



[TANA] -19.52558 169.25175

14.5 km

Dates des images satellite : 23 déc. 2005 - 5 févr. 2007

lat -19.494426° long 169.351780° élév. 439 m

Image © 2009 DigitalGlobe  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2009 TerraMetrics

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Altitude 48.73 km



[TANA] -19.52558 169.25175

Image © 2009 DigitalGlobe

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1145 m

Date des images satellite : 24 déc. 2005

lat -19.528438° long 169.259216° élév. 5 m

Altitude 3.96 km



[TANA] -19.52558 169.25175

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226 m

Date des images satellite : 24 déc. 2005

lat -19.525793° long 169.255186° élév. 14 m

Altitude 783 m



[TANA] -19.52558 169.25175

Image © 2009 DigitalGlobe

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54 m

Date des images satellite : 24 déc. 2005

lat -19.525356° long 169.252401° élév. 9 m

Altitude 188 m

This report should be completed in DETAIL to provide uniformity in data essential to station occupation and GPS experiment planning. It also aids in station recovery and reoccupation. Please provide the requested information.

Station Name: TANNA GPS MARK 4-Char ID: TANA Station ID #: TANA  
 Location: ON BEACH NEAR LENAKEL City: \_\_\_\_\_ Country: VANUATU  
 Site Address (if applicable): N/A  
 Reported By: D. S. COOK / M. MCKAY Agency: UNISA Tel#: (08) 302 3220 (AUSTRALIA)

Approximate Geodetic Coordinates GPS Mark Inscription: STAINLESS STEEL "BEVIS PIN"  
 Latitude: S 19° 31' 32.18 Datum: WGS 84 Current Magnetic Declination: 12° E  
 Longitude: E 169° 15' 06.31 Source of Position: \_\_\_\_\_ Rate & Direction of Change: \_\_\_\_\_  
 Height: 72.8 Source of Declination: UNAVCO  
 Topographic Map or Aerial Photo Showing Location \_\_\_\_\_ Time offset from UTC \_\_\_\_\_  
 Name: \_\_\_\_\_ Scale: N/A Standard: +11HRS Daylight  
 Agency: SEE VANUATU DEPT OF LANDS. Date Complied: \_\_\_\_\_ No seasonal time changes observed

**Information Included in this report** (Check all that apply)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> How to Reach the Station & Site Description                  | <input type="checkbox"/> Site Survey & Information /Results      |
| <input checked="" type="checkbox"/> Site Vicinity Sketch   | <input type="checkbox"/> Photos of all Marks (Label Photos)      |
| <input checked="" type="checkbox"/> Local Map Showing Site Location                              | <input type="checkbox"/> Photos of Station from Reference Points |
| <input checked="" type="checkbox"/> Ancillary Information Form <u>(MR J. BEAR'S 1990 REPORT)</u> | <input type="checkbox"/> Photos of Landmarks from Station        |
| <input checked="" type="checkbox"/> Horizon Mask Diagram   | <input type="checkbox"/> Other (Specify)                         |

**Site Ownership/Permission**

Who owns the site? IATA SAMAIKA  
(LAND OWNER)  
 Primary Site Contact: AS ABOVE  
 Title: LAND OWNER  
 Address: LOUKATAI STATION  
LENAKEL WEST TANNA  
 City, State, Zip: TAFEA REGION (TANNA)  
 Country: VANUATU  
 Tel#: \_\_\_\_\_ Fax: \_\_\_\_\_

Explain procedure required to obtain permission to occupy this particular site:

VISIT LAND OWNER DIRECTLY  
OR ASK PEOPLE NEAR THE GPS  
SITE FOR HIS WHEREABOUTS.  
\*MUST PAY "PROTECTION" FEE  
OF 6000 VATU \*. HE IS QUITE  
FRIENDLY BUT FEE IS EXPECTED

**Existing Geodetic Ties**

Is this part of an existing Geodetic Network? .....  Yes .....  No .....  Unsure  
 If yes, what type of network is it? .....  Horizontal .....  Vertical .....  3-D  
 What agency is responsible for the network? DEPT OF LANDS VANUATU  
 What is the accuracy classification of this network? \_\_\_\_\_  
 What other space geodetic systems use this site? .....  Fixed VLBI .....  Mobile VLBI .....  SLR  
 .....  None .....  Unsure  
 What agency is responsible for the other system's operation? \_\_\_\_\_  
 Has a survey tie been made to the GPS station? .....  Yes .....  No  
 Comments: THIS IS EXPECTED TO BE DONE DURING  
THE LATER LATTER PART OF 1992. (MIKE SHARP - ADVISER  
AT VANUATU LANDS LEAVES IN JANUARY 1993)



**Site Access:** What type of transportation is needed to gain access to the site (boat, 4WD, 2WD, inaccessible by vehicle, ect)? Please comment on the effort required to reach the site (long hike, assistance needed to carry gear, pack mule). If assistance is needed make recommendations.

IT IS A LONG WALK FROM THE GOVT GUEST HOUSE AT ISANGEL WHERE THE CHEAPEST ACCOMMODATION WITH POWER etc EXIST (2000 VATU / NIGHT). BEST TO TRY & ORGANISE A VEHICLE FROM PUBLIC WORKS OR VIA LANDS DEPT OR ORSTOM.

attach additional sheet if necessary

**On-Site Facilities:** Discuss any on-site facilities available to support GPS operations. Can the receiver be placed in a building? Is the building safe? How far is the building from the station? Is office or storage space available?

NO POWER, WATER, BUILDINGS ETC.

THE RECEIVER MUST STAY EXPOSED ON AT THE CORAZ TERRACE. THEREFORE WE EMPTIED OUR LARGE YELLOW BOX & PLACED THE "RX" IN THE BOX WITH A STICK TAPED ON THE FRONT OF THE LID. THIS PREVENTS THE LID CRUSHING THE CABLES BUT ~~MAKES~~ <sup>MAKES</sup> THE "RX" WATERPROOF etc. OUR TENT WAS ABOUT 50 METRES

N.B HIGH TIDES CAN COVER <sup>attach additional sheet if necessary</sup> FROM THIS RECEIVER.

GPS SITE !!!!!!

**Power:**  
 Is AC power available on-site?..... NO .....  Yes .....  No  
 Voltage \_\_\_\_\_ V. Frequency \_\_\_\_\_ Hz. Distance from power source to receiver: \_\_\_\_\_ Meters  
 Comment on stability and reliability:

Discuss any special equipment that may be required, describe outlets (sketch if needed) and state any costs if required.

MUST CHARGE "GEL CELL" BATTERIES AT GOVT GUEST HOUSE. MUST HAVE SOLAR PANELS. THESE WERE INVALUABLE.

**Batteries:**  
 Where can batteries be purchased (try and include several options, comment on type and costs)?  
 CAR BATTERIES - BUT DIFFICULT TO FIND € 10,000 VATU  
 PUBLIC WORKS LENT US FREE ONE (1) TRUCK BATTERY  
 WE RENTED ONE (1) CAR BATTERY FROM "TANNA BEACH RESORT"  
 FOR 5000 VATU. WE ALSO FOUND 2 USEABLE "ORSTOM"

Where can batteries be charged (try and include several options, and indicate best option)? GEL CELLS AT THE GOVT. GUEST HOUSE  
 240 VOLT POWER AVAILABLE 07<sup>h</sup> → 12<sup>h</sup> 00<sup>m</sup> Govt GUEST HOUSE  
 and 18<sup>h</sup> 00 → 22<sup>h</sup> 00<sup>m</sup> (LOCAL TIME) 13<sup>h</sup> 00<sup>m</sup> → 17<sup>h</sup> 00<sup>m</sup>

Is a generator or solar panels needed at this site?.....  Yes.....  No  
 Any comments?  
 SOLAR PANELS A MUST !!!  
 FOR 22 hours / day observations.

