

HAITI

GPS site descriptions

January 19, 2003

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In collaboration with the
Bureau of Mines and Energy and the
Department of Interior, Direction of Civil Protection



The markers used during the January 2003 field work are the so-called “Bevis pins”, see description below:

MACHINE SHOP SPECIFICATIONS

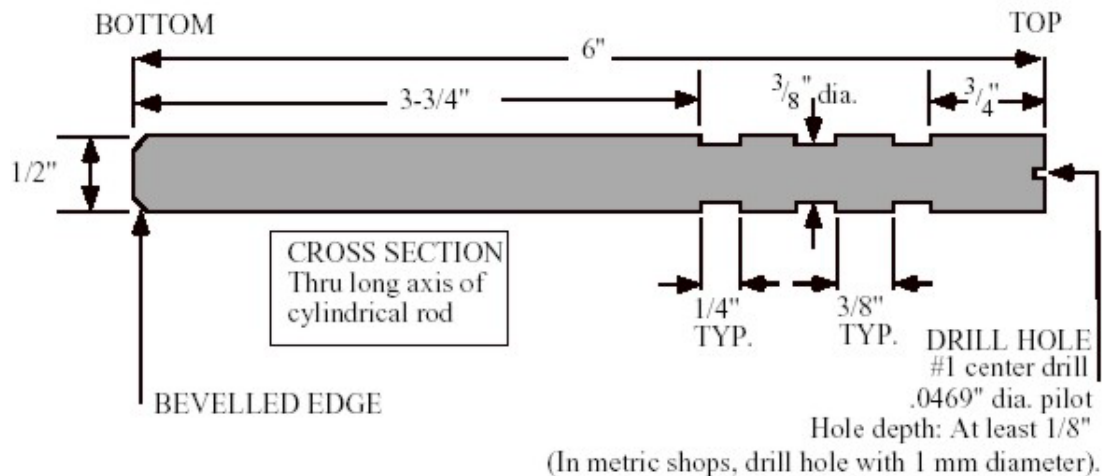
TOLERANCES: ALL DIMENSIONS $\pm 1/64$ " (Except drill hole diameter)

Use cylindrical stainless steel rod such as #304, which is reasonably machinable and highly corrosion resistant.

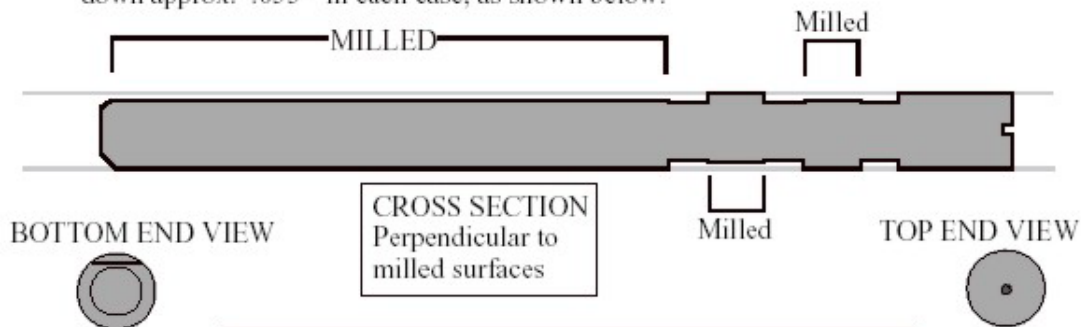
Cut the three grooves. We use a lathe tool $1/8$ " wide, and make two cuts per groove. Do not bother to make the base of the grooves really smooth.

Use plenty of cutting oil to prevent chattering during groove cutting.

Cut a bevel on bottom (approx. 45°), and center drill the top end.



Next mill a flat surface onto the lower shank of the pin, and the top $3/8$ " notch, then rotate roughly 180° and mill the other notch. Mill down approx. $.055$ " in each case, as shown below.



STAINLESS STEEL PIN FOR USE AS A GEODETIC REFERENCE MARK. 6" x 1/2" Pin, Version 2

design by Mike Bevis, NCSU April 1992
with suggestions from George Hade (Cornell)
Cash Johnson and Haywood Burnette (NCSU)
James Stowell (UNVACO) and Ken Hudnut (Caltech).

Note added in 1998: Tech 2000 now makes these pins with a slightly conical hole to optimize their use with the Tech 2000 GPS antenna mast (a fixed-height spike mount leveled under tension).

Summary:

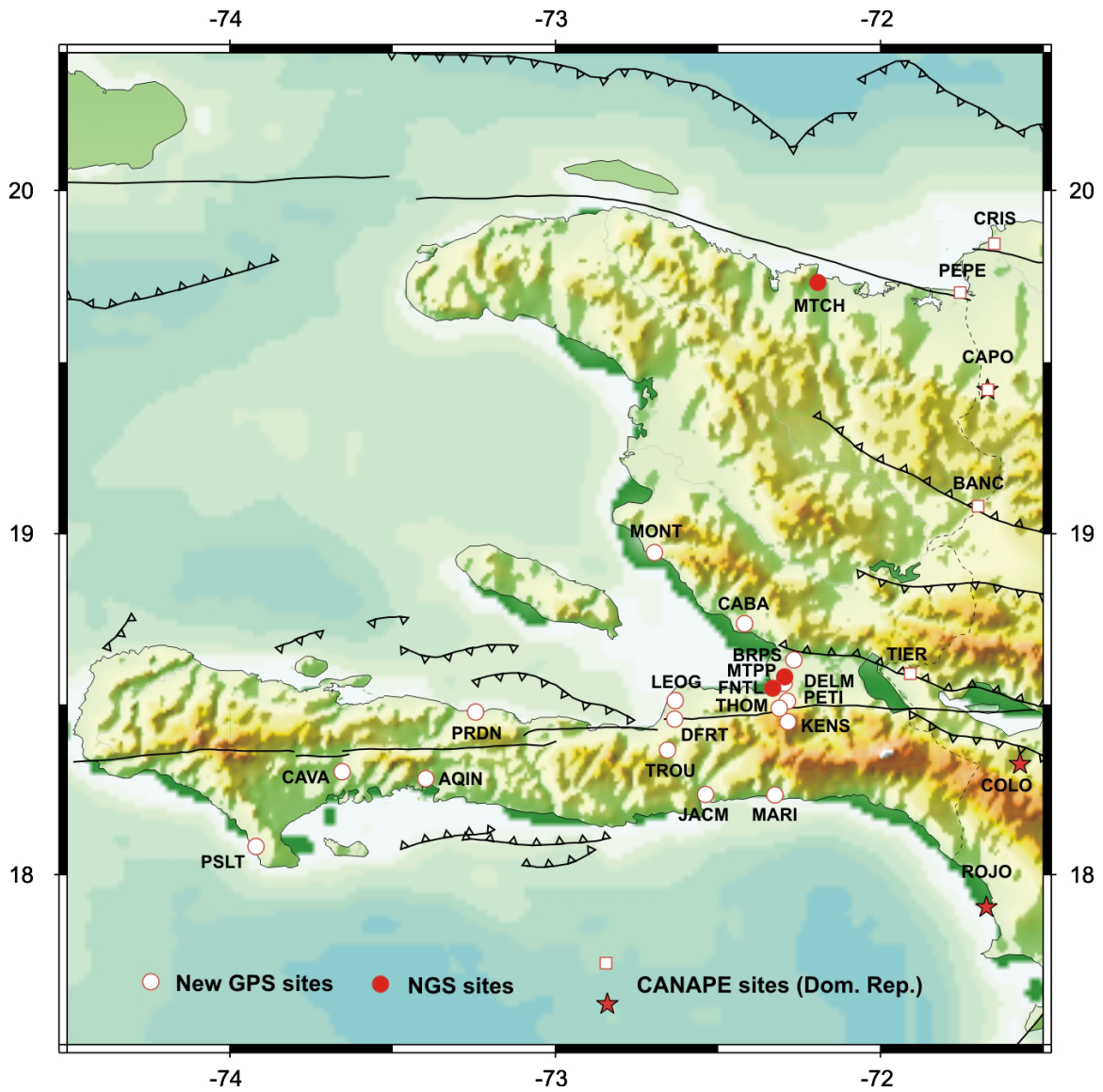
There are currently 19 campaign sites in Haiti. 16 were installed during a 1-week field work period in January 2003 by Pierre-Richard Jouissance (Bureau des Mines et de l'Énergie), Louis Obenson (Direction de la Protection Civile, Ministère de l'Intérieur), and Eric Calais (Purdue University). Three sites were installed by the US National Geodetic Survey in 1955 (Fort National) and 1996 (Cap Haitien International Airport and Port-au-Prince International Airport).

In addition to campaign sites, the US National Geodetic Survey installed a continuous GPS station in Port-au-Prince in June 2002, see <http://www.ngs.noaa.gov/News/Haiti>:
« *The National Ocean Service is currently involved in a project to assist the Haitian-American Association of Engineers and Scientists (HAAES) and the Episcopal University of Haiti at Port-au-Prince to establish the first Global Positioning System (GPS) Continuously Operating Reference Station (CORS) in that region. This is the first step in an effort to invigorate a geospatial reference system for Haiti. This reference system is critical, especially for a nation bordered on three sides by the ocean, for monitoring erosion, subsidence, and other types of land movement. For more information, please contact Dave Doyle* »

GPS site coordinates (WGS-84):

	Name	latitude			longitude			elevation
1	Delmas	18	33	44.7	-72	17	46.6	133
2	Petionville	18	30	33.2	-72	17	13.6	456
3	Kenscoff	18	26	56.5	-72	17	6.8	1504
4	Thomassin	18	29	18	-72	18	43.4	944
5	Bon Repos	18	37	51.3	-72	16	2.7	97
6	Cabaret	18	44	11.6	-72	25	3.4	54
7	Leogane	18	30	40.4	-72	37	55.4	60
8	Dufort	18	27	23.1	-72	38	2.5	72
9	Marigot	18	14	1.4	-72	19	32.8	10
10	Jacmel	18	14	6	-72	32	18.2	49
11	Trouin	18	21	59.7	-72	39	16.4	367
12	Nippes	18	28	37.6	-73	14	39.7	26
13	Aquin	18	16	52.5	-73	23	52	50
14	Cavaillon	18	18	10.7	-73	39	15.8	87
15	Port Salut	18	4	56.6	-73	55	12.5	30
16	Montrouis	18	56	42	-72	41	42	30
17	Fort National (NGS)	18	32	51.2	-72	19	51.6	94
18	Cap Haitien (NGS)	19	43	57.5	-72	11	38.9	1
19	Port au Prince (NGS)	18	34	50	-72	17	40.6	25

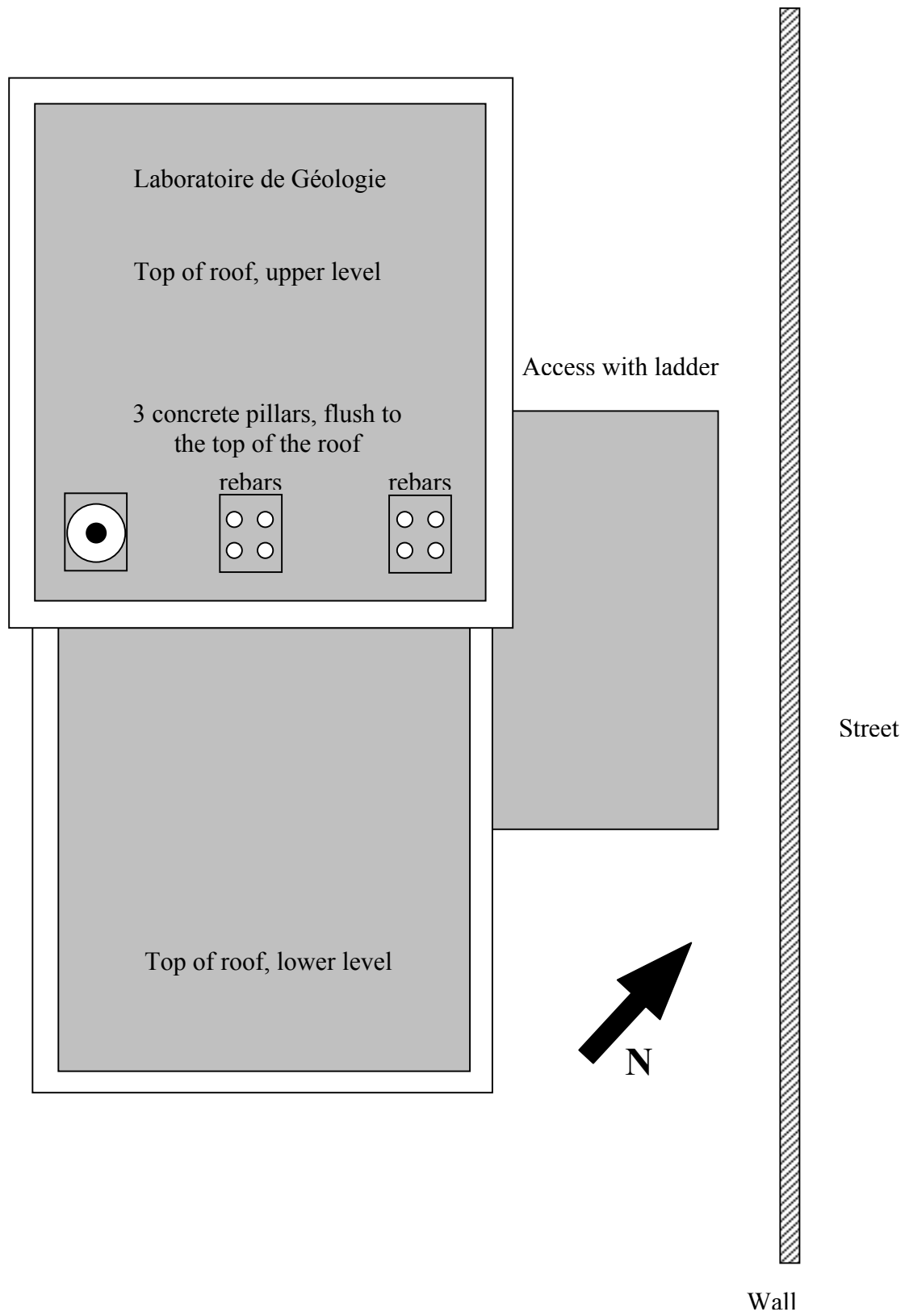
Map of GPS sites:



