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## CIENFUEGOS-TRINIDAD, CUBA

CHAPTER X  
POPULATION CENTERS AND PORTS

## 14. Ranchuelo

22°22'N - 80°09'W  
UTM NQ975965  
Population: Unknown

## a. Functions

Transportation and agricultural center.

## b. Location

Central Las Villas Province, 11 miles west of Santa Clara.

## c. Shape and Dimensions

Irregular, approximately 1 mile east-west and .6 mile north-south.

## d. Streets

Main streets, including Routes 4 - 12, 4 - 14, and 4 - 68, are paved; 2 lanes with an average width of 24 feet. Most secondary streets are paved and range in width from 15 to 30 feet.

## e. Types of Buildings

One-to-three story cement block, masonry buildings predominate in vicinity of railroad station; mostly single story stucco or frame residential buildings elsewhere.

## f. Building Density

Moderate to dense.

## g. Principal Buildings

Railroad station and railroad yards; municipal building at city square; unidentified factory building three blocks north of railroad station; school or hospital three blocks northeast of railroad station; church near railroad station.

## h. Public Utilities

Possible sewage treatment plant east side of the town. No other information available.

## i. Industry

Sugar refinery, 1.7 miles east of town; probable water source and electric power generator at sugar mill.

## 15. La Esperanza

22°27'N - 80°06'W  
UTM NQ929823  
Population: Unknown

## a. Functions

Communications and food processing center.

## b. Location

Central Las Villas Province, 9 miles west-northwest of Santa Clara on the main rail line from Santa Clara to Havana.

## c. Shape and Dimensions

Irregular, approximate .7 mile east-west and .6 mile north-south.

## d. Streets

Generally rectangular grid pattern. Oriented northeast-southwest and northwest-southeast. Main street (Central Highway) and several others are paved and average 30 feet wide; remaining streets are packed dirt and range from 10 to 30 feet wide.

## e. Types of Buildings

One-to-four story masonry buildings predominate around city square; single story stucco or frame residential structures predominate elsewhere.

## f. Building Density

Moderate to dense.

## g. Principal Buildings

Railroad station; freight station; school and municipal building at north side of the town; tomato cannery; large unidentified warehouse structure south side of the town; church south of town square.

## h. Public Utilities

No information available.

## i. Industry

Food processing, cannery northeast of the city. No additional information available.

SPECIAL AMPHIBIOUS STUDY

S 156 63

MAY 1963



FIGURE X-23

La Esperanza

1:23,000 (APPROX.)

- |                       |                     |
|-----------------------|---------------------|
| 1. Central Highway    | 7. Storey Buildings |
| 2. School or Hospital | 8. Town Square      |
| 3. School             | 9. Church           |
| 4. Cannery            | 10. Route 4-12      |
| 5. Railroad Station   | 11. Warehouse       |
| 6. Freight Station    |                     |

MAP (A)

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1:23,000 (APPROX.)

8. Railroad Station
9. Town Square
10. Municipal Building
11. Sewage Plant
12. Route 4-68
13. Church

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PLATE X 16

SECRET

SECRET  
NO FOREIGN DISSEM



FIGURE X-22 Ranchuelo 1:23,000 (APPROX.)

- |                       |                        |
|-----------------------|------------------------|
| 1. School             | 8. Railroad Station    |
| 2. Factory 9          | 9. Town Square         |
| 3. School or Hospital | 10. Municipal Building |
| 4. Factory            | 11. Sewage Plant       |
| 5. Sugar Mill         | 12. Route 4-68         |
| 6. Generator          | 13. Church             |
| 7. Water Tank         |                        |

FEBRUARY 1963

SECRET NO FOREIGN DISSEM

# CIENFUEGOS-TRINIDAD, CUBA CHAPTER X

## POPULATION CENTERS AND PORTS

14. Ranchuelo  
22°02'N - 80°49'W  
UTM NQ475745  
Population: Unknown
- a. Functions  
Transportation and agricultural center.
- b. Location  
Central Las Villas Province, 11 miles west of Santa Clara.
- c. Shape and Dimensions  
Irregular, approximately .8 mile east-west and .6 mile north-south.
- d. Streets  
Main streets, including Routes 4 - 12, 4 - 14, and 4 - 68, are paved, 2 lanes with an average width of 24 feet. Most secondary streets are paved and range in width from 15 to 30 feet.
- e. Types of Buildings  
One-to-three story cement block, masonry buildings predominate in vicinity of railroad station; mostly single story stucco or frame residential buildings elsewhere.
- f. Building Density  
Moderate to dense.
- g. Principal Buildings  
Railroad station and railroad yard; municipal building at city square; unidentified factory building three blocks north of railroad station; school or hospital three blocks northeast of railroad station; church near railroad station.
- h. Public Utilities  
Possible sewage treatment plant east side of the town. No other information available.
- i. Industry  
Sugar refinery, 1.7 miles east of town; probable water source and electric power generator at sugar mill.

15. La Esperanza  
22°27'N - 80°06'W  
UTM NQ29423  
Population: Unknown
- a. Functions  
Communications and food processing center.
- b. Location  
Central Las Villas Province, 9 miles west-northwest of Santa Clara on the main rail line from Santa Clara to Havana.
- c. Shape and Dimensions  
Irregular, approximate .7 mile east-west and .6 mile north-south.
- d. Streets  
Generally rectangular grid pattern, oriented northeast-southwest and northwest-southeast; main street (Central Highway) and several others are paved and average 30 feet wide; remaining streets are paved dirt and range from 10 to 30 feet wide.
- e. Types of Buildings  
One-to-four story masonry buildings predominate around city square; single story stucco or frame residential structures predominate elsewhere.
- f. Building Density  
Moderate to dense.
- g. Principal Buildings  
Railroad station; freight station; school and municipal building at north side of the town; factory; cannery; large unidentified warehouse structure south side of the town; church south of town square.
- h. Public Utilities  
No information available.
- i. Industry  
Food processing; cannery northeast of the city. No additional information available.

FIGURE X-23

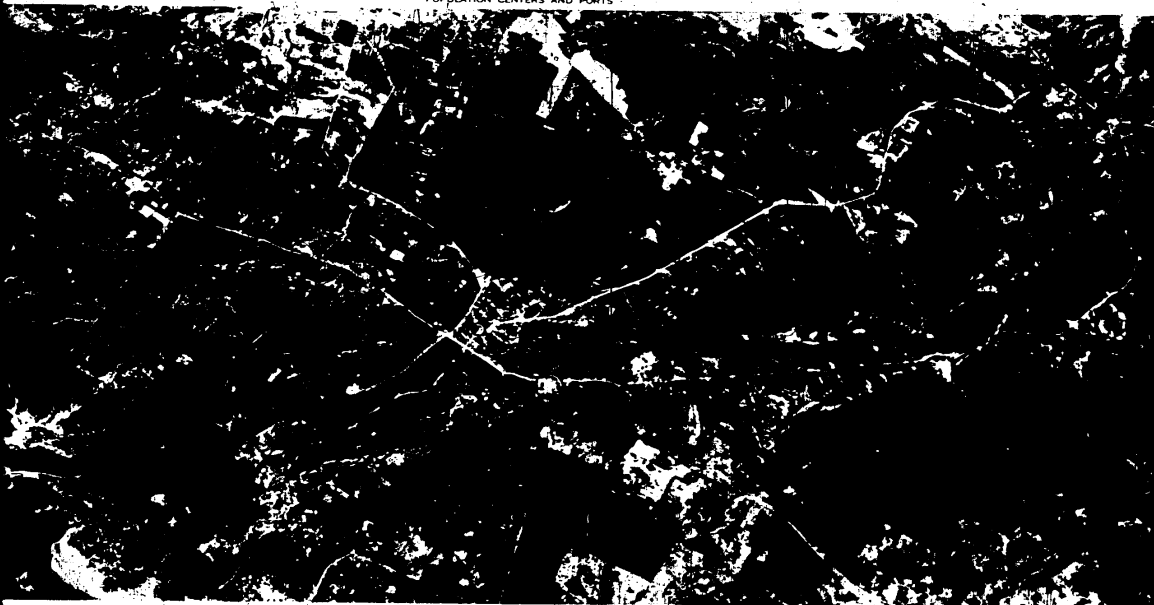
- |    |
|----|
| 1. |
| 2. |
| 3. |
| 4. |
| 5. |
| 6. |

MARCH 1963

PLATE X16

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

SPECIAL AMPHIBIOUS STUDY  
S 156-63  
MAY 1963



1:25,000 (APPROX.)

San Pedro

1. Secondary Road  
(to Route 4-36)
2. School

3. Church
4. Storage Buildings
5. Secondary Route  
(to Route 4-36)

c. Shape and Dimensions

Roughly triangular, about .3 mile wide at widest point.

d. Streets

Irregular pattern; 3 or 4 dirt packed streets ranging from 15 to 30 feet wide, and numerous dirt tracks.

e. Types of Buildings

About 150 single story wooden or stucco shacks and other buildings; a few cement block residential buildings.

f. Building Density

Sparse.

g. Principal Buildings

SECRET NO FOREIGN DISSEM

None evident; three large storage type buildings about .3 mile east of village.

h. Public Utilities

No information available.

i. Industry

None evident.

end of highway

southeast

PLATE X-17



SECRET

SECRET  
NO FOREIGN DISSEM

CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

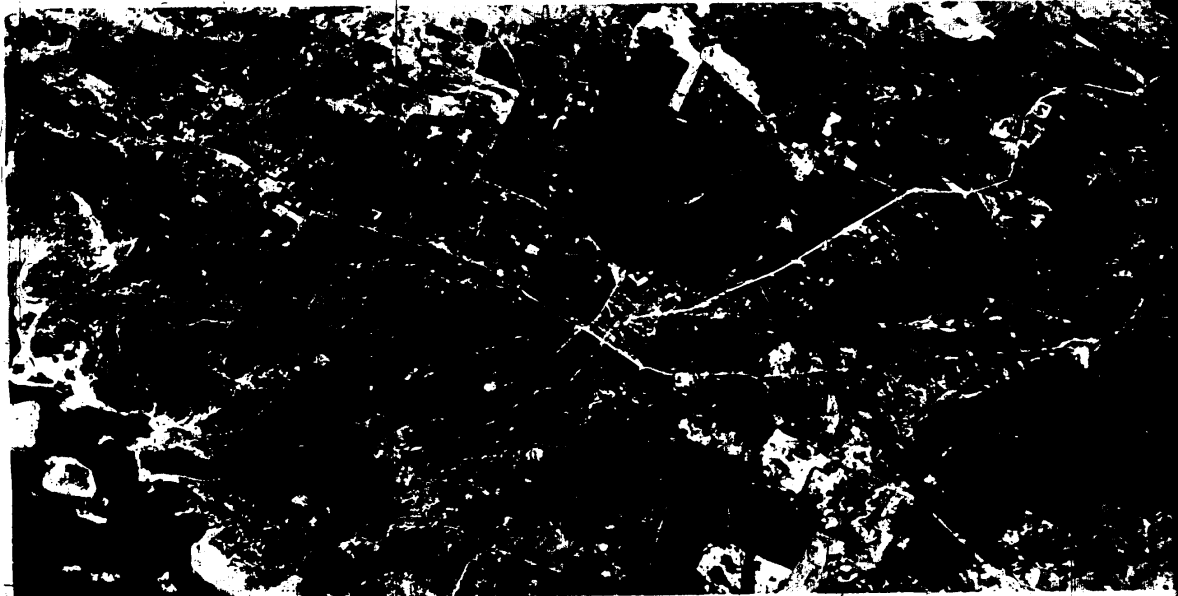


FIGURE X-24

San Pedro

1. Secondary Road  
(to Route 4-36)
2. School

3. Church
4. Storage Buildings
5. Secondary Route  
(to Route 4-36)

FEBRUARY 1963

16. San Pedro

21°45'N - 79°46'W  
UTM 18QJ74005  
Population: 300

a. Functions

Agricultural village; at head of highway leading inland from south coast.

b. Location

Approximately 10 miles east-southeast of Trinidad, 2 miles inland from coast.

c. Shape and Dimensions

Roughly triangular, about .3 mile wide at widest point.

d. Streets

Irregular pattern; 3 or 4 dirt packed streets ranging from 15 to 30 feet wide, and numerous dirt tracks.

e. Types of Buildings

About 150 single story wooden or stucco shacks and other buildings; a few cement block residential buildings.

f. Building Density

Sparsely.

g. Principal Buildings

PLATE X 17

CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

SPECIAL AMPHIBIOUS STUDY  
S 158 63  
MAY 1963



Fomento

1:23,000 (APPROX.)

Electric Power Station  
Refinery  
Fuel Storage Tanks  
Water Pumping Station  
School Buildings  
Town Square

7. School or Hospital
8. Route 4-29
9. School Buildings
10. School
11. Railroad Station
12. Church Buildings

SECRET NO FOREIGN DISSEM

g. Types of Buildings

Around the town square in the north-central part of town are several square blocks of one-to-three story cement block or adobe buildings; elsewhere single story residential structures predominate.

h. Building Density

In the center of the town building density is high with about 75% roof coverage; on the outskirts, density is sparse to moderate.

i. Principal Buildings

Large three wing, two-story hospital or school on north side of town; large sugar refinery, with separate power plant and warehouses.

j. Public Utilities

No information available. Probable power station and water pumping plant apparent on photography near sugar mill.

k. Industry

Probable agricultural processing and storage, none other apparent.

er. Town serves for the transshipment

illas Province about 10 miles from Clara, and 10 miles from

ately .8 mile north-northeast-southwest.

ering the town range of are paved, most unpaved and average



FIGURE K-26

APRIL 1963

Fomento

1:11,000 (APPROX.)

SECRET NO FOREIGN DISSEM

PLATE X 18

SECRET

SECRET  
NO FOREIGN DISSEM

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS



FIGURE X-25

Cienfuegos

1:23,000 (APPROX.)

1. Electric Power Station
2. Sugar Refinery
3. Alcohol Storage Tanks
4. Water Pumping Station
5. School Buildings
6. Town Square

7. School or Hospital
8. Road 4-39
9. School Buildings
10. School
11. Railroad Station
12. Church Buildings

APRIL 1963

SECRET NO FOREIGN DISSEM

Cienfuegos

22°06'N - 79°44'W  
CIN 1432046  
Population: Unknown

A. Functions

Transportation center. Town serves primarily as a collection point for the transshipment of local agricultural products.

B. Location

Northeastern Las Villas Province, about 20 miles east-southeast of Santa Clara, and 19 miles inland from the north coast.

C. Shape and Dimensions

Irregular, approximately 4 mile north-west-southeast and 2 mile north-east-southwest.

D. Streets

The main routes entering the town range from 15 to 30 feet in width and are paved; most side and secondary streets are unpaved and average 20 feet or less in width.

E. Types of Buildings

Around the town square in the north-central part of town are several square blocks of one-to-three story cement block or stucco buildings; elsewhere single story residential structures predominate.

F. Building Density

In the center of the town building density is high with about 75% roof coverage; in the outskirts, density is sparse to moderate.

G. Principal Buildings

Large three wing, two-story hospital or school on north side of town; large sugar refinery, with separate powerplant and warehouse.

H. Public Utilities

No information available. Probable power station and water pumping plant apparent in photography near sugar mill.

I. Industry

Probable agricultural processing and storage, none other apparent.



FIGURE X-26

APRIL 1963

PLATE X 10

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

## 18. Camajuan

22°24'N - 79°34'W  
UTM PQ312967  
Population: Unknown

## a. Functions

Highway and rail junction; transshipment point for agricultural products; rail repair and classification center (minor).

## b. Location

Northeastern Las Villas Province, about 17 miles east-northeast of Santa Clara and about 13 miles inland from the north coast.

## c. Shape and Dimensions

Irregular, approximately .5 mile northwest-southeast and .6 mile northeast-southwest.

## d. Streets

Rectangular grid pattern, oriented northwest-southeast and northeast-southwest. Main streets (Route 4 - 21 and several others) are paved and range from 15 to 30 feet in width; secondary streets appear to be unpaved, packed dirt and average 10 feet wide.

## e. Types of Buildings

Most structures stucco and concrete masonry, tile, and peaked roofs. Structures are one-to-three stories high near town square and along rail line; structures elsewhere are mostly single story, stucco ranchos.

## f. Building Density

Moderate to dense.

## g. Principal Buildings

Militia school and barracks northwest of town; railroad station, freight station, repair shops; multi-story municipal building and probable hospital east side of town; five or six story probable hotel near town square.

## h. Public Utilities

No information available.

## i. Industry

Agricultural processing, small scale railroad repair and machine shop facilities; large sugar mill with small generating plant and water treatment plant (exact capacities unknown) 0.5 miles southeast of town (possibly inactive since 1962).

## 19. Zulueta

22°22'N - 79°34'W  
UTM PQ673740  
Population: Unknown

## a. Functions

Small transportation and agricultural center.

## b. Location

Northeastern Las Villas Province, about 7 miles northeast of Placetas.

## c. Shape and Dimensions

Irregular, about .8 mile northeast-southwest and .6 mile northwest-southeast.

## d. Streets

Rectangular grid pattern oriented northeast-southwest and northwest-southeast; width range from 15 to 30 feet; Routes 4 - 29 and 4 - 85 probably paved through town; remaining streets packed earth.

## e. Types of Buildings

One-to-three story concrete block and wooden frame structures predominate.

## f. Building Density

High density at center of town around square; moderate to high density elsewhere.

## g. Principal Buildings

Railroad station and freight station; city utility center (water conservatory, water pumping plant, new power station).

## h. Public Utilities

Recent information indicates new water pumping station (deep well) and possible power station under construction at south end of town.

## i. Industry

Large sugar mill 1.7 miles northeast and another 2 miles southwest of town. No other information available.



FIGURE 8-26

Zulueta

- |                    |                       |
|--------------------|-----------------------|
| 1. Route 4-29      | 5. Railroad Station   |
| 2. Freight Station | 6. Municipal Building |
| 3. Town Square     | 7. School             |
| 4. Police Station  | 8. Route 4-85         |

MARCH 1963

SECRET NO FOREIGN DISSEM

PLATE X 19

SECRET

SECRET  
NO FOREIGN DISSEM



FIGURE X-27 Camajuan (1:23,000 (APPROX.))

1. Route 4-27
2. Railroad Repair Yard
3. Hotel
4. Town Square
5. Freight Station
6. Railroad Station
7. Municipal Building
8. Route 4-21
9. Barracks Area

FEBRUARY 1963

SECRET NO FOREIGN DISSEM

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER II  
POPULATION CENTERS AND PORTS

16. Camajuan

22°25'N - 79°05'W  
UTM 14QJ2647  
Population: Unknown

a. Functions:

Highway and rail junctions; transshipment point for agricultural products; rail repair and classification center (minor).

b. Location:

Northeastern Las Villas Province, about 17 miles east-northeast of Santa Clara and about 13 miles inland from the north coast.

c. Shape and Dimensions:

Irregular, approximately .5 mile northwest-southeast and .6 mile northeast-southwest.

d. Streets:

Rectangular grid pattern, oriented northwest-southeast and northeast-southwest; main streets (Route 4-21 and several others) are paved and range from 15 to 30 feet in width; secondary streets appear to be unpaved, packed dirt and average 20 feet wide.

e. Types of Buildings:

Most structures stucco and concrete masonry, tile, and peaked roofs. Structures are one-to-three stories high near town square and along rail line; structures elsewhere are mostly single story, stucco residences.

f. Building Density:

Moderate to dense.

g. Principal Buildings:

Militia school and barracks northwest of town; railroad station, freight station, repair sheds; multi-story municipal building and probable hospital east side of town; five- or six-story probable hotel near town square.

h. Public Utilities:

No information available.

i. Industry:

Agricultural processing, small scale railroad repair and machine shop facilities; large sugar mill with small generating plant and water treatment plant (exact capacities unknown) 3.5 miles southeast of town (possibly inactive since 1962).

17. Zulueta

22°22'N - 79°35'W  
UTM 14QJ3740  
Population: Unknown

a. Functions:

Small transportation and agricultural center.

b. Location:

Northeastern Las Villas Province, about 7 miles northeast of Placetas.

c. Shape and Dimensions:

Irregular, about .6 mile northeast-southwest and .6 mile northwest-southeast.

d. Streets:

Rectangular grid pattern oriented northeast-southwest and northwest-southeast; widths range from 15 to 30 feet; Routes 4-29 and 4-85 probably paved through town; remaining streets packed earth.

e. Types of Buildings:

One-to-three story concrete block and wooden frame structures predominate.

f. Building Density:

High density at center of town around square; moderate to high density elsewhere.

g. Principal Buildings:

Railroad station and freight station; city utility center under construction; water pumping plant, new power station.

h. Public Utilities:

Recent information indicates new water pumping station (deep well) and possible power station under construction at south end of town.

i. Industry:

Large sugar mill 1.7 miles northeast and another 2 miles southwest of town. No other information available.

FIGURE X-28

1. Route 44
2. Freight
3. Town Square
4. Police

MARCH 1963

PLATE X 19

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER 1  
POPULATION CENTERS AND PORTS

SPECIAL AMPHIBIOUS STUDY  
S 158-63  
MAY 1963



Sancti Spiritus  
Tunas De Zaza  
1223,000 (APPROX.)  
SECRET NO FOREIGN DISSEM

Types of Buildings  
Single story wooden frame structures predominate; several residential, a few shed-type structures, and a long narrow warehouse about 200 x 50 feet.

