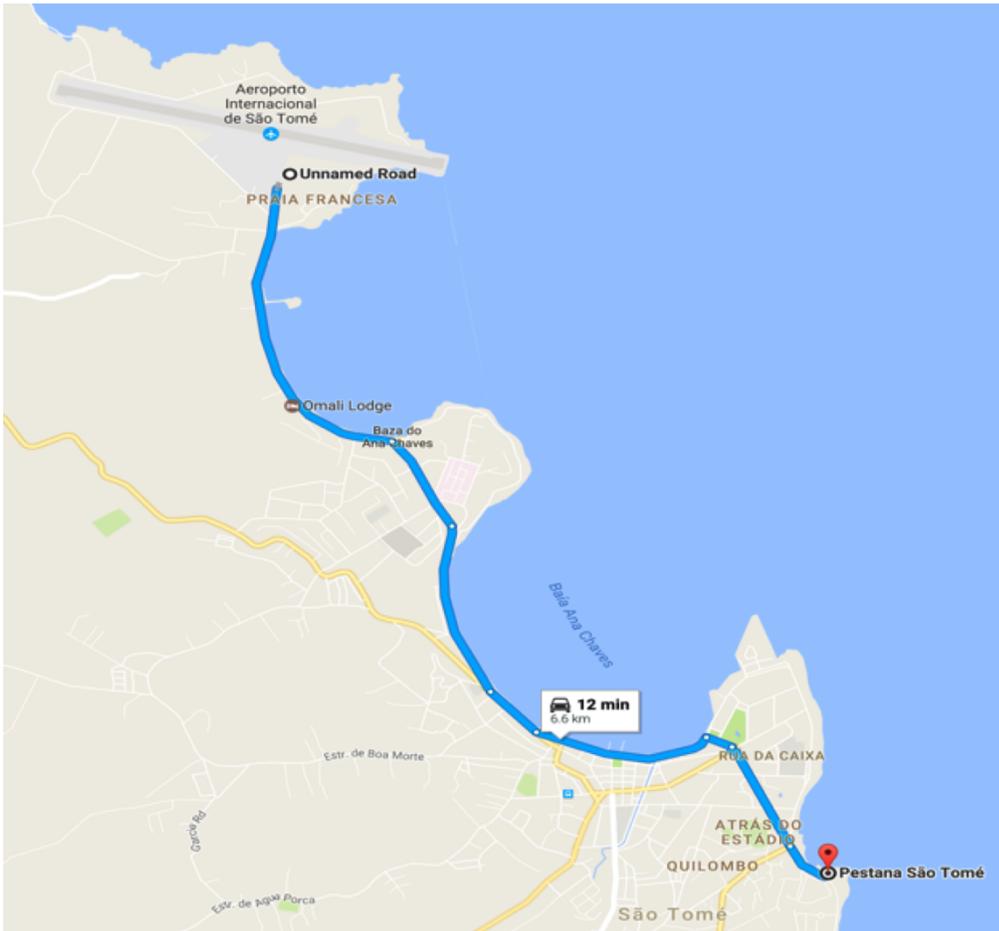
COMMUNICATIONS IN THE FIELD

When you arrive, check-in with ESPO to verify your contact information (hotel/room,

cell phone number, email).

The POD (Plan of the day) will be mailed to the ORACLES mailing list, posted on the ESPO ORACLES webpage, **posted in the ORACLES 2018 Google Sheet** and texted on the ORACLES WhatsApp group.

There will be daily meetings scheduled. In-flight communications are yet to be determined.



LODGING

ORACLES travelers will stay at the Pestana São Tomé, a 5-star hotel on the seafront with panoramic sea views. <https://www.pestana.com/en/hotel/pestana-sao-tome>



We are arranging for rooms to have safes installed by the time we arrive. Rooms will not have a microwave or minibar but there is a small refrigerator. The refrigerator is within a cabinet and in our experience, does not keep items very cold. It is recommended to keep the cabinet door in front of the refrigerator open to facilitate heat exchange and better operation of the refrigerator.