DELMAS, BUREAU OF MINES AND ENERGY

1. 4-character name: DBME
2. Date installed: January 11, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Jean Pierre Eliphaine, guard (lives across the street)
5. Address: Centre Experimental du Bureau des Mines et de l'Energie
Delmas 31, rue Jacques Premier
Ville de Delmas, Haiti
6. Coordinates: N 18 33' 44.7"
W 72 17' 46.6"
133 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Director General of the Bureau des Mines et de l'Energie, Geffrard JEAN (Tel / Fax: 246 2853 / 246 2248)
Director of the Experimental Center, Ing. Paul Sanon (Tel: 246 4024 / 246 1163)
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete pillar (building "laboratoire de geologie")
11. Local geology: Pliocene conglomerates
12. Masks: None
13. Setup tips: Spike mount ok.
14. Electricity: Yes
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information:

DELMAS



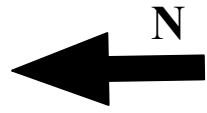


DELMAS

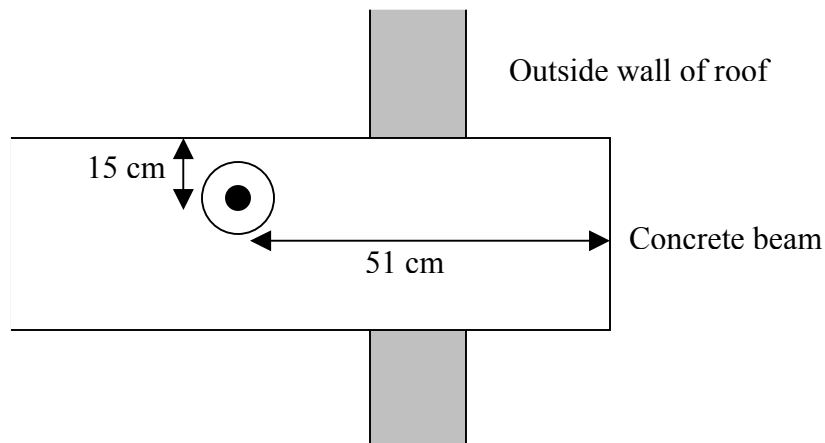
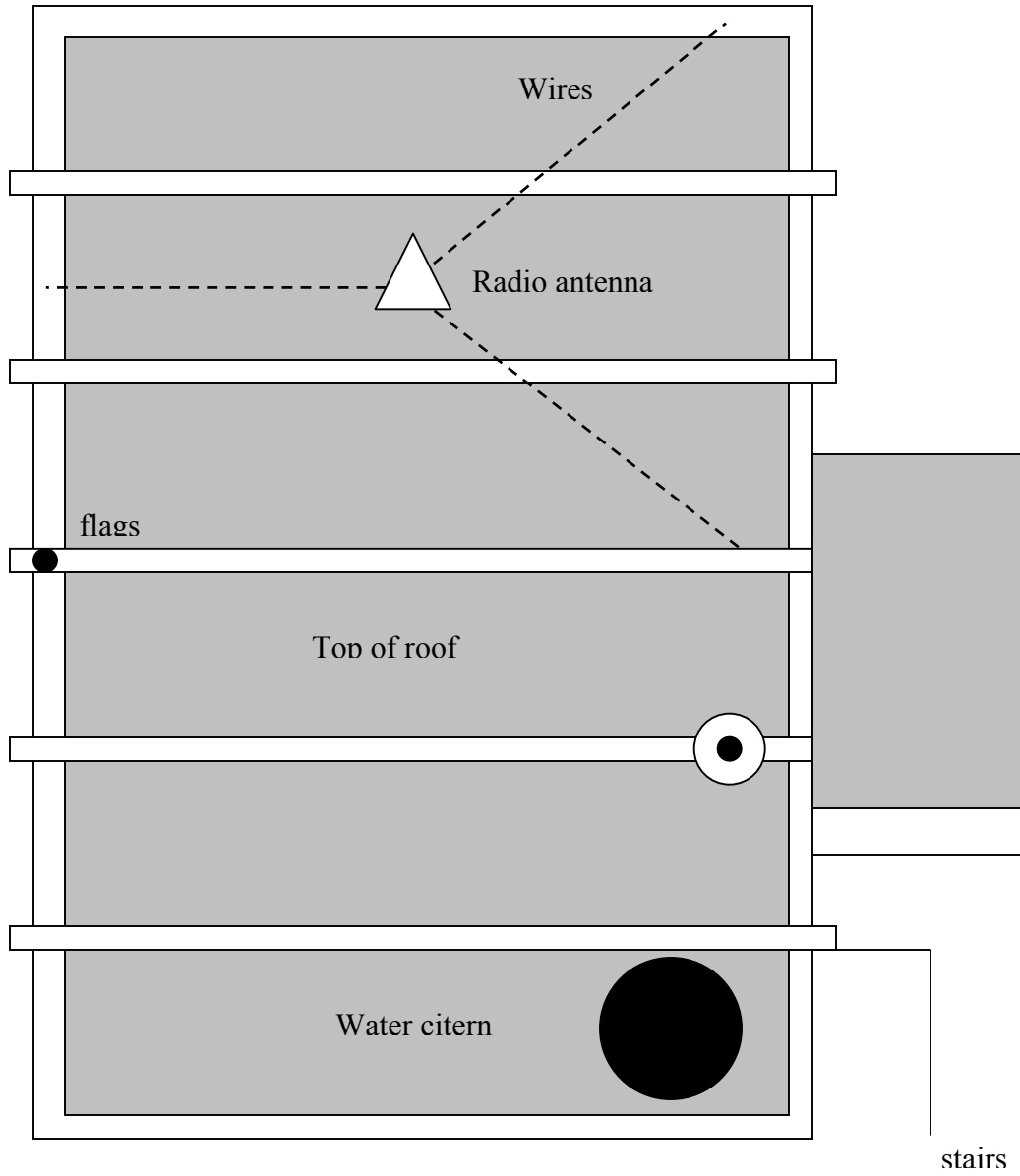


PETIONVILLE, POLICE STATION

1. 4-character name: PETI
2. Date installed: January 11, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Strelie Blancher (in charge of logistics at the police station)
Jean-Louis Melius (in charge of logistics at the police station)
5. Address: Commissariat Principal
Rue Pinchinat
Petionville, Haiti
6. Coordinates: N 18 30' 33.2"
W 72 17' 13.6"
456 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Commissaire Carlo Lochard (Tel 257 4934)
Commissaire adjoint Cetoute Wallman
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete wall
11. Local geology: Pliocene conglomerates
12. Masks: None
13. Setup tips: Spike mount ok.
14. Electricity: Yes
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information:
Access 24/24
Other phone numbers:
Information: 257 9494, 257 2222
Investigations: 257 1629, 257 0019



PETIONVILLE





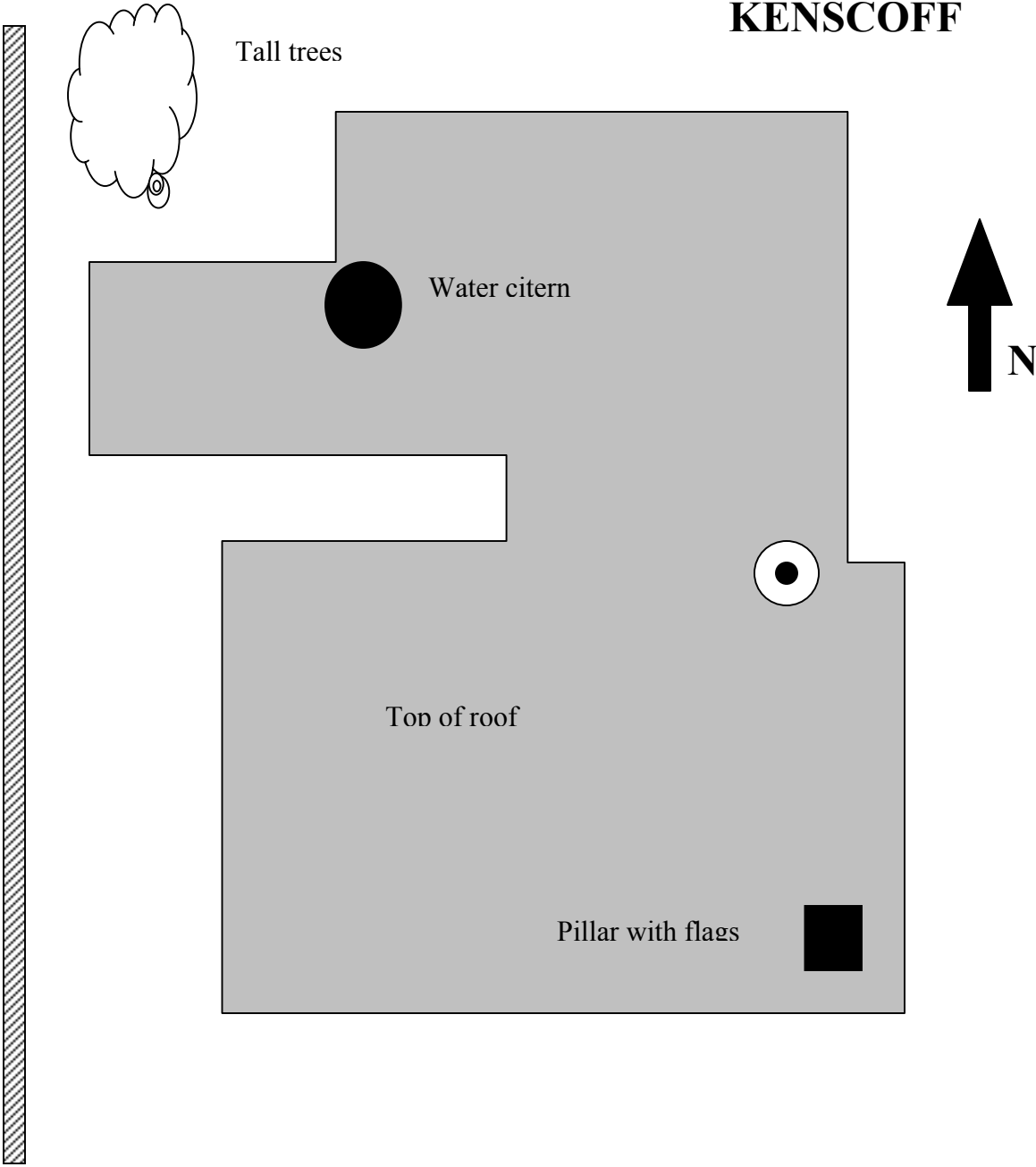
PETIONVILLE



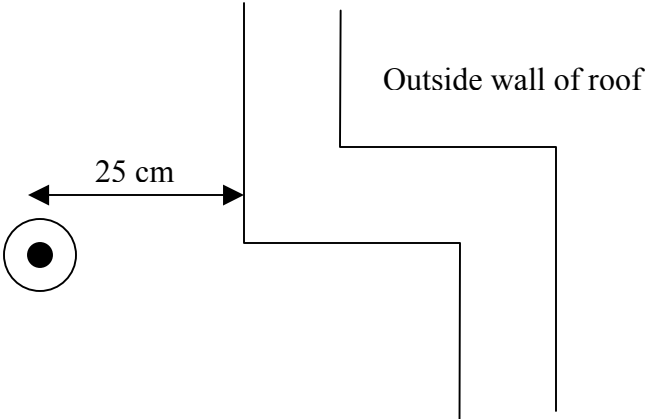
KENSCOFF, POLICE STATION

1. 4-character name: PETI
2. Date installed: January 11, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Eric Pierre (police officer)
5. Address: Commissariat de Police
Kenscuff, Haiti
6. Coordinates: N 18 26' 56.5"
W 72 17' 06.8"
1504 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Commissaire Marie-Louise Gauthier (Tel 298 4656)
Commissaire adjoint Joseph-John Zamor
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: Limestones
12. Masks: high trees to the NW + small pillar with flags to the south
13. Setup tips: Spike mount ok.
14. Electricity: Yes
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24

