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HEADQUARTERS
HARBOR DEFENSES OF KEY WEST
Key West Barracks, Florida

CHANGE NO. 1
to
SUPPLEMENT TO THE
HD PROJECT, HDKW.
(HDKW-AN-45 & AP-45)

4 June 46

1. The following changes will be made to subject documents:

✓ a. Annex B, Page 5: Change Length of Baseline for Stock Island Location #204 to read - "B₄² B₄³ 7,854.2 yards".

✓ b. Annex B, Exhibit 10-B: Following notation should be added to the face of exhibit - "Two Radio Sets SCR-543 are allocated to the HD Command Post for air and naval communication. They are shown on the exhibit as allocated to the 6" batteries which may be one of the contemplated radio nets, but not necessarily the standard procedure".

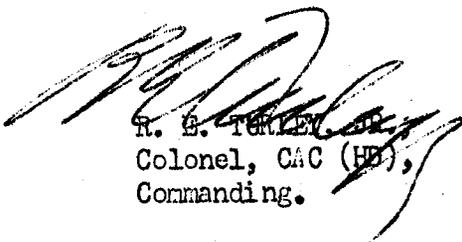
✓ c. Annex G, Exhibit 1-G: Following should be added as a footnote - "NOTE: In addition to nine (9) portable SC searchlights listed above, five (5) portable searchlights are being retained in the HD as AA lights pending approval of the installation of an AA Gun Battery".

✓ d. Annex G, Exhibit 4-G: Following should be added as a footnote - "NOTE: Five (5) of the searchlights 60" portable are being retained in the HD as AA lights pending approval of the installation of an AA Gun Battery".

✓ e. Annex G, Exhibit 6-G: The totals of allowance of gun, machine, cal. .30, should be changed to read -

TOTAL	120mm AA BTRY	TOTAL LESS AA
36	10	26

✓ d. Appendix III: Delete Item 15-0


R. E. TALLEY
Colonel, CAC (HD),
Commanding.

*Changes made in
basic - 12 June 46
jff.*

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Authority: NND 735 036
By: K6 NARA Date: 6/8/00

*Note:
The Harbor Defense Project
see CCA-P-SCF.
Part IV Appendices II.*

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REGISTER NO. 5

SUPPLEMENT
to
THE HARBOR DEFENSE PROJECT
HARBOR DEFENSES
of
KEY WEST

1. This is a REGISTERED DOCUMENT (AR 380-5), and consists of 8 Annexes and 6 Appendices.
2. The SHORT TITLE of this document is HDKW-AN-45 (AR 380-5).
3. This document will be accounted for on June 30 and December 31 of each year to the Commanding Officer, Harbor Defenses of Key West, Fort Taylor, Key West, Florida, (AR 380-5).
4. Prompt report will be submitted when this document is transferred from one person to another (AR 380-5).
5. This document, when approved, supersedes the document with Short Title: CCA-AN-KW and local board proceedings.

Revision Date JUN 30 1945

*Character
with no
key
copy
approved*

I

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Authority NB735 036
By RG-NARA Date 6/8/02

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DISTRIBUTION LIST

<u>REGISTER NUMBER</u>	<u>ISSUED TO</u>
1.	Chief of Engineers.
2.	Commanding General, Army Ground Forces, (Attn: Ground Requirements Section).
3.	Commanding General, Army Service Forces, (Attn: Planning Division).
4.	Commanding Officer, Harbor Defenses of Key West
5.	The Adjutant General (For Assistant Chief of Staff, Operations Division).
6.	Chief of Ordnance.
7.	Chief Signal Officer.
8.	Chief of Chemical Warfare Service.
9.	Commanding General, Army Ground Forces, (Attn: Coast Artillery Board).
10.	Commanding General, Eastern Defense Command.
11, 12.	Commanding General, Fourth Service Command.
13.	District Engineer.
14.	Division Engineer.
15, 16, 17, 18.	Commanding Officer, Harbor Defenses of Key West

II

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By RG NARA Date 6/8/00
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- Annex D - UNDERWATER DEFENSE
- Annex E - ANTI-AIRCRAFT ARTILLERY (Harbor Defense)
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- Annex F - GAS DEFENSE
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III

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S E C R E T

SUPPLEMENT

to

HARBOR DEFENSE PROJECT

HARBOR DEFENSES OF KEY WEST

1945

AUTHORITIES

1. This document is a supplement to the document entitled "Harbor Defense Projects for Harbor Defenses included in the Southern Coastal Frontier, Parts I to IV", (Short Title CCA-P-SCF), as approved by the Secretary of War in 1st Indorsement, AG 660.2 (3-30-33) (Misc.) E, dated 16 June 1933, and modified by the following:
 - (1) Letter, War Department, AGO, AG 660.2 (9-14-40), 27 September 1940, subject: "Modernization of Harbor Defense Projects, Continental United States."
 - (2) Letter, War Department, AGO, AG 660.2 (4-12-43)OB-S-SPDDO-M, 17 April 1943, subject: "Defense of Harbors Against Motor Torpedo Boats."
 - (3) 1st Indorsement, War Department, AGO, AG 472.93 (5 Nov 43)OB-S-E, 26 November 1943, on letter, Headquarters, Eastern Defense Command, ORD 472.93/1097, 5 November 1943, subject: "Disposition of 3-Inch AA Gun Materiel", which eliminated the 3-Inch AA batteries from the harbor defense project and included a 120mm AA battery to replace it.
 - (4) Letter, War Department, AGO, AG 660.2 (10-23-40)M-OCCA, 1 November 1940, subject: "Revision of Antiaircraft Annex, Harbor Defense Project."
 - (5) Letter, Army Service Forces, SPOPS 671.1, 18 May 45, subject: "Reserve Water Tanks for Modernization Program Batteries."
2. The original annexes to Harbor Defense Project, Harbor Defenses of Key West were prepared by a Board of Officers appointed by paragraph 1b, S.O. No. 174, Headquarters Fourth Corps Area, dated 5 December 1933, as amended by paragraph 3, S.O. No. 131, Headquarters Fourth Corps Area, dated 1 July 1935, under the provisions of paragraph 1a, (3) and d, Army Regulations 100-20, 26 August 1932. The original Annexes were approved by the Secretary of War in 15th Indorsement, AG 660.2 (10-7-35) (Misc.) E, dated 16 September 1936. Short Title of the approved annexes was "CCA-AN-KW".
3. Proceedings of a local Board of Officers, appointed by paragraph 5, S.O. No. 99, Headquarters Eastern Defense Command and First Army, dated 29 June 1942, were approved by the Chief of Engineers in 8th Indorsement, C of E 662 B (Key West) CM 8248 SPOEF, 22 December 1942, on letter subject, "Local Board Proceedings, Harbor Defenses of Key West, Florida", dated Headquarters Southern Sector, 334, 3 August 1942.
4. This revision of annexes to Harbor Defense Project, Harbor Defenses of Key West was directed in 1st Indorsement, dated Headquarters Southern Sector, 12 July 1943, on letter, subject: "Preparation of Supplement to Harbor Defense Basic Projects", dated Headquarters Eastern Defense Command & First Army, 10 July 1943, CA-660.2/992. These supplements were approved in letter Headquarters Army Service Forces, 3 May 45, file SPOPS 660, subj: "Supplement to the Harbor Defense Project, HDKW".