There will be a conference room at the hotel set up as an Operations Center. There will be a dedicated Wi-Fi setup for ORACLES as well as a coffee maker and a group refrigerator or two.

Reservations have been made for you at the hotel. There is a spreadsheet sent out to validate this information. Please review and let ESPO know if anything has changed. https://espo.nasa.gov/home/oracles/content/Pestana_São_Tomé_Reservations_0

The property has a swimming pool with view of the ocean, beach, gym, spa, sauna, etc.

The hotel offers laundry service, **charging by the item. There is also a drop-off Laundry service within walking distance of the hotel, charged by the kilogram.**

Your initial arrival and departure shuttle is included in your negotiated hotel rate.

Next to the hotel is the São Tomé casino and Beach Club nightclub. It is about a 10-15-minute walk to the center of São Tomé.

TRANSPORTATION

Familiar rental car agencies do not operate in São Tomé. Driving can be difficult due to road conditions, pedestrians, motorcycles, mopeds, etc.. We will have a few rental cars for ESPO arriving early for setup as well as for P-3 pilots and maintenance crew. Cars will be rented from the hotel or local providers. Rental cars are small, fairly expensive and may not take credit cards. A shuttle will be provided for transportation to and from the hotel and hangar. There are taxis available for your personal excursions at your own expense. Make sure taxis have seat belts and negotiate the rate before getting in. They may only take cash. Ask the hotel to call a taxi for you. They may also be able to identify private drivers for hire. You can walk to downtown. Bring a flashlight so you can see and be seen when walking at dusk/dark. See **Appendix H - Additional Items to Pack** for other suggestions.

INTERNET

Wi-Fi will be set up at the hangar and at the hotel conference room by ESPO. You will be provided a network name and password upon arrival – **please do not give the password to anyone not on the mission at the airport or hotel – contact ESPO if you have any questions.** Limit your Internet usage to work and contact with home. Do not use the ESPO network for streaming movies. Instead use the hotel network. ESPO network speed is expected to be up to 200 Mbps down and 20 Mbps upload.

SHIPPING

There is a DHL in downtown São Tomé.

HANGAR

Instrument Support Operations will be performed in a hangar. Aircraft may be parked in the hangar or on the ramp. The hangar doesn't have doors so expect exposure to the elements and is not air-conditioned. Tables and chairs will be set up in the hangar. The hangar will have 220V and planning to have a 110V generator for limited capacity. **There will also be a coffee maker, refrigerator and a microwave.**

AIRCRAFT ACCESS

Even though the weather is hot, safety rules around the aircraft apply.

- No open toed shoes in the hangar or around the aircraft
- Tool control will be strictly enforced
- FOD (Foreign Object Debris) control rules apply, including prevention of articles in operational areas and general housekeeping
- Be aware of tripping hazards and low parts of the aircraft such as propellers
- Respect any barriers that have been put in place (i.e., walk around pylons)
- Hearing protection is always readily available – please use it

You will be required to participate in a Safety Briefing related to hangar and aircraft safety. If you are flying on the Transit, Suitcase or Science Flights, you need to have medical clearance to fly.

https://espo.nasa.gov/home/oracles/content/ORACLES_Medical_Clearance_for_P3_Flyers

Access times to the aircraft will be communicated via the Daily Schedule.

APPENDIX

APPENDIX A - PORTUGUESE WORDS AND PHRASES ([HTTP://WWW.101LANGUAGES.NET/PORTUGUESE/BASICS.HTML](http://www.101languages.net/portuguese/basics.html))