**Equipment Recommendations:** List ancillary equipment that may be useful at this site (antenna cable length, tent, etc.)

- \* BEST TO HAVE VERY LONG CABLE eg at least 30 metres BUT this is not enough! (60 metres would be realistic BUT NOT PRACTICAL?)
- \* TIDE TABLES - BECAUSE WITH POOR WEATHER PLUS SPRING TIDES etc. THE MARK IS UNDER  $\hat{=}$  1.5 METRES OF SURF
- TENT A MUST BUT WELL ABOVE TIDE LEVEL (SEE ATTACHED)
- A STOVE WOULD BE USEFUL FOR COOKING SKETCH  
attach additional sheet if necessary

**Communications:** What modes of communications are available at or near the site (telephone, fax, telex, radio, mail, indicate locations)? State the best mode of communication. Make recommendations and give instructions. Supply all relevant numbers or radio frequencies. Access quality, operating hours, frequency of delivery.

- NOTHING AT SITE !!!
- INTERNATIONAL CALLS / LOCAL CALLS AT POST OFFICE CLOSE TO GOVT. GUEST HOUSE.
- 2 POSSIBLE FAX CONTACTS
  - a) PAT LLOYD (COFFEE PROJECT)  
FAX (1)-(678)-68617.
  - b) TANNA BEACH RESORT - FAX (1)-(678)-68610.  
attach additional sheet if necessary

**Adverse Conditions:** Discuss any conditions that could adversely affect operations. Include things like potential sources of multipath, radio frequency interference, cultural or political sensitivities, adverse weather conditions, etc.

- \* HIGH TIDES! A CONSTANT VIGIL IN POOR WEATHER CONDITIONS IS NEEDED AS A WIND FROM THE ~~WEST~~ WEST PRODUCES VERY HIGH SWELLS. THIS CAN MAKE 22 HOURS/DAY OBSERVATIONS A LITTLE "WORRISOME"!

N.B EVEN TIDE TABLES DO NOT SUGGEST THE POSSIBLE EXTREMITY OF TIDE. UNDER NORMAL CONDITIONS MARK (GPS) IS NEVER COVERED  
attach additional sheet if necessary

**Other Site Contacts:** List all possible persons providing assistance at this site. Include all those visiting the site with you, other local contacts providing assistance, US embassy contacts etc. Indicate rolls and include institutions, mailing addresses, telephone and fax numbers, etc. (include yourself)

- 1) MIKE SHARP - DEPT OF LANDS AT VILA (BUT HE LEAVES JAN 1993)  
DEPT OF LAND SURVEYS  
P.O BOX 57 PORT VILA Ph(W) 22427
- 2) FRANCIS BONDOUX - ORSTOM  
BP 76 PORT VILA  
EFATE FAX 23276 Ph(W) 22268
- 3) ON TANA 2 FAX CONTACTS DESCRIBED ABOVE!

attach additional sheet if necessary

Station Name: TANNA GPS MARK 4-Char ID: TANA Station ID #: TANA  
Location: ON BEACH NEAR LENAKEL City: \_\_\_\_\_ Country: VANUATU  
Site Address (if applicable): N/A  
Reported By: M. MCKAY, D. SUTOCK Agency: UNISA Tel#: (W) 302 3220

**Verbal Site Description:** Describe how to reach the site from an identifiable location such as a city, town, major intersection or landmark. Include street names, distances and direction of travel. Verbally describe the site. Indicate relative locations of all monuments and the monument locations relative to landmarks. Describe each monument (what it is set in, what it is, inscription and condition).

(SEE ATTACHED DESCRIPTION)  
ON MR J. BEHR'S 1990 REPORT.

attach additional sheet if necessary

Station: TANA

Date: 9/8/92

PROJECT NAME

**Site Sketch:** Sketch the site vicinity. Show all features, landmarks and the relative locations of all markers. Include a North arrow and approximate scale. If no scale please indicate so. Try to use a straight edge if available.

(SEE ATTACHED SKETCH)

#1

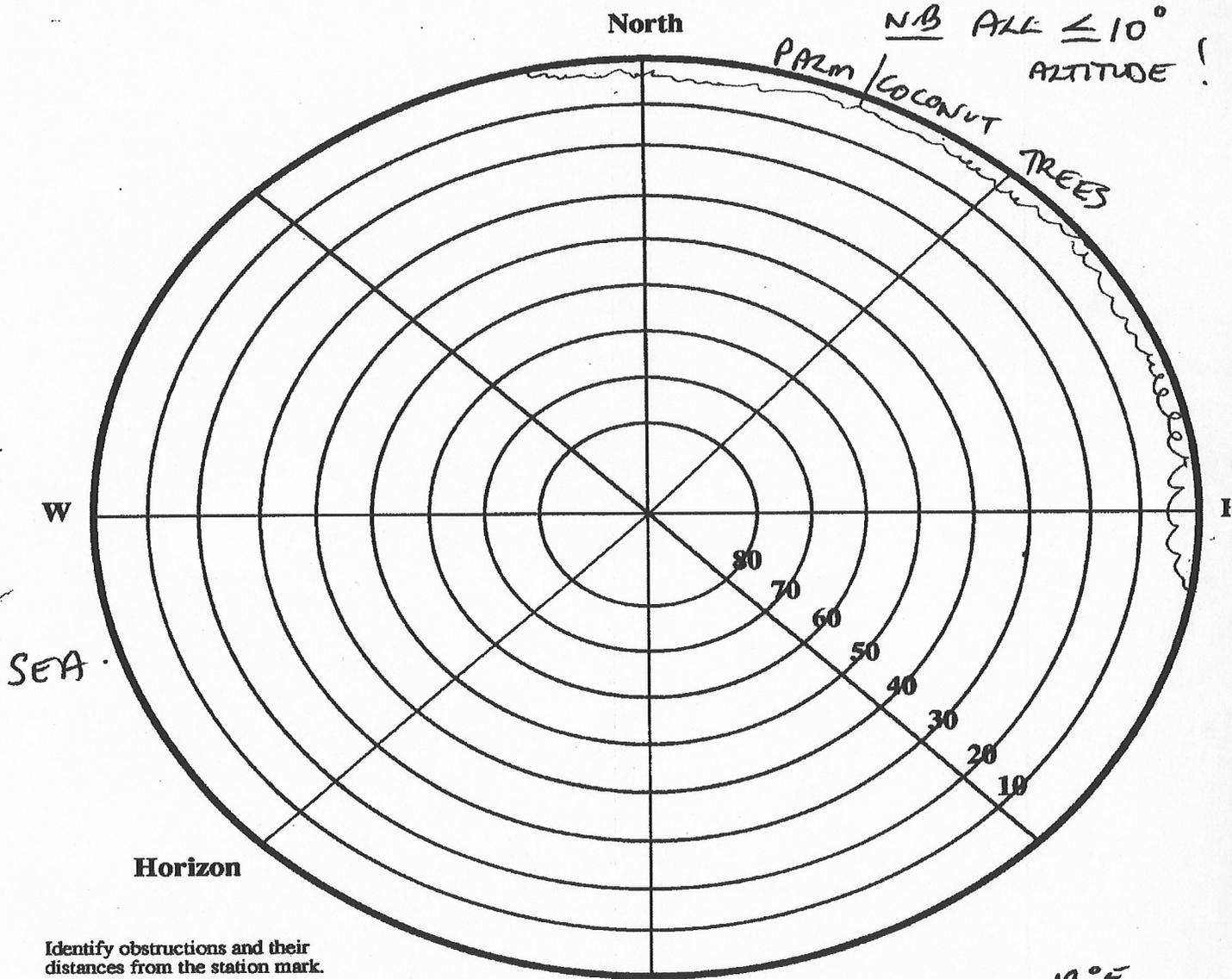
& #2 & #3.