IV

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By *KG* N/A Date *6/18/60*
Authority *NNP735036*

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ANNEX A

ARMAMENT

SECTION I - GENERAL

SECTION II - SEACOAST ARTILLERY

SECTION III - MISCELLANEOUS

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SECTION I - GENERAL

1. Reference to Basic Project: The basic project together with modifying actions, is cited in par. 1 under "Authorities".
2. Purpose of Supplement: This supplement amplifies the Basic Project and is intended to furnish a concise record of the status both of existing harbor defense fortification construction and equipment, and of new or modified construction which has been approved by the War Department for future accomplishment. One of the principal purposes is to provide the basis for advance procurement of funds and materials necessary to complete approved items. A second important purpose is to make available, to those concerned, information of a technical and tactical nature which is not otherwise available in usable form.
3. Mission of Harbor Defenses:
 - a. To protect harbor facilities, naval shore installations, and shipping in Key West harbor from gun fire in minor naval attacks.
 - b. To deny to the enemy the use of the harbor.
 - c. To support the defense against landing attacks within the range of armament installed.
4. a. The tactical organization, under the Harbor Defense Command, upon completion of the project, will consist of: One battalion of two 6-inch, 2-gun, batteries; one Battalion of two 3-inch, 2-gun, batteries; two 90mm batteries (2 fixed guns and 2 mobile guns); nine seacoast searchlights; and one 120mm AA battery with five mobile searchlights. See exhibits No. 1-A and 4A. It is noted that there are no immediate plans for furnishing the 120mm AA battery. Hereinafter the symbol G represents a battalion.
 - b. (1) Cooperative arrangements with the Navy are made by higher Headquarters.
 - (2) Cooperative arrangements with the Air Corps are made by higher Headquarters.

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c. Armament listed in order of tactical importance:

Tactical No.	Name	Caliber	No. of Guns	Location	Remarks
3	Const. 231	6"	2	Ft. Taylor Loc. #200	Complete except for tubes and M-8 data computer.
4	Const. 232	6"	2	Salt Ponds Loc. #203	Complete except M-8 computer.
5		90mm	4	Ft. Taylor Loc. #200	2 fixed guns, 2 mobile guns.
6		90mm	4	W. Martello Loc #201	2 fixed guns, 2 mobile guns.
1	Mahlon Ford	3" S C	2	Ft. Taylor Loc. #200	
2	Inman	3" S C	2	W. Martello Loc. #201	

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SECTION II - SEACOAST ARTILLERY

5. Armament.

a. Tabulation of seacoast armament required by basic project follows:

Tactical No.	Name	No. Guns	Caliber and Model	Model of Mount	Range for Maximum Elevation Yards	Location	Current Status*	Exhibit number showing directrix and field of fire
1	Mahlon Ford	2	3" M1903	M1903	10,900	Ft. Taylor Loc. #200	E AE	2 - A
2	Inman	2	3" M1903	M1903	10,900	W. Martello Loc. #201	E AE	2 - A
3	Const. 231	2	6" M-1	M-4	27,100	Ft. Taylor Loc. #200	E I(a)	2 - A
4	Const. 232	2	6" M-1	M-3	27,100	Salt Ponds	E AE	2 - A

* E - Existing. AE - Armament emplaced. I - Incomplete.

(a) - Supply of guns deferred pending availability of industrial manufacturing facilities.

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b. (1) For existing armament.

- (a) Tactical No. 1, Battery Mahlon Ford. A Battery Commander's Station should be erected to complete this installation. No action has been taken to obtain the above, pending determination of post war employment of the armament.
- (b) Tactical No. 2, Battery Inman. A Battery Commander's Station should be erected to complete this installation. No action has been taken to obtain the above, pending determination of post war employment of the armament.

(2) Projected fixed armament.

- (a) Tactical No. 3, Battery Construction 231. 1. This Battery was authorized by Letter WD, AGO, AG 660.2 (9-14-40)M-WPD-M, 27 September 1940, subject: "Modernization of Harbor Defense Projects, Continental United States". 2. The battery is now complete with exception of tubes for guns, M-8 data computer, and Reserve Water Tank, the delivery date of which is indefinite.
- (b) Tactical No. 4, Battery Construction 232. 1. This battery was authorized by Letter WD, AGO, AG 660.2 (9-14-40)M-WPD-M, 27 September 1940, subject: "Modernization of Harbor Defense Projects, Continental United States". 2. The battery is complete with exception of M-8 data computer and Reserve Water Tank, delivery date of which is indefinite.

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- c. Tabulation of seacoast armament abandoned or to be abandoned upon completion of modernization program follows:

Name	No. Guns	Caliber and Model	Model of Mount	Location	Remarks
Seminole	4	Armament removed	Armament removed	Ft. Taylor Loc. #200	See Note 1
Osceola	2	Armament removed	Armament removed	Ft. Taylor Loc. #200	See Note 2

Note 1. Abandoned per 3rd Indorsement, WD, AGO, AG 660.2 (10-29-42) OB-S-E, 19 November 1942, on letter Headquarters Eastern Defense Command & First Army, CA 381, 29 October 1942, subject: "Category of Defense."
Disposition of armament authorized by 4th Indorsement, Headquarters Eastern Defense Command and First Army CA 381, 25 November 1942, on letter Headquarters Eastern Defense Command and First Army, CA 381, 29 October 1942, subject: "Category of Defense."
Referred to Commanding General, Fourth Service Command for disposition by 7th Indorsement, Headquarters Harbor Defenses of Key West, CA 381, 4 December 1942, on letter Headquarters Eastern Defense Command and First Army CA 381, 29 October 1942, subject: "Category of Defense". Ammunition shipped to Milan Ordnance Depot, Shipment completed 15 February 1943. Armament sold for salvage and removed 15 December 1944.