Hello.	Bom dia. (bon DEE-ah)
Hello.	(informal)Olá. (O-lá)
Thank you. (said by a man)	Obrigado. (ob-ree-GAH-doo)
Thank you. (said by a woman)	Obrigada. (ob-ree-GAH-dah)
How are you?	Como está? (KOH-moh ish-TAH?)
Is everything ok? (more common than Como está?)	Tudo Bem? (TOO-do BENG?)
Fine, thank you.	Bem, obrigado/a. (BENG, ob-ree-GAH-doo/dah)
Everything is OK. (Lit. "All is well")	Tudo Bem. (TOO-do BENG)
What is your name? (Lit. "How are you pronounced?")	Como se chama? (KOH-moh se SHA-ma?)
My name is ____ .	(O) meu nome é ____ . ({oh} mew NOME ey ____ .)
Nice to meet you.	Muito prazer em conhecê-lo. (MOOY-to pra-ZEHR eng koh-nye-SEH-lo)
Please.	Por favor. (pohr fa-VOHR)
You're welcome.	De nada. (je NAH-dah)
Yes.	Sim. (SEE)
No.	Não. (NOWNG)
Excuse me. (begging pardon)	Desculpe. (desh-KULP)
I'm sorry.	Desculpe. (desh-KULP)
Goodbye	Adeus. (uh-DEOOSH.)
Goodbye (informal)	Tchau. (CHOW)
See you later	Até logo. (ah-TEH LOH-goo)
I can't speak Portuguese [well].	Não falo [bem] Português. (NOWNG fah-loo [beng] por-too-GEZH)
Do you speak English?	Fala Inglês? (fah-lah ing-GLEZH?)
Is there someone here who speaks English?	Há aqui alguém que fale Inglês? (AH ah-KEE al-GENG keh FAH-leh ing-GLEZH?)
Help!	Socorro! (soo-KOO-hoo!)
Good day.	Bom dia. (bon DEE-ah)
Good evening.	Boa tarde. (bo-ah /TARD (Port)
Good night.	Boa noite. (bo-ah NOIT)
I don't understand.	Não compreendo. (NOWNG kom-pre-EN-doo)
Where is the toilet? (Port.)	Onde é a casa-de-banho? (OND eh a KAH-sah de BAH)

APPENDIX B – TO DO CHECKLIST

ORACLES São Tomé Checklist

This appendix is a checklist of items suggested in this document. Some of the items are the same as what is found online at the ESPO website which has required steps to take for deployment.

https://espo.nasa.gov/home/oracles/content/Sao_Tome_Travel_Checklist

- Install the WhatsApp application on your smartphone and validate your phone before flying overseas
- Visa – Wait for instructions. **São Tomé visa for all on deployment and Gabon visa for P-3 Flyers.** Application will be online. Upload Visa confirmation to ESPO database in section called **Extra Documentation** Section and use the type **Other Forms**. Name your file with your *Lastname_First_STPVISA.pdf*
- Upload your flight itinerary to the ESPO database
- Upload your ANF (Advanced Notice Form) to the ESPO database if you are a **contractor at AMES (i.e., BAERI, NSERC).**
- Register your travel plans with the US State Department’s STEP Program** <https://step.state.gov> if you are a U.S. Citizen or if you are from another country, contact your Embassy where you are travelling
- Check with your medical insurance to find out how foreign incidents are covered
- Get a pre-deployment checkup
- Get a letter from your doctor for any prescriptions that you take so you can pass through customs easily
- Get prescription for enough medicine for deployment and some extra prescription medicines
- Decide on Yellow Fever and/or Malaria Medication. If you get the yellow fever vaccination, upload a copy to the ESPO database in section called **Extra Documentation** Section and use the type **Other Forms**.
- Medical evacuation insurance
 - o https://espo.nasa.gov/home/oracles/content/ORACLES_Medical_Evacuation_Insurance
 - o Upload a copy to the ESPO database in section called **Extra Documentation** Section and use the type **Other Forms**.
- MTS account and familiarization
https://espo.nasa.gov/content/ASP_Mission_Tools_Suite
- Have Cash (Euros, 20 for São Tomé entry visa stamp, 85 for P-3 flyers in case of divert to Gabon for entry visa stamp and about 100-200 USD a week for your personal purchases for food, etc)
- Contact your credit card company and let them know your travel plans

APPENDIX C – WHATSAPP INFORMATION

WhatsApp <https://www.whatsapp.com/> provides real-time communication in the field that is supplemental to our other methods. It is not required to use Whatsapp but it is extremely helpful for reaching people and keeping up with changes in schedules (flight, shuttle). We will continue to post the Plan of the Day via email and the ESPO website. If you are not planning to have a smart phone with you for Whatsapps, you will need to coordinate with a teammate to keep you informed of updates applicable to you, for example, a shuttle change.