attach additional sheet if necessary

Station: \_\_\_\_\_ Date: \_\_\_\_\_

PROJECT NAME

### GPS Station Horizon Mask



Identify obstructions and their distances from the station mark.

Height above marker that horizon was mapped from: 1.5

Magnetic Declination 12°E  
Declination applied to this figure?  Yes  No

Station Name: <u>TANNA GPS MARK</u>	4-Char ID: <u>TANA</u>	Station ID #: <u>TANA</u>
Location: <u>ON BEACH NEAR LENAHEL</u>	City: _____	Country: <u>VANUATU</u>
Site Address (if applicable): <u>N/A</u>		
Reported By: <u>D. SILCOCK / M. MCKAY</u>	Agency: <u>UNISA</u>	Tel#: <u>(W) 08 3023220</u>

Station Name: TANNA GPS MARK4-Char ID: TANAStation ID #: TANALocation: ON BEACH NEAR LEAKA

City:

Country: VANUATU

Site Address (if applicable):

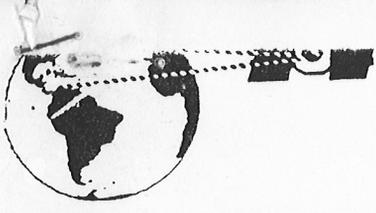
Reported By: M. MCNAY, D. SELWICKAgency: UNESATel#: (LV) (618) 302 3221Additional sheet if necessary: ADDENDUM TO "MR. J. BEN'S 1990 REPORT"

THE GOVERNMENT GUEST HOUSE APPEARS TO HAVE IMPROVED QUITE A LOT SINCE 1990. IT IS NOW VERY CLEAN WITH NO RATS, MOSQUITOS AND COCKROACHES ARE STILL FOUND IN LARGE NUMBERS THOUGH. WATER IS TURNED OFF SUNDAY AND THURSDAY MORNINGS FOR MAINTENANCE. ONLY SAW THE SECRETARY TWICE, BOTH TIMES HE CAME TO TAKE DISHES FOR HIS PRIVATE PARTY.

THE PEOPLE AT TANNA BEACH RESORT CAN BE HELPFUL, BUT WILL CHARGE FAIRLY WELL. THE RESORT IS A GOOD PLACE TO GO FOR A MEAL WHEN YOU FEEL LIKE SOMETHING OTHER THAN YOUR OWN COOKING, AND IS A GOOD PLACE FOR A FEW DRINKS. THE RESORT RUNS A NIGHT TIME VOLCANO TOUR WHICH IS SOMETHING THAT SHOULD BE TAKEN IF AT ALL POSSIBLE.

WE FOUND PAT LLOYD WHO RUNS THE TANNA COFFEE PROJECT AND HIS CUSTOM WIFE SANDRA SUMRALL, AN AMERICAN PEACE CORP TEACHER, ALSO GOOD PEOPLE TO HAVE A DRINK WITH AND WILLING TO HELP IF WE HAD A PROBLEM.

THE LANDOWNER, IATA SAMAIKA, IS ALSO VERY FRIENDLY ONCE HE GETS HIS FEE, OR PART OF IT. HIS FAMILY AND HE WILL STOP AT THE TENT OFTEN TO ENSURE YOU ARE OKAY AND HAVE FOOD. HE EVEN OFFERED TO GET HIS WIFE TO WASH OUR CLOTHES.



# Project

## UNAVCO GPS Station Description

Station occupied by Name Barbara Perin  
 Address 3433 1/2 4th St Boulder, CO 80304  
 Phone (303) 442 4994

Jean-Claude Willy  
 ORSTROM  
 Vila  
 VANUATU

Date 7-31-89

Station Name TANNA 4 char. ID TANA

Latitude S 19.52567 Source of Position \_\_\_\_\_

Longitude E 169.31817

Elevation 1.5m

Station Location 5 km N of Lenakel, 1 km N of Lighthouse, W COAST, TANNA, VANUATU

Other Names \_\_\_\_\_

Topographic maps showing location \_\_\_\_\_

Magnetic Declination 12° E

Site owner/contact Name MR. SAMAIKA

Address LOUKATAI, Lenakel

Phone \_\_\_\_\_

Road log description of route to station mark (include mileage from well known location in the nearest town).

FROM ISADGEL it is 4.7 km to site.  
FROM TAFEA COOPERATIVE STORE go north past  
DISCO on left to turn off on left 1.2 km past  
store. AT end of road is the beach (65 km).  
Mark is approx 100 feet from ~~water~~ water  
8 metre at bearing of N46°E from large  
concrete pad (TNY 2P). Mark is located in canal  
& is a steel pin.