KENSCOFF



Wall





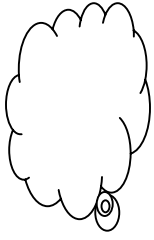
KENSCOFF



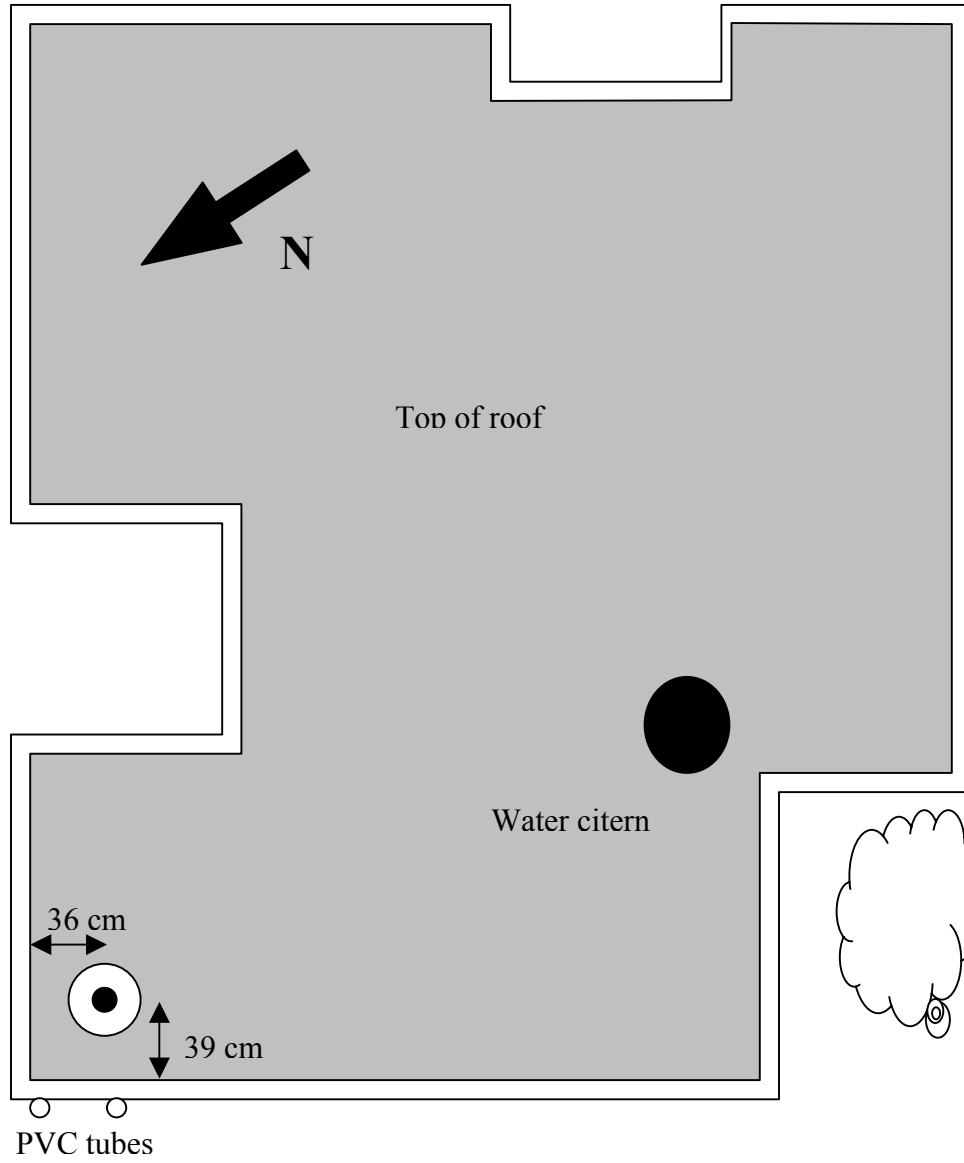
THOMASSIN – POLICE STATION

1. 4-character name: THOM
2. Date installed: January 12, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
5. Address: Sous-commissariat de Police de Thomassin
6. Coordinates: N 18 29' 18.0"
W 72 18' 43.4"
944 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Inspecteur Blaise Destin, 255-7266
Chef de Poste Jocelyn Casseus
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: Limestones
12. Masks: 2 significant masks to the SE and SW (trees)
13. Setup tips: Spike mount ok.
14. Electricity: Yes, but no generator
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24, secure.

THOMASSIN



Tall trees (eucalyptus, mask 60)





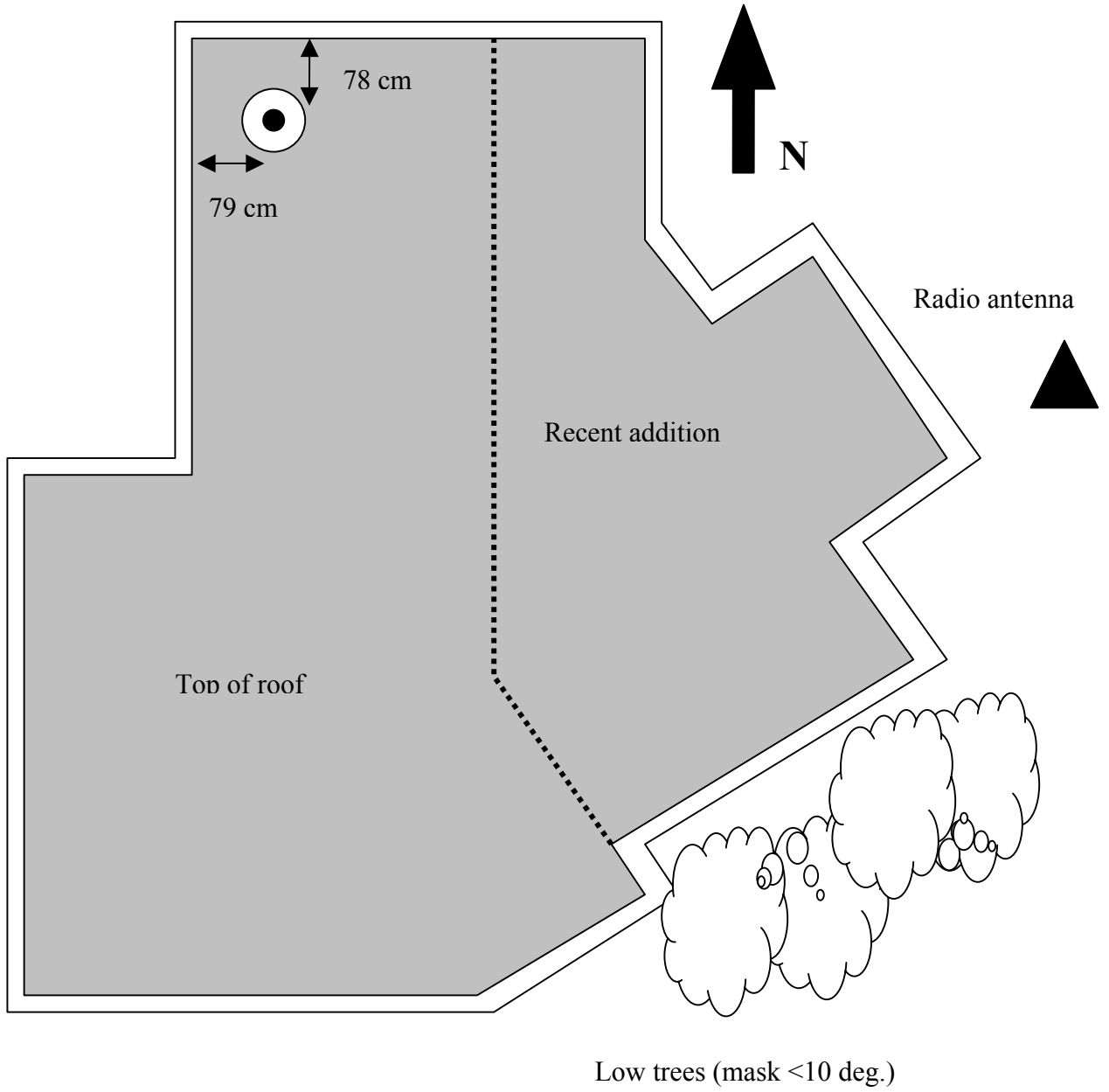
THOMASSIN



BON REPOS – TELECO BUILDING

1. 4-character name: BRPS
2. Date installed: January 12, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Aurelius Saint Jean (security guard)
Regis Seide (security guard)
5. Address:
6. Coordinates: N 18 37' 51.3"
W 72 16' 02.7"
97 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Mr. Etienne, director of the Teleco office – 238 1819
Chief of Security, Malherbe Dosciné – 238 3800
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: quaternary alluvial deposits
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Yes, 24/24, generator
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access every day from 6 AM to 10 PM, secured.

BON REPOS





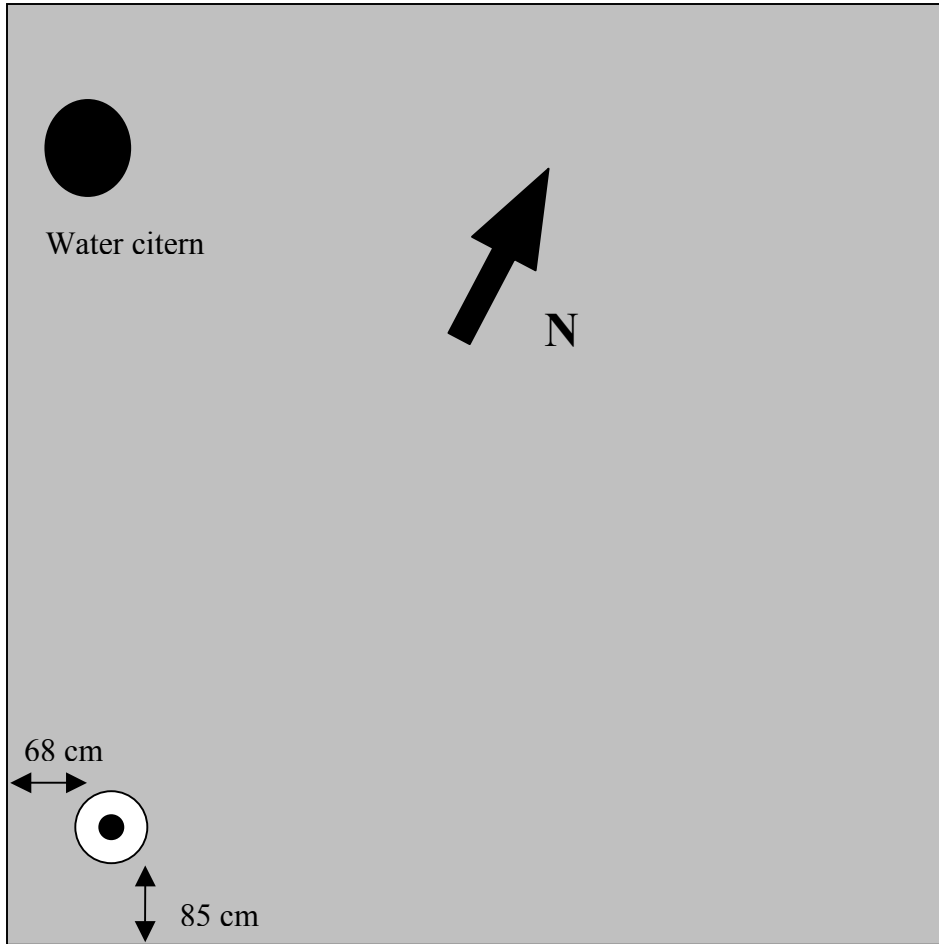
BON REPOS



CABARET – CITY HALL

1. 4-character name: CABA
2. Date installed: January 12, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
5. Address:
6. Coordinates: N 18 44' 11.6"
W 72 25' 03.4"
54 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Maire: Josph Wills Thomas (home: 278 3350, 278 3425)
Adjoints: Joseph Emmanuel LeBlanc, Marie Monique Casilius
Tel. Mairie : 278-3828 / 278-3838
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete, south corner
11. Local geology: limestones
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Yes, not continuous
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Difficult access, requires double ladder. Can be borrowed with EDH (Electricité d'Haïti).