WhatsApp is FREE on WiFi. It is a smartphone-based app (Android & iPhone) and desktop app for Windows and Macs. It allows Texting, Phone calls, Voice messages, File transfer, Picture/Video transfer using data (as opposed to a SMS text over a cellular plan). This means that when you are on WiFi (hotel, hangar, hotspot) you can get messages as well as see all the history from the group communications. It is widely used around the world to avoid international SMS texting fees. It is encrypted. You are able to mute notifications for a group if you are in another time zone or need to sleep undisturbed. You are able to view history of the group texts and get caught up.

There are smart phones as inexpensive as \$39.99 on Amazon, for example: goo.gl/w4WK5A.

Timely communication is critical to our ability to operate smoothly and successfully. We will be using WhatsApp again this year and **we have renamed the ORACLES 2017 group to ORACLES 2018**. The ORACLES 2018 group will be used for logistics communications to all. There is also another group called ORACLES FUN for communicating activities like dinners, soccer games etc.

It is your responsibility to **MUTE** the group communication so that you are not receiving pings when you are not in country. To mute, tap on the name of the group and change Mute to Yes. **Please** change Mute to No when you arrive in country so you can be contacted. When you are in mute mode, you will still be able to scroll back and see past messages.

If you are new to the mission or would like to be added, please email susan.k.mcfadden@nasa.gov with the mobile number you would like added to the ORACLES 2018 and ORACLES FUN groups.

Important to do BEFORE deployment: Install the app and validate your phone in the WhatsApp application via an SMS text message. This may be difficult to do abroad.

Note: If you purchase a local data plan in São Tomé (with a sim card and local phone # ... your phone must be unlocked for this to work), the same phone # that was validated when the app was installed will be used. – Purchasing a local data plan, using your per diem allowance, will allow you to receive continuous WhatsApp updates (not limited to WiFi) and will not change your WhatsApp identity.

APPENDIX D- SMARTPHONE APPS

COMMUNICATION AND NAVIGATION:

Download and set up these apps before deployment:

WhatsApp

Free messaging app for smartphones. Will be used on this mission for group chat. Free voice calls with WhatsApp Calling, even in another country. **Best to install and register before leaving home.**

Google Maps

Download maps and reference without an Internet connection for 29 days.

Google Maps – Open app and search for a place. Then at the bottom, tap the name or address of the place. Select Download.

We have our own customized São Tomé Google Map with links to grocery, dining laundry, post office, currency exchange, gas stations, etc... Let ESPO know if you would like to add a pin.: goo.gl/UduJeo

Google Translate

Download Portuguese and reference without an Internet connection

Portuguese English Translator

iOS: iTranslate has a monthly subscription for \$4.99 or 2-month subscription for \$9.99

Android: Google Play Portuguese English Translator.

There are many other translation app choices.

HEALTH:

TravWell –

CDC's TravWell app helps you plan for safe and healthy international travel. Build a trip to get destination-specific vaccine recommendations, a checklist of what you need to do to prepare for travel, and a customizable healthy travel packing list. The app also lets you store travel documents, keep a record of your medications and immunizations, and set reminders to get vaccine booster doses or take medicines while you're traveling. During-travel features are available offline (no data connection needed). Emergency services phone numbers for every destination.

Can I Eat This?

Montezuma's revenge, Delhi belly, or travelers' diarrhea—whatever you call it, it can ruin your international trip. Help prevent travelers' diarrhea by using

CDC's Can I Eat This? app. Select the country you're in and answer a few simple questions about what you're thinking about eating or drinking, and Can I Eat This? will tell you whether it's likely to be safe. With Can I Eat This?, you can be more confident that your food and drink choices won't make you spend your international trip in the bathroom.

- Authoritative recommendations from the Centers for Disease Control and Prevention
- Access recommendations offline (no data connection needed)

2016 Yellow Book

CDC Health Information for International Travel (commonly called the Yellow Book) is published every two years by CDC as a reference for those who advise international travelers about health risks. The Yellow Book is written primarily for health professionals, although others will find it useful.