Building Density  
Sparse.

Principal Buildings  
Elongated warehouse near pier; smaller warehouse in northwest corner of village.

Public Utilities  
No information available.

Industry  
Fishing and cane shipping.

Ports  
See Figure K-30.

PLATE K-31  
MARCH 1963  
21. Cabaiguán  
22°05'N 79°30'W  
UTM 14Q547620  
Population: 15,369

Functions  
Marketing and distribution center for surrounding agricultural region.

Location  
Approximately 12 miles northwest of Sancti Spiritus.

Shape and Dimensions  
Irregular, approximately 1.2 miles northwest-southeast and .8 mile northeast-southwest.

Streets  
Streets (lugs a rectangular grid. Within the town streets range in width from 12 to 30 feet.

Types of Buildings  
One-to-four story concrete block or reinforced concrete structures predominate in center of town; elsewhere, single story, residential structures predominate.

Cabaiguán  
1223,000 (APPROX.)  
SECRET NO FOREIGN DISSEM

Principal Buildings  
Petroleum refinery southeast side of town; school or hospital and municipal building east of town square; school or institutional building northwest end of town; possible police station 3 blocks west of town square; large warehouse-type structures measuring 220 feet by 40 feet multi-story on east side of town; large concentration of institutional type buildings 4 blocks northwest of town square; large unidentified industrial installation, possible fuel storage southwest of town.

Public Utilities  
Long distance telephone exchange and a telegraph office (locations not known). No other information available.

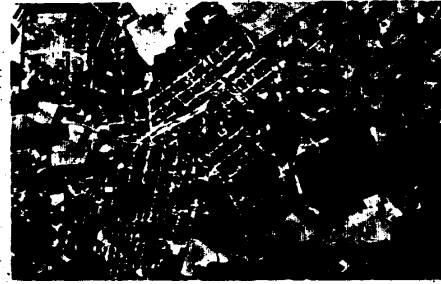
Industry  
The Betguá Buté Petroleum Refinery employs 125 persons and was producing an average of 3,300 barrels of gasoline, kerosene, and fuel oil per day as of August 1962. No other significant industry.

| NAME            | TYPE OF BUILDING                                                   | LOCATION       | REMARKS                                                                                                        | STATUS | REMARKS | STATUS | REMARKS |
|-----------------|--------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------|--------|---------|--------|---------|
| Sancti Spiritus | Single story wooden frame structures                               | Coastal area   | predominate; several residential, a few shed-type structures, and a long narrow warehouse about 200 x 50 feet. |        |         |        |         |
| Tunas De Zaza   | Single story wooden frame structures                               | Coastal area   | predominate; several residential, a few shed-type structures, and a long narrow warehouse about 200 x 50 feet. |        |         |        |         |
| Cabaiguán       | One-to-four story concrete block or reinforced concrete structures | Center of town | predominate in center of town; elsewhere, single story, residential structures predominate.                    |        |         |        |         |

PLATE K-20

SECRET

CIEINFUEGOS-TRINIDAD, CUBA  
CHAPTER 4  
POPULATION CENTERS AND PORTS



Ismael De Laza

1,23,000 (APPROX.)

FIGURE X-31

1. Munitions Storage  
2. Government Buildings  
3. Municipal Buildings  
4. Hospital  
5. Central Highway

Cabaiguan

MARCH 1963

e. Types of Buildings

Single story wooden frame structures predominate; several residential, a few shed-type structures, and a long narrow warehouse about 200 x 40 feet.

f. building Density  
Sparse..

### g. Principal Buildings

Elongated warehouse near pier; smaller warehouse in northwest corner of village.

## n. Public Utilities

NO information available.

1. Industry

fishing and cane shipping.

J. Forts

see Figure X-30.

One-to-four story concrete block or reinforced concrete structures predominate in center of town; elsewhere single story, residential structures predominate.

| Index | Page | Message                                                                                                                         | Time of Day | Channel and Date | Source        | Location | Remarks  |
|-------|------|---------------------------------------------------------------------------------------------------------------------------------|-------------|------------------|---------------|----------|----------|
| 1     | 1    | 1. The first message received from the ship was at 10:00 AM on 10/10/54. It was a message from the ship to the shore station.   | 10:00 AM    | 10/10/54         | Ship to Shore | Ship     | 10:00 AM |
| 2     | 2    | 2. The second message received from the ship was at 10:05 AM on 10/10/54. It was a message from the ship to the shore station.  | 10:05 AM    | 10/10/54         | Ship to Shore | Ship     | 10:05 AM |
| 3     | 3    | 3. The third message received from the ship was at 10:10 AM on 10/10/54. It was a message from the ship to the shore station.   | 10:10 AM    | 10/10/54         | Ship to Shore | Ship     | 10:10 AM |
| 4     | 4    | 4. The fourth message received from the ship was at 10:15 AM on 10/10/54. It was a message from the ship to the shore station.  | 10:15 AM    | 10/10/54         | Ship to Shore | Ship     | 10:15 AM |
| 5     | 5    | 5. The fifth message received from the ship was at 10:20 AM on 10/10/54. It was a message from the ship to the shore station.   | 10:20 AM    | 10/10/54         | Ship to Shore | Ship     | 10:20 AM |
| 6     | 6    | 6. The sixth message received from the ship was at 10:25 AM on 10/10/54. It was a message from the ship to the shore station.   | 10:25 AM    | 10/10/54         | Ship to Shore | Ship     | 10:25 AM |
| 7     | 7    | 7. The seventh message received from the ship was at 10:30 AM on 10/10/54. It was a message from the ship to the shore station. | 10:30 AM    | 10/10/54         | Ship to Shore | Ship     | 10:30 AM |
| 8     | 8    | 8. The eighth message received from the ship was at 10:35 AM on 10/10/54. It was a message from the ship to the shore station.  | 10:35 AM    | 10/10/54         | Ship to Shore | Ship     | 10:35 AM |
| 9     | 9    | 9. The ninth message received from the ship was at 10:40 AM on 10/10/54. It was a message from the ship to the shore station.   | 10:40 AM    | 10/10/54         | Ship to Shore | Ship     | 10:40 AM |
| 10    | 10   | 10. The tenth message received from the ship was at 10:45 AM on 10/10/54. It was a message from the ship to the shore station.  | 10:45 AM    | 10/10/54         | Ship to Shore | Ship     | 10:45 AM |

PLATE X 20

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

SPECIAL AMPHIBIOUS STUDY  
S 158.63  
MAY 1963

22. Guayma

22°03'N - 79°24'W  
UTM PQ388047  
Population: 4,000

a. Functions

A small market and sugar mill town.

b. Location

Nine miles northwest of Sancti Spiritus.

c. Shape and Dimensions

Irregular, about .6 mile north-south and .6 mile east-west.

d. Streets

Street pattern generally northwest-southeast trending rectangular blocks. Streets within the town vary in width from 15 to 30 feet. All of the streets, with the exception of the Central Highway which is the main through route, are unpaved. A bridge on the south side of town crosses the Central Highway over railroad.

e. Types of Buildings

Several one-to-three story commercial structures, probably of concrete block construction, located on Central Highway and immediately around and south of town square; remainder single story residential structures.

f. Building Density

Sparse to moderate.

g. Principal Buildings

Sugar mill southwest corner of town with a 90 foot smokestack and a water tower 20 feet high; railroad station; probable municipal building and police station.

h. Public Utilities

Sugar mill has own steam generating plant of unknown capacity and is believed to furnish some power to town; town has a public long distance telephone exchange and telegraph office (location unknown). No other information available.

i. Industry

The sugar mill with a capacity of 1,475 short tons per 24 hours employs 220 workers during the milling season. No other significant industries.

23. Guazima

21°44'N - 79°26'W  
UTM PQ388047  
Population: 2,220

a. Functions

A small agricultural and transportation center.

b. Location

Approximately 16 miles south of Sancti Spiritus.

c. Shape and Dimensions

The town is an imperfect rectangle, approximately .3 mile by .4 mile.

d. Streets

The street pattern consists of unequal north-south trending rectangular blocks. Streets within town range in width from 20 to 30 feet; none are paved.

e. Types of Buildings

Most structures are single story wooden frame or concrete block residences; however, a small group of one-to-two story commercial and warehouse-type buildings are located along the railroad.

f. Building Density

The building density is moderate to sparse.

g. Principal Buildings

Railroad station and freight station; school or institutional building.

h. Public Utilities

Telegraph office located in the town. No additional information available.

i. Industry

No information available.



FIGURE X-33

1:23,000 (APPROX.)

- |                                      |                                            |
|--------------------------------------|--------------------------------------------|
| 1. Secondary Road<br>(to Route 4-36) | 4. Freight Station                         |
| 2. Church                            | 5. School or Hospital                      |
| 3. Town Square                       | 6. Municipal Building                      |
|                                      | 7. Secondary Road<br>(to Rio Zaza (river)) |

SEPTEMBER 1962

SECRET NO FOREIGN DISSEM

SECRET  
NO FOREIGN DISSEM



FIGURE X-12  
1,221,000 (APPROX)

1. Town Square
2. Central Highway
3. Police Headquarters
4. School
5. Railroad Station
6. Sugar Mill

MARCH 1963

SECRET NO FOREIGN DISSEM

# CIENFUEGOS-TRINIDAD, CUBA CHAPTER X POPULATION CENTERS AND PORTS

## 22. Caguas

22°33'N - 70°15'W  
CIN 14000000  
Population: 4,000

### a. Functions

A small marketing and sugar mill town.

### b. Location

Nine miles northwest of Sancti Spiritus.

### c. Shape and Dimensions

Irregular, about 10 miles north-south and 10 miles east-west.

### d. Streets

Street pattern generally northwest-southeast trending rectangular blocks. Streets within the town vary in width from 15 to 30 feet. All of the streets, with the exception of the Central Highway which is the main through route, are unpaved. A bridge on the south side of town carries the Central Highway over railroad.

### e. Types of Buildings

Several one-to-three story commercial structures, probably of concrete block construction, located on Central Highway and immediately around and south of town square; remainder single story residential structures.

### f. Building Density

Sparse to moderate.

### g. Principal Buildings

Sugar mill southwest corner of town with a 90 foot smokestack and a water tower 70 feet high, railroad station, public municipal building and police station.

### h. Public Utilities

Sugar mill has own small generating plant of unknown capacity and is believed to furnish some power to town; town has a public long distance telephone exchange and telegraph office (location unknown). No other information available.

### i. Industry

The sugar mill with a capacity of 12475 short tons per 24 hours employs 720 workers during the milling season. No other significant industries.

## 23. Guazima

21°45'N - 79°25'W  
CIN 14000000  
Population: 2,220

### a. Functions

A small agricultural and transportation center.

### b. Location

Approximately 16 miles south of Sancti Spiritus.

### c. Shape and Dimensions

The town is an imperfect rectangle, approximately .3 mile by .4 mile.

### d. Streets

The street pattern consists of one-to-two north-south trending rectangular blocks. Streets within town range in width from 20 to 30 feet. None are paved.

### e. Types of Buildings

Most structures are single story wooden frame or concrete block residences; however, a small group of one-to-two story commercial and warehouse type buildings are located along the railroad.

### f. Building Density

The building density is moderate to sparse.

### g. Principal Buildings

Railroad station and freight station, school or institutional building.

### h. Public Utilities

Telegraph office located in the town. No additional information available.

### i. Industry

No information available.



FIGURE X-13

1. School
2. Town Square
3. Town

SEPTEMBER 1962

PLATE X-1

CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

SPECIAL AMPHIBIOUS STUDY  
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MAY 1963



24. Cienfuegos

21°40'N - 79°20'W

Population: unknown

a. Functions

A sugar mill town and minor communication center.

b. Location

Approximately 4 miles southeast of Guajama, south of the Rio Zaza.

c. Shape and Dimensions

Roughly square, approximately 500 feet by 500 feet.

d. Streets

Irregular, all dirt, about 15 to 30 feet in width.

e. Types of Buildings

All structures are concrete block or frame single story residential type structures with the exception of the sugar mill.

f. Building Density

Sparse.

g. Principal Buildings

Sugar mill (with a 90-foot smokestack).

h. Public Utilities

Electric power probably furnished by sugar mill; mill generator (exact capacity unknown).

i. Industry

The sugar mill has a grinding capacity of 1,000 short tons per 24 hours. During the milling season it employs 1,500 workers. No other industry in village.

1:23,000 (APPROX.)

1. Church  
2. School  
3. Sugar Mill  
4. Smoke Stack

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25. (E1) Jibaro

21°42'N - 79°11'W

CIM PPH71994

Population: 300

a. Functions

Agricultural village.

b. Location

On the west bank of the Rio Jatibonico del Sur, about 21 miles southeast of Sancti Spiritus.

c. Shape and Dimensions

The village is arc-shaped, approximately .3 mile northwest-southeast and about .1 mile north-east-southwest.

d. Streets

Main street is a secondary highway, a few side streets leading off about 2 to 3 blocks; none paved; streets range in width from 15 to 24 feet.

e. Types of Buildings

Mostly one story wooden structures.

f. Building Density

Sparse.

g. Principal Buildings

None.

h. Public Utilities

No information available.

i. Industry

None.

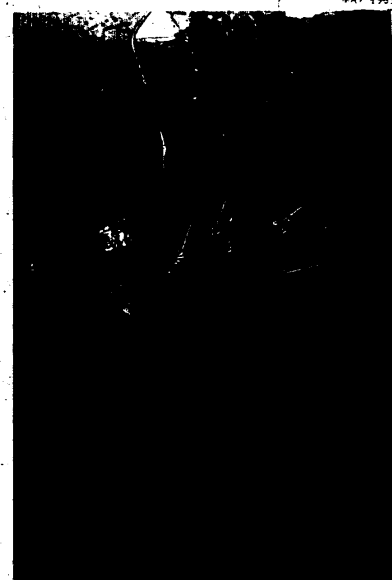


FIGURE X-33

(E1) Jibaro

1:23,000 (APPROX.)

1. Church  
2. Route 4-36  
3. School  
4. Silo  
5. Old-Lane Wooden Bridge  
6. Rio Jatibonico del Sur (river)

MARCH 1963

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PLATE X-22



SECRET

SECRET  
NO FOREIGN DISSEM



FIGURE X-14  
1:25,000 (AMNEX)

1. Bridge Site (Destroyed) 4. School  
2. Ferry 5. Sugar Mill  
3. Secondary Road 6. Smoke Stack  
(to Guazimal)

MARCH 1963

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CIEÑFUEGOS, TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

24. AMAGINES

21°40'N - 79°26'W  
STM 1813945  
Population: Unknown

a. Functions

A sugar mill town and minor communication center.

b. Location

Approximately 4 miles southeast of Guazimal, south of the Rio Zaza.

c. Shape and Dimensions

Roughly square; approximately 500 feet by 500 feet.

d. Streets

Irregular; all dirt, about 15 to 30 feet in width.

e. Types of Buildings

All structures are concrete block or frame single story residential type structures with the exception of the sugar mill.

f. Building Density

Sparse.

g. Principal Buildings

Sugar mill (with a 90 foot smokestack).

h. Public Utilities

Electric power probably furnished by sugar mill's small generator (exact capacity unknown).

i. Industry

The sugar mill has a grinding capacity of 12,000 short tons per 24 hours. During the milling season it employs 1,500 workers. No other industry in village.

25. (El) Jitaro

21°42'N - 79°11'W  
STM 1871294  
Population: 300

a. Functions

Agricultural village.

b. Location

On the west bank of the Rio Jatibonico del Sur, about 2 1/2 miles southeast of Sancti Spiritus.

c. Shape and Dimensions

The village is arc-shaped, approximately 1/2 mile northwest-southeast and about 1/2 mile north-southwest.

d. Streets

Main street is a secondary highway, a few side streets leading off about 2 to 3 blocks; none paved; streets range in width from 15 to 24 feet.

e. Types of Buildings

Mostly one story wooden structures.

f. Building Density

Sparse.

g. Principal Buildings

None.

h. Public Utilities

No information available.

i. Industry

None.

FIGURE

MARCH

PLATE X-22

CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

26. Jaitibonico

23°06'N - 79°12'W  
1914/00275  
Population: 3,493

a. Functions

Jaitibonico is a marketing and sugar mill town.

b. Location

Approximately 17 miles east of Sancti Spiritus.

c. Shape and Dimensions

The town is rectangular in shape, extending about 2 miles along the railroad line northwest-southeast and .6 mile northeast-southwest.

d. Streets

Streets in Jaitibonico form a northeast-southeast rectangular pattern. Streets range in width from 20 to 60 feet. The Central Highway (route 3-39) is paved; most other streets hard-packed dirt. A 30-foot wide through truss steel bridge approximately 300 feet long crosses the Rio Jaitibonico del Sur immediately northwest of town on the Central Highway.

e. Types of Buildings

One-to-three story concrete block residential structures along main street (Central Highway) and railroad; one story stucco or frame residential structures elsewhere.

f. Building Density

Moderate to high building density throughout town.

g. Principal Buildings

Sugar mill; school; large institutional type building east end of town; probable petroleum storage warehouse 1/2 mile east of town on railroad; hospital near sugar mill; possible electric power plant west end of town; school or hospital on high side of town.

h. Public Utilities

Radio relay station of the Cuban TV network located 1 1/2 miles east of town, 1/2 mile south of Central Highway.

i. Industry

Sugar mill. No other significant industries in the town.

27. Mayajigua

23°15'N - 79°04'W  
2314/00008  
Population: Unknown

a. Functions

Railroad and highway junction; agricultural center.

b. Location

Northeastern Las Villas Province, 12 miles northwest of Sancti Spiritus, and 8 miles inland from north coast.

c. Shape and Dimensions

Irregular, .7 mile east-west, .4 mile north-south.

d. Streets

Irregular rectangular grid pattern; two secondary routes leading into the city are paved, 2 lanes, 25 feet wide; remaining streets appear to be packed dirt and range in width 10 to 25 feet.

e. Types of Buildings

All buildings appear to be single story; some masonry and stucco near center of city; remainder mostly stucco or wooden frame residential types.

f. Building Density

Sparse, to moderately dense near town square.

g. Principal Buildings

Church west side of town square; possible police and/or bus station in southern part of town; school in south end of town.

h. Public Utilities

No information available

i. Industry

Unidentified factory building 40 feet by 80 feet in north part of town; large sugar mill 2.5 miles north of town.

SPECIAL AMPHIBIOUS STUDY  
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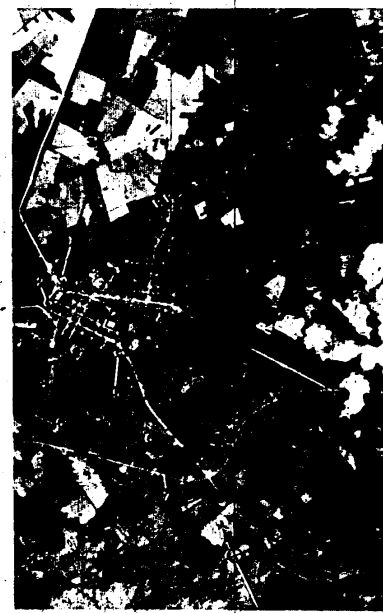


FIGURE X-37

1:23,000 (APPROX.)

1. Factory
2. Church
3. Town Square
4. Police Station

5. School
6. Paved Secondary Roads
7. Route 4-53

MARCH 1963

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PLATE X-23

SECRET

SECRET  
NO FOREIGN DISSEM



FIGURE X-36 Jatabonico 1:25,000 (APPROX)

1. Central Highway
2. Hospital
3. School
4. School or Hospital
5. Tower
6. Radio-relay tower
7. Hospital
8. TOL Storage
9. Sugar Mill

NOVEMBER 1962

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CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER X  
POPULATION CENTERS AND PORTS

26. Jatabonico

21°56'N - 79°12'W  
CTN PQ90275  
Population: 5,493

- a. Functions  
Jatabonico is a marketing and sugar mill town.
- b. Location  
Approximately 19 miles east of Sancti Spiritus.
- c. Shape and Dimensions  
The town is rectangular in shape, extending about 1 mile along the railroad line northwest-southeast and .6 mile northeast-southwest.
- d. Streets  
Streets in Jatabonico form a northwest-southeast rectangular pattern. Streets range in width from 20 to 60 feet. The Central Highway (Route 3 - 30) is paved, most other streets hard-packed dirt. A 30 foot wide through truss steel bridge approximately 300 feet long crosses the Rio Jatabonico del Sur immediately northwest of town on the Central Highway.
- e. Types of Buildings  
One-to-three story concrete block residential structures along main street (Central Highway) and railroad; one story stucco or frame residential structures elsewhere.
- f. Building Density  
Moderate to high building density throughout town.
- g. Principal Buildings  
Sugar mill; school; large institutional type building east end of town; probable petroleum storage warehouse 1/2 mile east of town on railroad; hospital near sugar mill; possible electric powerplant west end of town; school or hospital north side of town.
- h. Public Utilities  
Radio relay station of the Cuban TV network located 1.6 miles east of town, .6 mile south of Central Highway.
- i. Industry  
Sugar mill. No other significant industries in the town.

