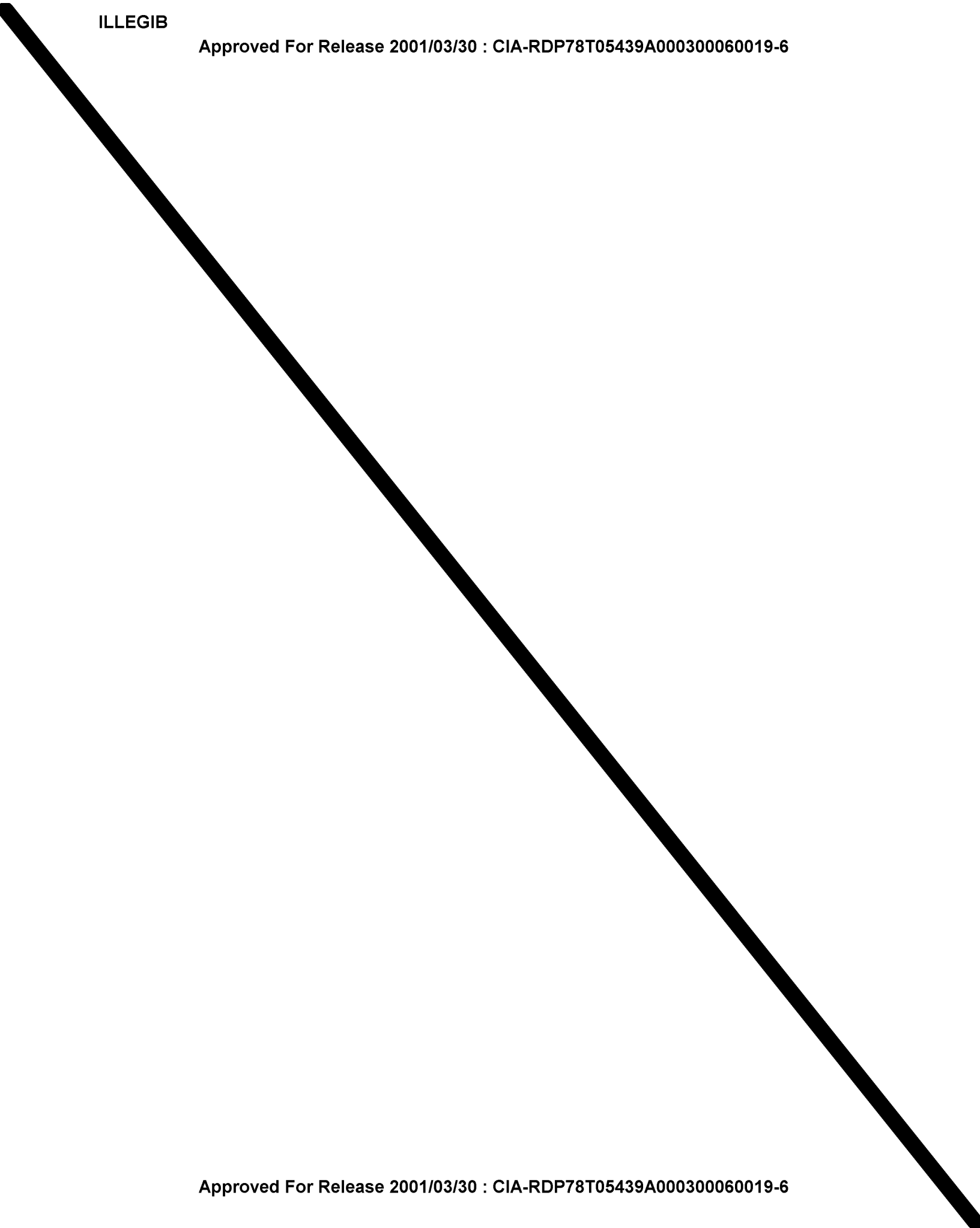

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M/EB 6/64
6 January 1964
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MEMORANDUM FOR: Chief, Industrial Register, OCR

25X1A ATTENTION: [redacted]

THROUGH: Chief, Requirements Branch, Reconnaissance Group, CGS

FROM: Chief, CIA/PID (NPIC)

SUBJECT: Photos of Commo Sites, area of Wajay, Cuba

REFERENCE: (a) Requirement OCR/8/63
(b) CIA/PID Project C 412-63

1. This memorandum is in response to your requirement dated 27 March 1963 requesting for retention, three annotated enlargements of the prescribed commo sites in the Havana area.