CABARET



No picture

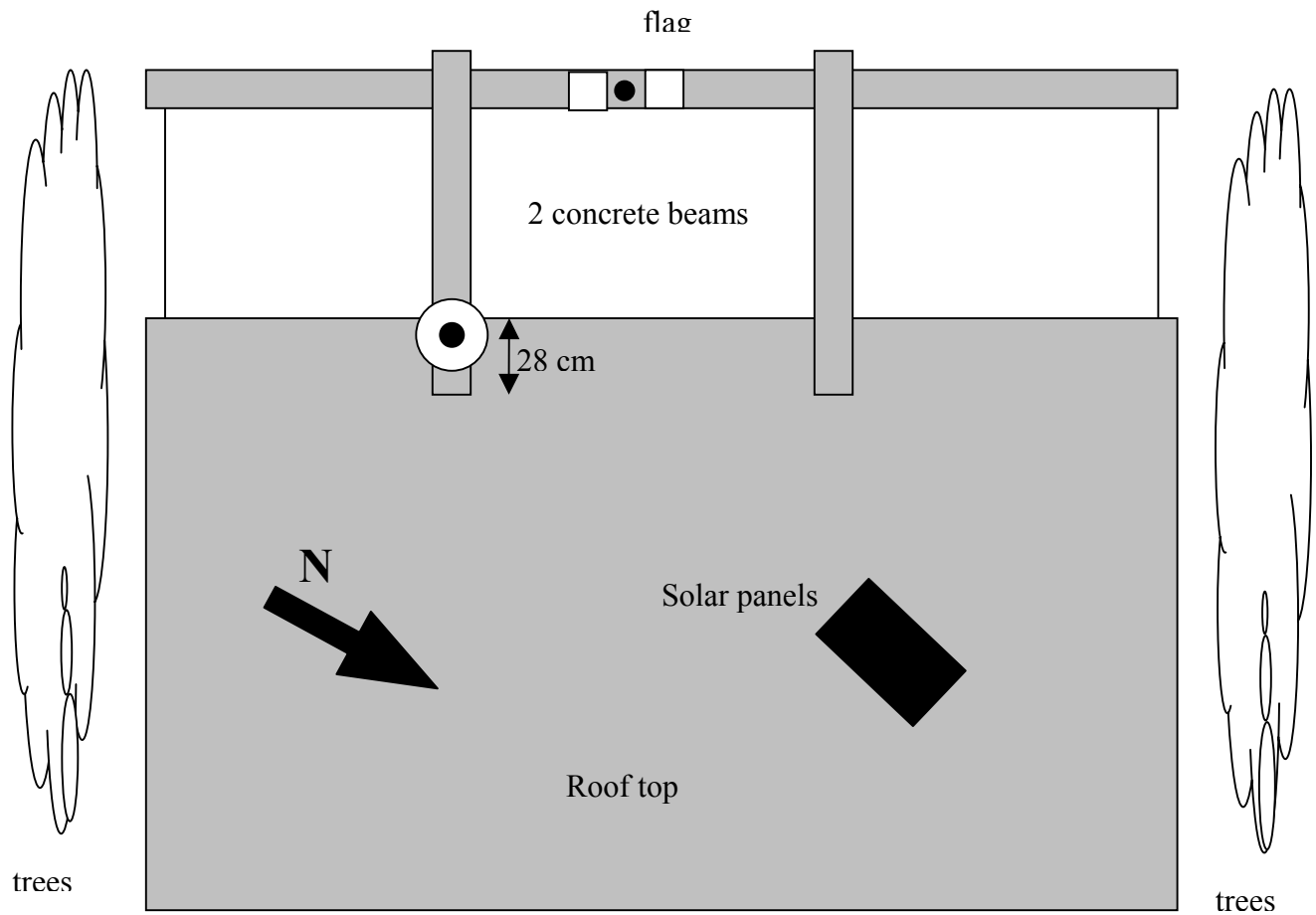
CABARET

No picture

LEOGANE – POLICE STATION

1. 4-character name: LEOG
2. Date installed: January 13, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
5. Address:
6. Coordinates: N 18 30' 40.4"
W 72 37' 55.4"
60 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Commissaire Ovilmar Sagesse
Cell: 554 9539
Office : 235 0956 / 235 1923 / 235 0077
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete
11. Local geology:
12. Masks: south = 20, west = 40, north = 10, east = 10.
13. Setup tips: Spike mount ok.
14. Electricity: Not continuous, generator.
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24. Stairs to top of 1st floor, then ladder.

LEOGANE





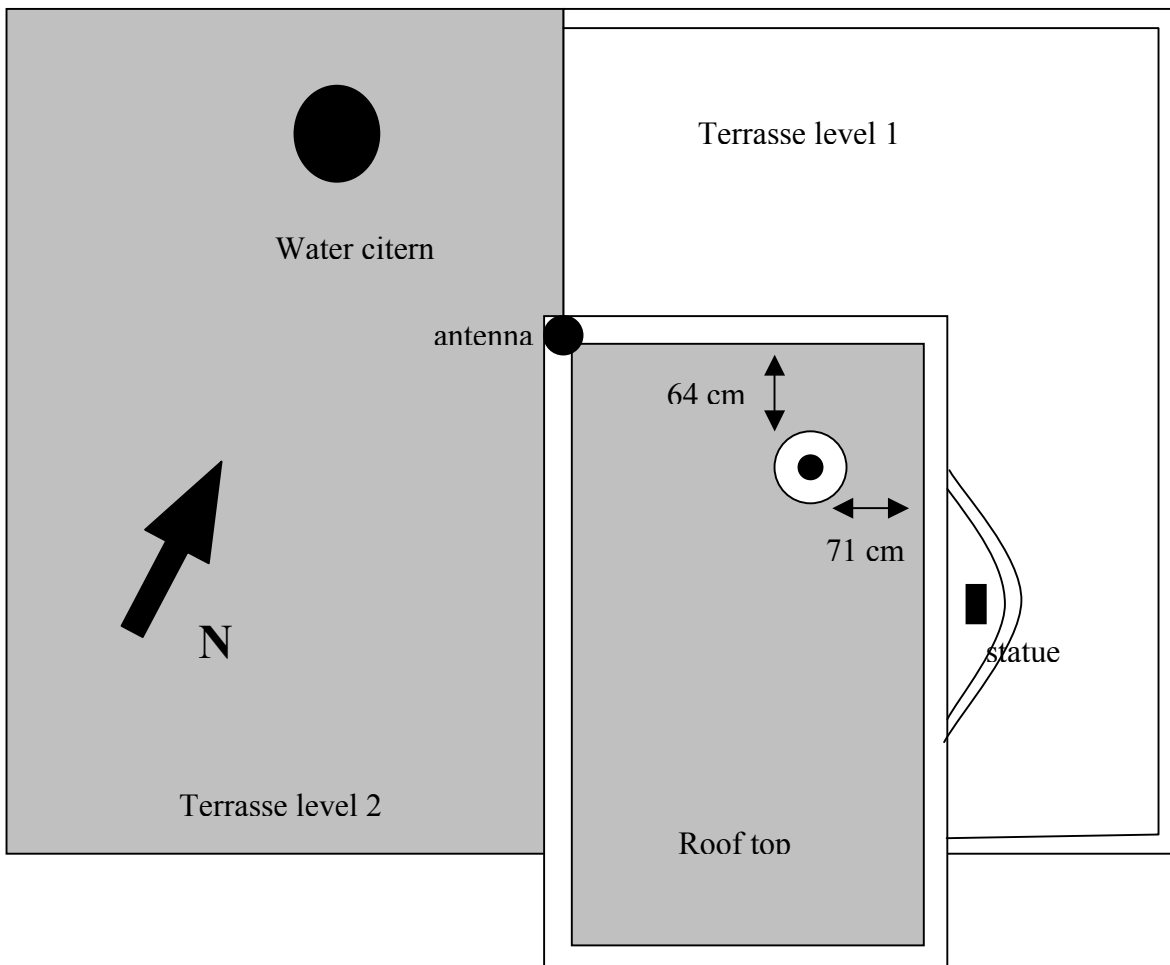
LEOGANE



CARREFOUR DUFORT – POLICE STATION

1. 4-character name: CADF
2. Date installed: January 13, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Inspecteur Etienne Antoine Franet
5. Address:
6. Coordinates: N 18 27' 23.1"
W 72 38' 02.5"
72 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Inspecteur Etienne Antoine Franet, cell 556 8707
Brigadier Jean Dernier Saint Philippe
No telephone in police station
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: Unconsolidated conglomerates
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Not continuous, they use batteries + inverter.
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24

CARREFOUR DUFORT





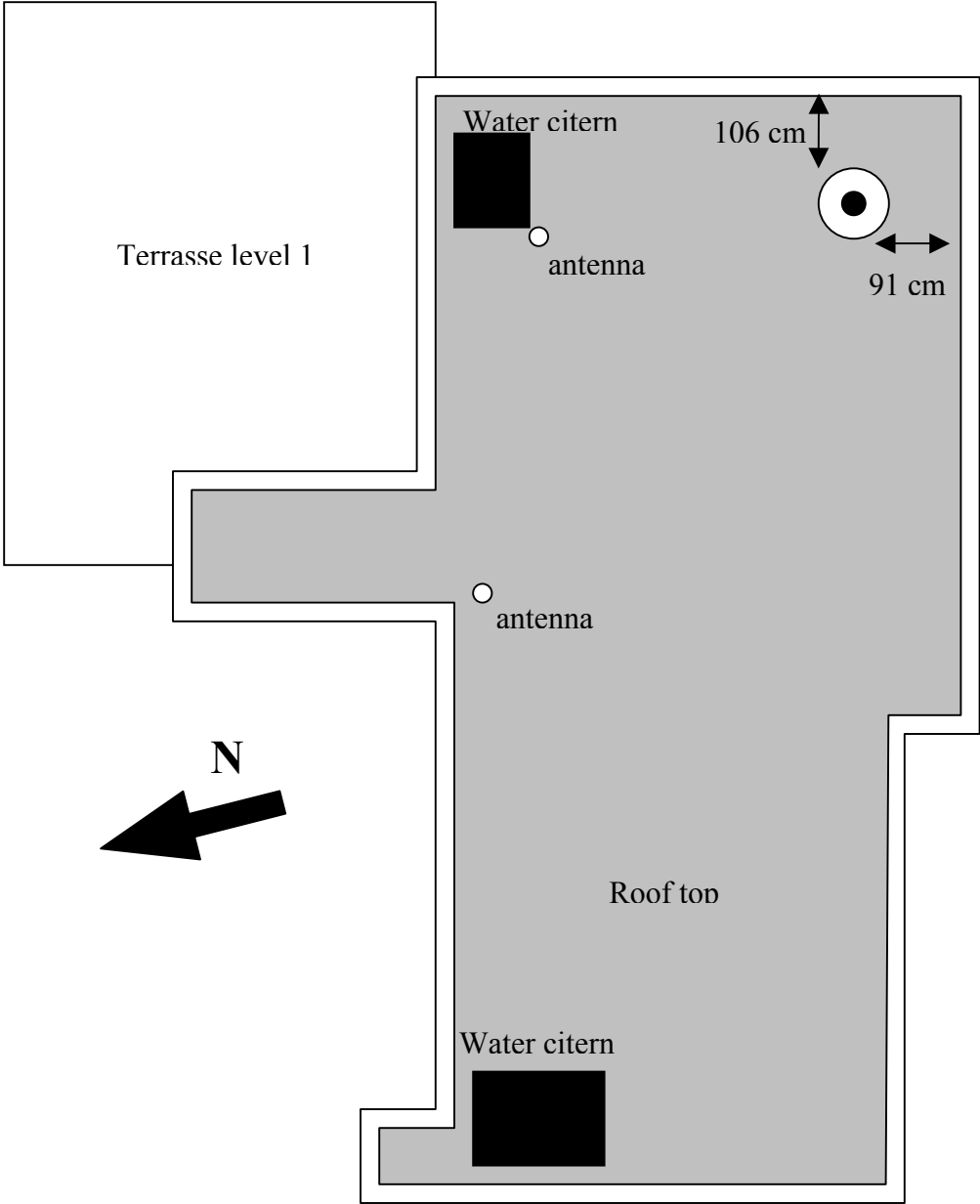
CARREFOUR DUFORT



MARIGOT - PRESBYTERE

1. 4-character name: MARI
2. Date installed: January 14, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Priest Father Jean Charles Pierre
5. Address: Rue Saint Pierre
6. Coordinates: N 18 14' 01.4"
W 72 19' 32.8"
10 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Priest Father Jean Charles Pierre, 288-3610
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete
11. Local geology: unconsolidated conglomerates
12. Masks: southwest = 15.
13. Setup tips: Spike mount ok.
14. Electricity: Yes, rare blackouts. 60W solar panels.
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access when priest is in. Secure.

MARIGOT





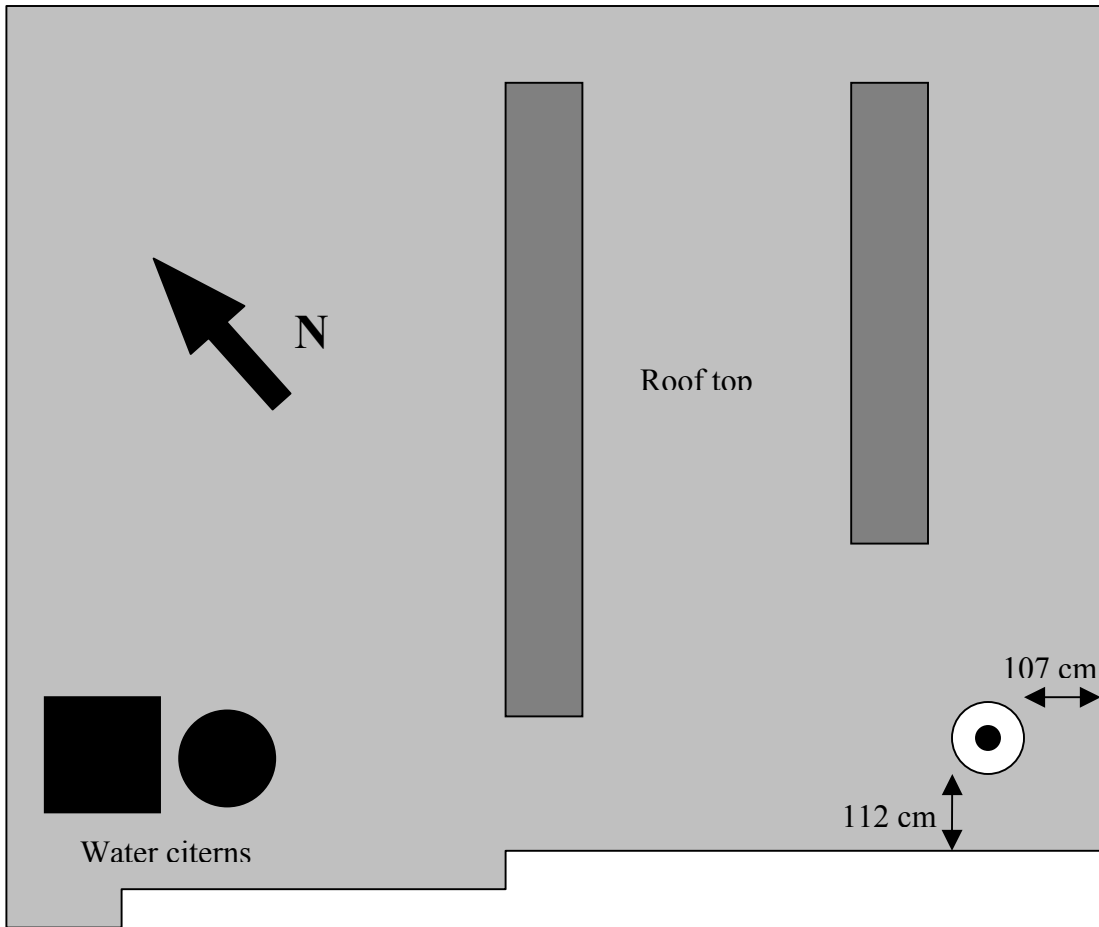
MARIGOT



JACMEL – POLICE STATION

1. 4-character name: JACM
2. Date installed: January 14, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Jeudi Dieusibon, police officer
5. Address: Rue de la Comédie
6. Coordinates: N 18 14' 06.0"
W 72 32' 18.2"
49 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Madame le Commissaire Nilda Peigne
Inspecteur Aurival (gave the authorization)
288 2856
288 2857
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete
11. Local geology: ?
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Yes
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24, secure.