27. Mayajigua

22°16'N - 79°05'W  
CTN PQ99063  
Population: Unknown

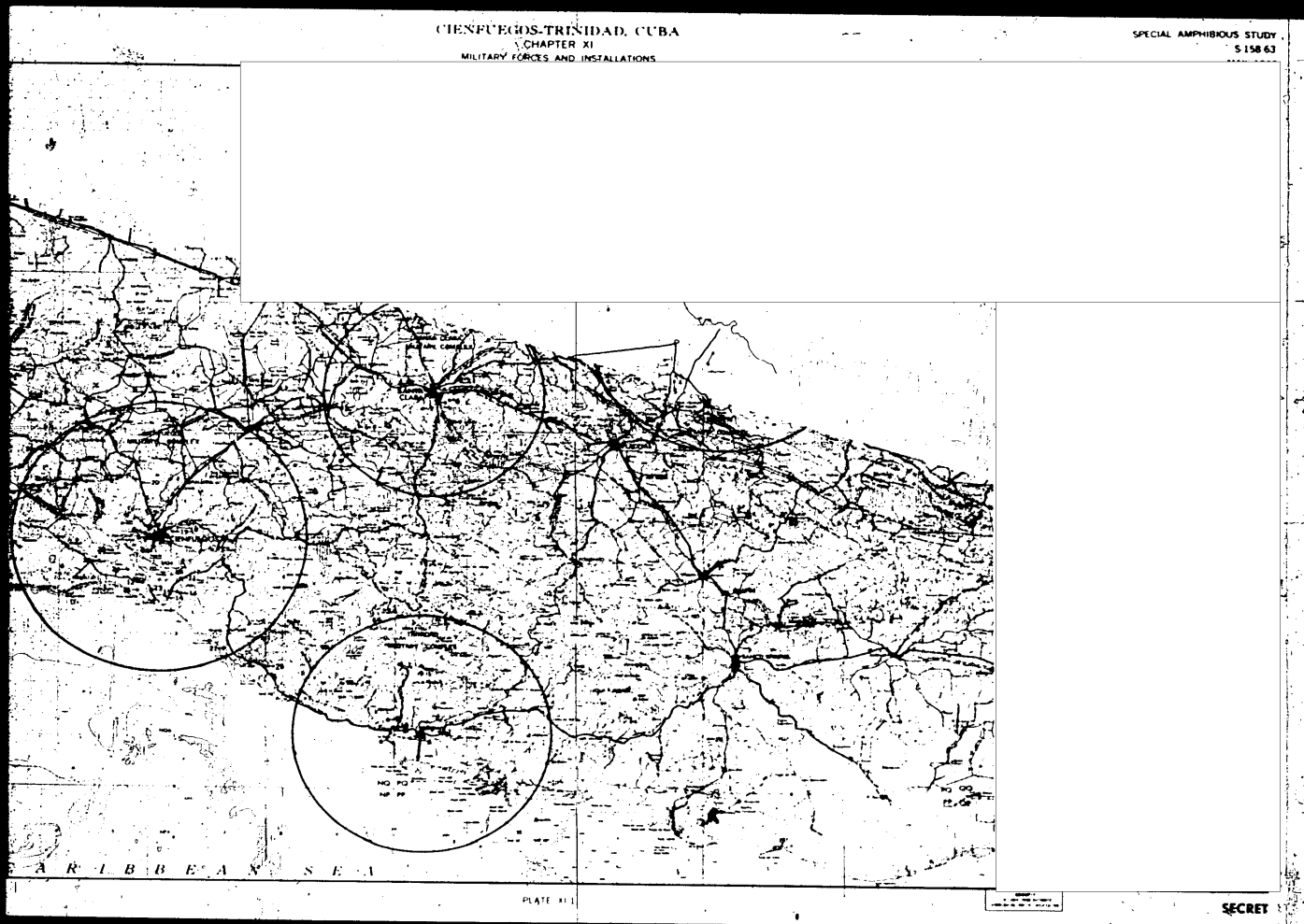
- a. Functions  
Railroad and highway junction; agricultural center.
- b. Location  
Northeastern Las Villas Province, 32 miles northeast of Sancti Spiritus, and 5 miles inland from north coast.
- c. Shape and Dimensions  
Irregular, .7 mile east-west, .4 mile north-south.
- d. Streets  
Irregular rectangular grid-pattern; two secondary routes leading into the city are paved, 2 lanes, 25 feet wide; remaining streets appear to be packed dirt and range in width 10 to 25 feet.
- e. Types of Buildings  
All buildings appear to be single story; some masonry and stucco near center of city; remainder mostly stucco or wooden frame residential types.
- f. Building Density  
Sparse, to moderately dense near town square.
- g. Principal Buildings  
Church west side of town square; possible police and/or bus station in southern part of town; school in south end of town.
- h. Public Utilities  
No information available.
- i. Industry  
Unidentified factory building 40 feet by 80 feet in north part of town; large sugar mill 4.5 miles north of town.

FIGURE X-37

1. Factory
2. Church
3. Town square
4. Police

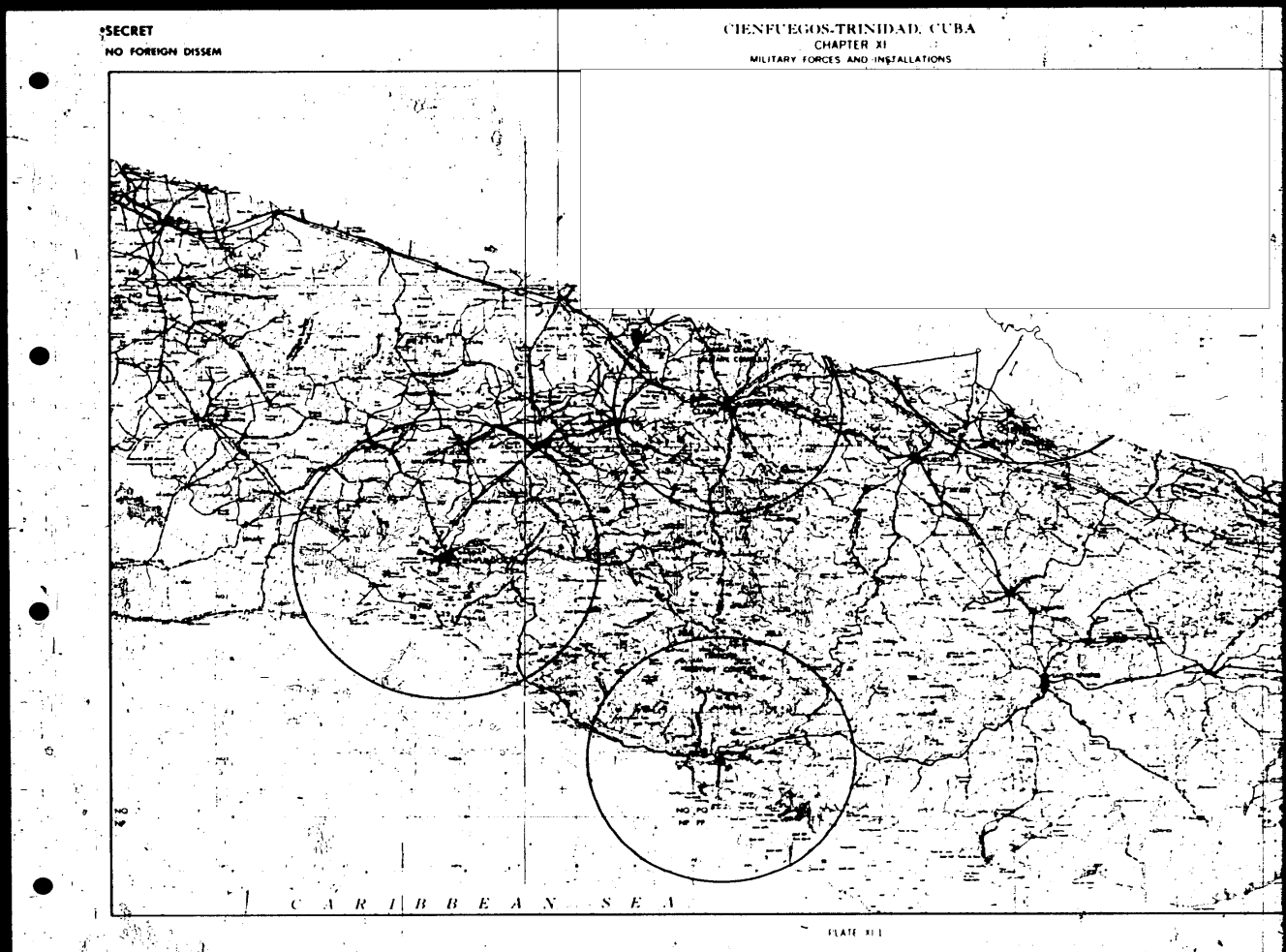
MARCH 1963

PLATE X-23



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Military Installation 2

Military Installation 3

Military Installation -

Military Installation 5

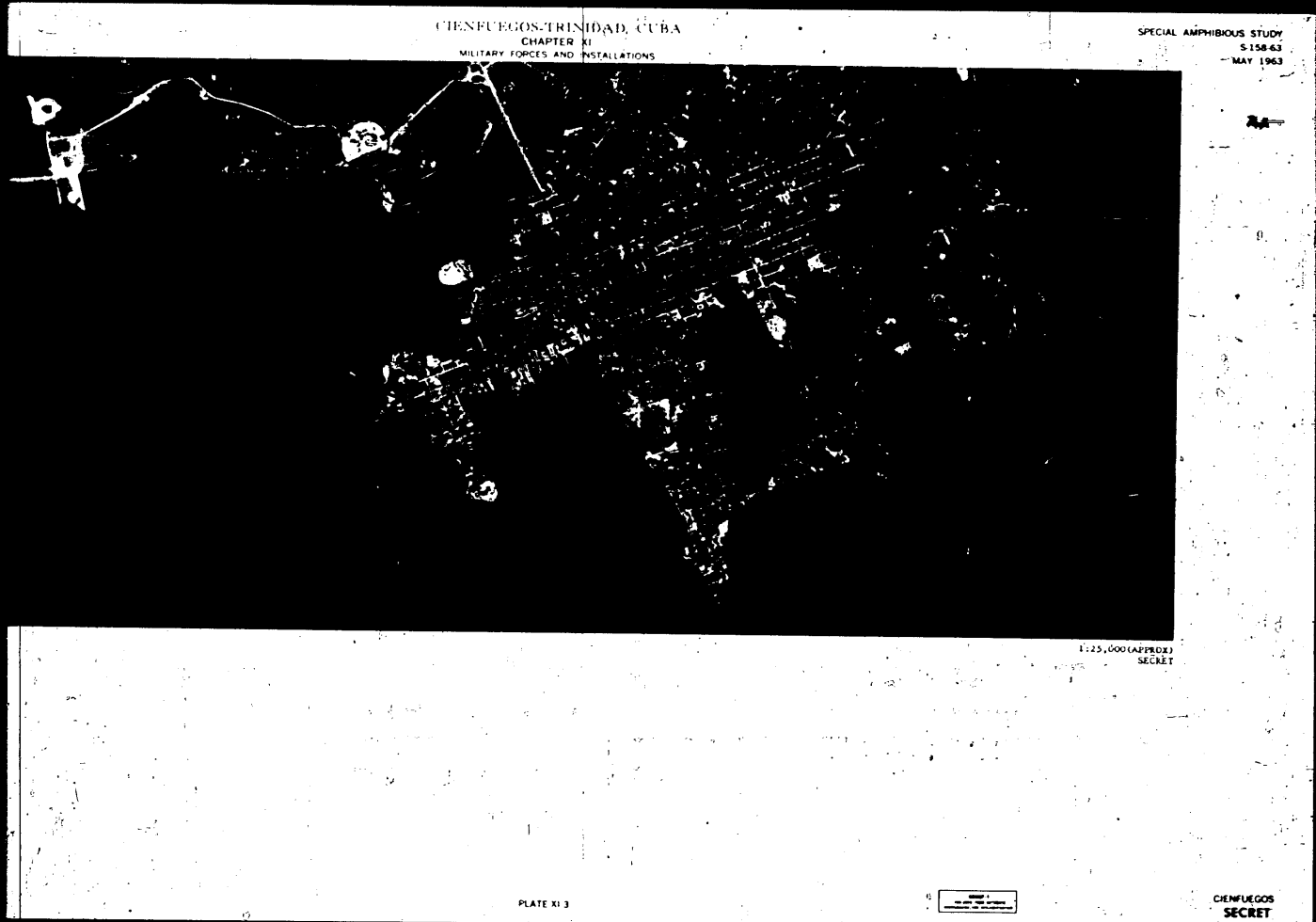
Military Installation 6

Military Installation:

Military Installation #

CIENFUEGOS  
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CIEINFUEGOS-TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS

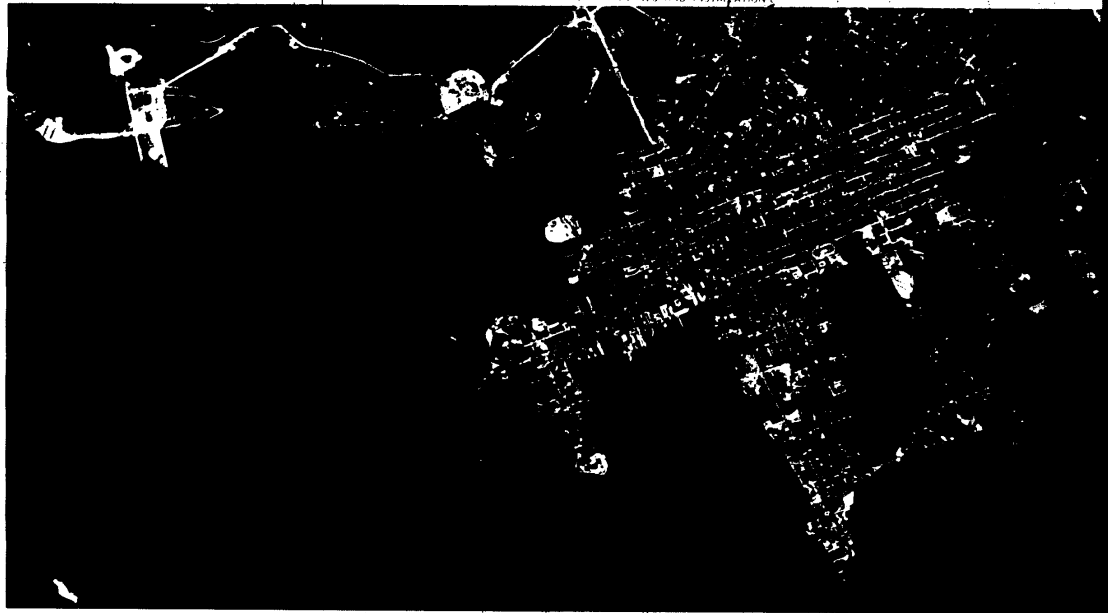


FIGURE XI-1  
APRIL 1963

PLATE XI 3

CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS

SPECIAL AMPHIBIOUS STUDY  
S-158-63  
MAY 1963



1:24,000 (APPROX)  
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FIGURE XI-3  
APRIL 1963

1:24,000 (APPROX)  
SECRET



FIGURE XI-4  
APRIL 1963

1:25,000 (APPROX)  
SECRET

Military Installation 10

Name and Type: Barracks, Storage Area.

Location: 22°11'N-80°36'W, UTM NQ648540.

Shape and Size: Overall installation covers rectangular area about 3000 feet x 2000 feet.

Construction and Condition: Area (A) contains 2 barracks-type buildings 110 feet x 30 feet, several smaller shed-type buildings, and 2 large parking areas and possible tent camp. Area (B) is probable AA deployment site. Area (C) is possible training course. Entire area secured by fence.

Present and Potential Use: Probable billeting, storage, and driver training course. Possible deployment area for motorized units, AA or FA.

PLATE XI 4

500 feet x 700 feet. Area (B).  
2 or more (probable prefab) barracks  
storage type buildings 10 feet x  
additional barracks/storage  
platform in for 10 additional

billeting or storage.

Military Installation 11

Name and Type: Cienfuegos defensive fortifications.

Location: 22°06'N-80°24'W, NQ620405.

Shape and Size: Roughly rectangular, 2,250 feet x 2000 feet.

Construction and Condition: Entire area saturated with numerous defensive fortification (A) automatic weapons and anti-tank emplacements; (B) & artillery self propelled guns revetment; (C) & mortar positions; (D) trenching.

Present and Potential Use: Emplacements are sited for seaward defense of Cienfuegos.

CIENFUEGOS  
SECRET

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CIENFUEGOS-TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS



FIGURE XI-2  
APRIL 1963

1:24,000 (APPROX)  
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FIGURE XI-3  
APRIL 1963

1:24,000 (APPROX)  
SECRET



FIGURE XI-4  
APRIL 1963

Military Installation 9  
**Name and Type:** Consuecancia barracks area.  
**Location:** 22°14'N-80°35'W, 110435592.  
**Shape and Size:** Area (A), Rectangular 1300 feet x 700 feet. Area (B), Irregular rectangle 300 feet x 600 feet.  
**Construction and Condition:** Area (A), 32 or more (probable prefab) barracks buildings 30 feet x 60 feet; 2 very large storage type buildings 70 feet x 220 feet; foundations in for at least 40 additional barracks/storage buildings. (B) 15 squad-type tents with platforms in for 10 additional similar tents.  
**Present and Potential Use:** Probable billeting or storage.

Military Installation 10  
**Name and Type:** Barracks, Storage Area.  
**Location:** 22°11'N-80°36'W, UTM NQ408340.  
**Shape and Size:** Overall installation covers rectangular area about 3000 feet x 2000 feet.  
**Construction and Condition:** Area (A) contains 2 barracks-type buildings 110 feet x 30 feet, several smaller shed-type buildings, and 2 large parking areas and possible tent camp. Area (B) is probable FA, AA deployment site. Area (C) is possible training course. Entire area secured by fence.  
**Present and Potential Use:** Probable billeting, storage, and driver training course. Possible deployment area for motorized units, AA or FA.

Military Installation 11  
**Name and Type:** Cienfuegos defense area.  
**Location:** 22°04'N-80°24'W, NQ62040.  
**Shape and Size:** Roughly rectangular.  
**Construction and Condition:** Entire fortification (A), automatic weapons self propelled gun/levelment, (B), (C), (D), (E), (F), (G), (H), (I), (J), (K), (L), (M), (N), (O), (P), (Q), (R), (S), (T), (U), (V), (W), (X), (Y), (Z).  
**Present and Potential Use:** Replace Cienfuegos.

PLATE XI-4

# CIENTUEGOS-TRINIDAD, CUBA CHAPTER XI

SPECIAL AMPHIBIOUS STUDY  
\$156.63  
MAY 1963

300 feet x 300 feet.  
Area (A) Multi-story  
area. Condition Unknown.  
Little billeting. Area  
and probable AA positions.

Military Installation 16  
Name and Type: Military Camp.  
Location: 22°03'N-80°24'W, UTM M616382.  
Shape and Size: Rectangular, 500 feet x 500 feet.  
Construction and Condition: (A) 3 probable prefab  
barracks 150 feet x 30 feet 80 more storage type  
buildings; (B) vehicle park immediately to east  
containing trucks, tanks, and field artillery.  
Present and Potential Use: Billeting, storage, and  
support camp for AA missile site.

Location 13  
Area, Defense, Secured Area,  
M616385.

Area long NS axis; 290M.

(A) Area secured by fence;  
(B) numerous gun and AA  
sites; (C) possible vehicle

defensive gun emplacements,  
sites and equipment in large

well and defended. Extensive  
area woods.

Military Installation 14  
Name and Type: Playa Rancho Loma, Military Billets,  
Defenses, Gun Emplacements.

Location: 22°02'N-80°25'W, UTM M616370.

Shape and Size: Irregular, 200M E-W, 50M N-S.

Construction and Condition: (A) Extensive trenching  
and defenses; (B) Gun positions, and vehicle hold stand;  
(C) Single story building former residential homes now  
purportedly used to billet military personnel; (D) Small  
tent area; (E) 6 gun AA position; (F) Possible  
AA positions; (G) Fortified hill, numerous AA positions  
and automatic weapons positions.

Present and Potential Use: Billeting, defense, and  
equipment dispersal areas.

PLATE XI.5.

1:25,000 (PROX)

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Military Installation 15

Name and Type: Cientuegos "San Site"

Location: 22°03'N-80°24'W, UTM M615382.

Shape and Size: Rectangular cleared area 650 feet x  
500 feet.

Construction and Condition: (A) 6 unrevetted launchers  
and unrevetted guidance unit, including "FRUIT 520",  
"SPOON REST" and possible "BARLOCK RADARS"; (B) 3  
vehicle/park/hold areas. Site secured by fence and  
trenches.

Present and Potential Use: AA missile site.

CIENTUEGOS  
SECRET

**SECRET**  
**NO FOREIGN DISSEM**

# CIENFUEGOS-TRINIDAD, CUBA

CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS

## Military Installation 12

Name and Type: Castillo Pardo, billeting, storage, gun emplacements.