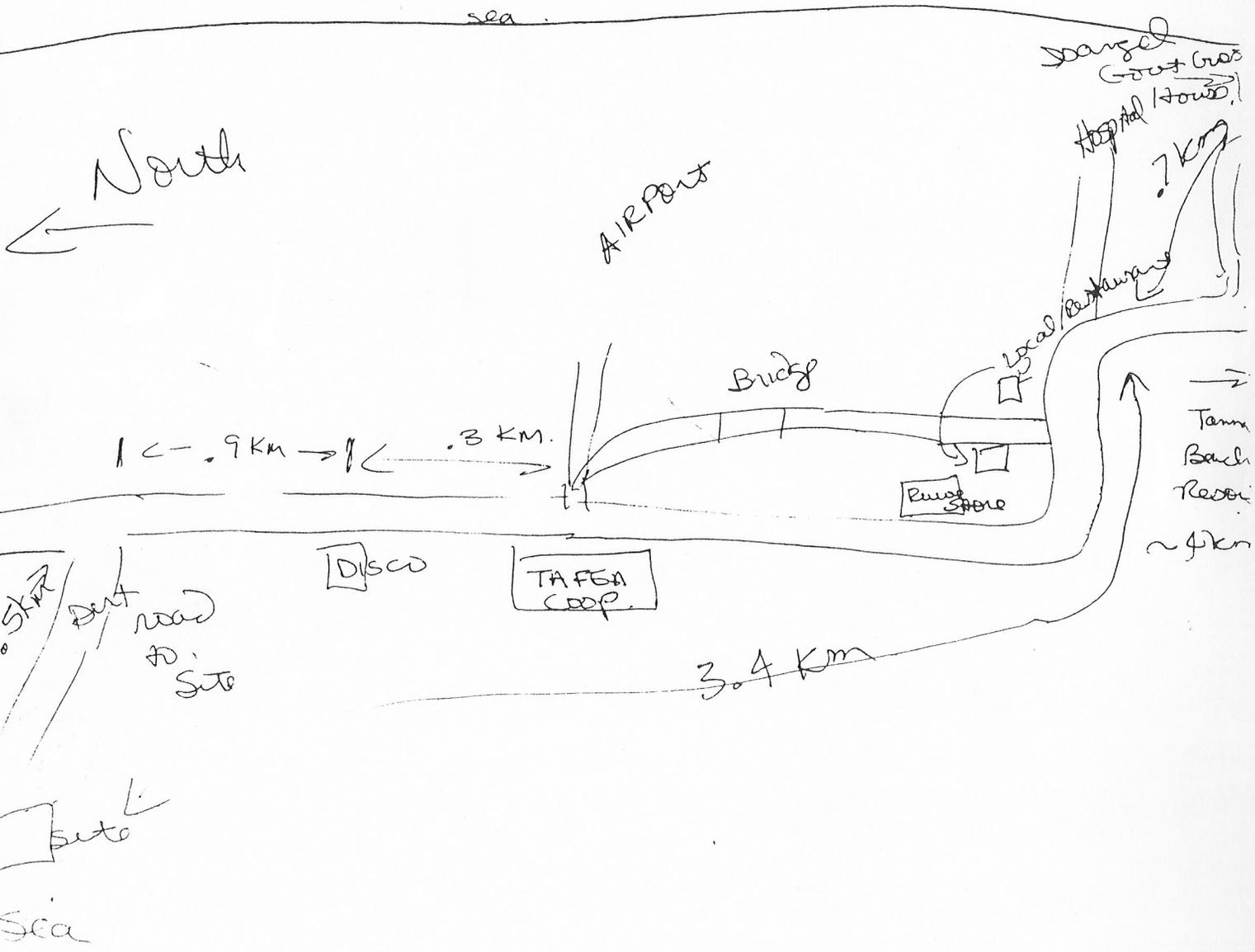
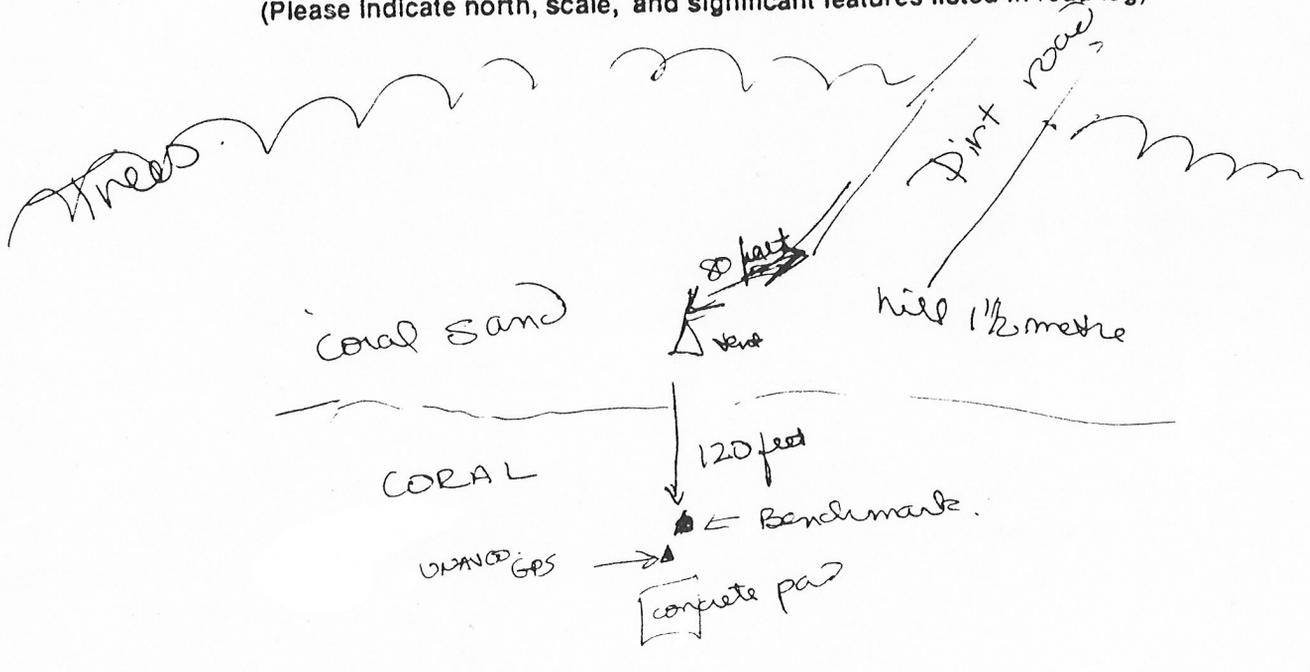
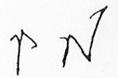
Mise a jour  
Cout Rest House 2000 VT/S.

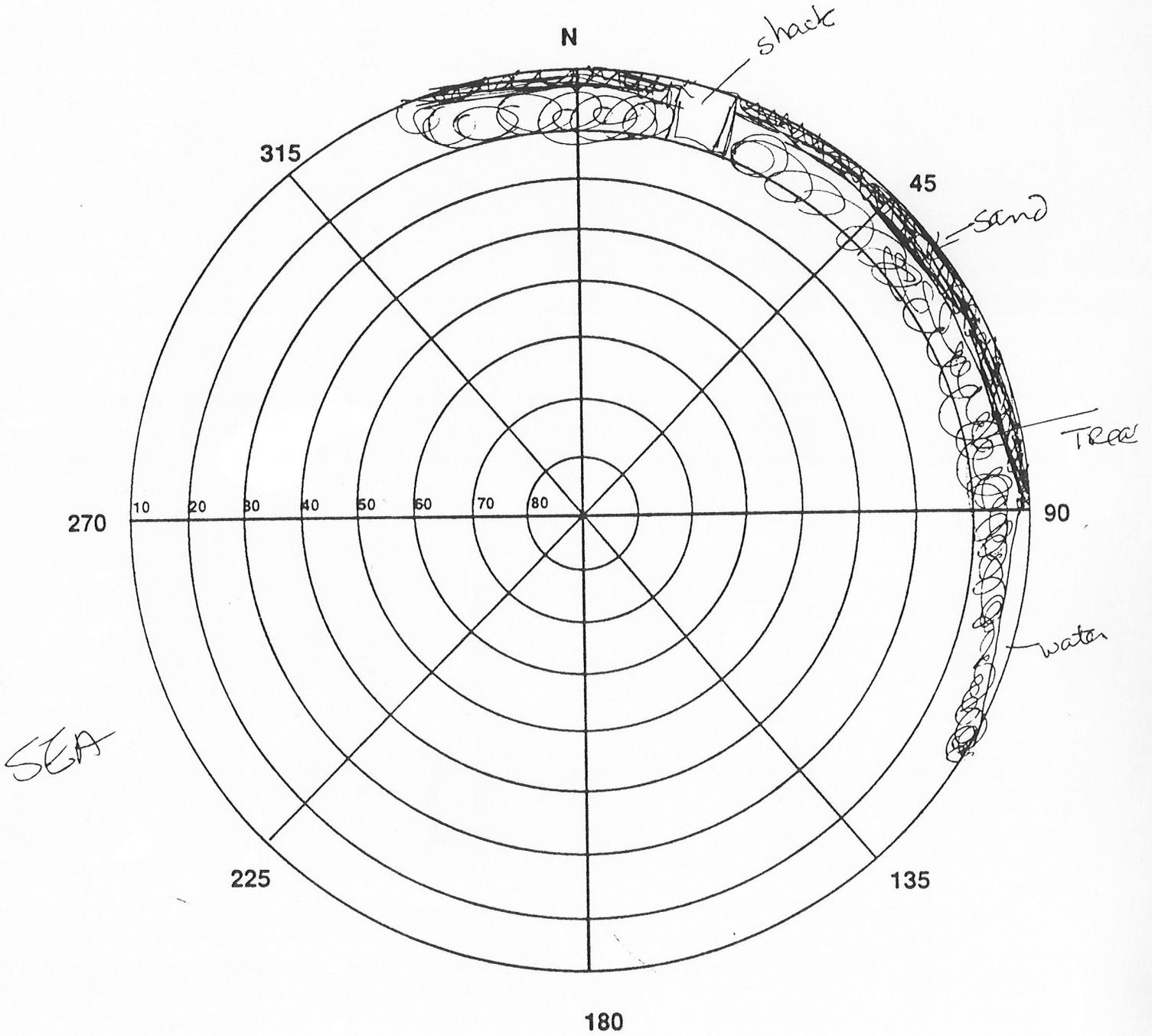
- Pas possible de monter une tente a moins de 30m de l'antenne - Prevoir caisse + bache pour le GPS wild.
- Prevoir un chargeur de 6 Amp au moins pour charger la batterie en 10/12 h (peut etre moins si par une groupe de pendant le week end)
- Prevoir des batteries costands (60 A). - Eventuellement, on peut "emprunter" une batterie DORIS (reserve aux ORSTOMIENS.)



