



INSTITUTO PANAMERICANO DE GEOGRAFIA E HISTORIA

Organismo Especializado de la Organización de los Estados Americanos

A

COMISION DE CARTOGRAFIA

February 6, 2001
Mr. Cesar Gaviria
Secretary General
Organization of American States
17th St. & Constitution Ave. NW
Washington, DC

Dear Secretary General Gaviria:

It was a true pleasure for The Pan American Institute of Geography and History (PAIGH) to work with the Organization of American States as a partner in this most important Confidence Building Project.

Enclosed are coordinates for the three reference markers: Gracias a Dios, Garrbutt's Falls and Aguas Turbias; and the three settlements: Rio Blanco, Machaquila and Valentin Camp as identified in the Plan of Action signed on January 17, 2001 by the governments of Belize and Guatemala. The mission assigned to PAIGH was to determine the precise location of each settlement from the Adjacency Line. There was, however, no significant landmark in any of the settlements that all parties could agree on as the center. It was decided that location would be determined by establishing a base station to roughly position the settlement east or west of the Adjacency Line. By taking measurements at the eastern and western limits of each settlement, we were able to compute the distance of the settlement to the Adjacency Line. By following this process it was determined that all three settlements are located on the eastern side of the Adjacency Line.

These coordinates are being used to locate the settlements on the map that will be presented tomorrow, Wednesday February 7, 2001.

I hope that this data will serve as a useful tool for the facilitators who will undertake the next phase of this project. If I can be of any further assistance, please do not hesitate to call upon me.

Sincerely,

Paul L. Peeler
President
Commission of Cartography
PAIGH



INSTITUTO PANAMERICANO DE GEOGRAFIA E HISTORIA

Organismo Especializado de la Organización de los Estados Americanos

COMISION DE CARTOGRAFIA

February 6, 2001

To: Mr. Cesar Gaviria, Secretary General (OAS)
Mr. Gabriel Orellana, Foreign Minister Republic of Guatemala
Mr. Assad Shoman, Senior Ambassador with Ministerial Rank

On behalf of the Pan American Institute of Geography and History (PAIGH), it was a pleasure to participate in the confidence-building measures undertaken by Belize and Guatemala.

In accordance with the instructions outlined in the Belize/Guatemala Negotiations (Plan of Action to implement the November 8, 2000 agreement on confidence-building measures, we are now able to submit the coordinates for the three reference stations and three settlements). PAIGH assembled a survey team with the help of the National Imagery and Mapping Agency (NIMA), which supplied manpower and more then \$120K worth of the latest GPS receiving equipment for use in determining the coordinates of the three reference markers Gracias a Dios, Garbutt's Falls and Aguas Turbias. The team also determined the location of the three settlements known as Rio Blanco, Machaquila and Valentin Camp as identified in the Plan of Action. By determining the eastern and western limits of each settlement, it was possible to determine the distance of each from the Adjacency Line.

Location of the three primary reference markers are as follows:

GRACIAS a DIOS

WGS 84

(deg. min. sec.)

LATITUDE 15 53 47.237 N
LONGITUDE 89 13 39.306 W
ELLIPSOID HEIGHT 4.824 Meters

GARBUTT'S FALLS

LATITUDE 17 03 31.071 N
LONGITUDE 89 09 00.283 W
ELLIPSOID HEIGHT 82.624 Meters

AGUAS TURBIAS

LATITUDE 17 48 56.123 N
LONGITUDE 89 09 07.064 W
ELLIPSOID HEIGHT 129.628 Meters



INSTITUTO PANAMERICANO DE GEOGRAFIA E HISTORIA

Organismo Especializado de la Organización de los Estados Americanos

COMISION DE CARTOGRAFIA

Location of the three Settlements are as follows:

VALENTIN CAMP (base station)

WGS 84

(deg. min. sec.)

LATITUDE 16 46 41.861 N
LONGITUDE 89 09 12.242 W
ELLIPSOID HEIGHT 445.48 Meters

(E-2) site was located a short distance from the base station. The position was located at the southern end of the settlement.

LATITUDE 16 46 39.75 N
LONGITUDE 89 09 15.21 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*

(E-3) site was very close to the E-2 structure a short distance to the south and west.