2. A short description of each installation is provided on the reverse side of each enlargement.

25X1A 3. The photo analyst on this project is [redacted] and he may be contacted on extension 2078 should you have any further questions concerning this project.

25X1A 4. This project is considered to be complete.

25X1A [redacted]

Enclosures:
1 - Three (3) annotated 8 x 10 enlargements (CIA/PID/MEB-P-13/64 thru P-15/64

S-10521

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HAVANA COMMUNICATIONS STATION NPIC #586-86-E6

EXTRACT FROM - NPIC/R-1519/63

Table 4. Technical Data, Calabazar Receiving Station

Antenna No	Antenna Type	Axis Major ft	Axis Major m	Axis Minor ft	Axis Minor m	Leg Length ft	Leg Length m	Tilt ∠ Wave ∠ est deg	Est WL per Leg Length	Azimuth/ Back Azimuth[1] (°) (')	Prob Correspondents[1] Forward Projection	Prob Correspondents[1] Rear Projection	Estimated Fundamental Frequency (Megacycles)
1	Fish-bone	960	292	[redacted]		[redacted]				[redacted]	Moscow, USSR	Tegucigalpa, Honduras	14 optimum, 10-19 broadband
2	Fish-bone	960	292								Odessa, USSR	--	14 optimum, 10-19 broadband
3	Fish-bone	960	292								Odessa, USSR	--	14 optimum, 10-19 broadband
4	Fish-bone	960	292								Moscow, USSR	Tegucigalpa, Honduras	14 optimum, 10-19 broadband
5	Rhombic	955	292			525	160				Rio de Janeiro, Brazil	None (USA)	11.8
6	Rhombic	1,140	349	420	128	600	183				Barranquilla, Colombia; Asuncion, Paraguay	None (USA)	11.8
7	Rhombic	955	292	420	128	525	160				Bogota, Colombia	None (USA)	11.8
8	Rhombic	955	292	420	128	525	160				Panama City	None (USA)	11.8
9	Rhombic	955	292	420	128	525	160				Niamey, Niger (Africa)	Mexico City	11.8
10	Rhombic	955	292	420	128	525	160				Rio de Janeiro, Brazil	None (USA)	11.8
11	Rhombic	955	292	420	128	525	160				Bogota, Colombia	None (USA)	11.8
12	Rhombic	900	275	[redacted]		490	150				Odessa, USSR	--	15.3
13	Rhombic	955	292	420	128	525	160				Panama City	None (USA)	11.8
14	Rhombic	1,140	349	420	128	600	183				Bogota, Colombia	None (USA)	11.8
15	Rhombic	955	292	420	128	525	160				Odessa, USSR	--	11.8
16	Self-supporting lattice tower with yagi-type microwave antennas									Undetermined	NA	NA	NA

[1]See Figure 10 for world map projection of azimuths to probable correspondents. see NPIC/R-1519/63, Fig 10
[2]Pole spacing, front to back.
[3]Pole spacing, side to side.

25X1D 25X1D 25X1D 25X1D

25X1D

CIA/PID/MEB-P-13/64
Attach to:
M/EB 6/64


HAVANA COMMUNICATIONS STATION (CALABAZAR)
23-01-00N 82-20-00W
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HAVANA AREA COMMO INSTALLATION

NPIC #586-911

The Havana Area Commo Installation consists of very tall steel lattice tower supported by numerous guy wires. The tower is located immediately adjacent to a rather large control building which is within a fenced area.