Location: 22°06'N-80°28'W, UTM NQ562396.

Shape and Size: Rectangular, 500 feet x 500 feet.

Construction and Condition: Area (A) Multi-story cement-block, fort-type structure. Condition unknown.

Present and Potential Use: Billeting, arms storage, artillery positions, and probable AA positions.

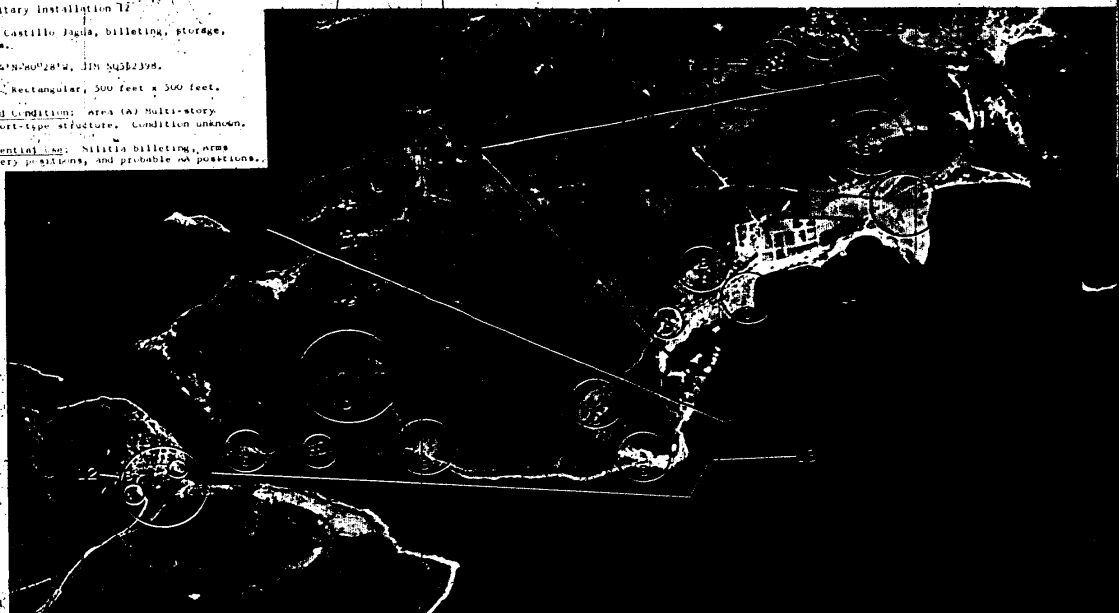


FIGURE XI-3  
April 1963  
Military Installation 12

Name and Type: Gun Emplacements, Defenses, Secured Area.

Location: 22°03'N-80°27'W, UTM NQ565385.

Shape and Size: Irregular, 2,400 long NS axis; 900 at widest point E-W axis.

Construction and Condition: (A) Area secured by fence and patrol path along east side; (B) numerous gun and AA emplacements; (C) look out towers; (D) possible vehicle park; (E) tent camp.

Present and Potential Use: Defensive gun emplacements, assembly areas for military units and equipment in large wooded area.

Remarks: Area heavily patrolled and defended. Extensive equipment, AA purportedly hid in woods.

## Military Installation 14

Name and Type: Playa Rancho Luna, Military Billets, Defenses, Gun Emplacements.

Location: 22°02'N-80°25'W, UTM NQ590370.

Shape and Size: Irregular, 2NM E-W; .5NM N-S.

Construction and Condition: (A) Extensive trenching and defenses; (B) Gun positions and vehicle hard stand; (C) Single story building, former residential home now purportedly used to billet military personnel; (D) Small tent area; (E) 6 gun AA position; (F) Possible AA positions; (G) Fortified hill, numerous AA positions and automatic weapons positions.

Present and Potential Use: Billeting, defense, and equipment dispersal areas.

PLATE XI 5

# CIEINFUEGOS, TRINIDAD, CUBA CHAPTER XI

SPECIAL AMBIGUOUS STUDY  
S-158 63  
MAY 1963

**Name and Type:** Probable munition factory, and storage.  
**Location:** 22°14'N-80°28'W, UTM HQS46591.  
**Shape and Size:** Rectangular, 1,000 feet x 1,200 feet.  
**Construction and Condition:** (A) 4 storage type buildings 40 feet x 40 feet. 2 factory type buildings 120 feet x 130 feet with full length skylights; (B) 40 demolition bunkers widely scattered throughout the site, site fenced and secured.  
**Present and Potential Use:** Munitions factory and storage.



FIGURE XI-8  
NOVEMBER 1962  
1:26,000 (APPROX)  
SECRET

## Military Installation 21

**Name and Type:** La Sierra Coastal Defense cruise missile site.

**Location:** 21°57'N-80°19'W, UTM HQS98270.

**Shape and Size:** Irregular rectangle, 800 feet x 1,000 feet.

**Construction and Condition:** 2 unvetted launch positions, 1 unvetted guidance area, vehicle park about 800 feet N, scattered trenching in area, all positions served by dirt roads.

**Present and Potential Use:** Coastal Defense, Cruise missile site.

**Remarks:** Site was manned and operational through 19 November. Site since abandoned, equipment returned to Campo Florida near Havana. Apparently is alternate launch site.



CIEINFUEGOS  
SECRET

## Military Installation 19

**Name and Type:** AA positions, civil fortifications.

**Location:** 22°09'N-80°25'W, UTM HQS00490.

**Shape and Size:** Irregular, 1,000 feet x 2,500 feet.

**Construction and Condition:** (A) trenching field fortifications, and gun emplacements; (B) vehicle park area, containing probable mobile AA guns in trees.

**Present and Potential Use:** AA gun positions.

PLATE XI-6

SECRET  
NO FOREIGN DISSEM

# CIENFUEGOS, TRINIDAD, CUBA

## CHAPTER XI MILITARY FORCES AND INSTALLATIONS

### Military Installation 20



FIGURE XI-6  
APRIL 1963

1:26,000 (APPROX)

SECRET

Military Installation 17

Name and Type: Militia Headquarters, anti-aircraft emplacements.

Location: 22°09'N-80°25'W, UTM NQ609312.

Shape and Size: Rectangular, 500 feet x 400 feet.

Construction and Condition: 2 story building, several other miscellaneous type buildings. Probable light anti-aircraft guns under trees.

Present and Potential Use: Militia Headquarters, arms storage in adjacent buildings, anti-aircraft defense.

Military Installation 18

Name and Type: Cienfuegos Airport barracks area.

Location: 22°09'N-80°25'W, UTM NQ610302.

Shape and Size: Irregular, 500 feet x 700 feet.

Construction and Condition: Includes 3 prefab barracks buildings 110 feet x 30 feet, 4 smaller barracks-type buildings, 1 large storage-type building 60 feet x 100 feet, and hardstand parking area.

Present and Potential Use: Militia barracks, covered storage.

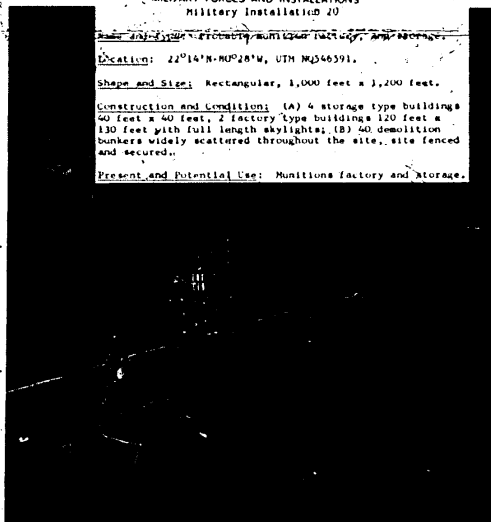


FIGURE XI-7  
APRIL 1963

1:24,000 (APPROX)

SECRET

Military Installation 19

Name and Type: AA positions, field fortifications.

Location: 22°09'N-80°25'W, UTM NQ609490.

Shape and Size: Irregular, 7,000 feet x 3,500 feet.

Construction and Condition: (A) Trenching field fortifications; and gun emplacements; (B) vehicle park area, containing probable mobile AA guns in trees.

Present and Potential Use: FA/AA gun positions.



FIGURE XI-8  
NOVEMBER 1962

SECRET

Military Installation 21

Name and Type: La Sierra missile site.

Location: 21°57'N-80°01'W

Shape and Size: Irregular, 1,000 feet.

Construction and Condition: Positions, 1 unrevetted about 800 feet N., scattered positions served by dirt.

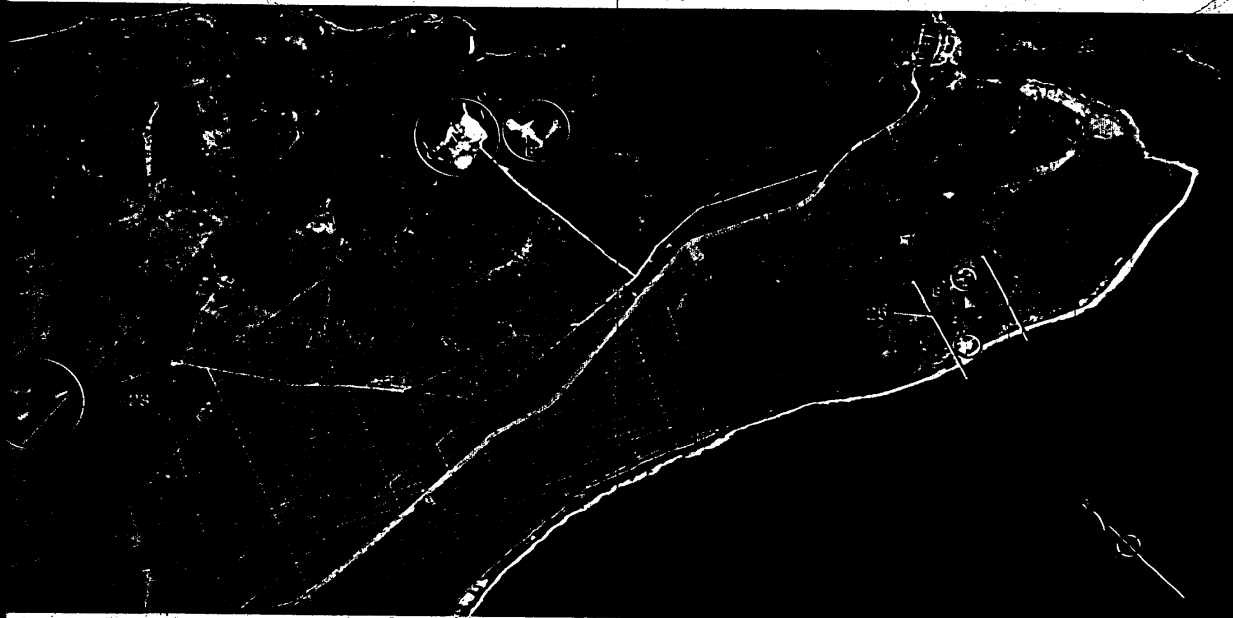
Present and Potential Use: missile site.

Remarks: Site was manned by Soviet. Site since abandoned. Located near Ha Naje launch site.

PLATE XI-6

CENFUEGOS-TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS

SPECIAL AMPHIBIOUS STUDY  
S-158-63  
MAY 1963



tion 22  
underground storage.  
MQ495863.  
feet x 700 feet.  
possible 2 roads serve  
security fence.  
ground storage.

**Military Installation 23**  
Name and Type: Field Artillery Positions.  
Location: 22°06'N-80°33'W, UTM MQ483640.  
Shape and Size: Triangular area roughly 1100 feet E side in an open field.  
Construction and Condition: Three groups each consisting of 6 revetted FA positions in line, possible trenching immediately north. All positions road served.  
Present and Potential Use: FA, AA positions.

**Military Installation 24**  
Name and Type: FA and AA emplacements.  
Location: 22°05'N-80°30'W, UTM MQ523427.  
Shape and Size: Irregular rectangle, cleared area 1,200 feet x 2,000 feet.  
Construction and Condition: (A) 6 or more FA positions some trenching, road served. Cleared area 2,500 feet SE at (B); contains vehicle park, 2 storage type buildings, possible fire control radar, (C) vehicle park areas in woods.  
Present and Potential Use: FA and AA positions.

**Military Installation 25**  
Name and Type: Artillery position; possible radar.  
Location: 22°03'N-80°29'W, UTM MQ540382.  
Shape and Size: Large, irregular shaped wooded area.  
Construction and Condition: (A) 2, possibly 3 field gun positions, with guidance, radar and trenching in clearing. Numerous gun positions and trenching in the adjacent wood (B) possible tent area and storage buildings in trees immediately north.  
Present and Potential Use: Field artillery positions, field positions and billeting.

PLATE XI-7

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FIGURE XI-9  
APRIL 1963

Military Installation 22

Name and Type: Celicito Cave, underground storage.

Location: 22°07'N-80°31'W, UTM NQ495855.

Shape and Size: Irregular, 500 feet x 700 feet.

Construction and Condition: 1, possible 2 roads serve limestone cave entrances, with security fence.

Present and Potential Use: Underground storage.

Military Installation 23

Name and Type: Field Artillery Positions.

Location: 22°06'N-80°33'W, UTM NQ483440.

Shape and Size: Triangular area roughly 1100 feet E side in an open field.

Construction and Condition: Three groups each consisting of 6 revetted FA positions in line, possible trenching immediately north. All positions road served.

Present and Potential Use: FA, AA positions.

Military Installation 24

Name and Type: FA and AA emplacements.

Location: 22°05'N-80°30'W, UTM NQ523427.

Shape and Size: Irregular rectangle, cleared area 1,200 feet x 2,000 feet.

Construction and Condition: (A) 6 or more FA positions some trenching, road served. Cleared area 2,500 feet SE at (B), contains vehicle park, 2 storage type buildings, possible fire control radar, (C) vehicle park/area in woods.

Present and Potential Use: FA and AA positions.

Name

Location

Shape

Construction

Position

Number

(B) po

immedi

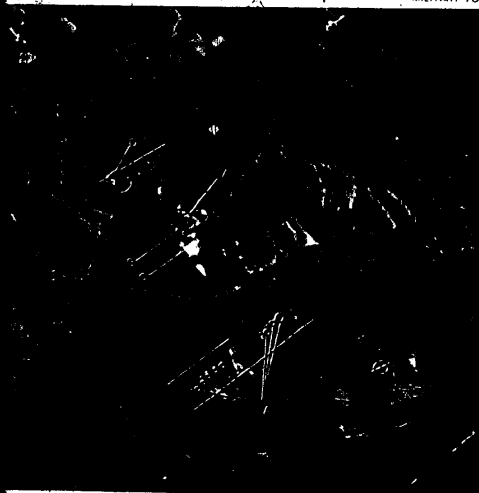
Present

field

PLATE XI-7

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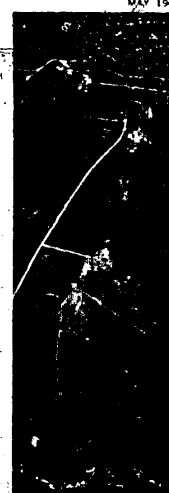


FIGURE XI-11  
APRIL 1963

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FIGURE XI-12  
NOVEMBER 1962



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Installation 1  
ve Positions.  
S. x 3000 feet E-W  
artillery firing positions; (B) camp including  
tions) center; (D) unidentified associated activi-  
assembly area, and gun emplacements.

Installation 2  
600 feet.  
B-type barracks, with 15 more under construc-  
etting, possible storage.

Name and Type: Possible Soviet camp.  
Location: 21°49'N-79°59'W, UTM PQ 054122  
Shape and Size: Triangular, 5500 feet x 5500 feet x 2500 feet.  
Construction and Condition: (A) headquarters building; (B) 12 barracks-type buildings;  
(C) 5 miscellaneous-type buildings; (D) unidentified associated activity; (E) revetments  
and trenching.  
Present and Potential Use: Probably billeting for Soviet personnel.

Name and Type: Trinidad Army Headquarters.  
Location: 21°48'N-79°59'W, UTM PQ040105  
Shape and Size: Irregular rectangle, 1000 feet x 1250 feet x 500 feet x 900 feet.  
Construction and Condition: (A) 3 headquarters buildings; (B) 20 barracks-type buildings;  
(C) 6 miscellaneous buildings; (D) 9 buildings under construction; (E) 4 anti-aircraft  
emplacements. Condition appears good.  
Present and Potential Use: Army Headquarters, billeting for approximately 1000 men.

PLATE XI B

Name and Type: Probable Soviet camp.  
Location: 21°48'N-80°00'W, UTM PQ031102.  
Shape and Size: Circular, approximately 1100 feet in  
diameter.  
Construction and Condition: 15 barracks-type buildings,  
3 storage-type buildings, and 4 miscellaneous buildings.  
Present and Potential Use: Billeting for Soviet per-  
sonnel.

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MILITARY FORCES AND INSTALLATIONS

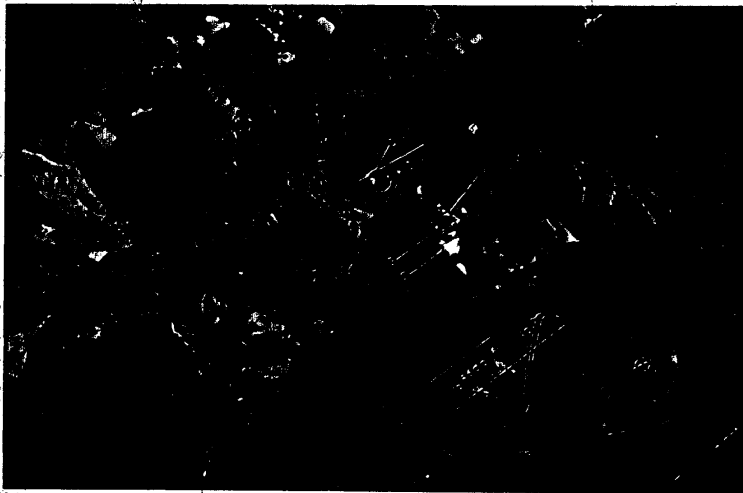


FIGURE XI-10  
APRIL 1963

Military Installation 1

Name and Type: Buena Vista Camp; Defensive Positions.

Location: 21°30'N-79°53'W, UTM PQ152140

Shape and Size: "L"-shaped, 6000 feet N-S x 3000 feet E-W

Construction and Condition: (A) 8 large artillery firing positions; (B) camp including open vehicle park; (C) possible communications center; (D) unidentified associated activity.

Present and Potential Use: Military camp, assembly area, and gun emplacements.

Military Installation 2

Name and Type: Trinidad barracks area.

Location: 21°46'N-79°57'W, UTM PQ082111

Shape and Size: Rectangular, 600 feet x 600 feet.

Construction and Condition: (A) 30 prefab-type barracks, with 15 more under construction; (B) fence line.

Present and Potential Use: Military billeting, possible storage.

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FIGURE XI-11  
APRIL 1963

Military Installation 3

Name and Type: Possible Soviet Camp.

Location: 21°49'N-79°59'W, UTM PQ 054122

Shape and Size: Triangular, 5500 feet x 5500 feet x 2500 feet.

Construction and Condition: (A) headquarters building; (B) 12 barracks-type buildings; (C) 5 miscellaneous-type buildings; (D) unidentified associated activity; (E) revetments and trenching.

Present and Potential Use: Probably billeting for Soviet personnel.

Military Installation 4

Name and Type: Trinidad Army Headquarters.

Location: 21°46'N-79°59'W, UTM PQ040105

Shape and Size: Irregular rectangle, 1000 feet x 1250 feet x 500 feet x 900 feet.

Construction and Condition: (A) 2 headquarters buildings; (B) 20 barracks-type buildings; (C) 6 miscellaneous buildings; (D) 9 buildings under construction; (E) 4 anti-aircraft emplacements. Condition appears good.

Present and Potential Use: Army Headquarters, billeting for approximately 1000 men.