### Sketch of Site

(Please indicate north, scale, and significant features listed in road log)







5) Power

- Type of power, voltage variance, and stability. 230 V.
- Location of stores to buy batteries, price of batteries, voltage and amp hrs available. TAFEA COOP  

12V	120 amp	116800 vahr.
12V	40 amp	6680 vahr.
- External power available, distance from power to receiver No external power.
- Best place to charge batteries Best in our sleeping quarters

6) Repair and maintenance facilities

- Local hardware stores TAFEA Cooperative & Government

7) Lodging and restaurants

- Local hotels recommended and prices in U.S. \$.  
TANNA Beach Resort - 4000 \$ / night - May bargain a weekly rate  
Govt Rest House - 1000 \$ / night (cooking, no fridge, no hot water, sometimes raw) NO
- Restaurants- the good, the bad and the ugly (water, rats, cockroaches, dirty)  
1 western restaurant - TANNA Beach Resort - 400-600 \$ lunch  
800-1200 \$ w/ dinner  
2 local restaurants in Lanakel (see map) Island food  
\* 60 vahr lunch, 80 vahr dinner

8) Local sanitation conditions

- Can you drink the water? best to filter, although I'd drink some
- Mosquitoes and other bugs? some mosquitoes (malaria here)

\* Market near ~~near~~ TAFEA COOP Mon ~~8:00~~ <sup>FRI</sup> morning  
 near ~~near~~ Lanakel in town " " " "  
 near ~~near~~ Dangel Wed morning

## 9) Medical clinics or doctors

- Are emergency medical services available (location and type)?

Hospital near Lanelkel (~3 km inland)  
 staffed with 2 doctors from England &  
 "obstet" doctors.

- Local phone number which could be called in case of emergency (i.e. local contact familiar with the project)

Claude Reichenfeld, ORSTOM, VILA 2268(w), 2776(h)  
 MR Phillip Shing, Secretary, TANNA 2038 -

## 10) Contact at the Local U.S. Embassy or consulate

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 11) Time of year and climate during site occupation. What clothing do you recommend for operator comfort and a successful survey. Any other equipment which would make the stay more enjoyable (camp stove, radio etc.).

16° - 23° C  
 Need rain gear & warm clothes  
 Stove was great

## 12) Location of banks, hours of operation, exchange rate - Vila open 7:30 - 4:00 M-F

118.59 vatu / \$1 US  
 TANNA - VANUATU SAVINGS BANK - 8-11, 1:30 - 3:00 M-F  
 14 vatu - \$1 US

- Name and address of bank where money can be wired.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- Is it proper to tip? If so how much? No need to tip

- How much for a cold beer? 100 V from store, 230V TANNA Beach Resort

## 13) Are the people friendly. Do you feel you and the equipment were safe? Any other conditions that could adversely effect operations

People friendly but shy. But custom landowner wanted more money. Paid guard 500 vatu per day. Felt equipment was safe.

# UNAVCO Day 209 GPS Station Description

University Navstar Consortium

UCAR, Boulder, CO., USA

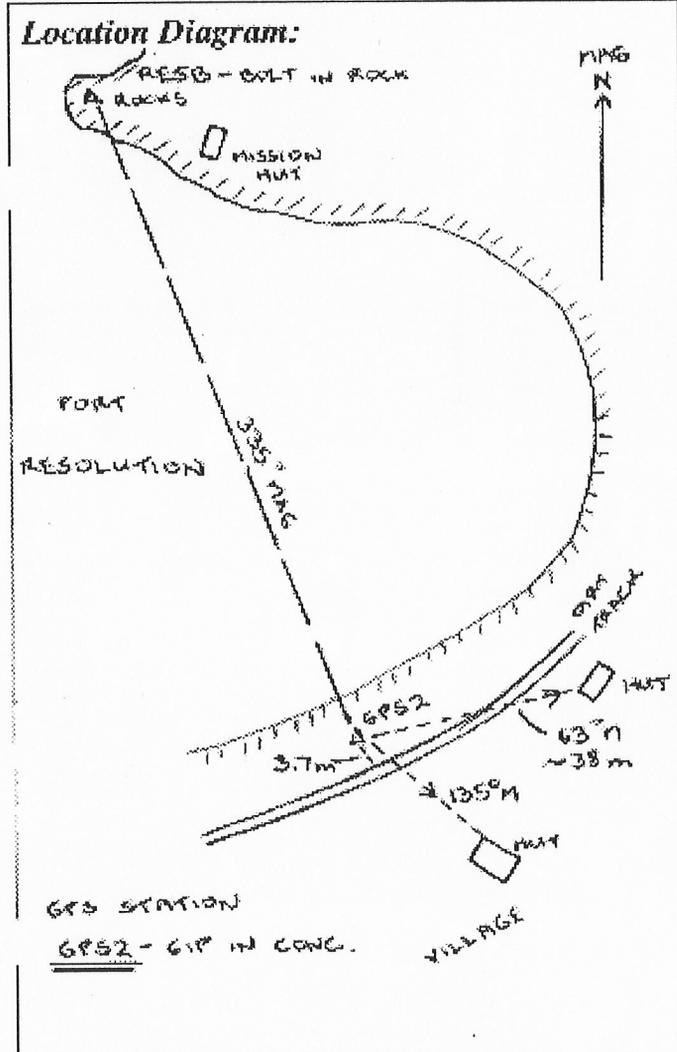
Station Name: FOAT RES 4-Char ID: GPS2 Station ID #: \_\_\_\_\_  
 Location: FOAT RESOLUTION TAINA ISLAND Country: TAHITI  
 Observing Monument Inscription: GIP (GALV. IRON PIPE IN CONC.) Project: SW Pacific