Note 2. Abandoned per letter WD, AGO, AG 660.2 (9-14-40)M-WPD-M, 27 September 1940, subject: "Modernization of Harbor Defense Projects, Continental United States".
Disposition of armament authorized by "Disposition Form" from Operations Division, War Department General Staff, dated 4 December 1943, subject: "Abandonment and Disposal of Guns and Carriages of Battery Osceola, Key West, Florida", bearing file number AG G-OPD 400.74 (30 November 1943). Ammunition shipped to Red River Ordnance Depot, Defense, Texas, 26 February 1944. Armament sold for salvage and removed 16 October 1944.

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 By: R6 NARA Date: 6/18/00

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6. War Reserve and Battle Allowances of Ammunition. Authority: WD Ltr, AGO AG 471 (28 Jan 44)OB-S-D, 11 Feb 44, subj: "War Reserve Ammunition, Seacoast Artillery".

War Reserve and Battle Allowances of Ammunition, Seacoast Artillery.

Battery	No. Guns	Caliber and Model	Projectile	Rounds		Place of Storage	
				W.R.	B.A.	Btry Emplacement	Central* Reserve
Mahlon Ford	2	3"-M1903	HE Fixed	600	400	400	200
Inman	2	3"-M1903	HE Fixed	600	400	400	200
Const 231	2	6"-M1	90# HE	300	200	200	100
			105# AP	400	300	300	100
Const 232	2	6"-M1	90# HE	300	200	---	300
			105# AP	400	300	---	400

* Remains under control of the Chief of Ordnance in such central depot storage as he may designate.

Storage regulations provided by Technical Manual 9-1900, dated 3 July 1942, including changes thereto, are being complied with. Allowances of ammunition for AMTB Weapons are governed per current WD Directives as authorized by WD Ltr, AGO 471 (9 Jun 44)OB-S-DM, 10 Jun 44, subj: "Day of Supply for Ammunition".

SECTION III - MISCELLANEOUS

7. Defense against motor torpedo boats.

a. The two anti-motor torpedo boat batteries of these Harbor Defenses were authorized by letter WD, AGO, AG 660.2 (4-12-43)OB-S-SPDDO-M, 17 Apr 43, subj: "Defense of Harbors Against Motor Torpedo Boats".

b. Tabulation of anti-motor torpedo boat armament follows:

Tactical No.	No. Guns	Caliber	Type of Mount	Status	Site	Exhibit No. showing arc of fire & range
5	2 fixed	90mm	M3	Emplaced	Ft. Taylor Loc. #200	3 - A
	2 mobile		MLA1	Storage	"	
6	2 fixed	37mm	M3	Emplaced	W. Martello Loc. #201	3 - A
	2 mobile		MLA1	Storage	Ft. Taylor Loc. #200	

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By: R6-NARA Date: 6/8/00

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8. Protective Concealment. Camouflage and concealment as authorized by 2d Indorsement, Office Chief of Engineers to District Engineer, Jacksonville, Fla., dated 23 Jul 43, File #CE 618.33 (Key West) CM 46511 SPEKM was completed except as noted below. The project in brief called for, (1) the netting of towers in tree form and painting towers a mist gray color above the netting, (2) throw nets over the fixed 90mm AMTB guns, fixed netting at rear and throw nets in front of mobile 90mm AMTB guns, (3) fixed netting to rotate with guns for .50 caliber machine guns, (4) netting to conceal shadow of deep revetment of Battery Osceola, (5) vertical netting attached to inside walls of old Fort Taylor, (6) planting around the battery area and throw nets over the guns of Battery Const 231, (7) umbrella type netting clamped to existing shield of 3" seacoast batteries, (8) tone down painting and grassing of height finder and director mounds for 3" AA battery, (9) tone down grassing and tree planting for West Martello Tower, (10) for Battery Const 232 the barracks and other buildings resemble low cost housing projects in vicinity, dummy courts, dummy house included near gun, netting over emplacement and (11) SCR 268's to have netting over equipment platform and trucks and screen to reduce silhouette where necessary.

Items No. (5), (6), were not completed.

Items No. (1), (2), (3), (4), were destroyed insofar as the netting was concerned during the hurricane of October, 1944.

9. Government-owned or leased Reservations.

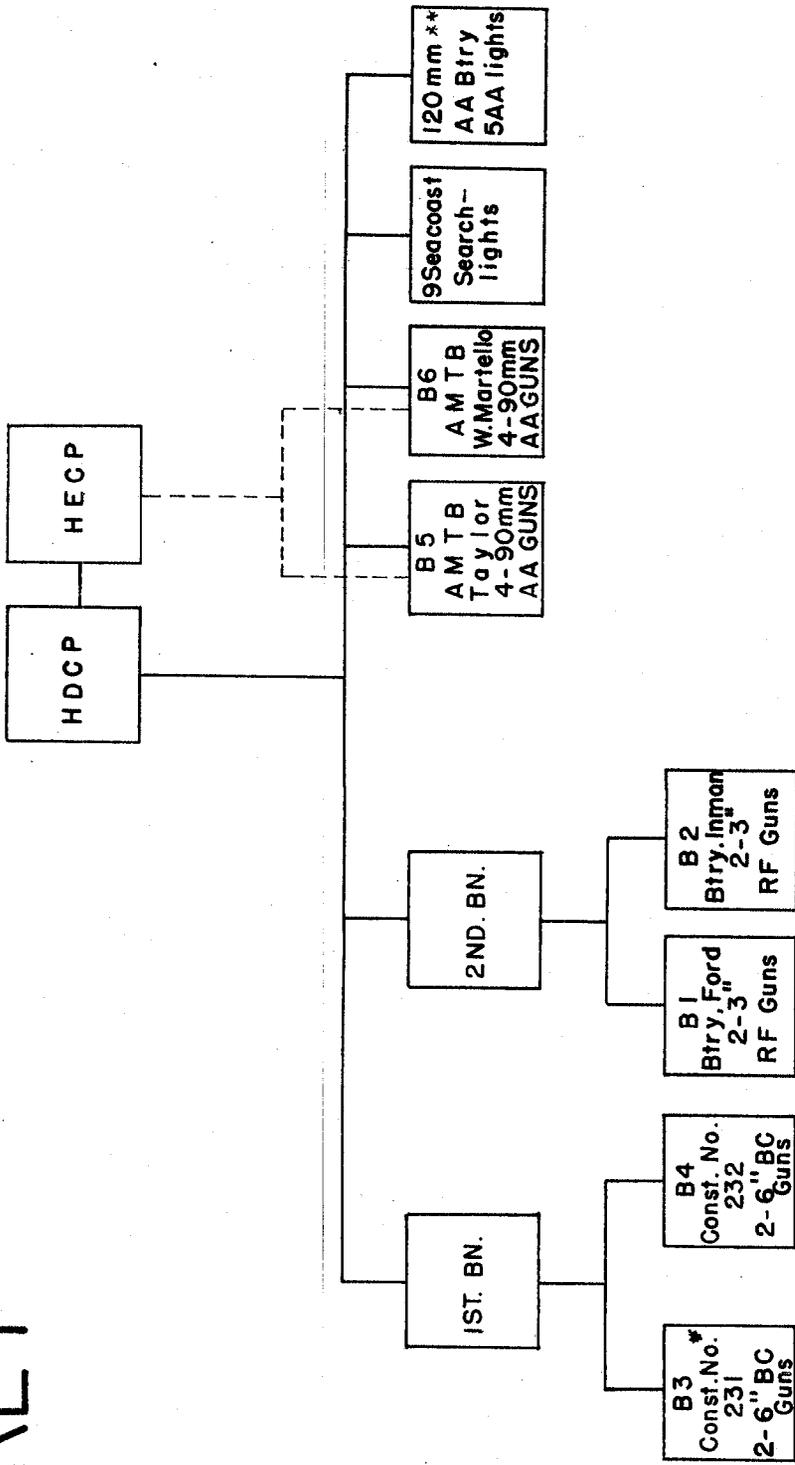
The following tabulation shows tracts of government-owned and leased land pertaining to the harbor defense. See also Exhibit 5-A.