JACMEL



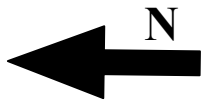


JACMEL

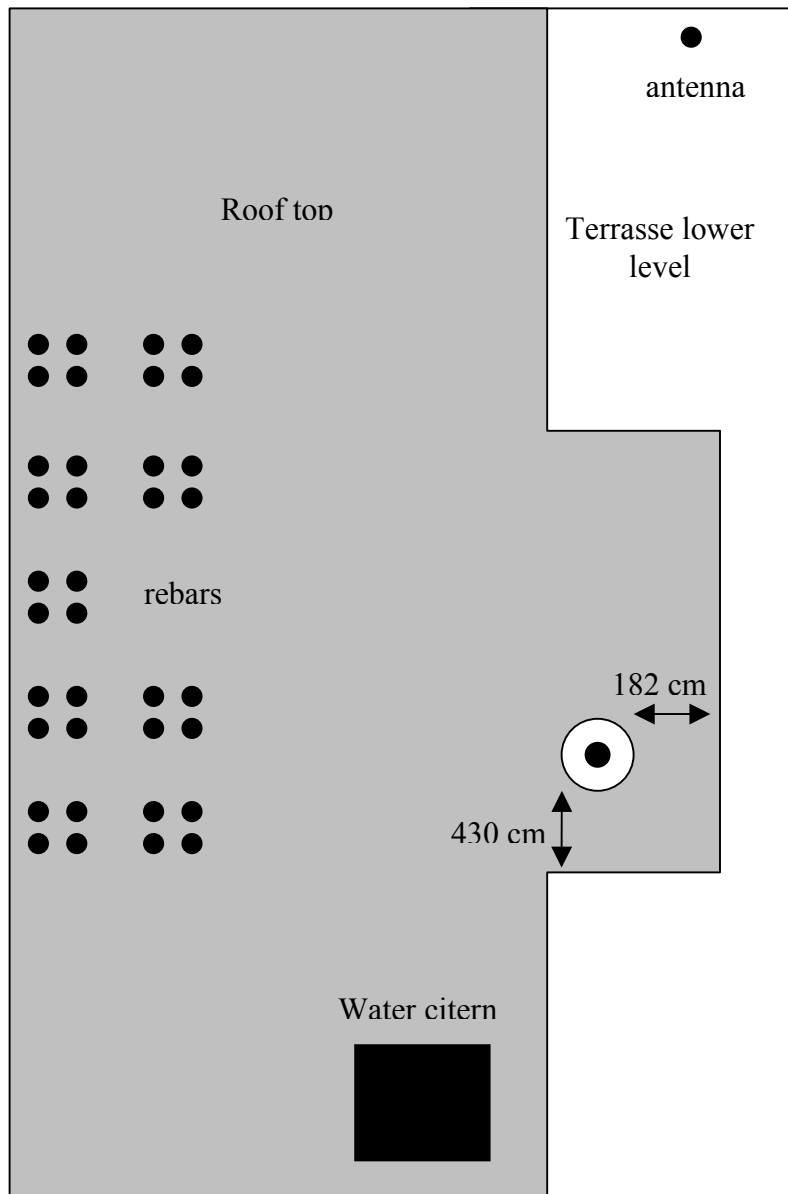


TROUIN - PRESBYTERE

1. 4-character name: TROU
2. Date installed: January 14, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Priest Father Jean Pierre Loudors
5. Address: Eglise Catholique Saint Anne
6. Coordinates: N 18 21' 59.7"
W 72 39' 16.4"
367 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Priest Father Jean Pierre Loudors, 287 9585
email : louisdo123@hotmail.com
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete
11. Local geology: Cretaceous volcanics
12. Masks: southeast = 20, north = 20.
13. Setup tips: Spike mount ok.
14. Electricity: Yes
15. Shelter for the equipment: Yes, with 30 m antenna cable.
16. Additional information: Access when priest is in. Secure.



TROUIN



No picture

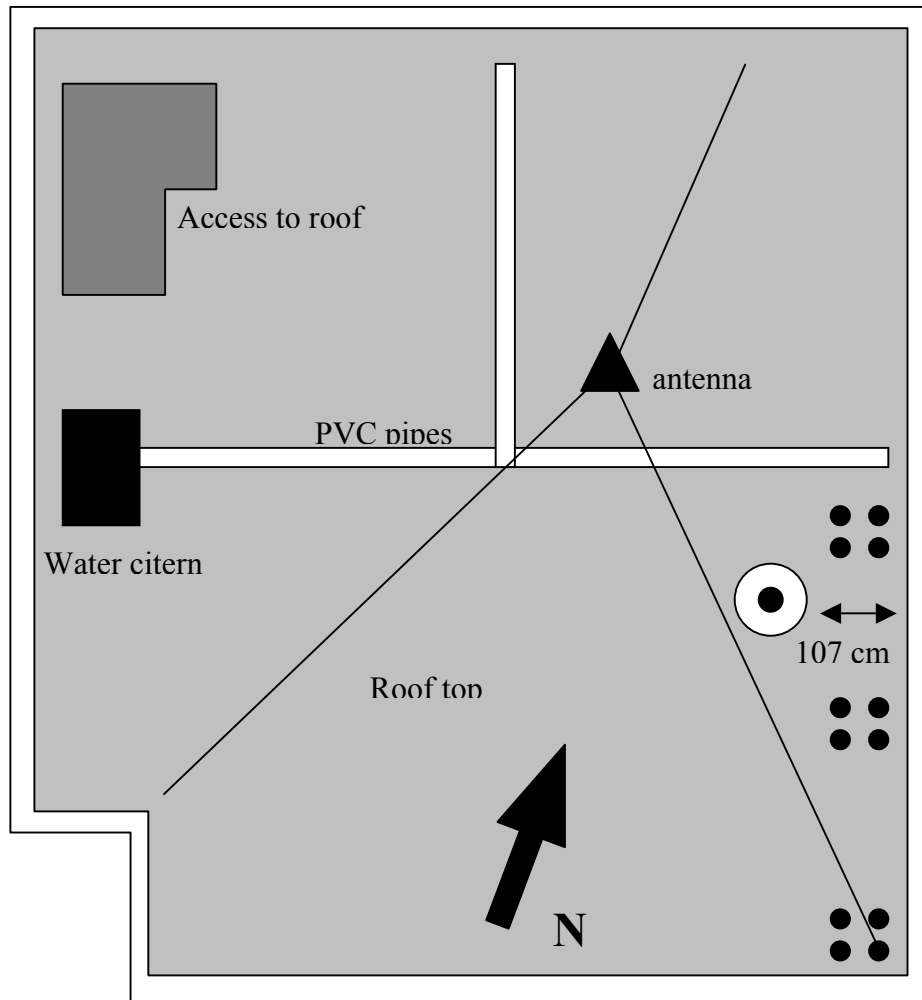
TROUIN

No Picture

PETITE RIVIERE DE NIPPES - PRESBYTERE

1. 4-character name: PRDN
2. Date installed: January 14, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Vicaire Jean Charles Clody
5. Address: Eglise Saint Antoine de Padoue
6. Coordinates: N 18 28' 37.6"
W 73 14' 39.7"
26 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Priest Father Valery Rebecca, 287 9696
Vicaire Jean Charles Clody
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: quaternary coral limestone.
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: No, generator turned on in the evening.
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access when priest is in. Secure.

PETITE RIVIERE DE NIPPES





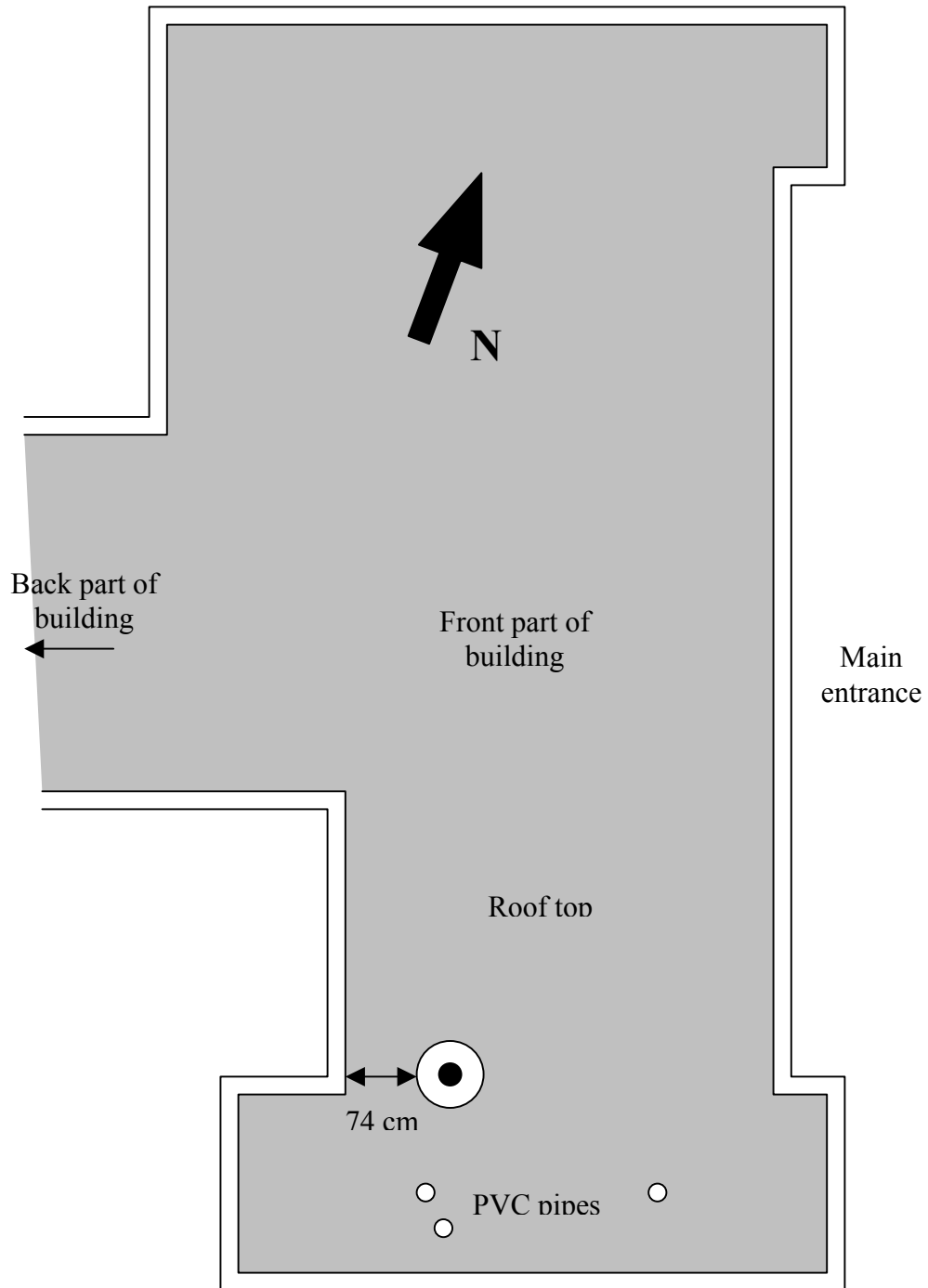
PETITE RIVIERE DE NIPPES



AQUIN - HOSPITAL

1. 4-character name: AQIN
2. Date installed: January 15, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Surveillant: Dugène Frisner
5. Address:
6. Coordinates: N 18 16' 52.5"
W 73 23' 52.0"
50 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Director: Dr. Louis Hébert, 287 9942
Administrator: Dodier Cmouins
Surveillant: Dugène Frisner
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: cretaceous volcanics
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Yes, 24/24.
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24, secure, not need for a ladder to access roof.