PLATE XI B



FIGURE XI-12  
NOVEMBER 1962

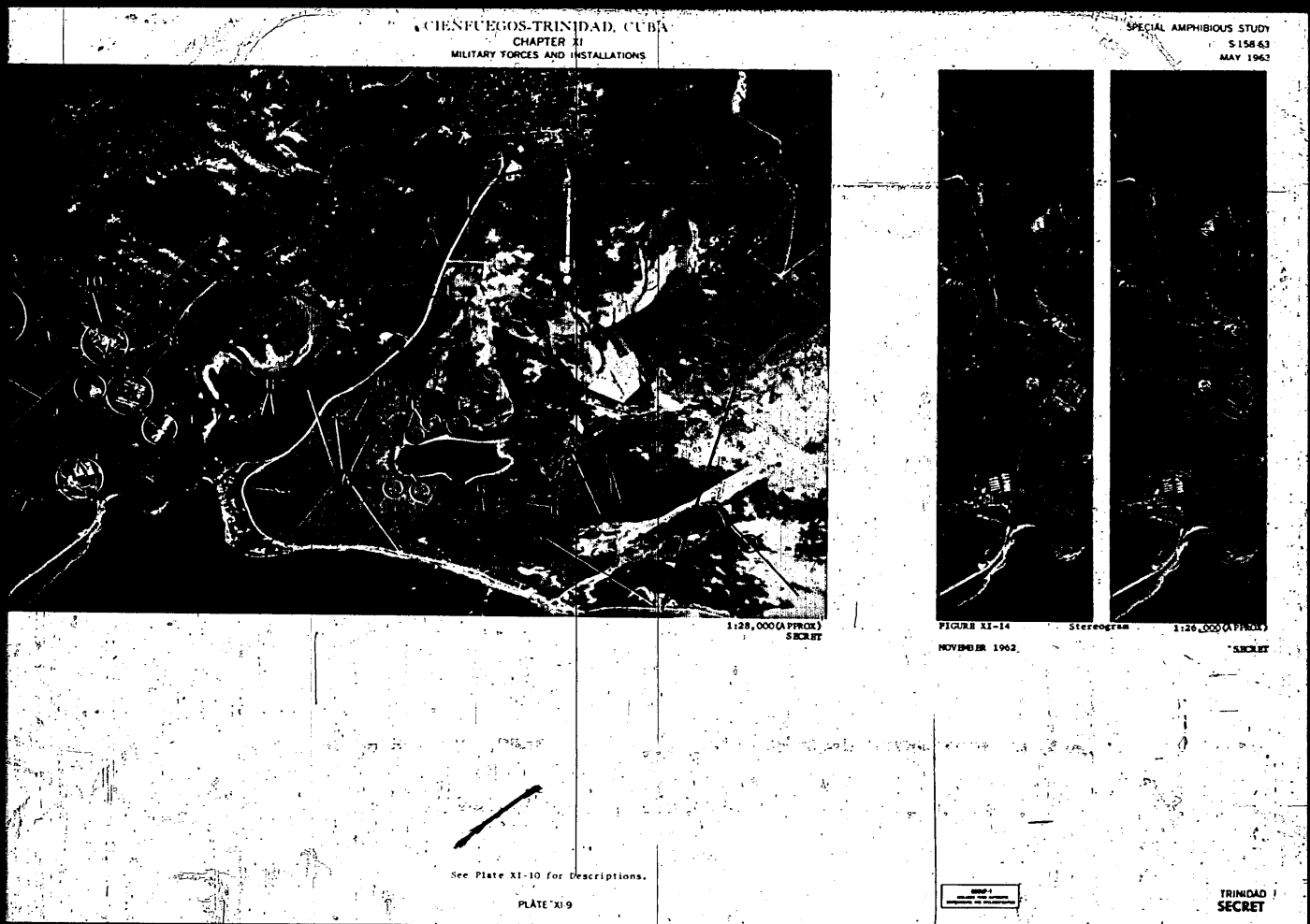
Name and Type:

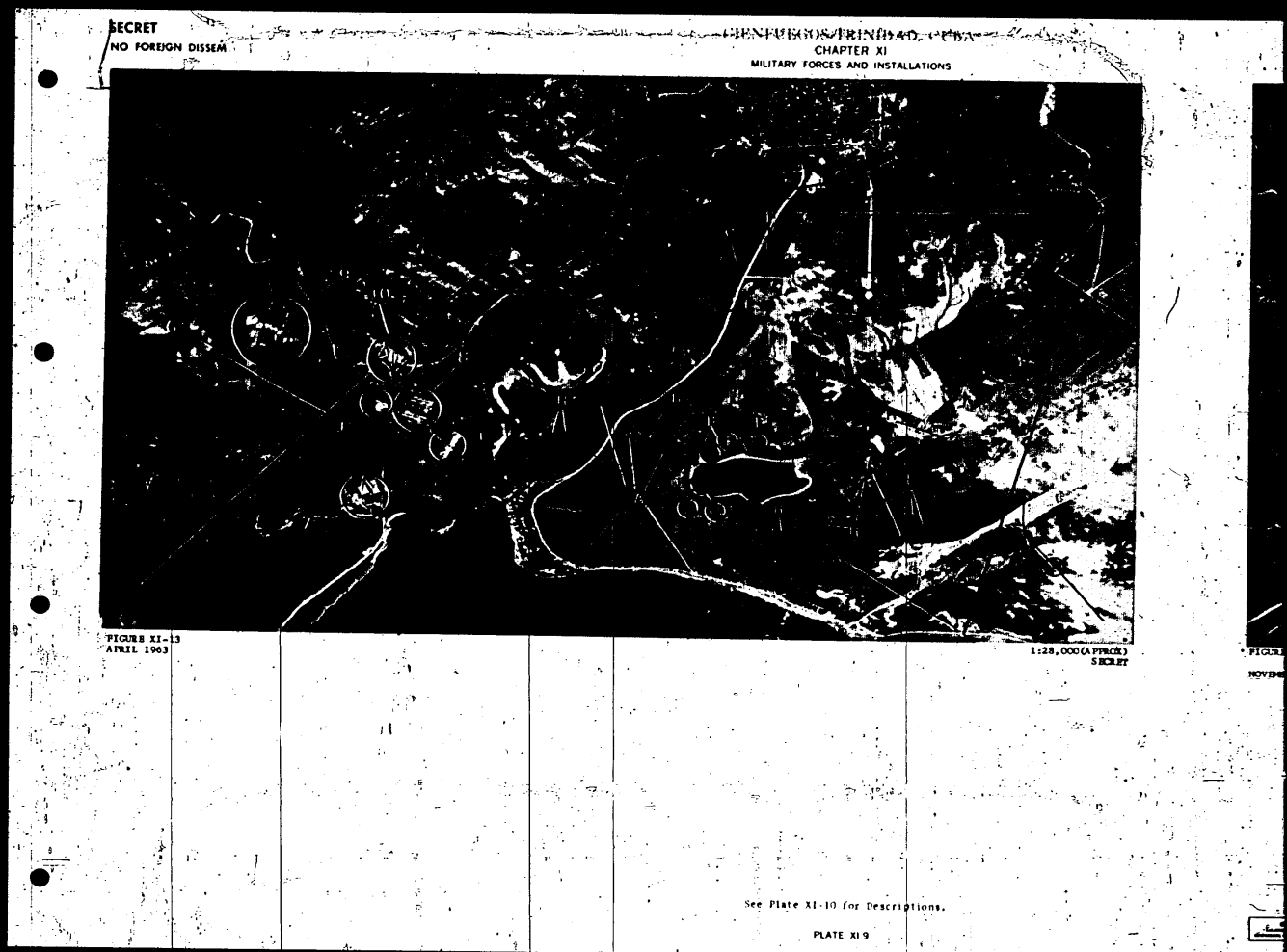
Location: 21°

Shape and Size:

Construction and Condition:

Present and Potential Use:





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Defense of Trinidad.

10 Military bulletin

## : Billeting for a battalion sized unit.

Present and Potential Use: Military storage, with possible underground storage.

Present and Potential Use: Military Headquarters.

PLATE XI 10

TRINIDAD  
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Military Installation 6

Name and Type: Trinidad defensive fortifications.

Location: 21°47'N-80°01'W, UTM PQ020090

Shape and Size: Irregular, covering approximately 4 square miles.

Construction and Condition: Numerous defensive emplacements sited throughout area. (A) anti-tank ditch; (B) anti-aircraft emplacements with radar; (C) 2 3-gun artillery emplacements with possible cave entrance; (D) 5 artillery emplacements; (E) vehicle dispersal area; (F) anti-tank emplacements; (G) 8 mortar emplacements; (H) automatic weapons emplacements; (I) probable anti-aircraft emplacements; (J) defensive strong point sited on hill overlooking route 1-36 on west side of Trinidad.

Present and Potential Use: Defense of Trinidad.

Military Installation 7

Name and Type: Canas River Club Billeting Area.

Location: 21°48'N-80°02'W, UTM NQ992119

Shape and Size: Irregular rectangle, 900 feet x 700 feet.

Construction and Condition: (A) 12 barracks-type buildings; (B) 8 miscellaneous buildings; (C) vehicle park.

Present and Potential Use: Military billeting.

Military Installation 8

Name and Type: Military Camp.

Location: 21°49'N-80°02'W, UTM PQ004118

Shape and Size: Rectangular, 950 feet x 950 feet.

Construction and Condition: 36 barracks-type buildings, 2 administration-type buildings. Condition appears good.

Present and Potential Use: Billeting for a battalion sized unit.

Military Installation 9

Name and Type: Military storage, possible underground storage.

Location: 21°49'N-80°03'W, UTM NQ990138

Shape and Size: Irregular, 1300 feet x 100, at base of hill.

Construction and Condition: (A) 5 warehouse-type buildings; (B) possible cave entrance.

Present and Potential Use: Military storage, with possible underground storage.

Military Installation 10

Name and Type: Probable Military Headquarters.

Location: 21°49'N-80°02'W, UTM NQ998124

Shape and Size: Circular, 580 feet in diameter, sited at base of hill.

Construction and Condition: (A) Headquarters building; (B) anti-aircraft trenchline with automatic weapons emplacements.

Present and Potential Use: Military Headquarters.

PLATE XI 10

GROUP 1  
EXCLUDED FROM AUTOMATIC  
DOWNGRADING AND  
DECLASSIFICATION

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FIGURE XI-16  
MARCH 1963

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See Plate XI-12 for Descriptions.

PLATE XI-11



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FIGURE XI-13  
FEBRUARY 1962

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FIGURE XI-16  
MARCH 1963

See Plate XI-12 for Descriptions.

PLATE XIII

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Military Installation 1

Urban Army Training Camp.

22°25'N-79°35'W, UTM PQ454850.

Irregular, 500 feet x 500 feet.

Condition: At least 17 small tents, one large tent; 40 trucks containing 24 vehicles and several tracked vehicles.

Final Use: Military camp.

Does not appear on photo.

Military Installation 4

Name and Type: Bartolome Cave, storage depot.

Location: 22°25'N-79°35'W, UTM PQ450806, 2 miles southeast of Remedios Camp (Military Installation 1).

Shape and Size: Irregular, 2000 feet x 500 feet.

Construction and Condition: (A) at least 6 revetted storage-type buildings, each about 110 feet x 30 feet, and several smaller buildings; (B) 1 or more cave entrances. Road served from highway immediately to the northeast. Entire area is fenced and secured.

Present and Potential Use: Probable ammunition and explosives storage.

Military Installation 2

Medios Military Camp.

22°25'N-79°35'W, UTM PQ456838; Road served from highway two miles

Irregular rectangle, 3500 feet x 1900 feet, with several

Condition: (A) 11 barracks-type buildings, each about 110 feet x 30 feet, arranged in a single line; (B) small tent area immediately adjacent to vehicle park 2000 feet x 500 feet immediately adjacent to (A). Contains over 300 trucks and vehicles and about 50 field artillery pieces and other equipment. Two elongated areas; (D) 6 gun AAA emplacement, with probable fire control post; and (E) 2 fenced vehicle parks. Entire camp fenced.

Final Use: Military camp; billeting; assembly camp for installation.

Military Installation 5

Name and Type: Military Camp.

Location: 22°26'N-79°34'W, UTM PQ484810 (approximate location).

Shape and Size: Unknown. This camp was established in late March 1963, and does not appear on annotated photograph.

Construction and Condition: Tent area containing 36 large tents, at least two vehicle parks with over 70 unidentified vehicles.

Present and Potential Use: Military camp.

Military Installation 3

Remedios IRBM launch site.

22°25'N-79°34'W, UTM PQ478816.

Irregular rectangle, 2500 feet x 800 feet.

Condition: (A) 4 launch pads; (B) 2 control block houses; support camp site immediately west, containing several hard-roof storage buildings and numerous tent foundations.

Final Use: Former ballistic missile launch site, now and block houses remain.

Military Installation 6

Name and Type: Caribbean SAM Site.

Location: 22°28'N-79°29'W, UTM PQ550855.

Shape and Size: Rectangular, 2000 feet x 1000 feet.

Construction and Condition: (A) 6 unrevetted launch positions; (B) central guidance area; (C) early warning and acquisition radar; (D) hold area, with at least 4 transporters and missiles; (E) support area, with 2 elongated warehouse-type buildings, 6 large squad tents, 8 smaller tents, vehicle park, and second hold area with 7 missile transporters; (F) possible 3-gun AA site; site unfenced, surrounded by bog.

Present and Potential Use: Missile site.

PLATE X-12

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Military Installation 1

Name and Type: Cuban Army Training Camp.  
Location: 22°28'N-79°35'W, UTM PQ456850.  
Shape and Size: Irregular, 500 feet x 500 feet.  
Construction and Condition: At least 17 squad tents, one large tent; at least 2 vehicle parks containing 24 vehicles and several tracked vehicles.  
Present and Potential Use: Military camp.  
Remarks: Does not appear on photo.

Military Installation 4

Name and Type: Bartolome Cave, storage depot.  
Location: 22°25'N-79°33'W, UTM PQ490806, 2 miles east of Camp (Military Installation 1).  
Shape and Size: Irregular, 2000 feet x 500 feet.  
Construction and Condition: (A) at least 6 revealed cave entrances, each about 110 feet x 30 feet, and several smaller ones; road served from highway immediately adjacent to entire area is fenced and secured.  
Present and Potential Use: Probable ammunition and

Military Installation 2

Name and Type: Remedios Military Camp.  
Location: 22°27'N-79°35'W, UTM PQ456838; Road served from highway two miles east.  
Shape and Size: Irregular rectangle, 3500 feet x 1900 feet, with several detached areas.  
Construction and Condition: (A) 11 barracks-type buildings, each about 110 feet x 30 feet, arranged in a single line; (B) small tent area immediately to the north; (C) hardstand vehicle park 2000 feet x 500 feet immediately northwest of barracks. Contains over 300 trucks and vehicles and about 50 tanks and numerous field artillery pieces and other equipment. Two elongated repair sheds nearby; (D) 6 gun AAA emplacement, with probable fire control radar, 1 mile southwest; and (E) 2 fenced vehicle parks. Entire camp fenced and secured.  
Present and Potential Use: Military camp; battalion; assembly camp for Soviet armored battalion.

Military Installation 5

Name and Type: Military Camp.  
Location: 22°26'N-79°34'W, UTM PQ484810 (approximate).  
Shape and Size: Unknown. This camp was established does not appear on annotated photograph.  
Construction and Condition: Tent area containing 36 two vehicle parks with over 70 unidentified vehicles.  
Present and Potential Use: Military camp.

Military Installation 3

Name and Type: Remedios IRBM launch site.  
Location: 22°26'N-79°34'W, UTM PQ478816.  
Shape and Size: Irregular rectangle, 2500 feet x 800 feet.  
Construction and Condition: (A) 4 launch pads; (B) 2 concrete block houses; and (C) former support camp site immediately west, containing several hardstands, an arched-roof storage building, and numerous tent foundations.  
Present and Potential Use: Former ballistic missile launch site, now abandoned. Pads and block houses razed.

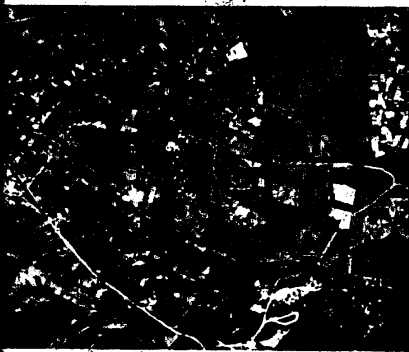
Military Installation 6

Name and Type: Cajabarien SAM Site.  
Location: 22°28'N-79°29'W, UTM PQ550855.  
Shape and Size: Rectangular, 2000 feet x 1000 feet.  
Construction and Condition: (A) 6 unrevetted launch guidance area; (C) early warning and acquisition radar; at least 4 transporters and missiles; (E) support area; house-type buildings; 6 large squad tents; 8 soldier second hold area with 7 missile transporters; (F) gun. Site unfenced; surrounded by bog.  
Present and Potential Use: Missile site.

PLATE XI12

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Military Installation 1  
Military Camp.

M PQ165768, 5.5 nautical miles east of Santa Clara.

Large area, north and south of Central Highway, covering about

(A) 1 large T-shaped, reinforced concrete headquarters building; (B) 6 large, and several smaller elongated storage buildings; (C) vehicle parking areas; (D) gun emplacements; (E) trenching.

Heavy bivouac, storage, assembly area, training camp, and

Military Installation 2

Large storage depot.

M PQ180774, six nautical miles east of Santa Clara, 1000

100 feet x 1000 feet.

(A) over 200 revetted and buried POL tanks, exact size and shape; (B) small tent; (C) vehicle parking areas; (D) 2, and gas structures, shielded by terrain; (E) fence line; (F) guard towers.

Military POL dump.

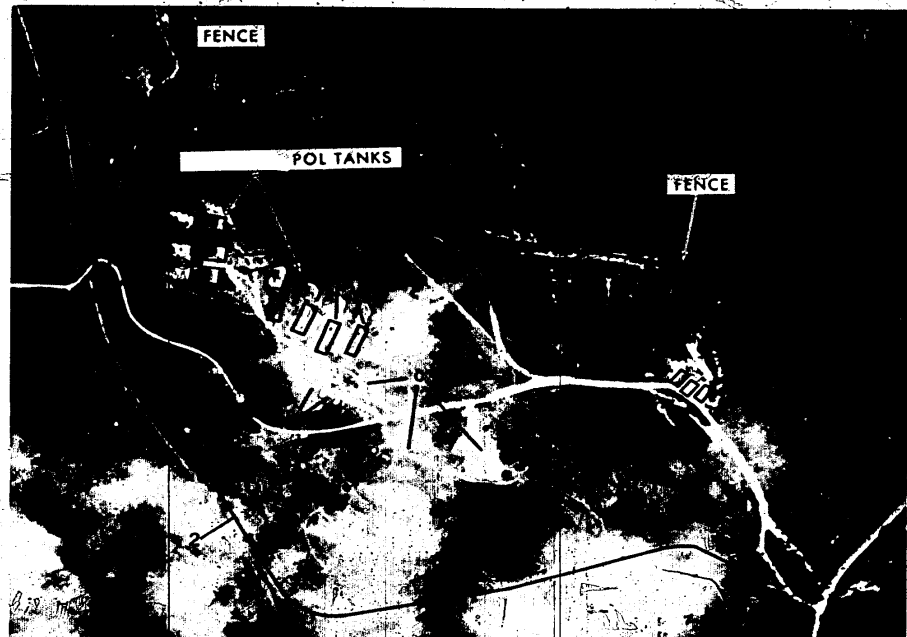


FIGURE XI-18  
NOVEMBER 1962

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PLATE XI-12



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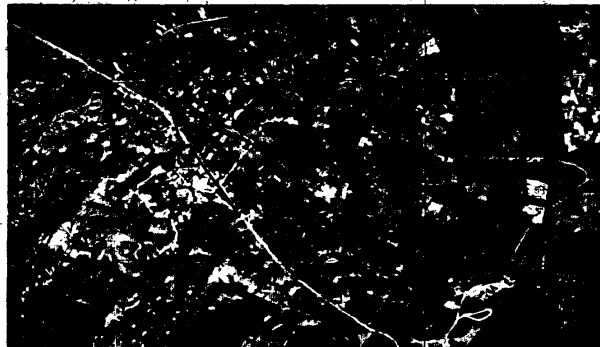


FIGURE XI-17  
NOVEMBER 1962

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#### Military Installation 1

Name and Type: Santa Clara Military Camp.

Location: 22°24'N-79°52'W, UTM PQ165768, 5.5 nautical miles east of Santa Clara.

Shape and Size: Large, irregular area, north and south of Central Highway, covering about 1 square mile.

Construction and Condition: (A) 1 large T-shaped, reinforced concrete headquarters building and 4 barracks-type buildings; (B) 6 large and several smaller elongated storage type buildings; (C) new area, containing 8 barracks-type buildings, several smaller buildings, and a large vehicle park; (D) gun emplacements; (E) trenching.

Present and Potential Use: Military billeting, storage, assembly area, training camp, and headquarters.

#### Military Installation 2

Name and Type: San Ricardo POL storage depot.

Location: 22°24'N-79°51'W, UTM PQ180774; six nautical miles east of Santa Clara, 1000 yards north of Central Highway.

Shape and Type: Irregular, 1500 feet x 1000 feet.

Construction and Condition: (A) over 200 revetted and buried POL tanks, exact sizes unknown; (B) 3 large and several small tents; (C) vehicle parking areas; (D) 2, and possibly 3, revetted warehouse-type structures, shielded by terrain; (E) fence line; (F) possible AA machine guns; (G) guard towers.

Present and Potential Use: Military POL dump.

#### CIENFUEGOS-TRINIDAD, CUBA CHAPTER XI MILITARY FORCES AND INSTALLATIONS

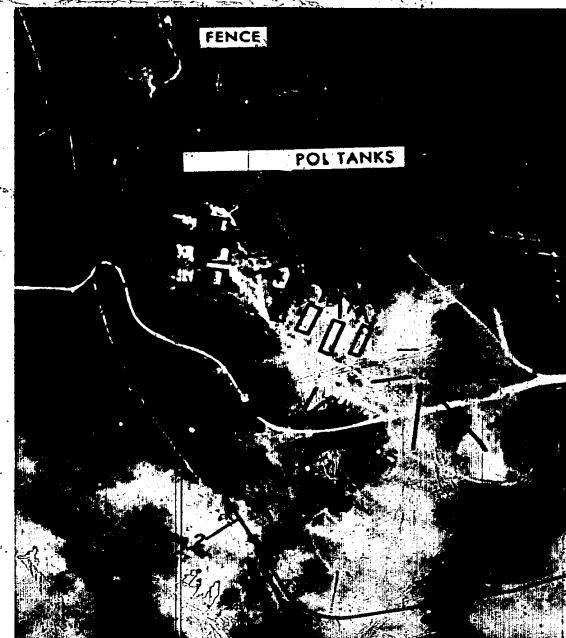


FIGURE XI-18  
NOVEMBER 1962

PLATE XI-13

CIEINFUEGOS-TRINIDAD, CUBA  
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Military Installation 3

Name and Type: Anti-aircraft emplacements.