Approximate Geodetic Coordinates:  
 Latitude: S 19° 31' 36.9" Datum WGS 84 Magnetic Declination 12° E  
 Longitude: WE 167° 30' 03.4" Source of Position GPS Rate & Direction of Change \_\_\_\_\_  
 Height: + 3.8677 Source of Declination \_\_\_\_\_

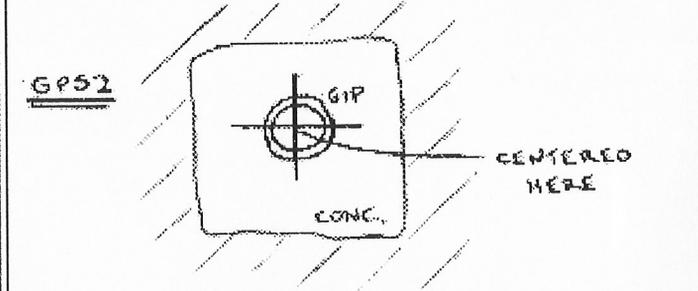
Site Personnel:

Name	Agency
<u>DAVID JERICHO</u>	<u>LANDS SOUTH AUST.</u>
<u>MIKE SHARP</u>	<u>LANDS SURVEY TAHITI</u>

Access Notes:



Rubbing or Photo of Monument: Indicate the exact point that the instrument was centered over and include a North arrow.



NOTE: THERE ARE MANY NEARBY PALM TREES ELEVATIONS UP TO AT LEAST 60-70'. THIS IS NOT A GOOD GPS SITE UNLESS SOME CLEARING IS PERFORMED.

Station Name: TANNA GPS MARK 4-Char ID: TANA Station ID #: TANA  
 Location: ON BEACH NEAR LENAKEL Country: VANUATU  
 Observing Monument Inscription: \_\_\_\_\_ Project: SW Pacific

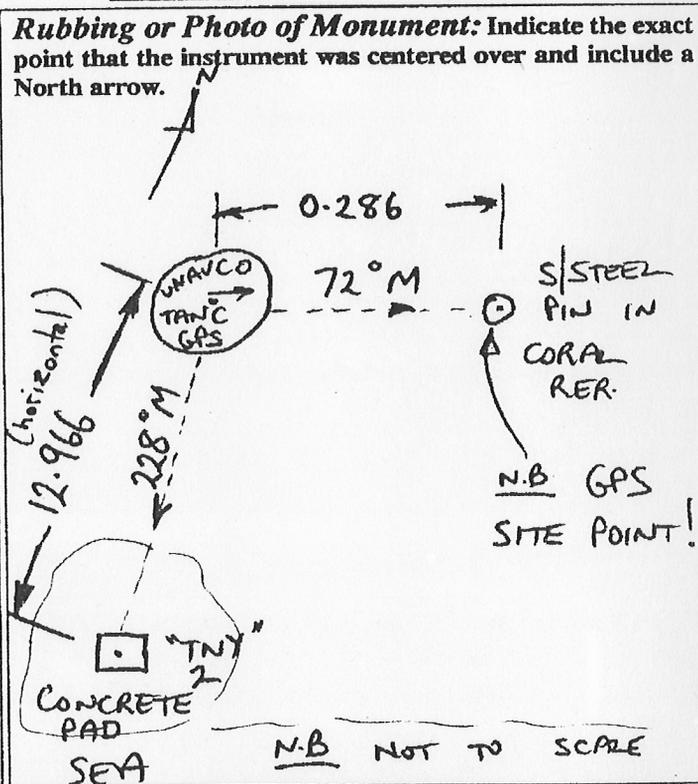
Approximate Geodetic Coordinates:  
 Latitude: S 19° 31' 32" 18 Datum WGS 84 Magnetic Declination 12° E  
 Longitude: E 169° 15' 06" 31 Source of Position RECEIVER Rate & Direction of Change ?  
 Height: 72.8 Source of Declination UNAVCO

Site Personnel:

Name	Agency
<u>D. SILCOCK</u>	<u>UMISA</u>
<u>M. MCKAY</u>	<u>UMISA</u>

Access Notes:  
 (SEE MR J. BEHR'S )  
 1990 REPORT  
 ATTACHED !

Location Diagram:  
 (SEE ATTACHED SKETCH #1)  
 SEE ATTACHED SKETCH #2  
 SEE ATTACHED SKETCH #3



Station TANNA GPS MARK "TANA" UTC Start Date 30 JULY '92 UTC Start Day 212



N.B

AMMENDMENTS !!!

UNAVCO GPS Station Description

Station occupied by Name Jeff Behr  
Address 1520 Pine St; Boulder, CO.  
Phone 303 - 492 - 5411

57 1/6  
209  
653  
RES B.

Date August 7, 1990

Station Name Tanna 4 char. ID TANA

Latitude 19° 31' 48" S Source of Position GPS

Longitude 169° 15' 00" E Country Vanuatu

Elevation 1.5 m

Station Location In coral terrace, 3 km N of Lenakel, Tanna Island

Other Names \_\_\_\_\_

Topographic maps showing location \_\_\_\_\_

Magnetic Declination 12° E

Site owner/contact Name Iata Samaika

Address Loukatai, Lenakel

Phone \_\_\_\_\_

Road log description of route to station mark (include mileage from well known location in the nearest town).

From Tafea coop, the road leading along the coast, out of town to the north, is followed for 1.2 km to a dirt road on the left. Follow the dirt road for .5 km to the beach. The mark is almost straight out from where this road reaches the beach, embedded in the uplifted coral.

From the gov't town of Isangel, follow the coast road to the north to Lenakel and on through town past the Lenakel and Tafea coop stores. If you go the alternate route (past the public stadium/playing field) east of the town centre, turn left after the bridge. This will take you to the Tafea Co-op.

\*\*\*\* Attach all maps notes and drawings for this station and do not forget the camera.\*\*\*\*

## Site Description

The mark is a steel pin in coral with a UNAVCO/GPS reference mark a few inches away. ( $11\frac{1}{4}$ " at  $546$   $572^\circ$  W)  
 The mark is about 12 meters from a concrete pad further out in the coral with the letters TNY 2 on it.  
 The mark is at about  $N 46^\circ E$  from this pad

From where the dirt road leading to the beach ends the mark is about 32 m directly out from the road to the ocean across the coral. That is  $\approx 32$  m from where the coral begins to where the mark lies

## Distance and azimuth between reference and station marks.

## Reference 1

Name TANC  
 Bearing (mag)  $072^\circ$   
 Distance (m) 286 m ( $11\frac{1}{4}$ )

## Reference 2

Name TNY 2 (concrete pad)  
 Bearing (mag)  $046^\circ 48'$   
 Distance (m)  $\approx 12$  m

## Reference 3

Name \_\_\_\_\_  
 Bearing (mag) \_\_\_\_\_  
 Distance (m) \_\_\_\_\_

12.966 (horiz)

Other information (can the site be accessed by car, how many lengths of cable are needed, is there external power, what is needed at the site to make the operator more comfortable? ect.)