- The definitive resource for healthcare providers and individuals seeking consultation in advance of international travel
- Accessible content conveyed in easy-to-understand format, including maps

APPENDIX E – HOW TO SET UP LAPTOP HOTSPOT

If you don't travel enough to justify buying a pocket router like the TP-Link N150 Wireless Wi-Fi Mini Router, you can turn your own computer into a wireless access point. All you need is a live Ethernet cable, a visit to the System Preferences panel (for OS X), or a quick third-party app download (for Windows).

OS X: Launch System Preferences and click on 'Sharing' select 'Internet Sharing' (if this option is grayed out click on the padlock icon, lower left corner, to unlock these settings) from the list on the left. Set the "Share your connection from" Ethernet or in the case of a MacBook Air, USB/Thunderbolt Ethernet. Set the type of shared networking to wireless under "To computers using" by checking Wi-Fi. Click on the Wi-Fi Options button and a window will appear to set your network's name and password. Once those are set, hit ok. Now turn on Internet Sharing and you'll be able to log into your newly created Wi-Fi network from all your tablets, smartphones, and media streamers.

Windows:

Windows users will have to research if their specific hardware supports WiFi sharing. This is a good article describing the process in Windows 10 <https://goo.gl/SBV6Vh>

Alternative solution, download and install the \$13 [Thinix WiFi Hotspot](#) app. Launch it and click on the Configure tab. Set the name of your wireless hotspot in the SSID field. Add a password in the Wireless Key field and hit save. Hit the large Start Hotspot button at the top of the app's window and get ready to share your Internet connection.

APPENDIX F – MOBILE PHONE SETTINGS WHEN ABROAD

+1: Put +1 in front of all numbers in your phone directory that North America numbers. The calls will go through as normal when you are in the US and when you're abroad you won't accidentally call a local phone.

ENABLE WI-FI CALLING

These instructions may vary with your phone model.

iOS: Settings > Phone > Wi-Fi Calling > On > Enable

Android: **Check on the specific instructions for your model phone**

TURN DATA ROAMING OFF

iPhone: Go to Settings → Cellular → Cellular Data Options → slide Data Roaming off.

Android: Go to Settings → Wireless Controls → Mobile Network Settings → slide Data Roaming off.

You can turn off the Data Roaming slider. This will help you avoid charges by restricting your access to the cellular data when you're abroad. If you try to use an app that requires Internet access while data roaming is turned off, it will prompt you to manually switch data roaming back on unless you're connected to WiFi.

DISABLE PUSH NOTIFICATIONS AND AUTO-SYNCING

iOS: Settings > Mail, Contacts, Calendars > Fetch New Data to turn off Push Notifications.

iOS: Settings > Notifications > Click on each app and turn the Notifications Center to OFF

TURN OFF LOCATION SERVICES

- iPhone: Go to Settings → Privacy → Location Services → toggle Location Services On / Off.
- Android: Go to Settings → Location → toggle Location Services On / Off.

RESET YOUR DATA TRACKER SO YOU'LL KNOW HOW MUCH YOU'VE USED

iOS: Settings > General > Usage or Cellular Usage

<https://wwwnc.cdc.gov/travel/destinations/sao-tome-and-principe/traveler/packing-list>

Healthy Travel Packing List from CDC website along with additional suggestions from Embassy, ESPO online research **and last year's experiences**. Not all items will be applicable to this deployment and/or may not apply to you. These are not reimbursable items. Purchase any of these items at your own expense.

Pack items for your health and safety.

- You may not be able to purchase and pack all of these items, and some may not be relevant to you and your travel plans. Talk to your doctor about which items are most important for you.
- This list is general and may not include all the items you need. Check our [Traveler Information Center](#) for more information if you are a traveler with specific health needs, such as travelers who are pregnant, immunocompromised, or traveling for a specific purpose like humanitarian aid work.
- Remember to pack extras of important health supplies in case of travel delays.