Location: 22°25'N-80°01'W, UTM PQ011791.

Shape and Size: Irregular rectangle, 300 feet x 300 feet.  
Construction and Condition: (A) 6 medium anti-aircraft guns; (B) possible fire control radar; (C) 6 support buildings; (D) vehicle parking area.

Present and Potential Use: Anti-aircraft defense for city of Santa Clara.

Military Installation 4

Name and Type: Las Mercedes Barracks Area.

Location: 22°24'N-80°01'W, UTM PQ009785.

Shape and Size: Irregular rectangle, 700 feet x 800 feet.

Construction and Condition: 17 elongated barracks-type buildings, and 2 small miscellaneous buildings.

Present and Potential Use: Military billeting and storage.

Military Installation 5

Name and Type: Anti-aircraft emplacements.

Location: 22°23'N-79°57'W, UTM PQ078758.

Shape and Size: Circular, 600 feet in diameter.

Construction and Condition: (A) 4 57mm anti-aircraft emplacements; (B) possible fire control radar.

Present and Potential Use: Anti-aircraft defense for city of Santa Clara.

Military Installation 6

Name and Type: Anti-aircraft emplacements.

Location: 22°23'N-79°57'W, UTM PQ083762.

Shape and Size: Irregular, 900 feet x 600 feet.

Construction and Condition: (A) 6 anti-aircraft emplacements; (B) 2 fire control radar; (C) tent area; (D) probable warehouse under construction; (E) 2 probable gun positions, scattered trenching throughout area.

Present and Potential Use: Anti-aircraft defense of city of Santa Clara.

Military Installation 7

Name and Type: Santa Clara Military Camp.

Location: 22°22'N-80°01'W, UTM PQ025745.

Shape and Size: Unknown.

Construction and Condition: 8 barracks-type buildings; 2 anti-aircraft emplacements; large vehicle park with scattered trenching throughout.

Present and Potential Use: Military billeting and storage.

Remarks: No photo available.

PLATE XI-14

SPECIAL AMPHIBIOUS STUDY  
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FIGURE XI-20  
MARCH 1963

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FIGURE XI-19  
MARCH 1963

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# CIENFUEGOS-TRINIDAD, CUBA

## CHAPTER XI MILITARY FORCES AND INSTALLATIONS

### Military Installation 3

Name and Type: Anti-aircraft emplacements.

Location: 22°23'N-80°01'W, UTM PQ011791.

Shape and Size: Irregular rectangle, 800 feet x 500 feet.

Construction and Condition: (A) 6 medium anti-aircraft guns; (B) possible fire control radar; (C) 6 support buildings; (D) vehicle parking area.

Present and Potential Use: Anti-aircraft defense for city of Santa Clara.

### Military Installation 4

Name and Type: Las Mercedes Barracks Area.

Location: 22°24'N-80°01'W, UTM PQ009785.

Shape and Size: Irregular rectangle, 700 feet x 800 feet.

Construction and Condition: 17 elongated barracks-type buildings, and 2 small miscellaneous buildings.

Present and Potential Use: Military billeting and storage.

### Military Installation 5

Name and Type: Anti-aircraft emplacements.

Location: 22°23'N-79°53'W, UTM PQ078758.

Shape and Size: Circular, 600 feet in diameter.

Construction and Condition: (A) 4 57mm anti-aircraft emplacements; (B) possible fire control radar.

Present and Potential Use: Anti-aircraft defense for city of Santa Clara.

### Military Installation 6

Name and Type: Anti-aircraft emplacements.

Location: 22°23'N-79°53'W, UTM PQ083762.

Shape and Size: Irregular, 900 feet x 600 feet.

Construction and Condition: (A) 6 anti-aircraft emplacements; (B) 2 fire control radar; (C) tent area; (D) probable warehouse under construction; (E) 2 probable gun positions, scattered trenching throughout area.

Present and Potential Use: Anti-aircraft defense of city of Santa Clara.

### Military Installation 7

Name and Size: Santa Clara Military Camp.

Location: 22°22'N-80°01'W, UTM PQ025745.

Shape and Size: Unknown.

Construction and Condition: 8 barracks-type buildings; 2 anti-aircraft emplacements; large vehicle park with scattered trenching throughout.

Present and Potential Use: Military billeting and storage.

Remarks: No photo available.

FIGURE XI-20  
MARCH 1963

PLATE XI-14

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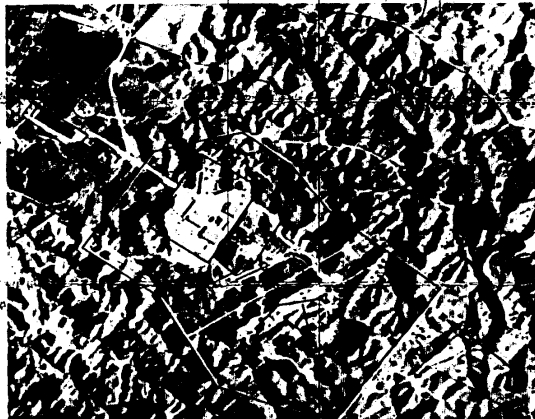


FIGURE XI-22  
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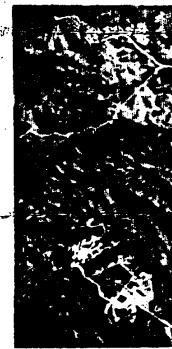
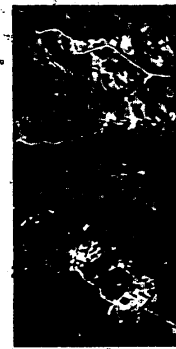


FIGURE XI-23  
APRIL 1963



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Military Installation 26

Site.

17Q PQ560110.

angle, 1000 feet N-S x 800 feet E-W.

6 unrevetted launch positions; (B) central guidance  
E; (D) hold area; (E) service and support areas con-  
crete buildings and tent area; and (F) vehicle parks.  
secondary highway from Sancti Spiritus.

aircraft missile site.

Military Installation 27

Name and Type: Underground storage depot.

Location: 22°08' N-80°04' W, UTM 17Q NK256486.

Shape and Size: Irregular rectangle, 1000 feet x 800 feet.

Construction and Condition: (A) 6, possibly 7, revetted buildings, shielded by terrain;  
(B) 2 possible cave entrances. Area road-served, fenced and secured; (C) security  
fence; (D) former storage warehouses and quarters for workers, now reported militia  
barracks and military storage; (E) probable concrete and clay products plant.

Present and Potential Use: Military storage, possibly explosives.

PLATE XI15

SECRET

SECRET  
NO FOREIGN DISSEM



FIGURE XI-21  
APRIL 1963

1:24,000 (APPROX)  
SECRET

CIENFUEGOS, TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS



FIGURE XI-22  
JANUARY

1:11,500  
SECRET

#### Military Installation 26

Name and Type: Sancti Spiritus Sea Site.

Location: 21°48'N-79°30'W, UTM 17Q HQ360110.

Shape and Size: Irregular rectangle, 1000 feet N-S x 800 feet E-W.

Construction and Condition: (A) 6 unrevetted launch positions; (B) central guidance area; (C) early acquisition radar; (D) hold area; (E) service and support areas containing at least 4 elongated barracks buildings and tent area; and (F) vehicle parks. Site is served by dirt road off secondary highway from Sancti Spiritus.

Present and Potential Use: Anti-aircraft missile site.

#### Military Installation 27

Name and Type: Underground storage depot.

Location: 22°08'N-80°04'W, UTM 17Q HQ356486.

Shape and Size: Irregular rectangle, 1000 feet x 800 feet.

Construction and Condition: (A) 6; possibly 7, revetted buildings; (B) 2 possible cave entrances. Area road-served, fenced and secured by a fence; (D) former storage warehouses and quarters for workers; (E) barracks and military storage; (F) probable concrete and clay pits.

Present and Potential Use: Military storage, possibly explosive.

PLATE X015

## CIENFUEGOS, TRINIDAD, CUBA

CHAPTER XI  
MILITARY FORCES AND INSTALLATIONSSPECIAL AMPHIBIOUS STUDY  
S-158 63  
MAY 1963VIEW NORTHWEST  
SECRETFIGURE XI-25  
MARCH 1963FIGURE XI-26  
APRIL 1963  
1:24,000 (A PPRCK)  
SECRET

ation 28  
storage (probable explosives).  
335; 3.5 nautical miles south of  
ad.  
about 2000 feet N-S and 500 feet E-W.  
reinforced concrete tunnel en-  
(B) 3 elongated warehouse-type  
(one is possibly barracks); (C)  
served by dirt roads from secondary  
storage.

## Military Installation 29

**Name and Type:** Leon San Juan Storage and Military Camp.**Location:** 21°55'N-80°16'W, UTM NQ 770241.**Shape and Size:** Irregular triangle, 1000 feet x 1200 feet x 800 feet.**Construction and Condition:** (A) 3 large (100 feet x 40 feet) revetted storage type buildings, and 2 large and several smaller unrevetted buildings; (B) elongated barracks-type building under construction; (C) vehicle parking area in trees; (D) gun emplacements on hilltops; (E) trenching; and (F) probable fence line. Camp is served by dirt road off route 4-36 immediately adjacent to north. Two buildings still under construction.**Present and Potential Use:** Military storage (probably ammunition) and billeting.

## Military Installation 30

**Name and Type:** Probable munition factory and storage.**Location:** 22°18'N-80°39'W, UTM NQ 370662.**Shape and Size:** Rectangular, 2800 feet x 2200 feet.**Construction and Condition:** (A) 4 storage-type buildings, 200 feet x 50 feet; (B) 2 factory-type buildings, 190 feet x 150 feet, with full length sky lights, CBS with girdes roofs; (C) 40 demolition bunkers widely scattered throughout the site. Entire area fenced and secured.**Present and Potential Use:** Munitions factory and storage.

PLATE XI-16

SECRET

SECRET  
NO FOREIGN DISSEM

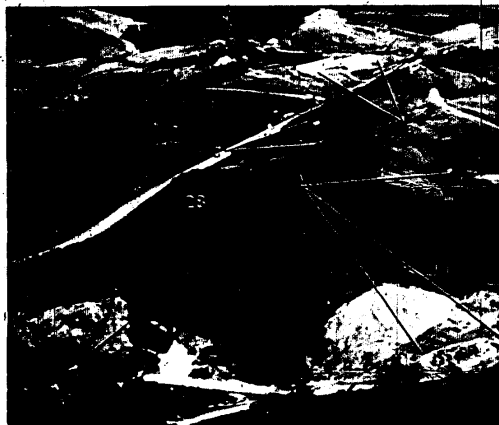


FIGURE XI-24  
NOVEMBER 1962

VIEW NORTHWEST  
SECRET

**Military Installation 28.**

**Name and Type:** Manicaragua, underground storage (probable explosives).

**Location:** 22°06'N-79°58'W, UTM 17Q PQ055435; 3.5 nautical miles south of Manicaragua, on east side of secondary road.

**Shape and Size:** Irregular, site covers about 2000 feet N-S and 500 feet E-W.

**Construction and Condition:** (A) 6 or more reinforced concrete tunnel-type entrances, average width of each, 12 feet; (B) 3 elongated warehouse-type structures, about 120 feet x 30 feet each (one is possibly barracks); (C) both areas fenced and secured. All areas served by dirt roads from secondary road.

**Present and Potential Use:** Underground storage.

CIEINFUEGOS-TRINIDAD, CUBA  
CHAPTER XI  
MILITARY FORCES AND INSTALLATIONS



FIGURE XI-25  
MARCH 1963

1:26,000 (APPROX)  
SECRET

**Military Installation 30.**

**Name and Type:** Loma San Juan Storage and Military Camp.

**Location:** 21°55'N-80°16'W, UTM NQ 770241.

**Shape and Size:** Irregular triangle, 1000 feet x 1200 feet x 800 feet.

**Construction and Condition:** (A) 3 large (100 feet x 40 feet) revetted storage type buildings, and 2 large and several smaller unrevetted buildings; (B) elongated barracks-type building under construction; (C) vehicle parking area in trees; (D) gun emplacements on hilltops; (E) trenching; and (F) probable fence line. Camp is served by dirt road off route 4-36 immediately adjacent to north. Two buildings still under construction.

**Present and Potential Use:** Military storage (probably ammunition) and billeting.

FIGURE XI-26  
APRIL 1963

**Military**

**Name and Type:** Probable ammunition.

**Location:** 22°18'N-80°39'W, UTM NQ

**Shape and Size:** Rectangular, 2800

**Construction and Condition:** (A) 2 factory-type buildings, 190 CBS with girded roofs; (C) 40 dem the site. Entire area fenced and

**Present and Potential Use:** Munitions

PLATE XI 16

# CIENFUEGOS-TRINIDAD, CUBA

## CHAPTER XII MAP, CHART AND AERIAL PHOTO COVERAGE

Symbol: AMS

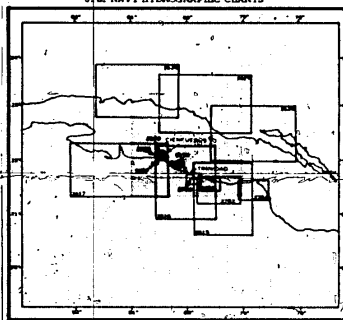
Source: Compiled by ECC by stereophotogrammetric methods from aerial photography, United States and Cuban hydrographic charts, grid revised and bilingual data added by AMS.

Characteristics: Provincial, municipal and military reservation boundaries delineated; relief indicated by contours at 10, 20, and 40 meter intervals as shown on terrain; heights in meters; populated places are indicated by listed block patterns conforming to shape and/or building symbols; roads classified according to surface, width and weatherability; railroads classified by number of tracks and gauge; airfields and landing areas delineated; vegetation symbolized; shoreline and offshore features delineated; bilingual (English-Spanish).

### C. Hydrographic Charts

The Objective Area has complete hydrographic chart coverage. H.O. Charts 2015, 2016, and 2017 afford the best coverage and are included in this study.

### U.S. NAVY HYDROGRAPHIC CHARTS



- H.O. 2007 Entrance to CIENFUEGOS BAHIA (Scale 1:65,400)  
H.O. 2008 BAHIA DE CIENFUEGOS (Cuba) 1:15,000  
H.O. 2009 CIENFUEGOS BAHIA (Cuba) 1:15,000  
H.O. 2015 YUCHARO to MANATI (Cuba) 1:145,400  
H.O. 2016 TUNAL DE ZAZA to BAHIA DE CIENFUEGOS (Cuba) 1:140,000  
H.O. 2017 BAHIA DE CIENFUEGOS to CANAL DEL ROYAL (Cuba) 1:144,000  
H.O. 2024 MATANZAS to CATO BAHIA DE CAJES (Cuba) 1:141,540  
H.O. 2025 CATO BAHIA DE CAJES to CATO SANTA MARIA (Cuba) 1:144,120  
H.O. 2781 YUCHARO and Approaches (Cuba) 1:50,000  
H.O. 2782 CRANIAS SUR to MANATI R. (Cuba) 1:72,034  
H.O. 2783 PORTO CASILLA and MAJADO and Approaches (Cuba) 1:30,000  
H.O. 5156 TUNAL DE ZAZA and Approaches (Cuba) 1:36,321  
H.O. 5158 River Entrances to South Coast of Cuba, Various Scales

### D. Combat Chart

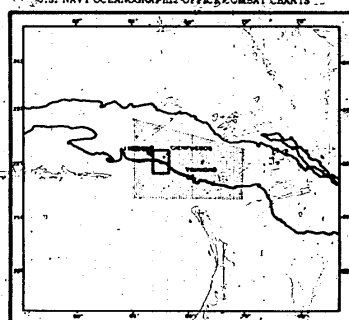
There is one U.S. Navy Oceanographic Office combat chart in the Objective Area. This chart covers the Cienfuegos Bahía area at a scale of 1:50,000.

## SPECIAL AMPHIBIOUS STUDY

9-158-63

MAY 1963

## U.S. NAVY OCEANOGRAPHIC OFFICE COMBAT CHARTS



1150-50-5 CUBA, SOUTH COAST, CIENFUEGOS 1:50,000  
NAVY OFFICE FOREIGN EDITION

### E. Aeronautical Charts

There are no U.S. Air Force Aeronautical Charts of a medium or large scale in the Objective Area.

### F. Aerial Photography

Selected aerial photography is available covering approximately 80 percent of the Area at scales of 1:21,000 to 1:25,000. It is good to excellent quality vertical photography dated 10 November 1962 and 14 April 1963. The following is a list of photographs by mission number, camera position and exposure number.

### SELECTED PHOTOGRAPHS

| Mission Number | Camera Position | Exposure Numbers     |
|----------------|-----------------|----------------------|
| 2158-GR        | V               | 005-0718, 0020-0025  |
| 2158-GR        | 1L              | 0024-0029            |
| 2158-GR        | 1R              | 0021-0024, 0709-0028 |
| 2158-GR        | V               | 0141-0261            |
| 2158-GR        | 1L              | 0140-0260            |
| 2158-GR        | 1R              | 143-0262             |
| 2158-GR        | V               | 0131-0261            |
| 2158-GR        | 1L              | 0130-0260            |
| 2158-GR        | 1R              | 0133-0277            |
| 2158-GR        | V               | 0081-0301            |
| 2158-GR        | 1L              | 0080-0300            |
| 2158-GR        | 1R              | 0082-0302            |
| 2158-GR        | V               | 0010-0308            |
| 2158-GR        | 1L              | 0009-0309            |
| 2158-GR        | 1R              | 1317-0304            |
| 2158-GR        | V               | 0730-0705            |
| 2158-GR        | 1L              | 0730-0706            |
| 2158-GR        | 1R              | 0731-0701            |
| 2158-GR        | V               | 0715-0705            |
| 2158-GR        | 1L              | 0705-0704            |
| 2158-GR        | 1R              | 0721-0706            |

GROUP 1  
EXCLUDED FROM AUTOMATIC  
DOWNGRADING AND  
DECLASSIFICATION

SECRET

## SECRET

## A. General

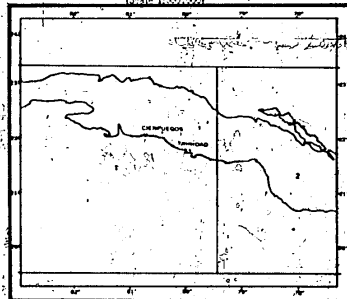
This chapter lists and evaluates the map, chart, and aerial photographic coverage of the Cienfuegos - Trinidad, Cuba Objective Area. It deals only with those maps, charts, and aerial photography which are currently available in quantity from U.S. sources. The principal sources are: Army Map Service (AMS) and U.S. Navy Oceanographic Office (USNO) for maps and charts; and U.S. Navy Photo Interpretation Center (USNIPC) for photography.

For description, appraisal, and information regarding availability of special maps and charts, refer to Chapter IX, National Intelligence Survey, (NIS) 78, Cuba.

## B. Topographic Maps

The most complete up-to-date, medium-scale topographic map coverage of the Area is provided by the AMS E502 West Indies (Cuba) 1:50,000 series produced by Army Map Service. Four sheets of this series are the base map for this study. These sheets were compiled in 1960 from an AMS Cuba 1:50,000 series (AMS E502) and the USNO Charts 2010, 2011, 2014, 1920. The road and railroad information was field checked in 1960. There is also a 1:500,000 AMS Series available of this Area.

The largest scale map series providing complete coverage is the AMS E73 Cuba 1:10,000 series. This series was copied in 1960 from the (Cuba) Instituto Cubano de Cartografia y Catastro (ICCC) 1:10,000 series produced in 1957, by photogrammetric methods from aerial photography dated 1946-1957. The AMS series has not been completely field checked. The fences and boundaries shown do not always indicate property lines. Road and railroad information, however, was field checked in 1960. There is also a 1:100,000 AMS Series available of this Area. No 1:100,000 map coverage is available.



SERIES DESCRIPTION

Type: Topographic; monochromatic; 2 half-sheets covering entire island.

Format: 37N-3 x 11° E-W (approximately); includes both sheets.

Symbols: Modified standard.

Sources: Compiled from data taken from original strategic maps of the Chief of the Army of Cuba.

Characteristics: Provincial boundaries delineated; cities classified with larger one outlined true to shape, minor ones by appropriate building symbols; communications classified; navigation routes (air and water) shown; relief shown by hachuring; army posts, camp areas, central major units, and other cultural features symbolized; offshore and foreground details included; text completely in Spanish.

All map sheets are available.