Designation	Acreage	Date of Procurement	Authority	Purpose	Status
Ft. Taylor Loc. #200	80.1	1845 1942		Military Sub-post	Owned
West Martello Loc. #201	12.5	1897		Military Sub-post	Owned
East Martello Loc. #202	12.0	1897		S. L. Station	Owned
Salt Ponds Loc. #203	85.8	1942		Battery Emplacement	Owned
Stock Island Loc. #204	0.86	1942		Fire Control Station	Owned
Key West Barracks Loc. #205	28.62	1833 1933		Military Post	Owned
Fleming Key Loc. #206	None	1942	Letter Sec/Navy, JAG: U:CKP;er, (SC) N8-4/ QA, Doc. 48703, 28 Apr 42, and Letter Sec/Navy, (SC) NB5/ N8-4, 12 Oct 42.	Fire Control Station	Navy Dept Permit
S. Roosevelt Boul.	None	1943	Monroe County, 7 Jul 43, and City of Key West, 31 Aug 43.	Cable R/way	Local Permit
Salt Ponds Loc. #203	None	1943		Utilities R/way	Easement

10. Land acquisition. No additional real estate is required.

By KG NARA Date 6/8/00
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---Note: Indicates control of Btrys. by HECP until they are released to groups by HDOP as the situation develops; also indicates intelligence to groups and Btrys at all times.

* Not Completed

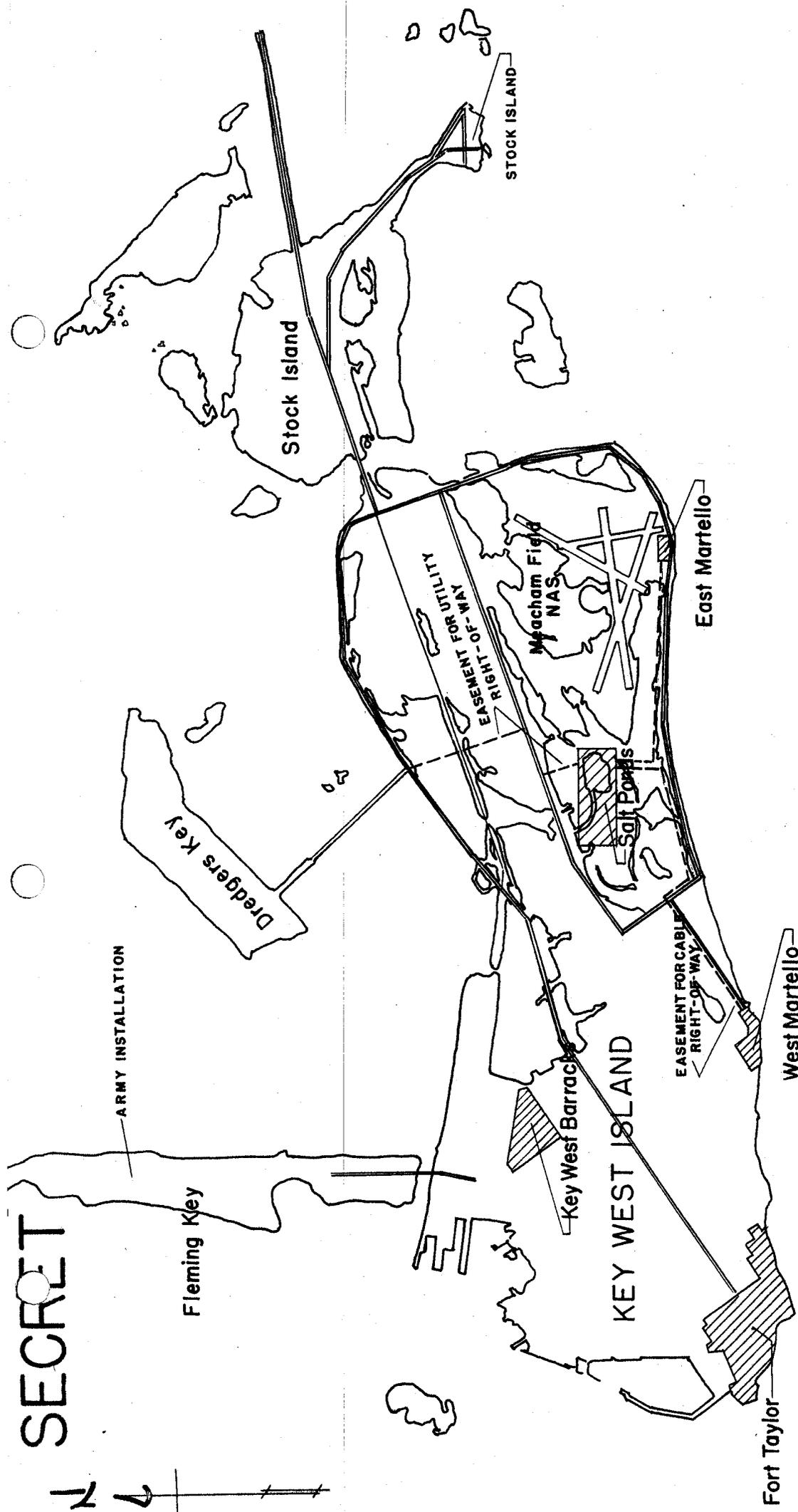
** Authorized but no immediate plan for construction