Prescription medicines

- Carry your prescriptions in your hand luggage. Pack medication in original containers, clearly labeled with names matching your id.
- Carry a signed, dated letter from your primary physician describing all your medical conditions and listing all medications, including generic names
- [Travelers' diarrhea](#) antibiotic (such as azithromycin since there is cipro resistance in São Tomé)
- Suture/syringe kit - Kit is for use by local health care provider & requires a letter from your doctor on letterhead stationery
- Altitude sickness medicine (not needed in São Tomé)
- Medicine to prevent malaria
- Clobetasol - prescription anti-itch cream (very strong corticosteroid)

Medical supplies

- Glasses - Consider packing spare glasses in case yours are damaged
- Contact lenses - Consider packing spare contacts in case yours are damaged
- Needles or syringes (for diabetes, for example) - Requires a letter from your doctor on letterhead stationery
- Suture kit - Kit is for use by local health care provider & requires a letter from your doctor on letterhead stationery
- Diabetes testing supplies
- Insulin
- Inhalers
- Epinephrine auto-injectors (EpiPens)
- Medical alert bracelet or necklace

Over-the-counter medicines

- Antacid
- [Diarrhea medicine](#) - loperamide [Imodium] or bismuth subsalicylate [Pepto-Bismol chewables]
- Antihistamine
- Benydryl
- Hydrocortisone anti-itch cream and/or spray
- Motion sickness medicine
- Cough drops
- Cough suppressant/expectorant
- Decongestant
- Medicine for pain and fever - acetaminophen, aspirin, tylenol or ibuprofen (Advil and AdvilPM)
- Mild laxative
- Mild sedative or other sleep aid
- Saline nose spray

Supplies to prevent illness or injury

- Hand sanitizer or wipes - Alcohol-based hand sanitizer containing at least 60% alcohol or antibacterial hand wipes
- Water purification tablets - See CDC recommendations: [Water Disinfection](#). [not needed for deployment - drink bottled water or water provided at hotel and hangar]
- Water purification tablets - May be needed if camping or visiting remote areas [not needed for deployment - drink bottled water or water provided at hotel and hangar]
- Insect repellent >20% DEET Cutter Backwoods or OFF! Deep Woods - Select an insect repellent based on CDC recommendations: <http://wwwnc.cdc.gov/travel/page/avoid-bug-bites>
- Permethrin – insect repellent for clothing. It may be needed if you spend a lot of time outdoors. Clothing can also be treated at home in advance.
- Bed net - For protection against insect bites while sleeping [Pestana does not provide and there may not be a place to hang one.]
- Sunscreen -(SPF 15 or greater) with UVA and UVB protection. See <http://wwwnc.cdc.gov/travel/page/sun-exposure>
- Sunglasses and hat - Wear for additional sun protection. A wide brim hat is preferred.
- Personal safety equipment - Examples: child safety seats, bicycle helmets
- Earplugs
- Latex condoms

First-aid kit

- 1% hydrocortisone cream
- Antifungal ointments
- Antibacterial ointments

- Antiseptic wound cleanser
- Aloe gel - For sunburns
- Insect bite treatment - Anti-itch gel or cream
- Bandages - Multiple sizes, gauze, and adhesive tape
- Moleskin or molefoam for blisters
- Elastic/compression bandage wrap - For sprains and strains
- Disposable gloves
- Digital thermometer
- Scissors and safety pins
- Cotton swabs (Q-Tips)
- Tweezers
- Eye drops
- Oral rehydration salts

Documents

- Health insurance documents - Health insurance card (your regular plan and/or supplemental travel health insurance plan), copies of claim forms
- Proof of yellow fever vaccination - If required for your trip, take your completed International Certificate of Vaccination or Prophylaxis card or medical waiver
- Copies of all prescriptions - Make sure prescriptions include generic names. Bring prescriptions for medicines, eye glasses/contacts, and other medical supplies.
- Emergency Contact card – See template
<https://espo.nasa.gov/home/oracles/node/50569>

APPENDIX H – ADDITIONAL THINGS TO PACK

- Flash light if walking at dusk/night or if there is a power outage
- Ethernet Cable for use in hotel room
- Personal Wi-fi Access Point for use in hotel room
- European 2 pin plug types (Type C plug)
- Cooling cloths
- Personal fan (battery, usb-powered)
- No Jet Lag - homeopathic pill to take while flying to reduce jet lag symptoms
- MidNite - drug-free sleep aid

We've made an Amazon list of recommended items to make it easy for you to find the products. We are not promoting these products or suggesting you purchase them through Amazon.