AQUIN





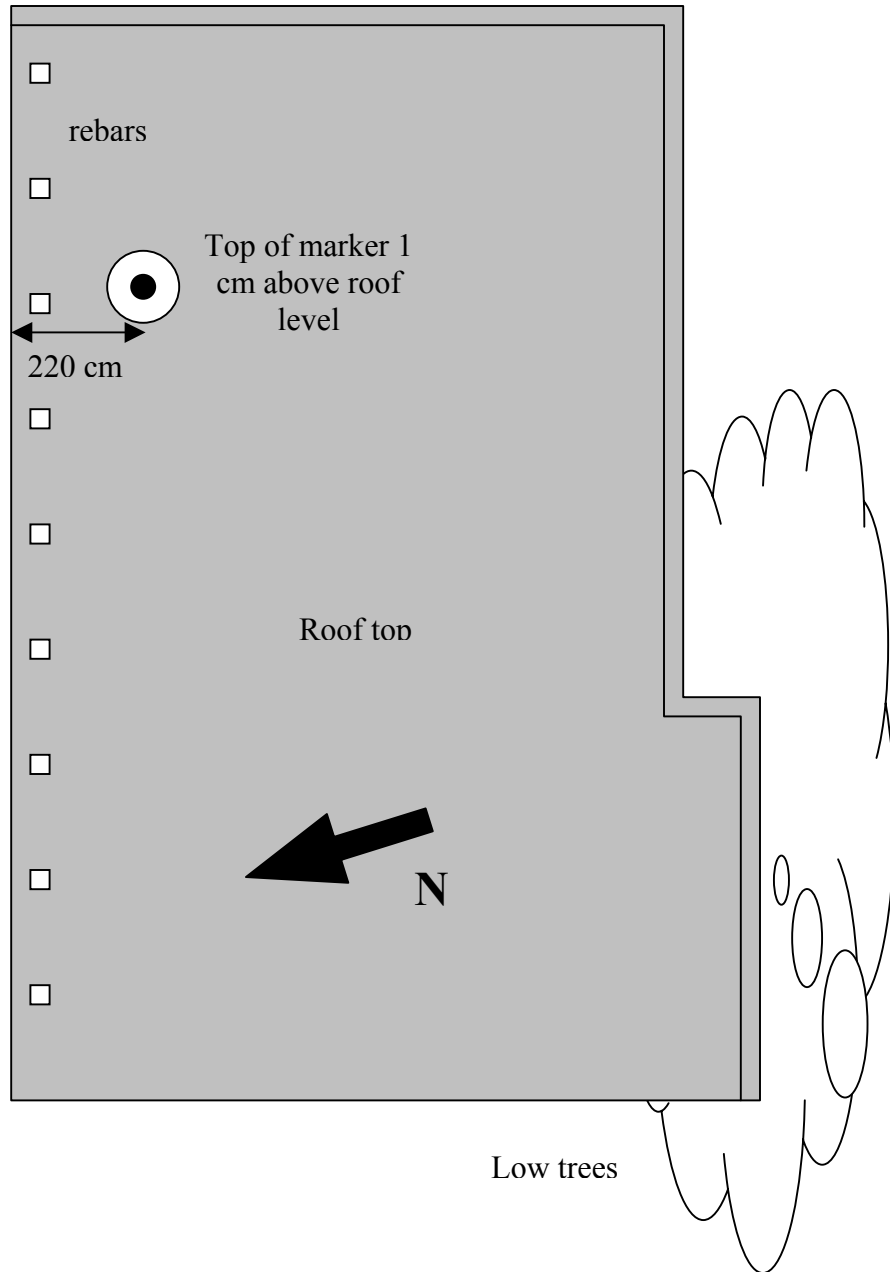
CAVAILLON



CAVAILLON – COLLEGE NOTRE-DAME

1. 4-character name: CAVA
2. Date installed: January 15, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Censeur des Etudes: Sanuel Saint Martin
5. Address:
6. Coordinates: N 18 18' 10.7"
W 73 39' 15.8"
87 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Father Jocelyn Mizalier, 286 9157
Censeur des Etudes: Sanuel Saint Martin (in charge of building during class hours)
9. Type of marker: Bevis pin
10. Type of setting: Top of 2-story building, concrete
11. Local geology: limestones
12. Masks: west = 15.
13. Setup tips: Spike mount ok.
14. Electricity: No.
15. Shelter for the equipment: Yes, with 10 m antenna cable, inside class room (locked at night and during week-ends)
16. Additional information: Access during class hours or when priest is present.

AQUIN





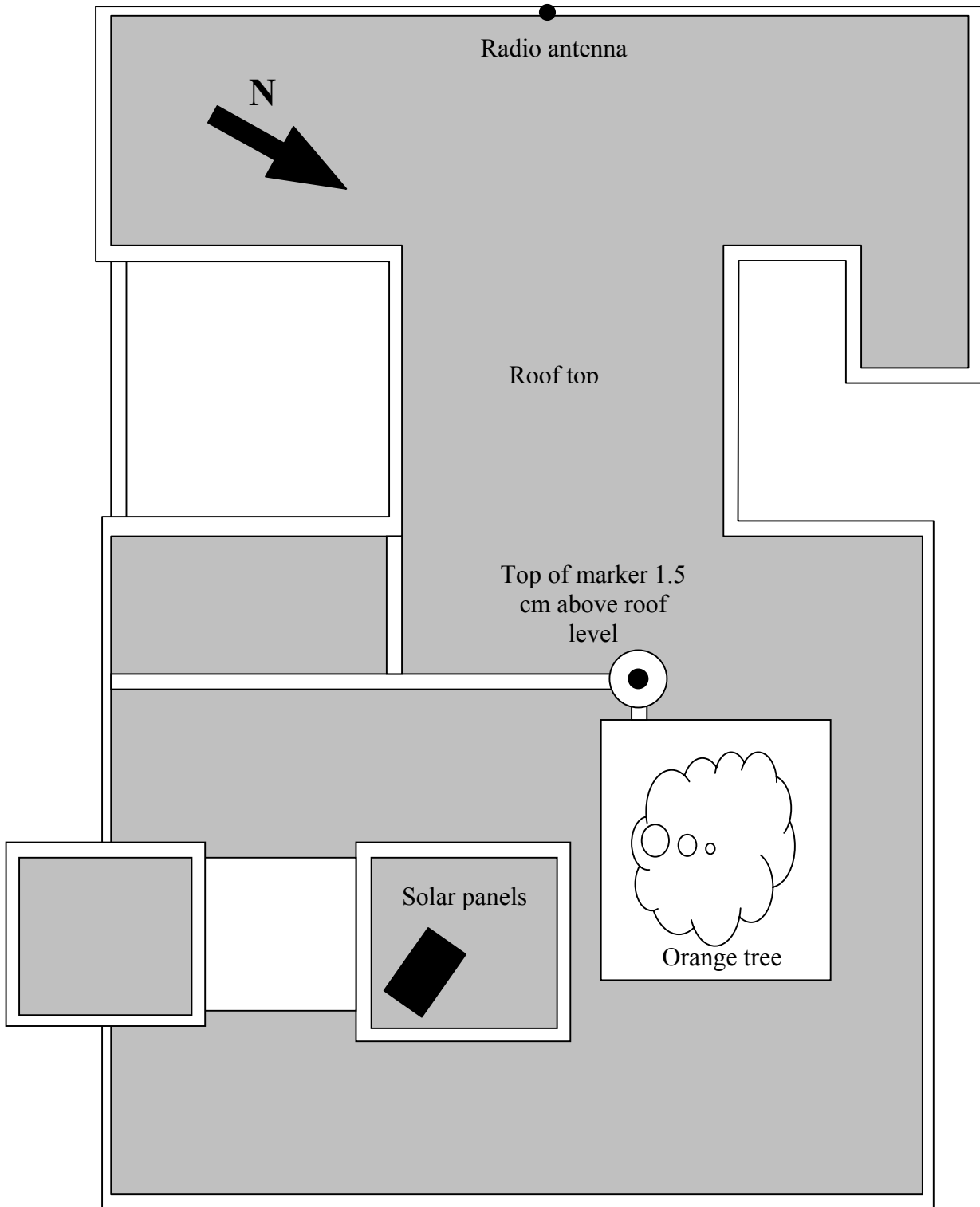
AQUIN



PORT-SALUT - HOSPITAL

1. 4-character name: PSLT
2. Date installed: January 15, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Yves Jean, support personnel
5. Address:
6. Coordinates: N 18 04' 56.6"
W 73 55' 12.5"
30 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Director: Dr. Victor Jean Elie, 286 8046
9. Type of marker: Bevis pin, top ~1.5 cm above concrete.
10. Type of setting: Top of 1-story building, concrete
11. Local geology: quaternary coral limestones
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: Yes, 24/24
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information: Access 24/24, secure.

PORT SALUT





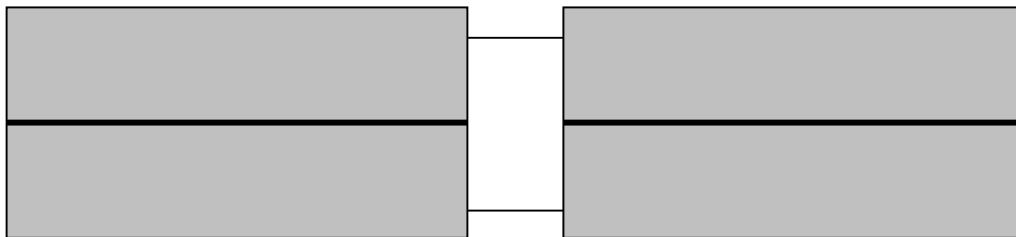
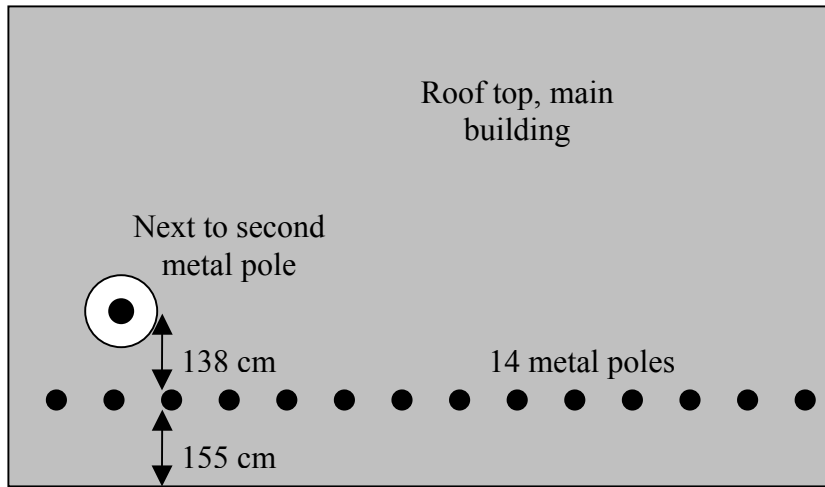
PORT-SALUT



MONTROUIS

1. 4-character name: MTRO
2. Date installed: January 16, 2003
3. Installed by: Eric Calais (ecalais@purdue.edu)
4. Persons present: Pierre Richard Jouissance (BME)
Wilson Dor, CASEC
Ernest Simeon, guard
5. Address: Lycée National
In front of Quisqueya beach.
6. Coordinates: N 18 56.67
W 72 41.66
30 m
7. Datum: WGS84
8. Persons responsible for access to the site, with phone number:
Director of Lycée National: Wilfrid Lessaint, 554-6917
9. Type of marker: Bevis pin
10. Type of setting: Top of 1-story building, concrete
11. Local geology: ?
12. Masks: none
13. Setup tips: Spike mount ok.
14. Electricity: No
15. Shelter for the equipment: Yes, with 10 m antenna cable.
16. Additional information:

PORT SALUT



No picture

PORT-SALUT

No picture

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AB9284 *****
AB9284 DESIGNATION - FORT NATIONAL
AB9284 PID - AB9284
AB9284 COUNTRY - HAITI
AB9284 USGS QUAD -
AB9284
AB9284 *CURRENT SURVEY CONTROL
AB9284
AB9284 * NAD 83(1996)- 18 32 51.15343(N) 072 19 51.64606(W) ADJUSTED
AB9284 * LOCAL TIDAL - 94. (meters) 308. (feet) GPS OBS
AB9284
AB9284 X - 1,835,968.466 (meters) COMP
AB9284 Y - -5,763,618.579 (meters) COMP
AB9284 Z - 2,015,954.594 (meters) COMP
AB9284 LAPLACE CORR- -1.00 (seconds) DCAR97
AB9284 ELLIP HEIGHT- 71.35 (meters) GPS OBS
AB9284 GEOID HEIGHT- -25.34 (meters) CARIB97
AB9284
AB9284 HORZ ORDER - FIRST
AB9284 ELLP ORDER - FIRST CLASS I
AB9284
AB9284.The horizontal coordinates were established by GPS observations
AB9284.and adjusted by the National Geodetic Survey in December 1996.
AB9284.No horizontal observational check was made to the station.
AB9284.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
AB9284.DATUM ITEM on the data sheet items page.
AB9284
AB9284.The orthometric height was determined by GPS observations and a
AB9284.high-resolution geoid model.
AB9284.No vertical observational check was made to the station.
AB9284
AB9284.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AB9284
AB9284.The Laplace correction was computed from DEFLEC99 derived deflections.
AB9284
AB9284.The ellipsoidal height was determined by GPS observations
AB9284.and is referenced to NAD 83.
AB9284
AB9284
AB9284; North East Units Scale Converg.
AB9284;UTM 18 - 2,052,853.694 781,742.968 MT 1.00058144 +0 50 58.4
AB9284
AB9284 SUPERSEDED SURVEY CONTROL
AB9284
AB9284.No superseded survey control is available for this station.
AB9284
AB9284_MARKER: DD = SURVEY DISK
AB9284_SETTING: 36 = CONCRETE GUNNERY ABUTMENT
AB9284_STAMPING: FORT NATIONAL 1955
AB9284_MAGNETIC: N = NO MAGNETIC MATERIAL
AB9284_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AB9284_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9284+SATELLITE: SATELLITE OBSERVATIONS - 1955
AB9284
AB9284 HISTORY - Date Condition Recov. By
AB9284 HISTORY - 1955 MONUMENTED IAGS
AB9284
AB9284 STATION DESCRIPTION
AB9284
AB9284'DESCRIBED BY INTER-AMERICAN GEODETIC SURVEY 1955
AB9284'THE STATION IS LOCATED AT FORT NATIONAL, ON A HILLSIDE OVERLOOKING
AB9284'PORT OF PRINCE, HAITI, IN A MASSIVE CONCRETE GUNNERY ABUTMENT
AB9284'OVERLOOKING THE PORT AND TOWN. TO REACH THE STATION FROM THE FRONT
AB9284'GATE AT FORT NATIONAL, HAITI, PASS THROUGH THE GATE AND GO ABOUT 50 M
AB9284'(164.0 FT) TO A VEHICLE PARKING AREA ON LEFT. PARK THE VEHICLE AND
AB9284'PROCEED ON FOOT ABOUT 20 M (65.6 FT) TO THE GUARD STATION. TURN RIGHT
AB9284'AND GO ABOUT 10 M (32.8 FT) TO THE STATION AHEAD IN THE FLOOR OF THE
AB9284'GUNNERY AREA. THE STATION IS 7.9 M (25.9 FT) NORTHWEST OF THE CENTER
AB9284'OF STONE STEPS, 5.0 M (16.4 FT) NORTH OF A FLAGPOLE, 3.8 M (12.5 FT)
AB9284'EAST OF THE MOST NORTHERLY OF THREE CANNONS, 2.3 M (7.5 FT) SOUTH OF A
AB9284'WALL.