CIA/PID/MEB-P-14/64
Attach to:
M/EB 6/64

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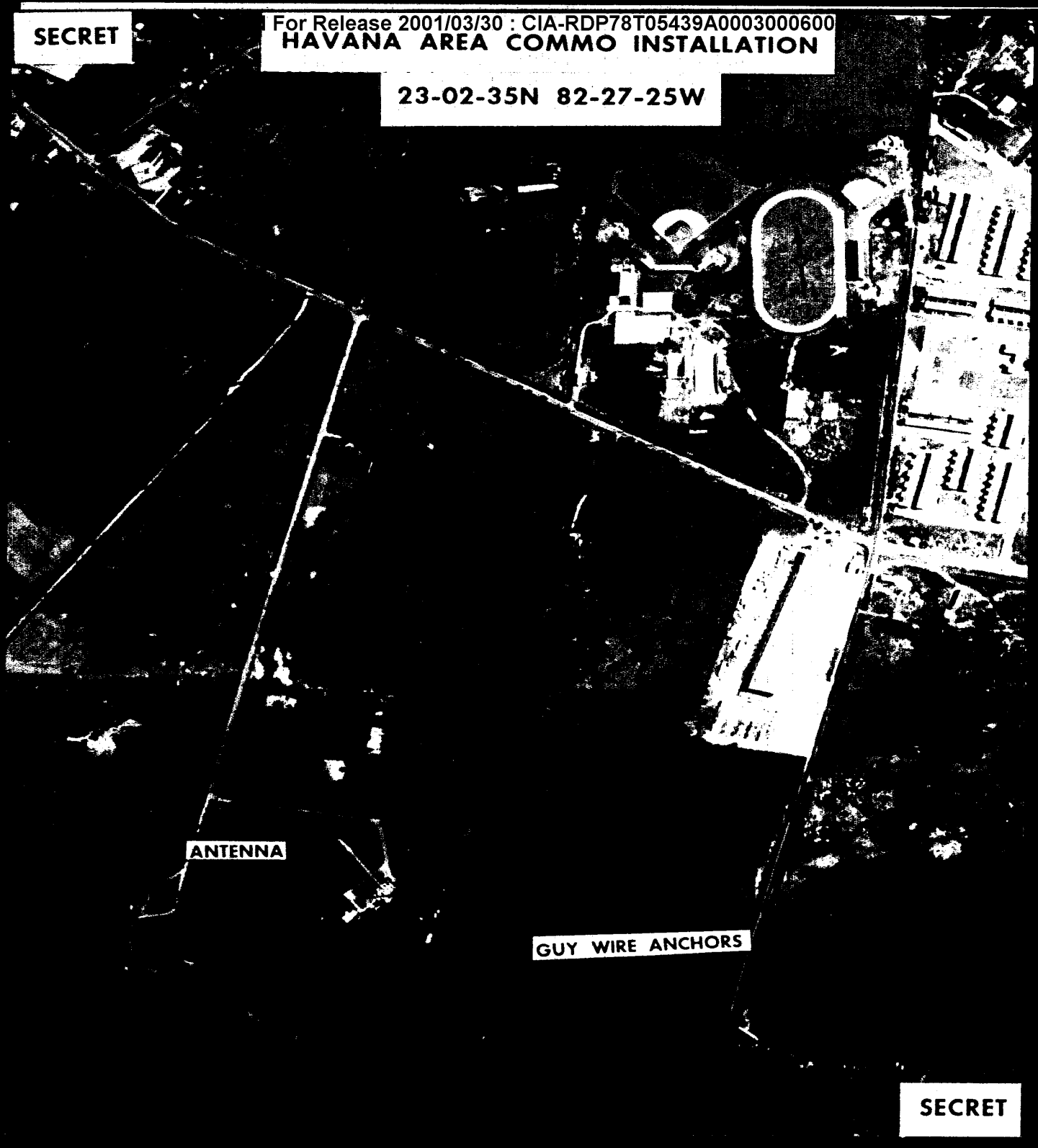
HAVANA AREA COMMO INSTALLATION

23-02-35N 82-27-25W



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HAVANA AREA COMMO CENTER

NPIC #586-86-A5

25X1B

The Havana Area Commo Center has been heavily camouflaged since shortly after it first appeared on photography. The electronics present prior to [redacted] 4 probable omni-directional wire cone antennas, 8 probable HF vertical radiators, one probable HF horizontal dipole, and at least 2 VHF antennas.

The number of truck-vans, vans, and trucks and vehicles varies from mission to mission.