LATITUDE 16 46 40.06 N
LONGITUDE 89 09 14.39 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*

(VCE-2) site was some distance from the base station. The position was located at the eastern edge of the farthest eastern structure in the settlement, which looked like two from the air but was one unit. Therefore only one measurement was made.

LATITUDE 16 46 28.55 N
LONGITUDE 89 09 59.63 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*

DISTANCE FROM THE ADJACENCY LINE .3km

RIO BLANCO (base station)

Because this settlement sits in a very deep and narrow valley which runs East and West, it was not as important to determine the northern and southern limits of the settlement, as it was to determine the eastern and western limits. Due to the height of the mountains and the density of the tree canopy, it was impossible to move the instrument very far North or South and obtain valid readings.



INSTITUTO PANAMERICANO DE GEOGRAFIA E HISTORIA

Organismo Especializado de la Organización de los Estados Americanos

COMISION DE CARTOGRAFIA

February 7, 2001

To: Mr. Cesar Gaviria, Secretary General (OAS)
Mr. Gabriel Orellana, Foreign Minister Republic of Guatemala
Mr. Assad Shoman, Senior Ambassador with Ministerial Rank

Supplemental information requested February 6, 2001

During the presentation of the coordinates of the three reference markers, Gracias a Dios, Garbutt's Falls and Aguas Turbias, and the three settlements known as Rio Blanco, Machaquila and Valentin Camp, I was asked to furnish the distance of each survey point from the Adjacency Line. However, as a point of caution, it should be noted that each point chosen for the GPS instrument was randomly selected. The distance from the structure was not accurately measured nor were measurements made of each structure. Therefore, the relationship of the survey point to the structures of the settlements are only approximate locations.

VALENTIN CAMP (base station)

WGS 84

(deg. min. sec.)

LATITUDE 16 46 41.861 N
LONGITUDE 89 09 12.242 W
ELLIPSOID HEIGHT 445.48 Meters

DISTANCE FROM THE ADJACENCY LINE-1.7km

(E-2) site was located a short distance from the base station. The position was located at the southern end of the settlement.

LATITUDE 16 46 39.75 N
LONGITUDE 89 09 15.21 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*

DISTANCE FROM THE ADJACENCY LINE-1.6km

(E-3) site was very close to the E-2 structure a short distance to the south and west.

LATITUDE 16 46 40.06 N
LONGITUDE 89 09 14.39 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*

DISTANCE FROM THE ADJACENCY LINE-1.6km

(VCE-2) site was some distance from the base station. The position was located at the eastern edge of the farthest eastern structure in the settlement, which looked like two from the air but was one unit. Therefore only one measurement was made.



INSTITUTO PANAMERICANO DE GEOGRAFIA E HISTORIA

Organismo Especializado de la Organización de los Estados Americanos

COMISION DE CARTOGRAFIA

WGS 84

(deg. min. sec.)

LATITUDE 16 46 28.55 N
LONGITUDE 89 09 59.63 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*
DISTANCE FROM THE ADJACENCY LINE-.3km

RIO BLANCO (base station)

Because this settlement sits in a very deep and narrow valley, which runs east and west, it was not as important to determine the northern and southern limits of the settlement, as it was to determine the eastern and western limits. Due to the height of the mountains and the density of the tree canopy, it was impossible to move the instrument very far north or south and obtain valid readings.

WGS 84

(deg. min. sec.)

LATITUDE 16 34 22.682 N
LONGITUDE 89 10 16.564 W
ELLIPSOID HEIGHT 389.435 Meters
DISTANCE FROM THE ADJACENCY LINE-1.2km

(RBE) measurement site was approximately 8 feet from the eastern corner of the farthest eastern structures.

LATITUDE 16 34 29.84 N
LONGITUDE 89 10 12.99 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*
DISTANCE FROM THE ADJACENCY LINE-1.3km

(RBF) site was approximately 6 feet from the east corner of the farthest western structure, which sits on the southern bank of a small river.

LATITUDE 16 34 19.37 N
LONGITUDE 89 10 20.43 W
ELLIPSOID HEIGHT *No height due to equipment malfunction*
DISTANCE FROM THE ADJACENCY LINE 1.1km