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AB9315 *****
AB9315 DESIGNATION - MTCH A
AB9315 PID - AB9315
AB9315 COUNTRY - HAITI
AB9315 USGS QUAD -
AB9315
AB9315 *CURRENT SURVEY CONTROL
AB9315
AB9315* NAD 83(1996)- 19 43 57.48323(N) 072 11 38.95032(W) ADJUSTED
AB9315* LOCAL TIDAL - 1.3 (meters) 4. (feet) GPS OBS
AB9315
AB9315 X - 1,836,548.955 (meters) COMP
AB9315 Y - -5,718,175.267 (meters) COMP
AB9315 Z - 2,139,850.322 (meters) COMP
AB9315 LAPLACE CORR- -4.82 (seconds) DCAR97
AB9315 ELLIP HEIGHT- -29.14 (meters) GPS OBS
AB9315 GEOID HEIGHT- -33.26 (meters) CARIB97
AB9315
AB9315 HORZ ORDER - A
AB9315 ELLP ORDER - FIRST CLASS I
AB9315
AB9315.The horizontal coordinates were established by GPS observations
AB9315.and adjusted by the National Geodetic Survey in December 1996.
AB9315.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
AB9315.DATUM ITEM on the data sheet items page.
AB9315
AB9315.The orthometric height was determined by GPS observations and a
AB9315.high-resolution geoid model.
AB9315
AB9315.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AB9315
AB9315.The Laplace correction was computed from DEFLEC99 derived deflections.
AB9315
AB9315.The ellipsoidal height was determined by GPS observations
AB9315.and is referenced to NAD 83.
AB9315
AB9315
AB9315; North East Units Scale Converg.
AB9315:UTM 18 - 2,184,327.698 794,090.015 MT 1.00066917 +0 56 52.9
AB9315
AB9315: Primary Azimuth Mark Grid Az
AB9315:UTM 18 - MTCH C 038 09 14.7
AB9315
AB9315|-----|
AB9315| PID Reference Object Distance Geod. Az |
AB9315| | | | dddmmss.s |
AB9315| AB9700 MTCH C APPROX. 0.6 KM 0390607.6 |
AB9315| AB9699 MTCH B APPROX. 0.7 KM 2200106.5 |
AB9315|-----|
AB9315
AB9315 SUPERSEDED SURVEY CONTROL
AB9315
AB9315.No superseded survey control is available for this station.
AB9315
AB9315_MARKER: DH = HORIZONTAL CONTROL DISK
AB9315_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AB9315_STAMPING: MTCH A 1996
AB9315_MAGNETIC: N = NO MAGNETIC MATERIAL
AB9315_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AB9315+STABILITY: SURFACE MOTION
AB9315_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9315+SATELLITE: SATELLITE OBSERVATIONS - 1996
AB9315
AB9315 HISTORY - Date Condition Recov. By
AB9315 HISTORY - 1996 MONUMENTED NGS
AB9315
AB9315 STATION DESCRIPTION
AB9315
AB9315'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
AB9315'STATION IS LOCATED AT THE CAP HAITIEN INTERNATIONAL AIRPORT, HAITI, IN
AB9315'THE GRASSY AREA SOUTH OF THE RUNWAY, NEAR THE MIDDLE OF THE RUNWAY,

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AB9315'ALONG THE NORTH-SOUTH UNPAVED ACCESS ROAD. ACCESS TO THIS STATION CAN
 AB9315'BE OBTAINED BY CONTACTING MR. PIERRE DUPUY, OFFICE NATIONAL DE L
 AB9315'AVIATION CIVILE, P.O. BOX 1346, PORT-AU-PRINCE, HAITI, TELEPHONE
 AB9315'(509) 46-2701. STATION IS LOCATED 22.2 METERS (72.8 FT) NORTHWEST OF
 AB9315'THE NORTH END OF THE WEST SIDE OF A CONCRETE BLOCK CULVERT, 13.1
 AB9315'METERS (43.0 FT) WEST NORTHWEST OF THE CENTERLINE OF THE UNPAVED
 AB9315'ACCESS ROAD, AND 25.5 METERS (83.7 FT) SOUTHEAST OF THE SOUTH EDGE OF
 AB9315'THE RUNWAY PAVEMENT, SET IN THE TOP OF A 0.6 METER (2.0 FT) ROUND
 AB9315'CONCRETE POST. THIS STATION HAS BEEN SELECTED AS THE PRIMARY AIRPORT
 AB9315'CONTROL STATION (PACS) .

1 National Geodetic Survey, Retrieval Date = MARCH 30, 2001
 AB9699 *****
 AB9699 DESIGNATION - MTCH B
 AB9699 PID - AB9699
 AB9699 COUNTRY - HAITI
 AB9699 USGS QUAD -
 AB9699
 AB9699 *CURRENT SURVEY CONTROL
 AB9699
 AB9699* NAD 83(1996)- 19 43 39.73664(N) 072 11 54.68620(W) ADJUSTED
 AB9699* LOCAL TIDAL - 2.3 (meters) 8. (feet) GPS OBS
 AB9699
 AB9699 X - 1,836,169.347 (meters) COMP
 AB9699 Y - -5,718,491.743 (meters) COMP
 AB9699 Z - 2,139,337.017 (meters) COMP
 AB9699 LAPLACE CORR- -4.74 (seconds) DCAR97
 AB9699 ELLIP HEIGHT- -28.05 (meters) GPS OBS
 AB9699 GEOID HEIGHT- -33.11 (meters) CARIB97
 AB9699
 AB9699 HORZ ORDER - FIRST
 AB9699 ELLP ORDER - FOURTH CLASS II
 AB9699
 AB9699.The horizontal coordinates were established by GPS observations
 AB9699.and adjusted by the National Geodetic Survey in January 1997.
 AB9699.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
 AB9699.DATUM ITEM on the data sheet items page.
 AB9699
 AB9699.The orthometric height was determined by GPS observations and a
 AB9699.high-resolution geoid model.
 AB9699
 AB9699.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AB9699
 AB9699.The Laplace correction was computed from DEFLEC99 derived deflections.
 AB9699
 AB9699.The ellipsoidal height was determined by GPS observations
 AB9699.and is referenced to NAD 83.
 AB9699
 AB9699
 AB9699;
 AB9699;UTM 18 - 2,183,774.116 793,640.604 MT 1.00066591 +0 56 46.8
 AB9699
 AB9699: Primary Azimuth Mark Grid Az
 AB9699:UTM 18 - MTCH A 039 04 14.4
 AB9699
 AB9699|-----|
 AB9699| PID Reference Object Distance Geod. Az |
 AB9699| | | | dddmss.s |
 AB9699| AB9315 MTCH A APPROX. 0.7 KM 0400101.2 |
 AB9699|-----|
 AB9699
 AB9699 SUPERSEDED SURVEY CONTROL
 AB9699
 AB9699.No superseded survey control is available for this station.
 AB9699
 AB9699_MARKER: DH = HORIZONTAL CONTROL DISK
 AB9699_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 AB9699_STAMPING: MTCH B 1996
 AB9699_MAGNETIC: N = NO MAGNETIC MATERIAL
 AB9699_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 AB9699+STABILITY: SURFACE MOTION

AB9699_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AB9699+SATELLITE: SATELLITE OBSERVATIONS - 1996

AB9699
 AB9699 HISTORY - Date Condition Recov. By
 AB9699 HISTORY - 1996 MONUMENTED NGS

AB9699 STATION DESCRIPTION
 AB9699

AB9699'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
 AB9699'STATION IS LOCATED AT THE CAP HAITIEN INTERNATIONAL AIRPORT, HAITI, IN
 AB9699'THE GRASSY AREA SOUTH OF THE RUNWAY NEAR THE SOUTH END, ALONG THE
 AB9699'NORTH-SOUTH UNPAVED ACCESS ROAD. ACCESS TO THIS STATION CAN BE
 AB9699'OBTAINED BY CONTACTING MR. PIERRE DUPUY, OFFICE NATIONAL DE L
 AB9699'AVIATION CIVILE, P.O. BOX 1346, PORT-AU-PRINCE, HAITI, TELEPHONE
 AB9699'(509) 46-2701. STATION IS LOCATED 27.9 METERS (91.5 FT) SOUTHEAST OF
 AB9699'THE SOUTH EDGE OF THE RUNWAY, 33.7 METERS (110.6 FT) EAST OF THE
 AB9699'NORTHEAST CORNER OF THE RUNWAY DISPLACED THRESHOLD PAINT BAR, 11.2
 AB9699'METERS (36.7 FT) NORTHWEST OF THE CENTERLINE OF THE UNPAVED ACCESS
 AB9699'ROAD, AND 48.6 METERS (159.4 FT) NORTH NORTHEAST OF A WOODEN BLACK AND
 AB9699'WHITE PAINTED 25 MPH SIGN. SET IN THE TOP OF A 0.55 METER (1.80 FT)
 AB9699'ROUND CONCRETE POST. THIS STATION HAS BEEN SELECTED AS A SECONDARY
 AB9699'AIRPORT CONTROL STATION (SACS) .

AB9700 *****

AB9700 DESIGNATION - MTCH C
 AB9700 PID - AB9700
 AB9700 COUNTRY - HAITI
 AB9700 USGS QUAD -

AB9700 *CURRENT SURVEY CONTROL

AB9700*	NAD 83(1996)-	19 44	12.60946(N)	072 11	25.96677(W)	ADJUSTED
AB9700*	LOCAL TIDAL -		0.9 (meters)		3. (feet)	GPS OBS
AB9700	X	-	1,836,860.698 (meters)			COMP
AB9700	Y	-	-5,717,909.644 (meters)			COMP
AB9700	Z	-	2,140,287.957 (meters)			COMP
AB9700	LAPLACE CORR-		-4.89 (seconds)			DCAR97
AB9700	ELLIP HEIGHT-		-29.67 (meters)			GPS OBS
AB9700	GEOID HEIGHT-		-33.38 (meters)			CARIB97

AB9700 HORZ ORDER - FIRST
 AB9700 ELLP ORDER - FOURTH CLASS II

AB9700.The horizontal coordinates were established by GPS observations
 AB9700.and adjusted by the National Geodetic Survey in January 1997.
 AB9700.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
 AB9700.DATUM ITEM on the data sheet items page.

AB9700
 AB9700.The orthometric height was determined by GPS observations and a
 AB9700.high-resolution geoid model.

AB9700
 AB9700.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB9700.The Laplace correction was computed from DEFLEC99 derived deflections.

AB9700
 AB9700.The ellipsoidal height was determined by GPS observations
 AB9700.and is referenced to NAD 83.

AB9700
 AB9700;

AB9700;UTM	18	-	2,184,799.345	794,460.553	MT	1.00067187	+0 56 58.0
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AB9700:

AB9700:UTM	18	-	MTCH A	Primary Azimuth Mark	Grid Az
					218 09 14.0

AB9700	-----				
AB9700	PID	Reference Object		Distance	Geod. Az
AB9700					dddmmss.s
AB9700	AB9315	MTCH A		APPROX. 0.6 KM	2190612.0
AB9700	-----				

AB9700
AB9700 SUPERSEDED SURVEY CONTROL
AB9700
AB9700.No superseded survey control is available for this station.
AB9700

AB9700_MARKER: DH = HORIZONTAL CONTROL DISK
AB9700_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AB9700_STAMPING: MTCH C 1996
AB9700_MAGNETIC: N = NO MAGNETIC MATERIAL
AB9700_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AB9700+STABILITY: SURFACE MOTION
AB9700_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9700+SATELLITE: SATELLITE OBSERVATIONS - 1996

AB9700
AB9700 HISTORY - Date Condition Recov. By
AB9700 HISTORY - 1996 MONUMENTED NGS

AB9700
AB9700 STATION DESCRIPTION
AB9700

AB9700'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
AB9700'STATION IS LOCATED AT THE CAP HAITIEN INTERNATIONAL AIRPORT, HAITI, IN
AB9700'THE GRASSY AREA SOUTH OF THE RUNWAY NEAR THE NORTH END, ALONG THE
AB9700'NORTH-SOUTH UNPAVED ACCESS ROAD. ACCESS TO THIS STATION CAN BE
AB9700'OBTAINED BY CONTACTING MR. PIERRE DUPUY, OFFICE NATIONAL DE L
AB9700'AVIATION CIVILE, P.O. BOX 1346, PORT-AU-PRINCE, HAITI, TELEPHONE
AB9700'(509) 46-2701. STATION IS LOCATED 32.1 METERS (105.3 FT) SOUTHEAST OF
AB9700'THE SOUTH EDGE OF THE RUNWAY, 8.0 METERS (26.2 FT) NORTHWEST OF THE
AB9700'CENTERLINE OF THE UNPAVED ACCESS ROAD. SET IN THE TOP OF A 0.47 METER
AB9700'(1.54 FT) ROUND CONCRETE POST. THIS STATION HAS BEEN SELECTED AS A
AB9700'SECONDARY AIRPORT CONTROL STATION (SACS) .