## Local Accommodations

Govt Guest House - 2000 vt/nt (SAME 1992)  
~~Local Secretary's Guest House - 1000 vt/nt (N/A 1992)~~  
 Tanna Beach Resort - 4000 vt/nt for a bungalow  
 9000 vt/nt 1992

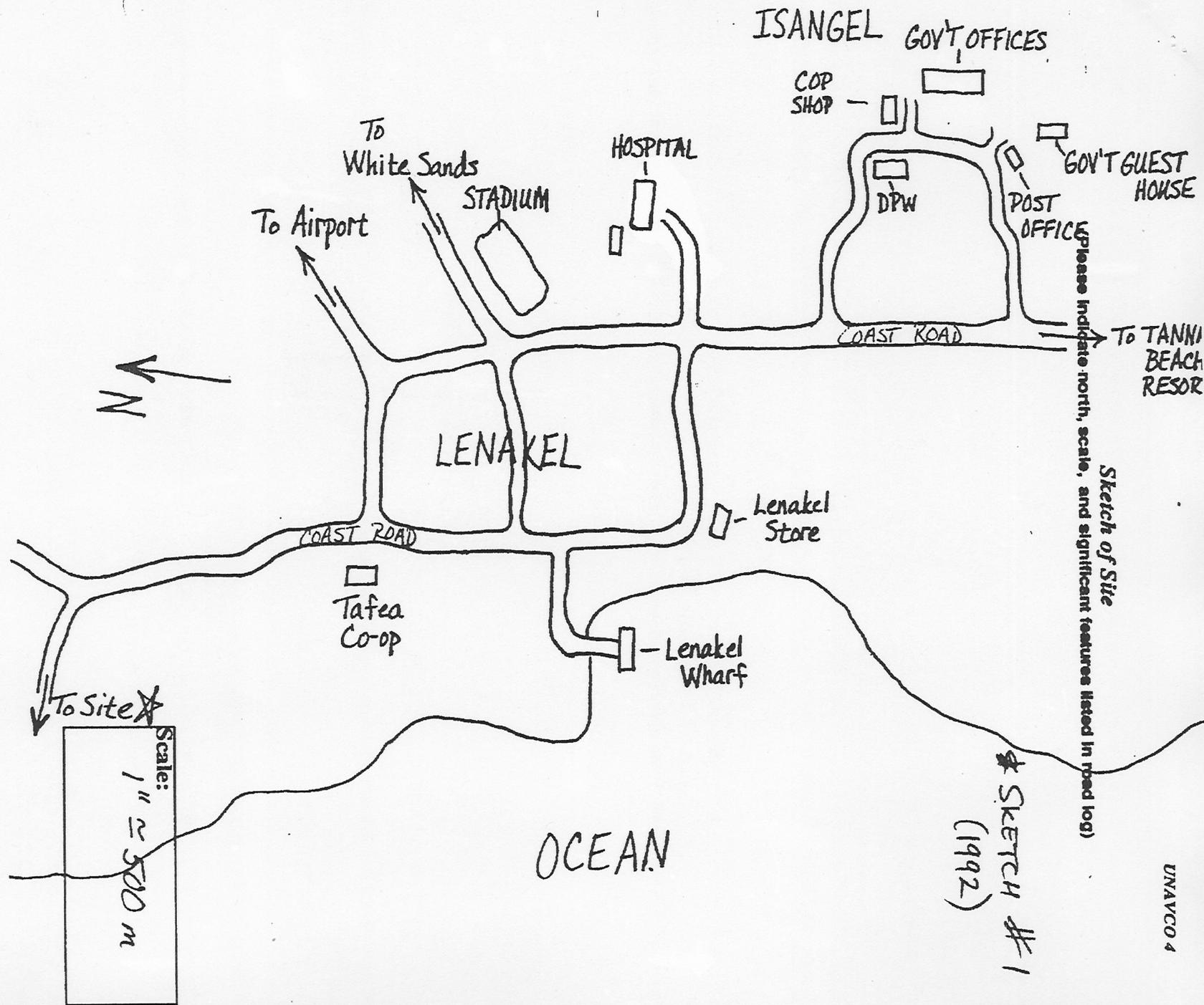
## Places to charge batteries

In your local accommodations. Power is only on about 12 hrs a day, however. 240 V, bring adaptors. Electric hours vary but are around 7:00-12:00, 13:00-17:00, 18:00-22:00 ✓

## Local contacts

N/A 1992  
 Phillip String - Secretary of Tanna Island - (will probably resign post in 1991)

(Tanna government offices phone # 2038)  
 Claude Reichenfeld in Vila may have others (ORSTOM-2268)  
 SEE MY REPORT 1992



## Other station information

Fill out as time permits

## Communication at site

## 1) Types and location of communications (Telex, Teletype, radio)

Post office radio telephone, Gov't office, ~~Phillip King's residence~~

## 2) Overseas communication

- Location Post Office
- Quality and cost VERY GOOD, 45 MIN. 250 VARY. CHARGE FOR COLLECT CALL. NOT SATELLITE LINK (HEAT SINK)
- Operating hours 7:30-12:00 13:00-16:00 - Island time!
- Time difference from UNAVCO +17 hours
- Country, state, and town long distance codes \_\_\_\_\_

## 3) Transportation

- Airport - Types and frequency of flights, cargo offices, price per kilo shipments Van Air 2 flights to and from Vila, daily 10:45 and 15:45 - subject to change Flights to Futuna, also
- Transportation from airport to site (type and availability) Taxis ~ \$400 vatu 600 - taxis are expensive in Tanna. Make arrangements with the gov't people for shuttling. This will save ~ 50%!

## 4) Other Local contacts - Name address and phone number of people providing assistance and the type of assistance provided.

Russell Wilson - Engineer with Dept. of Public Works  
can assist with charging by providing backup batteries  
- he may also be leaving Tanna, however, by '92

SEE 1992 REPORT

## 5) Power

- Type of power, voltage variance, and stability. 240 V on ~ 12 hrs/day  
700-1200, 1300-1700, 1800-2200 but varies.
- Location of stores to buy batteries, price of batteries, voltage and amp hrs available. Tafea co-op 12V, 40 Ah ~ \$800 rate  
10,000  
Ask for backup at Dept. of Public Works
- External power available, distance from power to receiver ~~1000~~  
No external power
- Best place to charge batteries In guest house  
Public works has a battery charger.

## 6) Repair and maintenance facilities

- Local hardware stores Tafea co-op store

## 7) Lodging and restaurants

- Local hotels recommended and prices ~~1000~~. If there are two or more people a Tanna Beach bungalow would be nice for a day or two. Don't recommend Gov't guest house @ 2000<sup>vt</sup>  
Do recommend Secretary's guest house if available @ 1000<sup>vt</sup>
- Restaurants- the good, the bad and the ugly  
The site on the beach is the best!  
I hear Tanna Beach has excellent food: lunch ~ 500 vt  
dinner 1000-1500 vt. total. OVERPRICE!  
H-H restaurant + Lenus Lapin - basic but good meat, rice and veges for ~ 150 vt.