## CIENFUEGOS-TRINIDAD, CUBA

## CHAPTER XII

## MAP, CHART, AND AERIAL PHOTO COVERAGE

Symbols: AMS

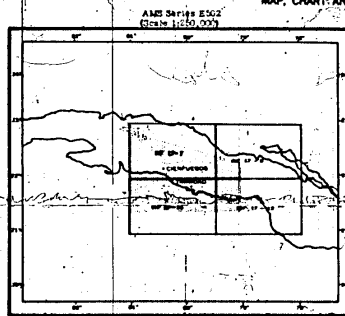
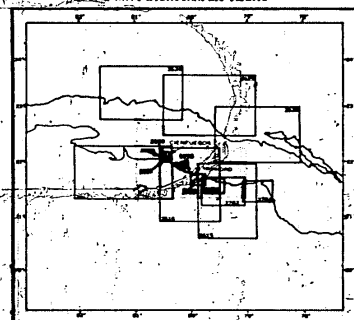
Source: Compiled by USNIPC by stereophotogrammetric methods from aerial photography, United States and Cuban hydrographic charts, grid overlays and bilingual data added by AMS.

Characteristics: Provincially municipal and military reservation boundaries delineated; relief indicated by contours at 10, 20, and 40 meter intervals as suited to terrain; heights in meters; populated places are indicated by tinted block patterns conforming to shape and/or building symbols; roads classified according to surface, width and weatherability; railroads classified by number of tracks and gauge; airfields and landing areas delineated; vegetation symbolized; harbors and offshore features delineated; bilingual (English-Spanish).

## C. Hydrographic Charts

The Objective Area has complete hydrographic chart coverage. H.O. Charts 2010, 2011, and 2017 afford the best coverage and are included in this study.

## U.S. NAVY HYDROGRAPHIC CHARTS



SERIES DESCRIPTION

Type: Topographic; multicolor.

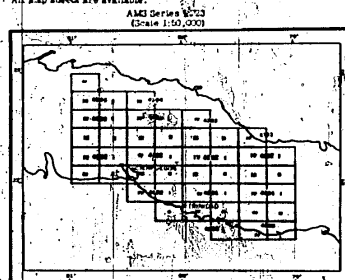
Format: 10° N-3 x 10° E-W; Transverse Spheroidal Projection with 12,000 meter UTM Grid based on Clarke 1866 Spheroid and 1927 North American datum.

Symbols: AMS.

Source: Prepared by AMS from large scale maps, U.S. Navy Hydrographic Charts and aerial photography.

Characteristics: Provincial boundaries shown. Relief indicated by contours at 20 meter intervals with 10 meter supplemental contours. Populated places shown by tinted block pattern. Roads classified according to surface, width, and weatherability with route numbers. Railroads classified according to number of tracks and gauge. Vegetation symbolized. Shores and offshore details indicated. Bilingual (English-Spanish) marginal data and glossary.

All map sheets are available.



SERIES DESCRIPTION

Type: Topographic; multicolor.

Format: 10° N-3 x 10° E-W; Transverse Mercator projection; 1,000 meter UTM grid based on Clarke 1866 spheroid and 1927 North American datum.

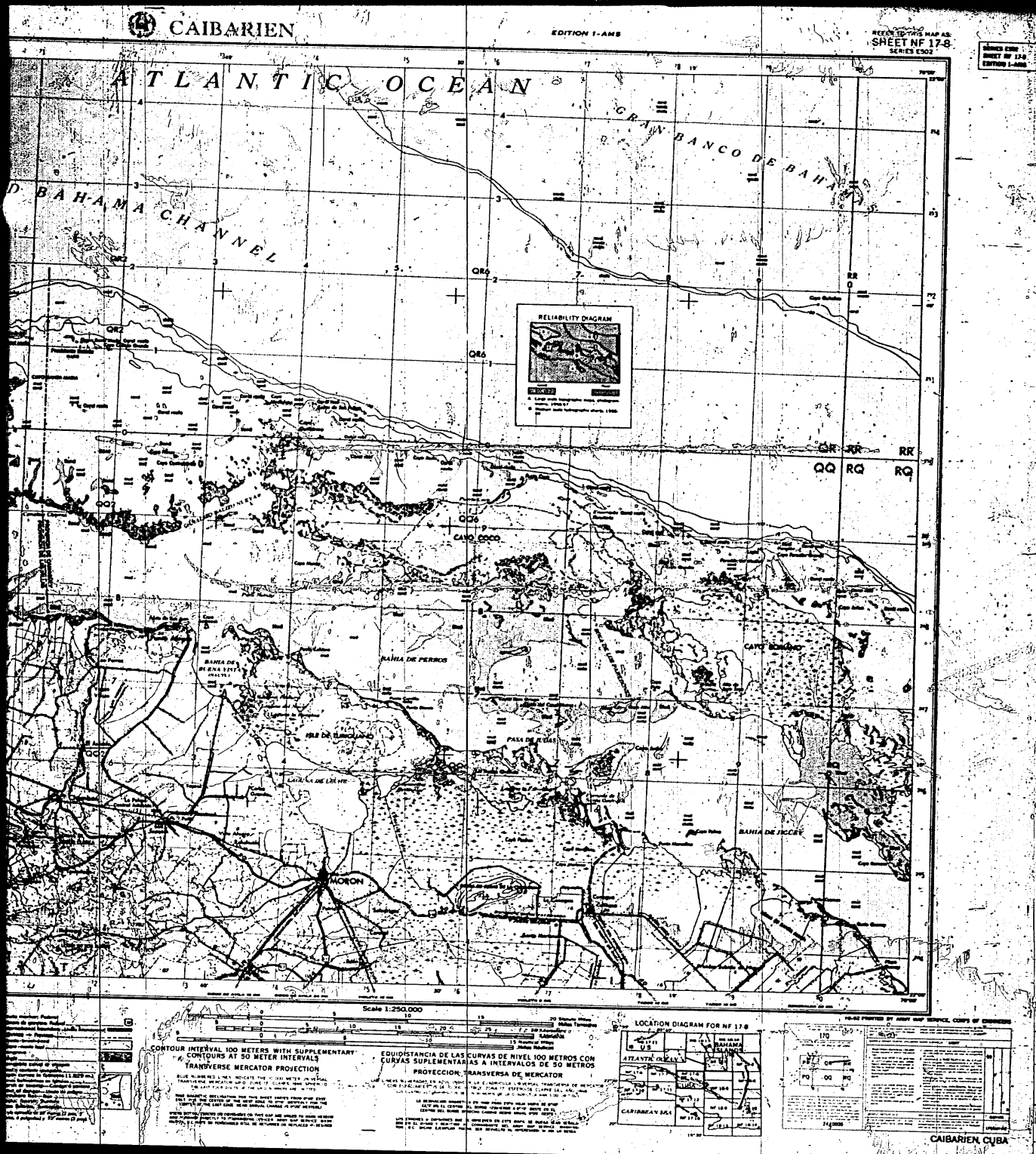
- H.O. 2007 Entrance to CIENFUEGOS BAHIA (Cuba) 1:60,400
- H.O. 2008 BAHIA DE CIENFUEGOS (Cuba) 1:60,400
- H.O. 2009 CIENFUEGOS HARBOR (Cuba) 1:60,400
- H.O. 2010 ZUCAR to MANATI (Cuba) 1:140,400
- H.O. 2011 TUNAS DE ZAZA to BAHIA DE CIENFUEGOS (Cuba) 1:140,400
- H.O. 2012 BAHIA DE CIENFUEGOS to CANAL DEL NOROCC including GOLFO DE CAZONES (Cuba) 1:140,400
- H.O. 2013 MATANZAS to CATO BAHIA DE CAJES (Cuba) 1:140,400
- H.O. 2014 CATO BAHIA DE CAJES to CATOS SANTA MARIA (Cuba) 1:140,400
- H.O. 2015 CATOS SANTA MARIA to CATO PAREDON GRANDE (Cuba) 1:140,400
- H.O. 2016 ZUCAR and Approaches (Cuba) 1:60,400
- H.O. 2017 CIENFUEGOS BAHIA to MANATI R. (Cuba) 1:72,000
- H.O. 2018 PUNTA CAJALIA and MATO and Approaches (Cuba) 1:20,000
- H.O. 2019 TUNAS DE ZAZA and Approaches (Cuba) 1:30,000
- H.O. 2020 River Entrances to South Coast of Cuba, Various Scales

## D. Combat Charts

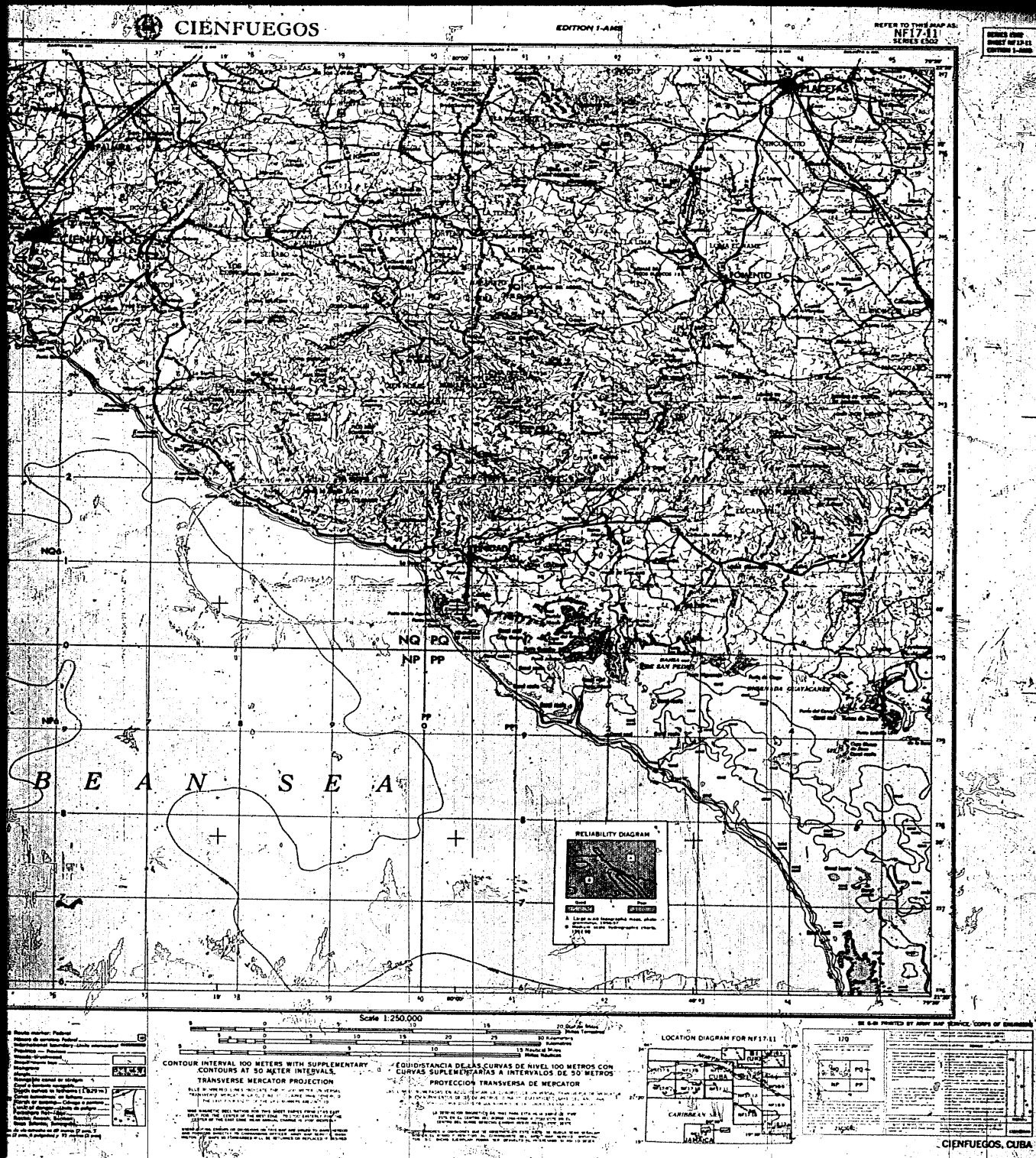
There is one U.S. Navy Oceanographic Office combat chart in the Objective Area. This chart covers the Cienfuegos Bahía Area at a scale of 1:50,000.











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GOVERNMENT OFFICIALS ONLY


**CIENFUEGOS**

that Army Map Service (AMS), Corps of Engineers, Springfield, Wash DC reported in 1961 from Cuba a 50,000 AMS. (AMS 11/24/61)  
 2. And 2618, 1957, 2617, 1958 Road and railroad information (see) (see)

[illegible]

POPULATED PLACES          

**HAYANA**  
**CARDENAS**

20. J. A. G. G. CARDENAS A.  
 21. J. A. G. G. TRINIDAD A.  
 22. J. A. G. G. Madrid A.

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| 9. 4. 2000  |             |

1. The first step is to identify the problem.
 2. The second step is to define the problem.
 3. The third step is to analyze the problem.
 4. The fourth step is to develop a solution.
 5. The fifth step is to implement the solution.
 6. The sixth step is to evaluate the solution.
 7. The seventh step is to monitor the solution.
 8. The eighth step is to maintain the solution.
 9. The ninth step is to improve the solution.
 10. The tenth step is to document the solution.

100-443887-100

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 3. TIME \_\_\_\_\_  
 4. LOCATION \_\_\_\_\_  
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 7. WAVE \_\_\_\_\_  
 8. SEA \_\_\_\_\_  
 9. SKY \_\_\_\_\_  
 10. MOON \_\_\_\_\_  
 11. STARS \_\_\_\_\_  
 12. PLANETS \_\_\_\_\_  
 13. COMETS \_\_\_\_\_  
 14. NEBULAE \_\_\_\_\_  
 15. OTHER \_\_\_\_\_

*(continued from page 6)*

1. *Translating the text into English*  
 2. *Translating the text into Spanish*  
 3. *Translating the text into French*  
 4. *Translating the text into German*  
 5. *Translating the text into Italian*  
 6. *Translating the text into Japanese*  
 7. *Translating the text into Korean*  
 8. *Translating the text into Russian*  
 9. *Translating the text into Chinese*  
 10. *Translating the text into Hindi*  
 11. *Translating the text into Urdu*  
 12. *Translating the text into Bengali*  
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 15. *Translating the text into Malayalam*  
 16. *Translating the text into Kannada*  
 17. *Translating the text into Marathi*  
 18. *Translating the text into Gujarati*  
 19. *Translating the text into Odia*  
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 35. *Translating the text into Greek*  
 36. *Translating the text into Latin*  
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1. **Project Name:** [Project Name]  
 2. **Project Manager:** [Project Manager]  
 3. **Project Sponsor:** [Project Sponsor]  
 4. **Project Start Date:** [Project Start Date]  
 5. **Project End Date:** [Project End Date]  
 6. **Project Budget:** [Project Budget]  
 7. **Project Status:** [Project Status]  
 8. **Project Description:** [Project Description]  
 9. **Project Objectives:** [Project Objectives]  
 10. **Project Deliverables:** [Project Deliverables]  
 11. **Project Risks:** [Project Risks]  
 12. **Project Issues:** [Project Issues]  
 13. **Project Communication:** [Project Communication]  
 14. **Project Stakeholders:** [Project Stakeholders]  
 15. **Project Milestones:** [Project Milestones]  
 16. **Project Resources:** [Project Resources]  
 17. **Project Tools:** [Project Tools]  
 18. **Project Templates:** [Project Templates]  
 19. **Project Reports:** [Project Reports]  
 20. **Project Documents:** [Project Documents]

1. **Address:** \_\_\_\_\_  
 2. **City:** \_\_\_\_\_  
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Nov. 2000 range is stream  
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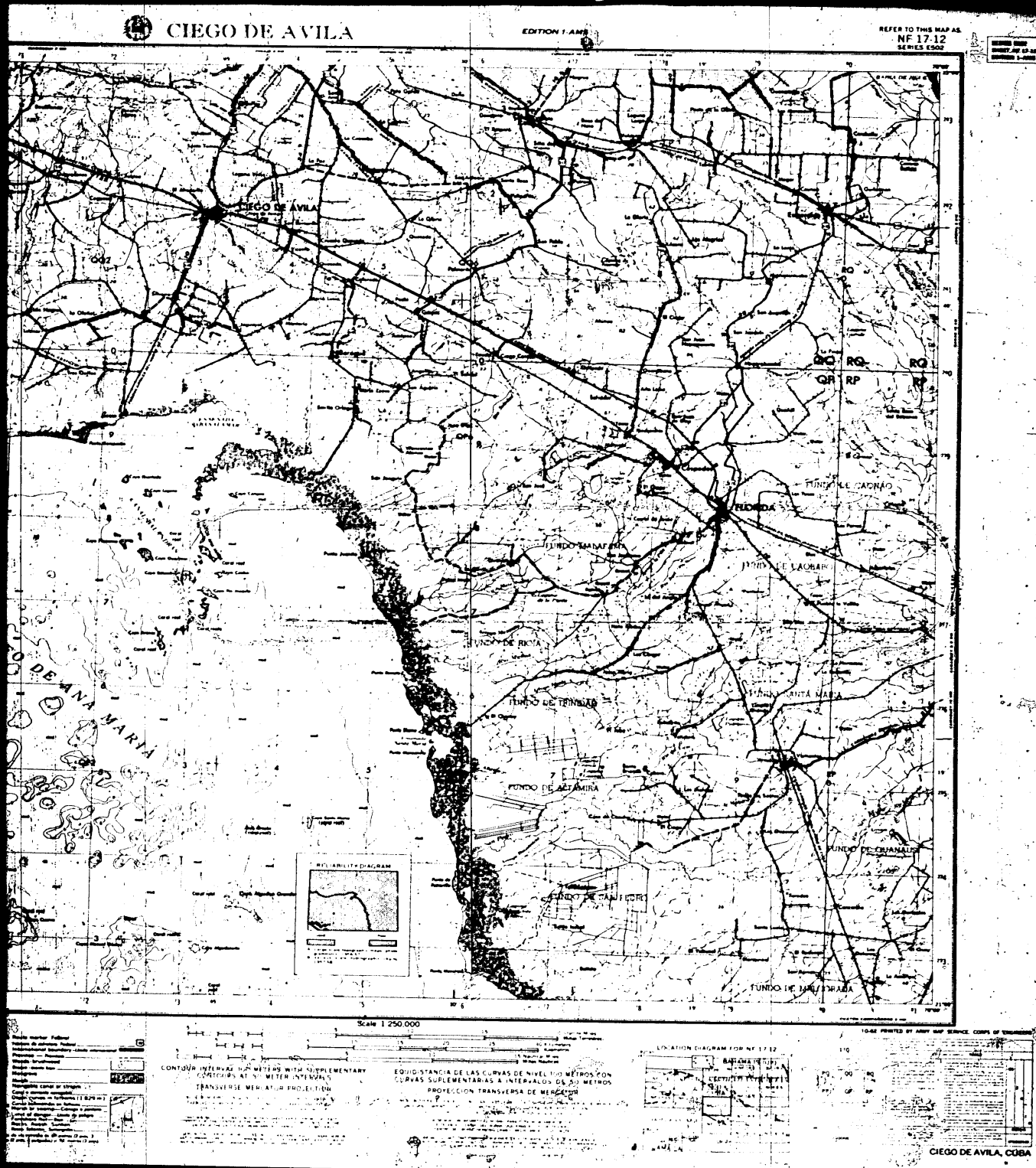
A horizontal ruler with markings in both inches and centimeters. The inch scale is at the top, with markings from 0 to 10. The centimeter scale is at the bottom, with markings from 0 to 10. The ruler is used to measure the length of the object being described.