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HARBOR DEFENSES of KEY WEST		Revised Date
TACTICAL ORGANIZATION		
Prepared By:	19 March 1945	
HQ. H. D. K. W.		EX. NO. 4 A

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 By: KGF-NRPA Date: 6/2/80

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HARBOR DEFENSES OF KEY WEST	Revised
ARMY CONTROLLED PROPERTY	Date
Prepared By : HQ. H.D.K.W.	19 March 1945
	EX. NO. 5-A

ANNEX B, INDEX

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 By: RG NARA Date: 6/8/00

S E C R E T

1. General. General limitations of equipment and of local conditions which determine the nature and extent of the fire control system are:
 - a. When a horizontal base-line system of position finding is employed for fire control, the angle of intersection of lines of sight from base end stations should be 15 degrees or greater at the target in order to meet with minimum accuracy considerations. Therefore, a circle passing through the base end stations may be described within which the angle of intersection at the target will be 15 degrees or greater. All points within this circle give intersections greater than 15 degrees. A target coming closer than 15 degrees to the base line (as measured from either base-end) cannot be located with the desired accuracy by that baseline. Any area lying within 15 degrees of the baseline is to be excluded as dead space because the construction of plotting board arms does not permit utilizing this area.
 - b. The M3 plotting board to be supplied for the 6" batteries has an azimuth circle of 260°, but this will cover the more important fields of fire of each battery.
 - c. The atmosphere at this station is clear the greater part of the year with visibility up to 12 miles. Fog is practically unknown.
 - d. The island is very flat, the highest point being only 16 feet above sea level.
 - e. No provision is made for airplane tracking or spotting. Normal emergency methods of fire control will be employed.
 - f. No need exists for coordination with Navy, Air Forces, or Coast Guard in connection with fire control.
2. Orientation Data. Orientation data is based on a Special Lambert Grid projection, prepared from a survey made by the U. S. Coast and Geodetic Survey of the principal elements of the fire control system in the spring of 1943.

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3. Command and fire control elements other than battery fire control systems.

COMMAND AND FIRE CONTROL ELEMENTS, EXCLUDING BATTERIES

Loc. No.	Site No.	Station	Gas & Bomb Prtn	Elev	H.I.	Type of Inst.	Arc of View		Men	Type of Structure	Exhi. bit
							LL	RL			
200	---	HDCP	BP G	4.5'	---	---	---	---	35	Casement(a)	1-
200	---	HDOP	SP	4.5'	108.6	---	360°	0°	2	Steel Tower(b)	1
200	---	HESS	---	4.5'	100.5	---	360°	0°	2	Steel Tower	1-
200	460	SCR682	SP	4.5'	123.9	---	360°	0°	2	Steel Tower	1-A
200	460	IFF	SP	4.5'	130.5	---	360°	0°	2	Steel Tower	1-A
200	---	Group 1 CP	---	4.19'	146.96'	---	360°	0°	8	Steel Tower (c)	1-A
200	---	Group 2 CP	---	5'	60'	---	281°	153°	8	Steel Tower (c)	1-A
200	---	Meteorological	---	4.5'	39.7'	---	360°	0°	3	Wooden tower on top of cottage(e)	1-
200	---	Fire Control SWBD Room	SP G	5'	---	---	---	---	3	Old mine casement	8-I
203	---	Fire Control SWBD	SP G	---	---	---	---	---	---	Magazine of Btry Constr 232	8-E
---	---	Tide Station	See note (d)								
200	---	Searchlight CP	SP	---	---	---	360°	-0°	3	Steel Tower	1-
200	---	Cable Hut #1	SP	4.5'	---	---	---	---	---	Cement Hut	9
200	---	Cable Hut #2	SP	4.5'	---	---	---	---	---	Cement Hut	9-i
200	---	Cable Hut #3	SP	4.5'	---	---	---	---	---	Cement Hut	9-B
203	---	Cabel Hut #4	SP	5.0'	---	---	---	---	---	Cement Hut	9-B
202	---	Cable Hut #5	SP	5.0'	---	---	---	---	---	Cement Hut	9-i
204	---	Cable Niche	---	6.3	---	---	---	---	---	Cement Niche	9-E
206	---	Cable Niche	---	6.0	---	---	---	---	---	Cement Niche	9-E

BP = Bombproof
 SP = Splinterproof
 G = Gasproof

- (a) Radio Sta #1 is in HDCP. HECP Sta is in HDCP.
 (b) HEOP is same as HDOP.
 (c) Splinter proofing is to be provided but has not been accomplished.
 (d) There is no tide station provided as the maximum tide in this locality does not exceed two feet.
 (e) Temporary.

- 3 -

S E C R E T

By R6 NARA Date 6/8/00
 Authority NP705036

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4. Post Telephone System. There are two private branch exchange switchboards in the Harbor Defenses. These switchboards and those of the local Naval facilities are easily connected through the use of facilities rented from the Southern Bell Telephone and Telegraph Company.

PERTINENT DATA

<u>Fort Taylor Switchboard</u>	<u>Key West Barracks Switchboard</u>
Site - Splinter-proof, gas-proof, structure in west wing of old Battery Seminole	Second floor, east wing of Post Headquarters building, Key West Barracks
Line Capacity - One hundred	Two Hundred
Number of positions - one	Two
Type of Board - Manual	Manual
Mfg. of board - Kellogg Co.	Western Electric Co.
Commercial Trunk Connections - three two-way trunks	Three two-way trunks
Trunk connections with other Post Switchboards - Three to Key West Barracks	Three to Fort Taylor
Degree of Protection - Splinterproof, gasproof	None

5. Teletype. There is one commercial teletype machine in the Harbor Defenses. It is a TWX machine. Any TWX station in the continental United States may be reached with it.
6. Radio Communications. Frequency assignments are governed by letter, War Department, AGO, AG311.23 (21 Jun 43)OB-S-SPSCLM, 25 Jun 43, subject: "Frequency Assignments - Coast Artillery, Harbor Defense Communications" and Signal Operating Instructions issued by higher Headquarters. A schematic diagram showing the Harbor Defense radio net can be found in Exhibit 10B.