## 8) Local sanitation conditions

- Can you drink the water? Yes; the Tannese are pretty good about water quality control
- Mosquitoes and other bugs? Mosquitoes, yes! Can get malaria + tengu fever.

## 9) Medical clinics or doctors

STAFF HELPFUL BUT  
QUALITY OF SERVICE  
DUBIOUS. SERVICE IS  
FREE.

- Are emergency medical services available (location and type)? Hospital  
is atop hill which is reached by paved road  
at intersection of coast road and stadium/airport  
road. - up from Leaked co-op.
- Local phone number which could be called in case of emergency  
(i.e. local contact familiar with the project) Phillip Shing 2038

## 10) Contact at the Local U.S. Embassy or consulate

## 11) Time of year and climate during site occupation. What clothing do you recommend for operator comfort and a successful survey. Any other equipment which would make the stay more enjoyable (camp stove, radio etc.).

Winter time, temp. range 16-28°C - can be cooler.  
Can also be windy & damp - a sleeping bag is good here  
Bring rain gear and warmer clothes.  
Camp stove is handy but could only find low quality  
kind here - try to bring white gas from Vila.

## 12) Location of banks, hours of operation, exchange rate

Bank in Tafea  
Co-op \$1.00 U.S. = 112 rate - store hours  
Banks in Vila \$1.00 U.S. = 117 rate

- Name and address of bank where money can be wired.

- Is it proper to tip? If so how much? Didn't tip. Don't know  
where I would have.

- How much for a cold beer? 100<sup>120</sup> vt. at Gov't store  
275 rate at Tanna Beach  
300

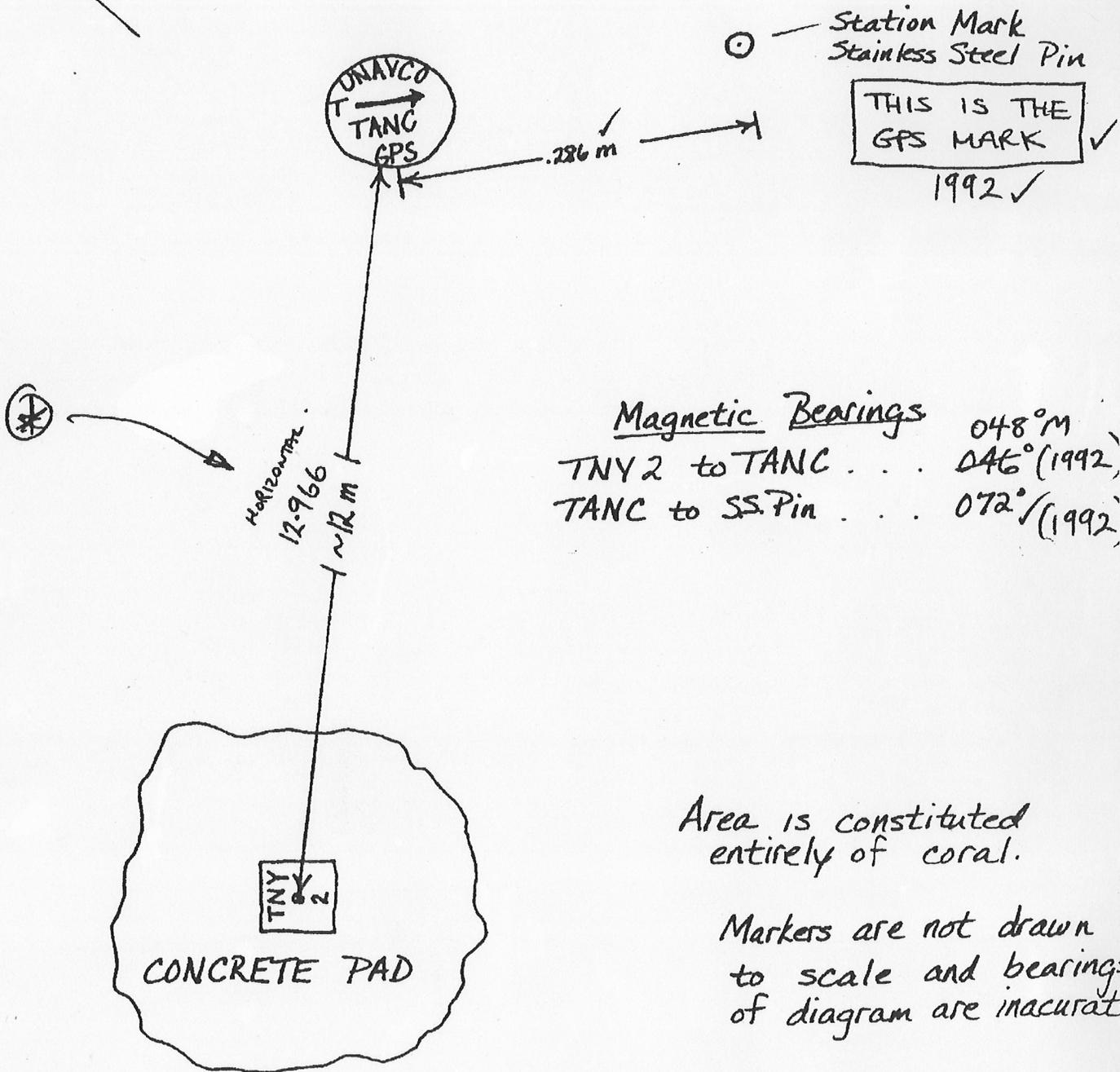
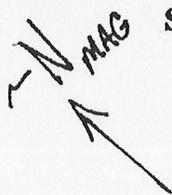
## 13) Are the people friendly. Do you feel you and the equipment were safe? Any other conditions that could adversely effect operations

People here are  
great. Some will try to get money from you  
but tell them 'no' and life's O.K. Field equipment  
was pretty safe. The landowner and his family  
will keep pretty good tabs on the eqpt., but some  
Tanvese steal, so be careful.

# SKETCH # 3 (1992)

UNAVCO 9

## STATION MARK "RUBBING" and a UNIQUE DESCRIPTION



Magnetic Bearings

TNY 2 to TANC . . .	048°M
TANC to SS Pin . . .	046° (1992)
	072° (1992)

Area is constituted entirely of coral.

Markers are not drawn to scale and bearing of diagram are inaccurate.

# SKETCH OF STATION AREA

(INCLUDE MARK and all references)

TANWA VANUATU.

SKETCH AT 1:1 (1:1)

UNAVCO 10

JOE SAMAIKA'S NEW HOUSE

N TRUE



COAST ROAD  
~0.5 km

1.2 km to Tafea Co

NOW GONE  
JOE SAMAIKA HUT



\* 1992 HIGHEST TIDE

BEACH ROAD  
CUT SLOPE ~1m

BUSH

\* 1992 TENT SITE \* ~0.5 km  
NOW GONE SHELTER



ACCESS

CORAL SAND BEACH

NOT POSSIBLE \* 1992

△ Tent Site



CORAL TERRACE

\* 1992 TIDE HIGHEST

CORAL SAND BEACH

○ TANC

□ TNY2

CORAL TERRACE (~1.5m ASL.)

SCALE: 1" ≈ 20m

OCEAN

NORMAL LIMIT OF HIGH TIDE