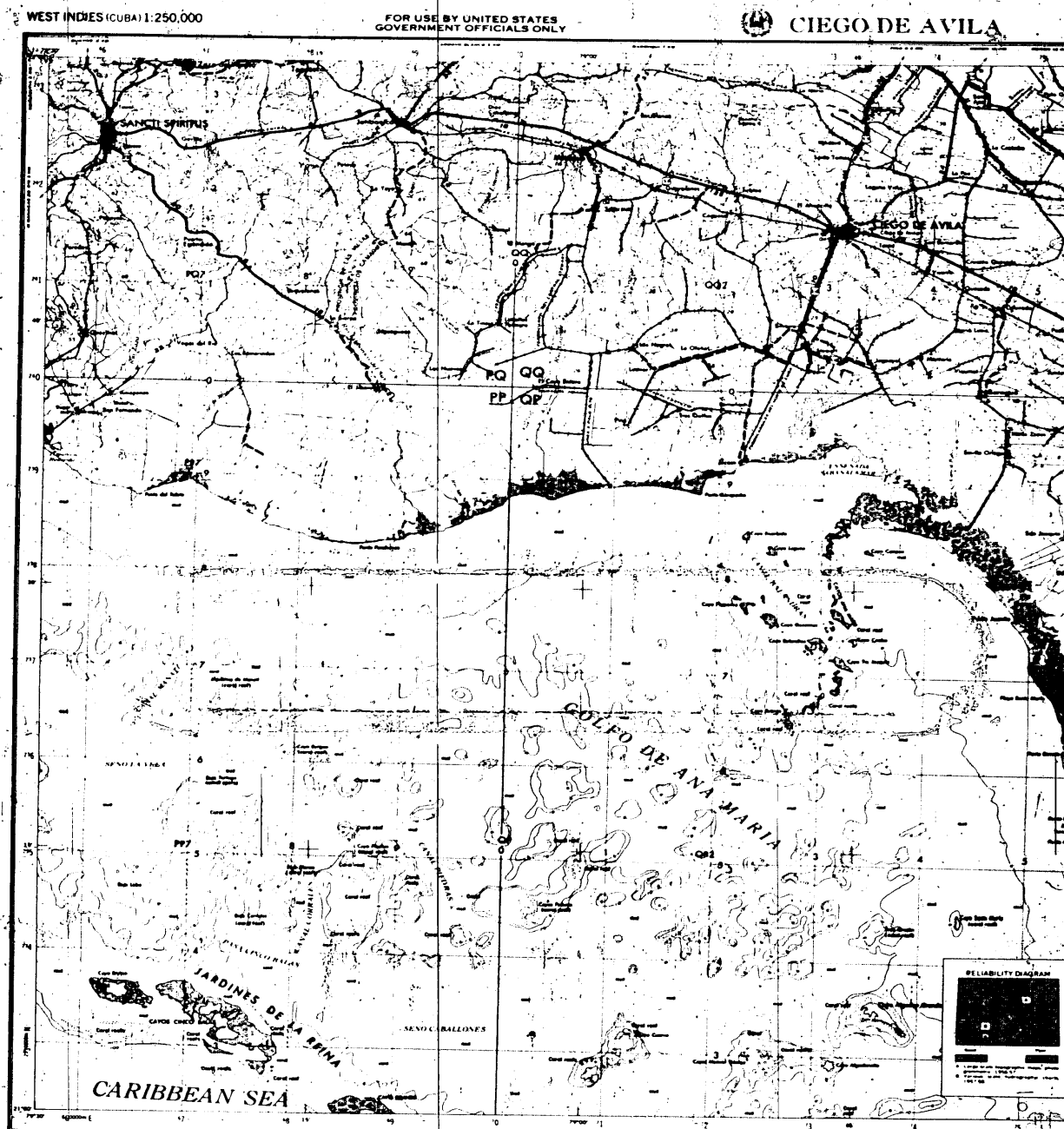
1. The first step is to identify the problem. This involves understanding the situation and the goals that need to be achieved.

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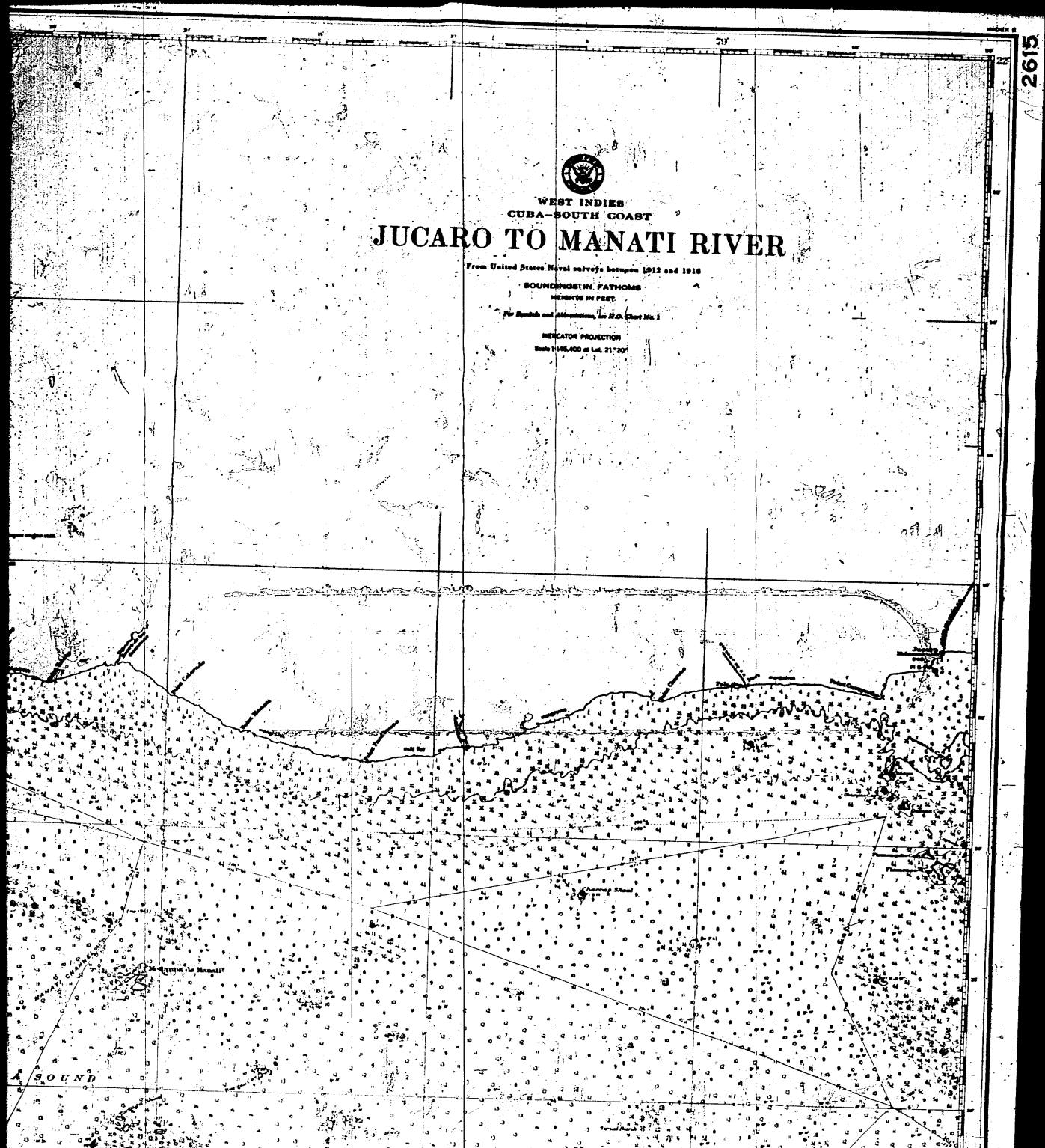
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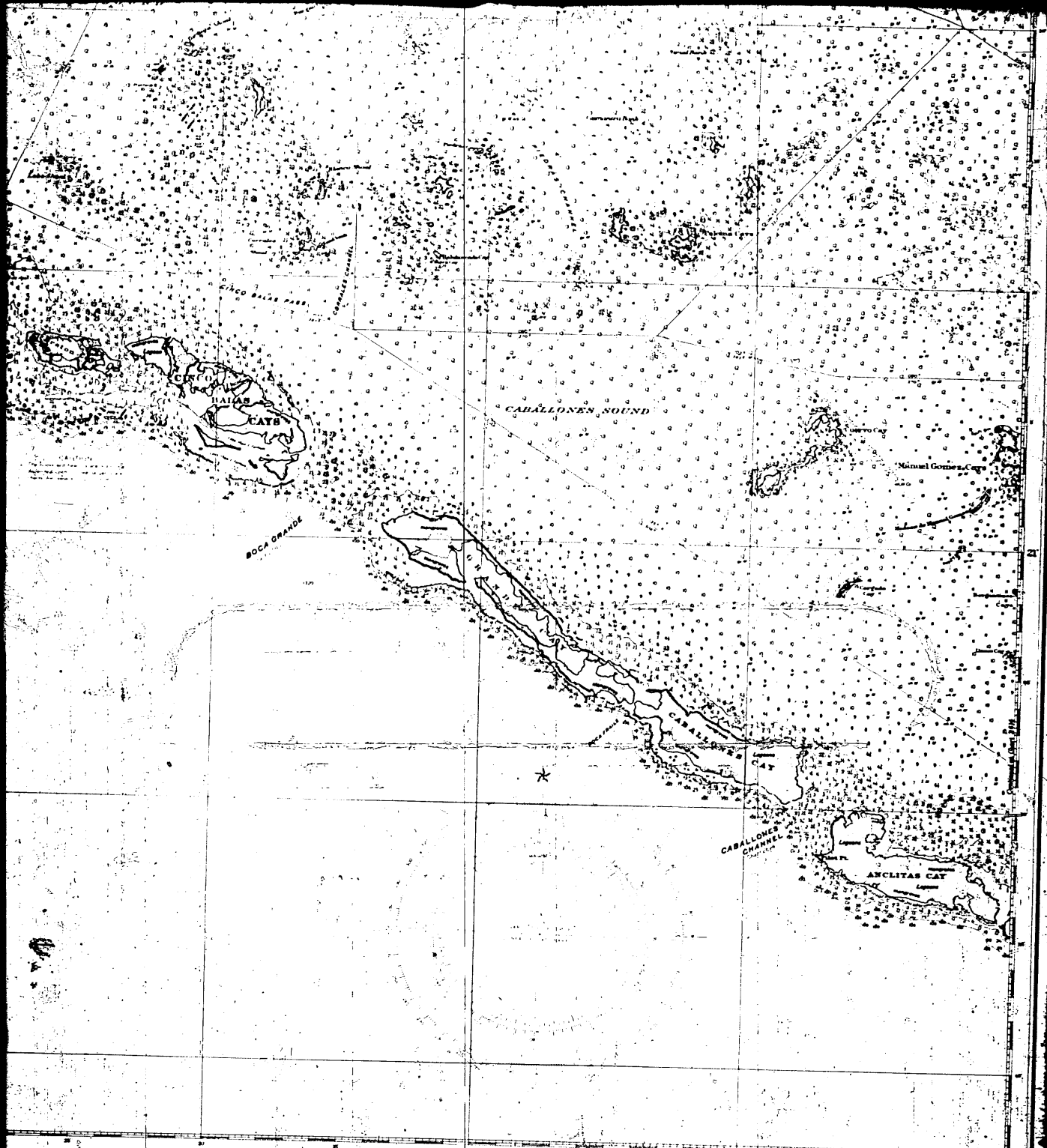
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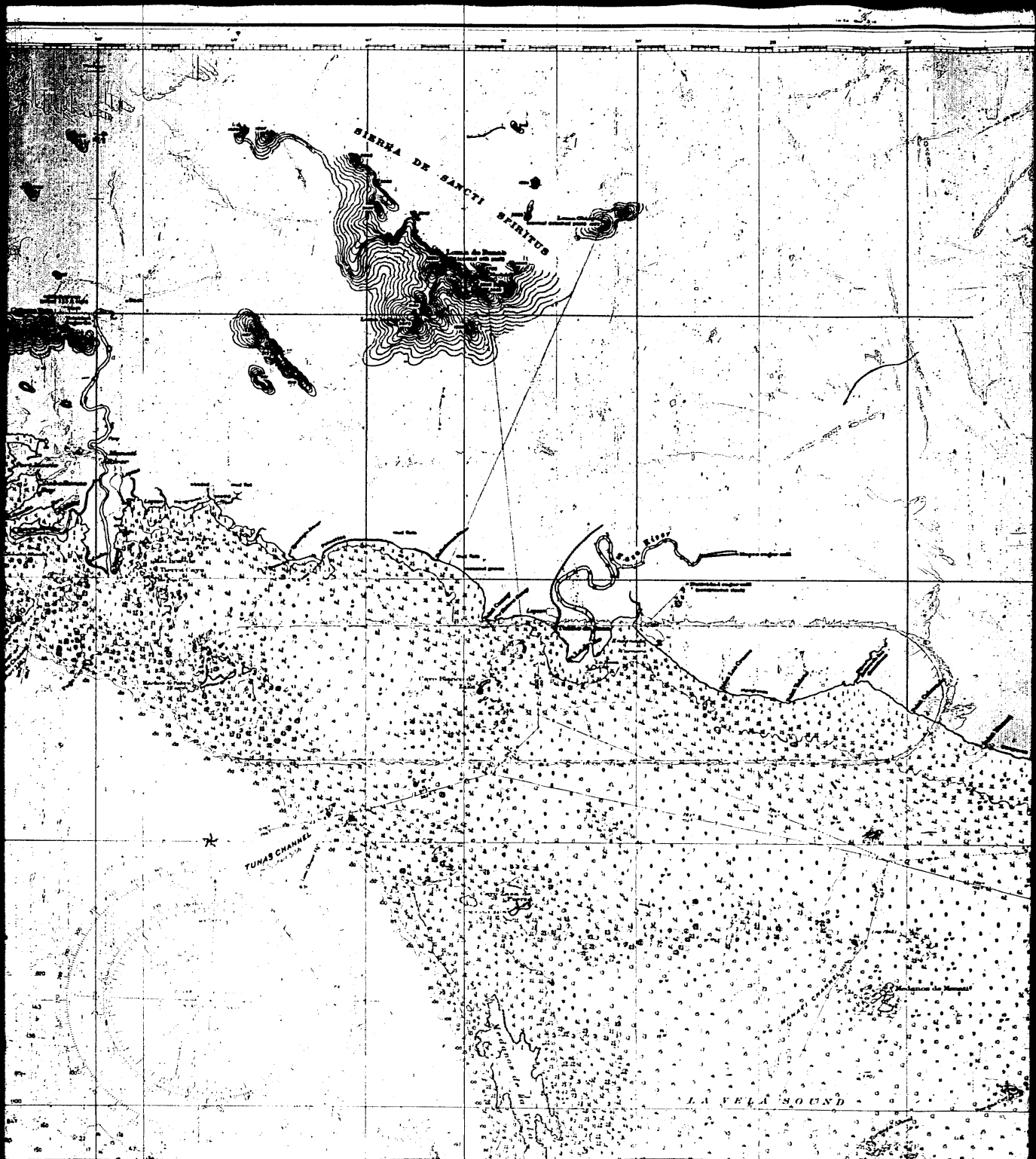
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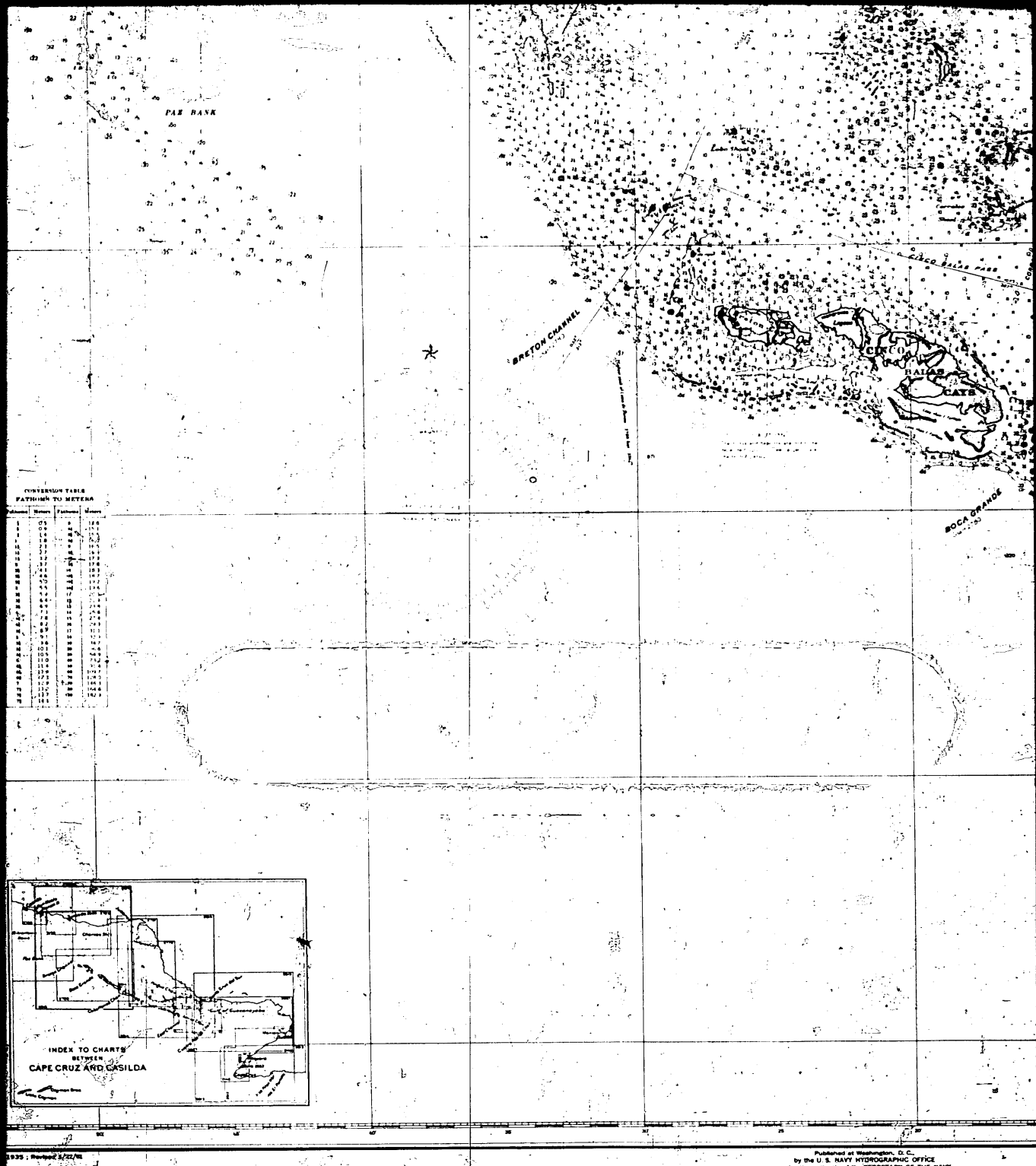
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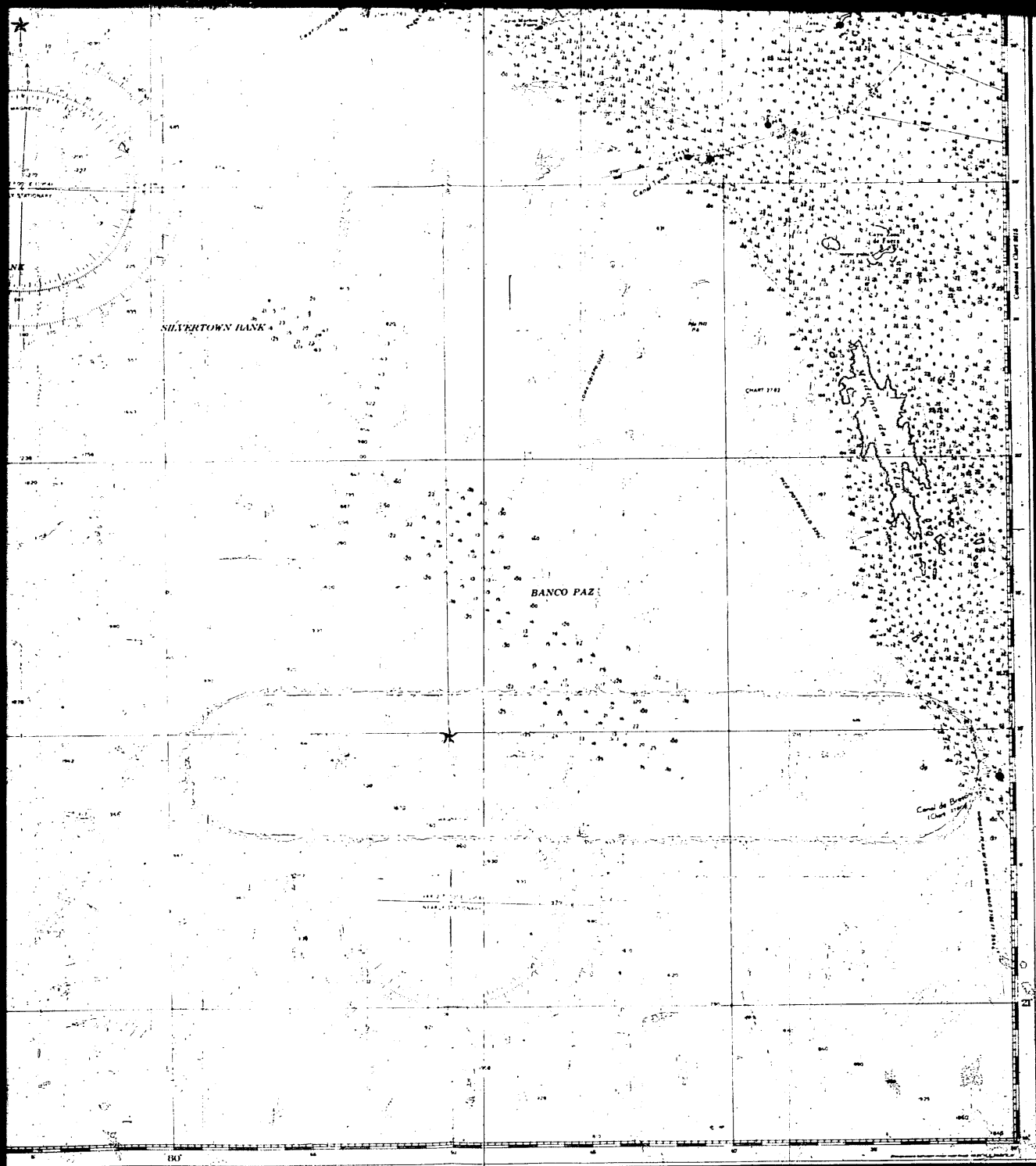












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