7. Battery fire control elements.

- a. Battery Mahlon Ford. This is a two-gun, 3" rapid fire battery. At present, the BC station and CRF station is located in a wooden tower 30 yards West of the battery at a ground elevation of 7' above sea level. The height of instrument of the CRF and of the BC instrument is 30'. Arc of view is 267° to 45°. This station is of local temporary construction, is too close to the guns, is too far forward and should be replaced. See Exhibit #13B. See Exhibit 1B for Field of Fire. Requirements of a new station contingent upon decision as to the post-war employment of 3 in. S. C. Batteries.
- b. Battery Inman. This is a two-gun, 3" rapid fire battery. The BC and CRF station consists of a splinterproof, steel, cottage-type structure, built on top of a brick column which is a portion of the original West Martello Tower. Atop the steel station which houses the CRF, there has been constructed locally a temporary wooden second story which serves as the BC station. The supporting brick column is not reinforced and has a bad fault where the entire upper quarter of the column is separating from the body; it is believed to be structurally unsound, and should be demolished. See Exhibit #14B. See Exhibit 2B for Field of Fire. Requirements of a new station contingent upon decision as to the post-war employment of 3 in. S. C. Batteries.

- 4 -

S E C R E T

By RG NARA Date 6/8/04
 Authority NP735036

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c. Battery Construction No. 231. This is a two-gun, 6" battery, now under construction. The Battery Commander's station, and three base end stations which house both observers and spotters, have been constructed. They are all steel towers, with an all around field of view. The BC station is splinterproof. The following tabulation gives pertinent information on these stations. See also Exhibit #13B and 17B. See Exhibit 3B for Field of Fire.

Station	Site	Grnd. Elev.	Et. of Instr.	No. of Instruments	DPF	Combrd with	Length/Baselines
B C	Fort Taylor Loc. #200	3.5'	92.5'	1	1M2A1 CL-2	AAOP G-1	
B ₃ ¹ S ₃ ¹	Fort Taylor Loc. #200	4.19'	138.96'	1	1-M2A1 CL-2	AAOP G-1 B ₄ ¹ S ₄ ¹	B ₃ ¹ B ₂ ² 8,803.0 yds.
B ₃ ² S ₃ ²	Stock Island Loc. #204	5.27'	140.05'	1	1-M2A1 CL-2	AAOP B ₄ ² S ₄ ²	B ₃ ² B ₃ ³ 7,854.2 yds.
B ₃ ³ S ₃ ³	Fleming Key Loc. #206	8.05'	118.82'	1	1-M2A1 CL-2	AAOP B ₄ ³ S ₄ ³	B ₃ ³ B ₃ ¹ 4,058.5 yds.

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Authority NMB705 036
By R6-NRA Date 6/8/00

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- d. Battery Construction No. 232. This is a two-gun, 6" battery. The Battery Commander's station, and three base end stations, which house both observers and spotters, are all steel towers, with an all around field of view. The BC station is splinterproof. The following tabulation gives pertinent information on these stations. See also Exhibit #16B and 17B. See Exhibit 4B for Field of Fire.

Station	Site	Grnd. Elev.	Ht. of Instr.	No. of Instruments Az. M1910A1	DPP	Combd with	Length/Baseline
B C	Salt Ponds Loc. #203	6.5'	107.5'	1	1-M2A1 CI-2	AAOP G-1 B ₁ S ₃	B ₁ D ₂ 8,803.0 yds.
B ₁ ¹ S ₁ ¹ D ₁ ¹	Fort Taylor Loc. #200	4.19'	130.84'	1	1-M2A1 CI-2	AAOP G-1 B ₁ S ₃	B ₁ D ₂ 8,803.0 yds.
B ₂ ² S ₂ ² D ₂ ²	Stock Island Loc. #204	5.27'	131.93'	1	1-M2A1 CI-2	AAOP R ₃ S ₃	B ₂ D ₂ 7,854.2 yds.
B ₃ ³ S ₃ ³ D ₃ ³	Fleming Key Loc. #206	8.05'	110.70'	1	1-M2A1 CI-2	AAOP R ₃ S ₃	B ₃ D ₁ 4,058.5 yds.

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Authority: NMB735036
By: R6-NRA Date: 6/8/82

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- e. Battery Tactical No. 5. This is a four-gun, 90mm AMTB battery, two guns fixed and two mobile. The two mobile guns are in storage at location No 200. Seacoast and Antiaircraft defense make up a dual mission of this battery. The fire control system consists of an M2 Height Finder and an M9A1 Director. Spotting is axial from the BC station. A combined BC, Height Finder and Director tracker station is located 25 yards to the rear of the battery, it is a wooden tower 33 feet high 50 feet long and 18 feet wide, open top with a wooden rail around it. The heights of instruments on this tower are as follows: Height Finder 45.91, BC Scope 46.53, Tracker 45.98. The arc of view is 360°. See Exhibit #13B. See Exhibit 5B for Field of Fire.
- f. Battery Tactical No. 6. This is a four-gun, 90mm AMTB battery, 2 guns fixed and 2 guns mobile. The two guns mobile are in storage at location #200. Seacoast and Antiaircraft defense make up a dual mission for this battery. The fire control system consists of an M2 Height Finder and M9A1 Director. The BC station, 70 yards to the rear of the battery, is a 30', 2-deck, temporary wooden tower, at a ground elevation of 3.5'. The height of instrument in the lower deck, which is used as a BC station, is 36.12' and the upper deck which is used as a spotting station has a height of instrument of 45.93'. The height finder is on a 30' steel braced, open cement top tower, the height of instrument is 34.66'; the Director tracker is on a 30' steel braced, open cement top tower; the height of instrument being 35.42'. The arc of view is LL 300°, RL 71°. See Exhibit #14B. See Exhibit 6B for Field of Fire. This battery is in a class C maintenance status. The M2 Height Finder and Director tracker is stored at location 200. The computer, altitude converter and rectifier are stored at location 201.
- 8. Datum Points. Datum points for the elements of the Harbor Defenses are well established lights and other channel markers in the waters surrounding Key West and easily located and well defined towers, spires, etc., in the City of Key West. The location of such points and their local plane coordinates are shown in Exhibit 12B. See also Exhibit #11B
- 9. Land Acquisition. No additional land is required.
- 10. Radar equipment other than antiaircraft.
 - a. The following radar equipment is authorized for this harbor defense by T/O & E 4-260-1:

No.	Item	Basis
2	SCR-296	2 SC Btry cal. 6-in.
*1	SCR-682	1 HD OP

*As authorized in letter WD, AGO, AG 413.44 (24 Jul 43) OB-S-SPRMS, 26 Jul 43, subj: "Issue of Instructions on Replacement of SCR-582 Radar Set by SCR-682 Radar Set".

b. Tabulation of sets.