There are 10 permanent structures in the area and the number of tents vary from time to time.

CIA/PID/MEB-P-15/64
Attach to:
M/EB 6/64

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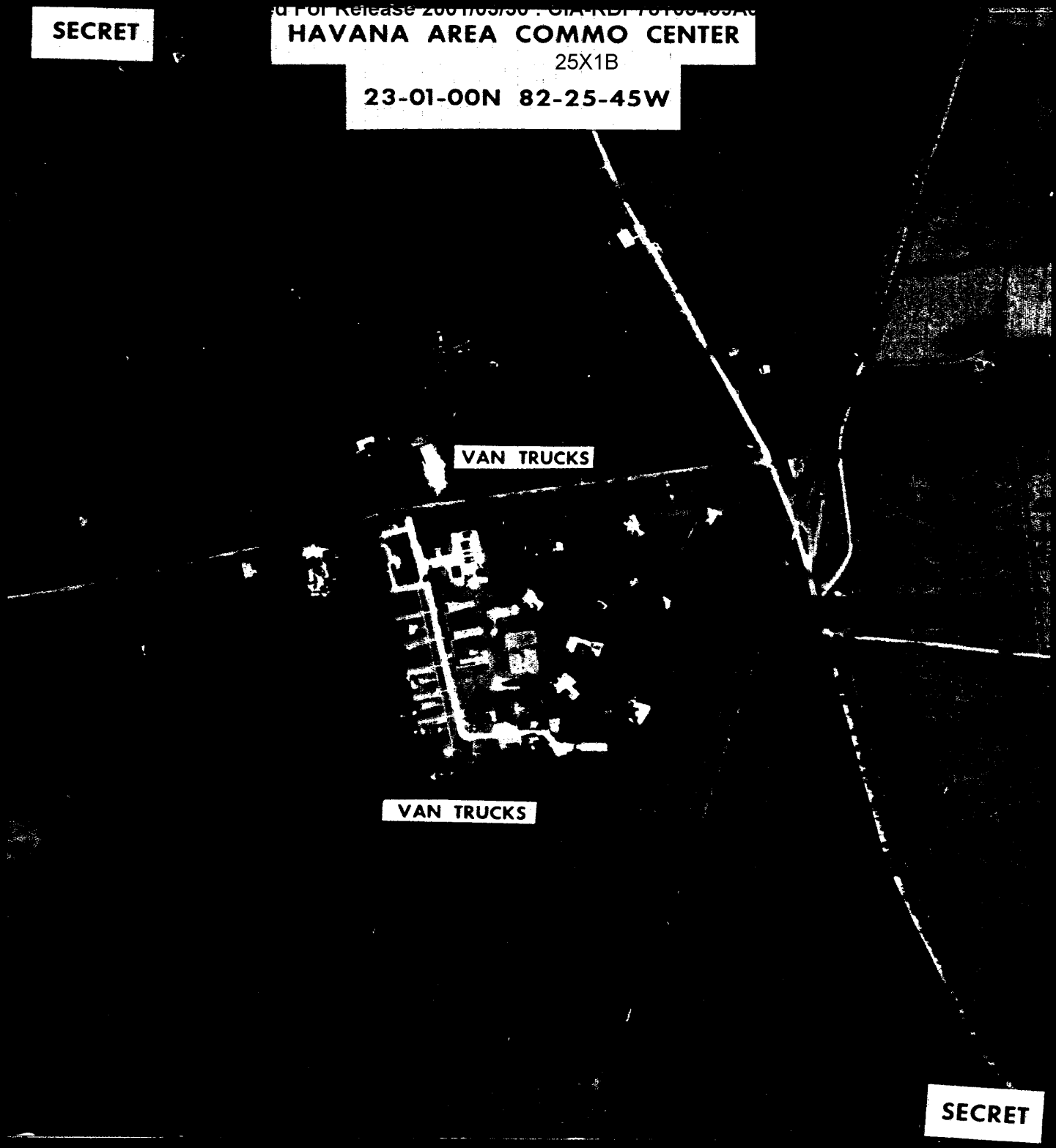
HAVANA AREA COMMO CENTER

25X1B

23-01-00N 82-25-45W



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