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AB9283 *****
AB9283 DESIGNATION - MTPP A
AB9283 PID - AB9283
AB9283 COUNTRY - HAITI
AB9283 USGS QUAD -
AB9283
AB9283 *CURRENT SURVEY CONTROL
AB9283
AB9283* NAD 83(1996)- 18 34 50.00467(N) 072 17 40.60988(W) ADJUSTED
AB9283* LOCAL TIDAL - 25.4 (meters) 83. (feet) GPS OBS
AB9283
AB9283 X - 1,839,255.898 (meters) COMP
AB9283 Y - -5,761,280.430 (meters) COMP
AB9283 Z - 2,019,396.741 (meters) COMP
AB9283 LAPLACE CORR- -1.65 (seconds) DCAR97
AB9283 ELLIP HEIGHT- 2.31 (meters) GPS OBS
AB9283 GEOID HEIGHT- -25.61 (meters) CARIB97
AB9283
AB9283 HORZ ORDER - A
AB9283 ELLP ORDER - FIRST CLASS I
AB9283
AB9283.The horizontal coordinates were established by GPS observations
AB9283.and adjusted by the National Geodetic Survey in December 1996.
AB9283.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
AB9283.DATUM ITEM on the data sheet items page.
AB9283
AB9283.The orthometric height was determined by GPS observations and a
AB9283.high-resolution geoid model.
AB9283
AB9283.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AB9283
AB9283.The Laplace correction was computed from DEFLEC99 derived deflections.
AB9283
AB9283.The ellipsoidal height was determined by GPS observations
AB9283.and is referenced to NAD 83.
AB9283
AB9283
AB9283; North East Units Scale Converg.
AB9283:UTM 18 - 2,056,567.146 785,532.581 MT 1.00060802 +0 51 45.4
AB9283
AB9283: Primary Azimuth Mark Grid Az
AB9283:UTM 18 - MTPP B 085 59 18.9
AB9283
AB9283|-----|
AB9283| PID Reference Object Distance Geod. Az |
AB9283| | | | dddmss.s |
AB9283| AB9692 MTPP B APPROX. 1.4 KM 0865104.3 |
AB9283| AB9693 MTPP C APPROX. 0.7 KM 2694907.5 |
AB9283|-----|
AB9283
AB9283 SUPERSEDED SURVEY CONTROL
AB9283
AB9283.No superseded survey control is available for this station.
AB9283
AB9283_MARKER: DH = HORIZONTAL CONTROL DISK
AB9283_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AB9283_STAMPING: MTPP A 1996
AB9283_MAGNETIC: N = NO MAGNETIC MATERIAL
AB9283_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AB9283+STABILITY: SURFACE MOTION
AB9283_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9283+SATELLITE: SATELLITE OBSERVATIONS - April 12, 1996
AB9283
AB9283 HISTORY - Date Condition Recov. By
AB9283 HISTORY - 1996 MONUMENTED NGS
AB9283 HISTORY - 19960412 GOOD NGS
AB9283
AB9283 STATION DESCRIPTION
AB9283
AB9283'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
AB9283'STATION IS LOCATED AT THE PORT-AU-PRINCE INTERNATIONAL AIRPORT, HAITI,

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AB9283'IN THE GRASSY AREA ON THE NORTH SIDE OF THE RUNWAY, DIRECTLY OPPOSITE
 AB9283'THE CONTROL TOWER, AND IN LINE WITH THE EAST EDGE OF THE NORTH-SOUTH
 AB9283'TAXIWAY BETWEEN THE RUNWAY AND THE AIRCRAFT PARKING AREA. ACCESS TO
 AB9283'THIS STATION CAN BE OBTAINED BY CONTACTING MR. PIERRE DUPUY, OFFICE
 AB9283'NATIONAL DE L AVIATION CIVILLE, P.O. BOX 1346, PORT-AU-PRINCE, HAITI,
 AB9283'TELEPHONE (509) 46-2701. STATION IS 37.5 M (123.0 FT) NORTH OF THE
 AB9283'NORTH EDGE OF THE PAVEMENT OF THE RUNWAY, AND SET IN THE TOP OF A 0.6
 AB9283'METER (2.0 FT) ROUND CONCRETE POST. IS STATION HAS BEEN SELECTED AS
 AB9283'THE PRIMARY AIRPORT CONTROL STATION (PACS) .
 AB9283
 AB9283 STATION RECOVERY (1996)
 AB9283
 AB9283'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (AJL)
 AB9283'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 12 APR 1996 (AJL) .
 AB9283'RECOVERED IN GOOD CONDITION AS DESCRIBED.

AB9692 *****
 AB9692 DESIGNATION - MTPP B
 AB9692 PID - AB9692
 AB9692 COUNTRY - HAITI
 AB9692 USGS QUAD -

AB9692
 AB9692 *CURRENT SURVEY CONTROL
 AB9692
 AB9692* NAD 83(1996)- 18 34 52.52954(N) 072 16 52.44817(W) ADJUSTED
 AB9692* LOCAL TIDAL - 33.6 (meters) 110. (feet) GPS OBS
 AB9692
 AB9692 X - 1,840,595.933 (meters) COMP
 AB9692 Y - -5,760,834.721 (meters) COMP
 AB9692 Z - 2,019,472.961 (meters) COMP
 AB9692 LAPLACE CORR- -1.75 (seconds) DCAR97
 AB9692 ELLIP HEIGHT- 10.58 (meters) GPS OBS
 AB9692 GEOID HEIGHT- -25.65 (meters) CARIB97
 AB9692
 AB9692 HORZ ORDER - FIRST
 AB9692 ELLP ORDER - FIFTH CLASS I
 AB9692

AB9692.The horizontal coordinates were established by GPS observations
 AB9692.and adjusted by the National Geodetic Survey in January 1997.
 AB9692.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
 AB9692.DATUM ITEM on the data sheet items page.
 AB9692

AB9692.The orthometric height was determined by GPS observations and a
 AB9692.high-resolution geoid model.
 AB9692

AB9692.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AB9692

AB9692.The Laplace correction was computed from DEFLEC99 derived deflections.
 AB9692

AB9692.The ellipsoidal height was determined by GPS observations
 AB9692.and is referenced to NAD 83.
 AB9692

AB9692
 AB9692;
 AB9692:UTM 18 North East Units Scale Converg.
 AB9692: - 2,056,666.141 786,944.226 MT 1.00061801 +0 52 00.9
 AB9692
 AB9692: Primary Azimuth Mark Grid Az
 AB9692:UTM 18 - MTPP A 265 59 18.8
 AB9692

AB9692|-----|
 AB9692| PID Reference Object Distance Geod. Az |
 AB9692| | | | dddmmss.s |
 AB9692| AB9283 MTPP A APPROX. 1.4 KM 2665119.7 |
 AB9692|-----|

AB9692
 AB9692 SUPERSEDED SURVEY CONTROL
 AB9692
 AB9692.No superseded survey control is available for this station.
 AB9692
 AB9692_MARKER: DH = HORIZONTAL CONTROL DISK
 AB9692_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AB9692 STAMPING: MTPP B 1996
 AB9692 MAGNETIC: N = NO MAGNETIC MATERIAL
 AB9692 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 AB9692 STABILITY: SURFACE MOTION
 AB9692 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AB9692 SATELLITE: SATELLITE OBSERVATIONS - 1996
 AB9692
 AB9692 HISTORY - Date Condition Recov. By
 AB9692 HISTORY - 1996 MONUMENTED NGS
 AB9692
 AB9692 STATION DESCRIPTION
 AB9692
 AB9692 DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
 AB9692 THE STATION IS AT THE PORT-AU-PRINCE INTERNATIONAL AIRPORT, HAITI, IN
 AB9692 THE GRASSY AREA ON THE NORTH SIDE OF THE RUNWAY, ABOUT 1.5 KM (0.95
 AB9692 MI) EAST OF THE INTERSECTION OF THE RUNWAY AND THE NORTH-SOUTH TAXIWAY
 AB9692 LEADING TO THE TERMINAL. ACCESS TO THIS STATION CAN BE OBTAINED BY
 AB9692 CONTACTING MR PIERRE DUPUY, OFFICE NATIONAL DE L AVIATION CIVILE, P.O.
 AB9692 BOX 1346, PORT-AU-PRINCE, HAITI, PHONE (509) 42-2701. THE STATION IS
 AB9692 LOCATED 41.2 M (135.2 FT) NORTH OF THE NORTH EDGE OF THE ASPHALT
 AB9692 RUNWAY, AND IS FLUSH WITH THE GROUND. THE STATION IS A HORIZONTAL
 AB9692 CONTROL DISK SET IN A 0.9 M (3.0 FT) DIA ROUND CONCRETE MONUMENT.
 AB9692 NOTE--THIS IS A SECONDARY AIRPORT CONTROL STATION (SACS) .

AB9693 *****
 AB9693 DESIGNATION - MTPP C
 AB9693 PID - AB9693
 AB9693 COUNTRY - HAITI
 AB9693 USGS QUAD -
 AB9693
 AB9693 *CURRENT SURVEY CONTROL
 AB9693

AB9693*	NAD 83(1996)-	18 34 49.92934(N)	072 18 05.43107(W)	ADJUSTED
AB9693*	LOCAL TIDAL -	24.5 (meters)	80. (feet)	GPS OBS

AB9693	X	-	1,838,562.589 (meters)	COMP
AB9693	Y	-	-5,761,501.708 (meters)	COMP
AB9693	Z	-	2,019,394.294 (meters)	COMP
AB9693	LAPLACE CORR-		-1.62 (seconds)	DCAR97
AB9693	ELLIP HEIGHT-		1.52 (meters)	GPS OBS
AB9693	GEOID HEIGHT-		-25.60 (meters)	CARIB97

AB9693	HORZ ORDER	-	FIRST
AB9693	ELLP ORDER	-	FIFTH CLASS I

AB9693.The horizontal coordinates were established by GPS observations
 AB9693.and adjusted by the National Geodetic Survey in January 1997.
 AB9693.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
 AB9693.DATUM ITEM on the data sheet items page.
 AB9693
 AB9693.The orthometric height was determined by GPS observations and a
 AB9693.high-resolution geoid model.
 AB9693
 AB9693.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AB9693
 AB9693.The Laplace correction was computed from DEFLEC99 derived deflections.
 AB9693
 AB9693.The ellipsoidal height was determined by GPS observations
 AB9693.and is referenced to NAD 83.
 AB9693
 AB9693

AB9693;		North	East	Units	Scale	Converg.
AB9693:UTM	18	- 2,056,553.879	784,804.494	MT	1.00060288	+0 51 37.5

AB9693:		Primary Azimuth Mark	Grid Az
AB9693:UTM	18	- MTPP A	088 57 22.1

AB9693	-----		
AB9693	PID	Reference Object	Distance Geod. Az
AB9693			ddmmss.s
AB9693	AB9283 MTPP A		APPROX. 0.7 KM 0894859.6

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AB9693|-----|
AB9693
AB9693                SUPERSEDED SURVEY CONTROL
AB9693
AB9693.No superseded survey control is available for this station.
AB9693
AB9693_MARKER: DH = HORIZONTAL CONTROL DISK
AB9693_SETTING: 66 = SET IN ROCK OUTCROP
AB9693_STAMPING: MTPP C 1996
AB9693_MAGNETIC: N = NO MAGNETIC MATERIAL
AB9693_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
AB9693+STABILITY: POSITION/ELEVATION WELL
AB9693_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9693+SATELLITE: SATELLITE OBSERVATIONS - 1996
AB9693
AB9693  HISTORY      - Date      Condition      Recov. By
AB9693  HISTORY      - 1996      MONUMENTED     NGS
AB9693
AB9693                STATION DESCRIPTION
AB9693
AB9693'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (AJL)
AB9693'THE STATION IS AT THE PORT-AU-PRINCE INTERNATIONAL AIRPORT, HAITI, IN
AB9693'THE GRASSY AREA ON THE NORTH SIDE OF THE RUNWAY, ABOUT 0.8 KM (0.50
AB9693'MI) WEST OF THE INTERSECTION OF THE RUNWAY AND THE NORTH-SOUTH TAXIWAY
AB9693'LEADING TO THE TERMINAL AND CONTROL TOWER. ACCESS TO THIS STATION CAN
AB9693'BE OBTAINED BY CONTACTING MR PIERRE DUPUY, OFFICE NATIONAL DE L
AB9693'AVIATION CIVILE, P.O. BOX 1346, PORT-AU-PRINCE, HAITI, PHONE (509)
AB9693'42-2701. THE STATION IS LOCATED 52 M (170.6 FT) EAST OF A WINDSOCK,
AB9693'AND IS SLIGHTLY RECESSED INTO A ROCK OUTCROP. THE STATION IS A
AB9693'HORIZONTAL CONTROL DISK SET IN A 0.4 M (1.3 FT) BY 0.3 M (1.0 FT) ROCK
AB9693'OUTCROP. NOTE--THIS IS A SECONDARY AIRPORT CONTROL STATION (SACS) .

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