	Site Loc. No.	Primary Assgmt.	Secondary Assgmt.	Height at Ant.	Gnd. Site	Height Antenna
SCR-682	200	HDOP	None	4.5'		127.5'
SCR-296	200	B-3	B-4	31'		109'
SCR-296	203	B-4	B-3	7'		110'

For areas of detection, etc., see Exhibit #19B.

By RG-NFPA Date 6/8/43
 Authority NP705 036

S E C R E T

11. Six Generating Units M-6 have been supplied these Harbor Defenses for furnishing electrical power and light for fire control stations at sites where fortification power and commercial power is not available and for auxiliary power where fortification power or commercial power is available. Two of these units are installed at the Fleming Key base end station, one each at the G-1 station and at the G-2 station at Fort Taylor and two are stored at Key West Barracks. The last two are for the base end stations at Stock Island.

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S E C R E T

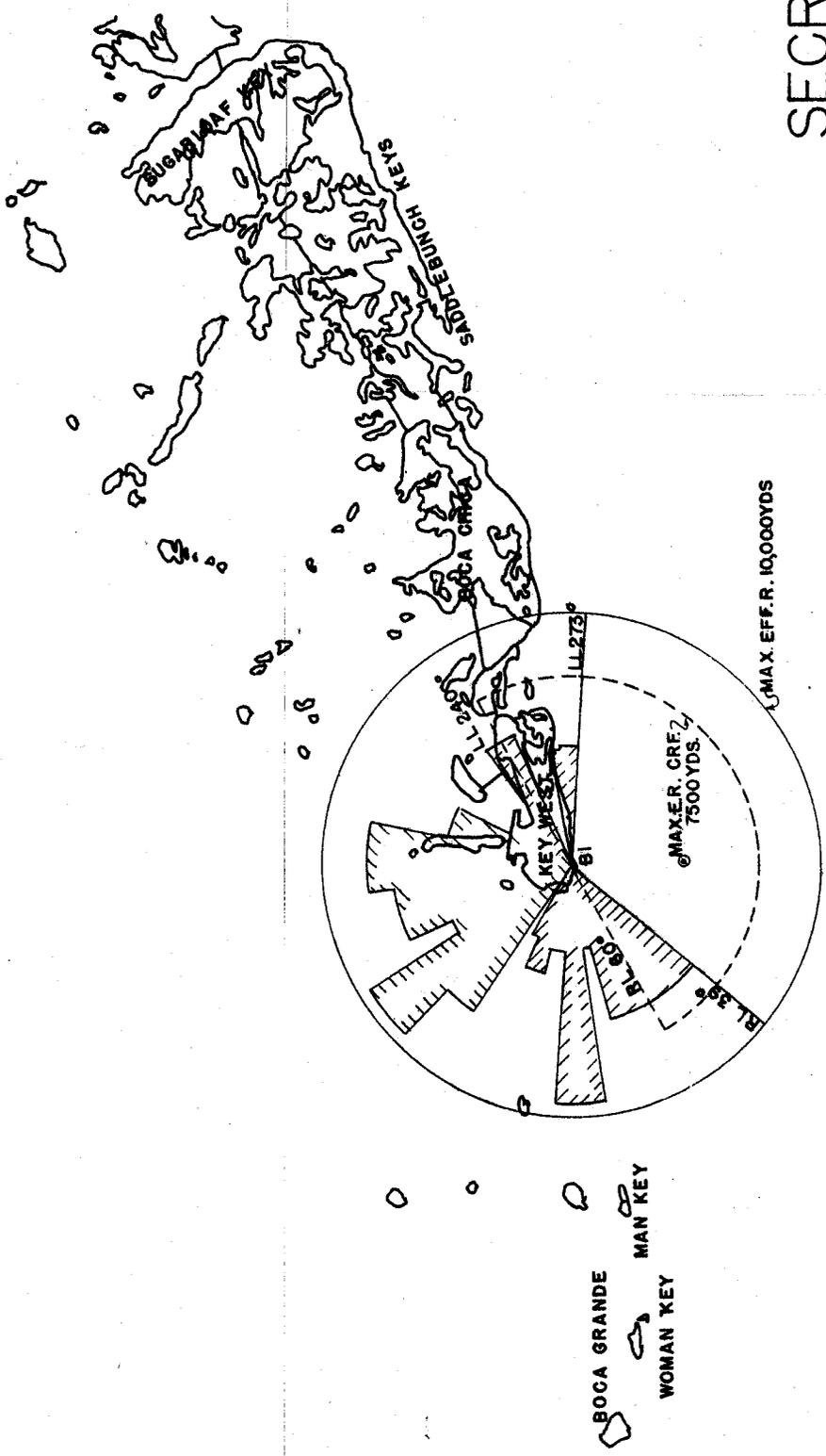
By KG NARA Date 6/8/00
Authority NPB705 036

DECLASSIFIED

SECRET

SECRET

Scale 1"=5000yds.