<http://a.co/5IxnwIU>

Pack a change of clothes in carry-on

You may want to pack a change of clothes in your carry-on luggage. We had about 4 of our travelers have to wait a couple of days before the next flight brought their luggage.

Allow ample time for check-in

Be sure to get to the airport early enough to get your baggage checked in (typically 60 minutes before your flight). Factor in queues and time for the airline counter to verify your travel documents. They will want to see your passport and your Sao Tome visa. Since the visa is in Portuguese I found they were not comfortable with it at face value even though it has some English words. They had to get a second opinion. This all took quite some time. This happened at my home airport check-in and at Washington Dulles' South African Airways gate check-in where Dan and I had to verify our passports and visa. Additionally they misread the dates and thought it was expired but the dates are in the format of dd/mm/yy. Dan and I are hoping to meet with immigration officials at the São Tomé airport tomorrow to follow up again for those of you who have submitted requests and still have not received your visas via email.

Transiting through Accra

If you are coming through Accra, follow the signs for Transit. You do not need to fill out the entry card they give out in the airplane. There is a desk before the elevator where someone records your passport info. They also want to see your boarding pass for the next flight and ask how many bags you have checked through.

After taking the elevator, you have to pass through security and put laptops in their own bin, remove shoes, etc... They don't allow for liquids and they took my 4 extra AAA batteries that I had for my noise cancellation headphones! :-)

Bring your own food or snacks as Accra doesn't have many options, even in airline lounges. There are a couple airline lounges open 6am to midnight. Pretty basic; various comfortable seating, free wifi, very limited snacks and lots of drinks. One can get free access with some status like United Gold, otherwise it costs \$27 USD.

Transiting through Lisbon

If you are overnighing follow the signs for exit/baggage claim. You must pass through

immigration, collect checked bags and then go through Customs (walk through the 'nothing to declare' aisle). There is an ATM in the airport lobby if you need Euros. Uber works in Lisbon, but the driver may not speak English. There are plenty of taxis just outside the exit. Cross the first street, past the line for taxis, to wait on the 2nd curb where parking and hotel shuttles (and maybe Uber) picks up. The Radisson Blu hotel has a shuttle but you must call to tell them you arrived (+351-210-045000). They have a black minivan with a small label on the side door. Radisson is about a 5-minute drive away. If you are staying overnight in Lisbon, you will want to check-in for your next leg (Lisbon to São Tomé) ASAP. You'll likely get to the hotel before your room is ready but you should be able to get connected to their Internet to check-in online with TAP. Otherwise you could be last to board.

If you are not overnighing, but proceeding to your connection, follow the signs for transfers.

Leaving Lisbon, you must check in and check bags, pretty straightforward and good signage. For Bernie, TAP designated a rolling duffle as oversized. She had to stand in another line to drop it off (extra time). Follow the signs for your gate. You must go through security (takes about 15-30 min) and then immigration (15-30 minutes). There is a TAP lounge after security but before immigration. Leave plenty of time for immigration if you stop at the lounge. They gate-checked her remaining carry-on rolling and she could take only her backpack on board; full flight). Be sure to remove any lithium batteries from bags that are gate-checked.

There can be long security lines at Lisbon as they are very thorough. They open and look at each medication bottle so make sure you have original containers and clearly labeled (with your name if they are prescription medications).

Arrival in São Tomé

The Pestana hotel knows when you are arriving and assumes you will be on the 4:55pm flight. If you are on an earlier flight (direct from Lisbon), please email ESPO. They have a list of names of people arriving and they are holding up a Pestana sign when you clear customs. Note: There will be other vendors offering taxi rides, tours, etc... The hotel may have one vehicle for luggage and another for people transport. If you don't see the Pestana sign, look for the 24 seat Pestana van in the parking lot.