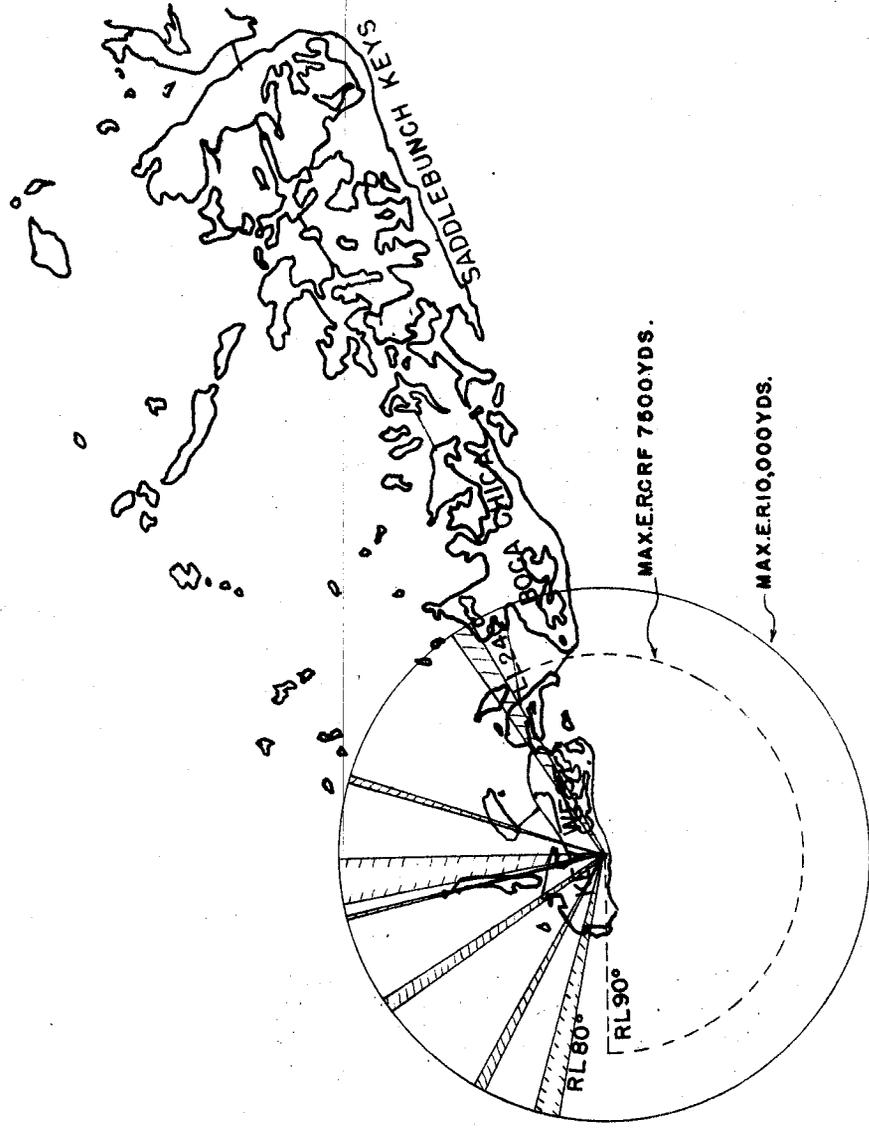
HARBOR DEFENSES of KEY WEST		Revised
FIELD of FIRE of MASK & FIELD of VIEW of CRF		Date
BI - 3" RF	LOC. NO. 200	
Prepared By:	4 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 1B	

DECLASSIFIED
 Authority: NNB705036
 By: K6-NARA Date: 6/8/00

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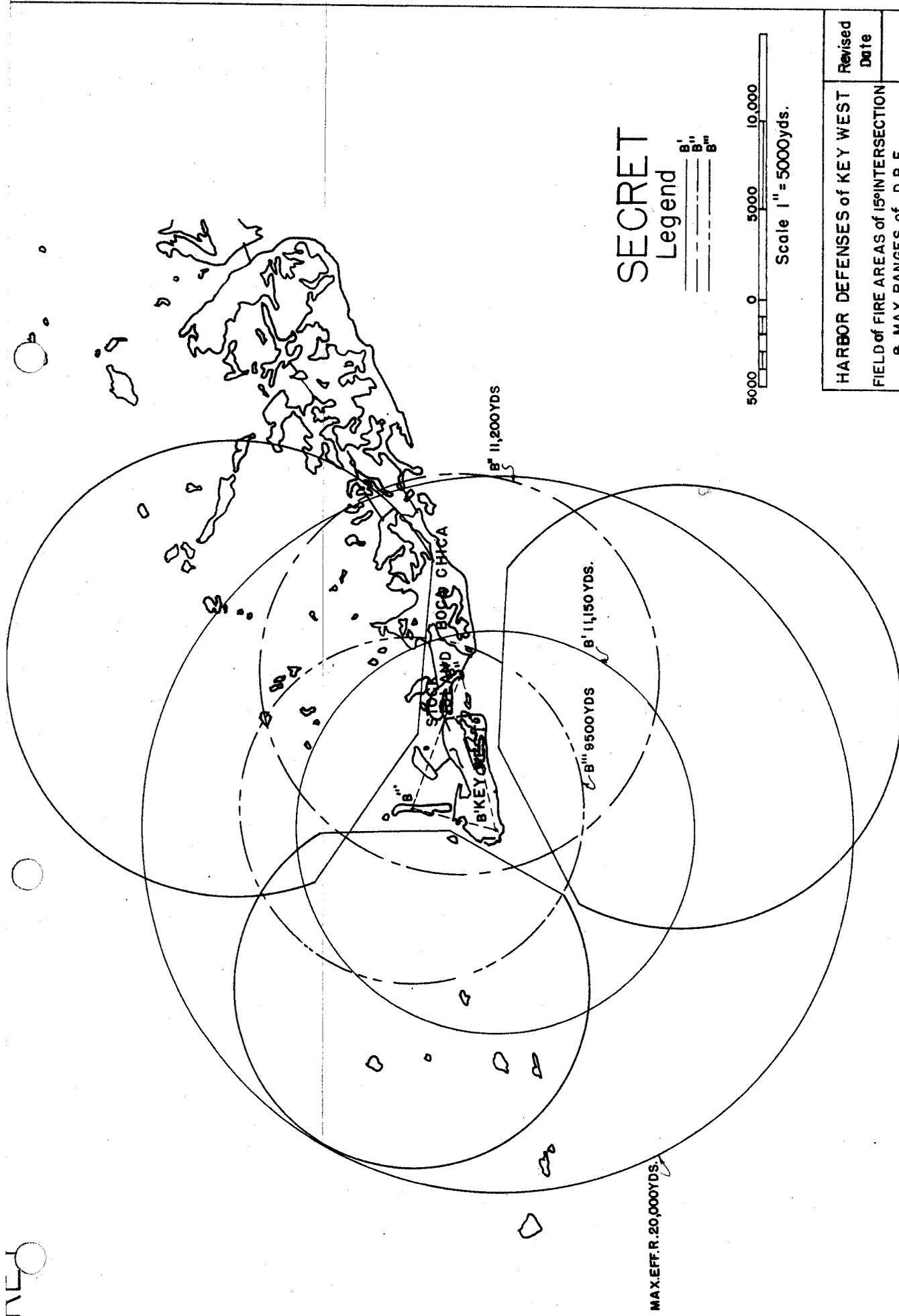
SCALE 1" = 5000yds.



HARBOR DEFENSES OF KEY WEST		Revise
FIELDS OF FIRE & EFFECT OF MASKS		Date
B2 3" RF		
LOC. NO. 201		
Prepared By:	3 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 2 B	

DECLASSIFIED
 Authority: MB705036
 By: KG-NRA Date: 6/2/00

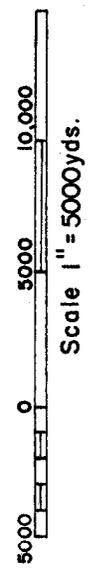
SECRET



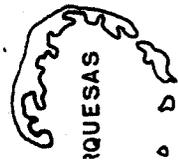
SECRET

Legend

——— B'
 - - - B''
 - - - B'''

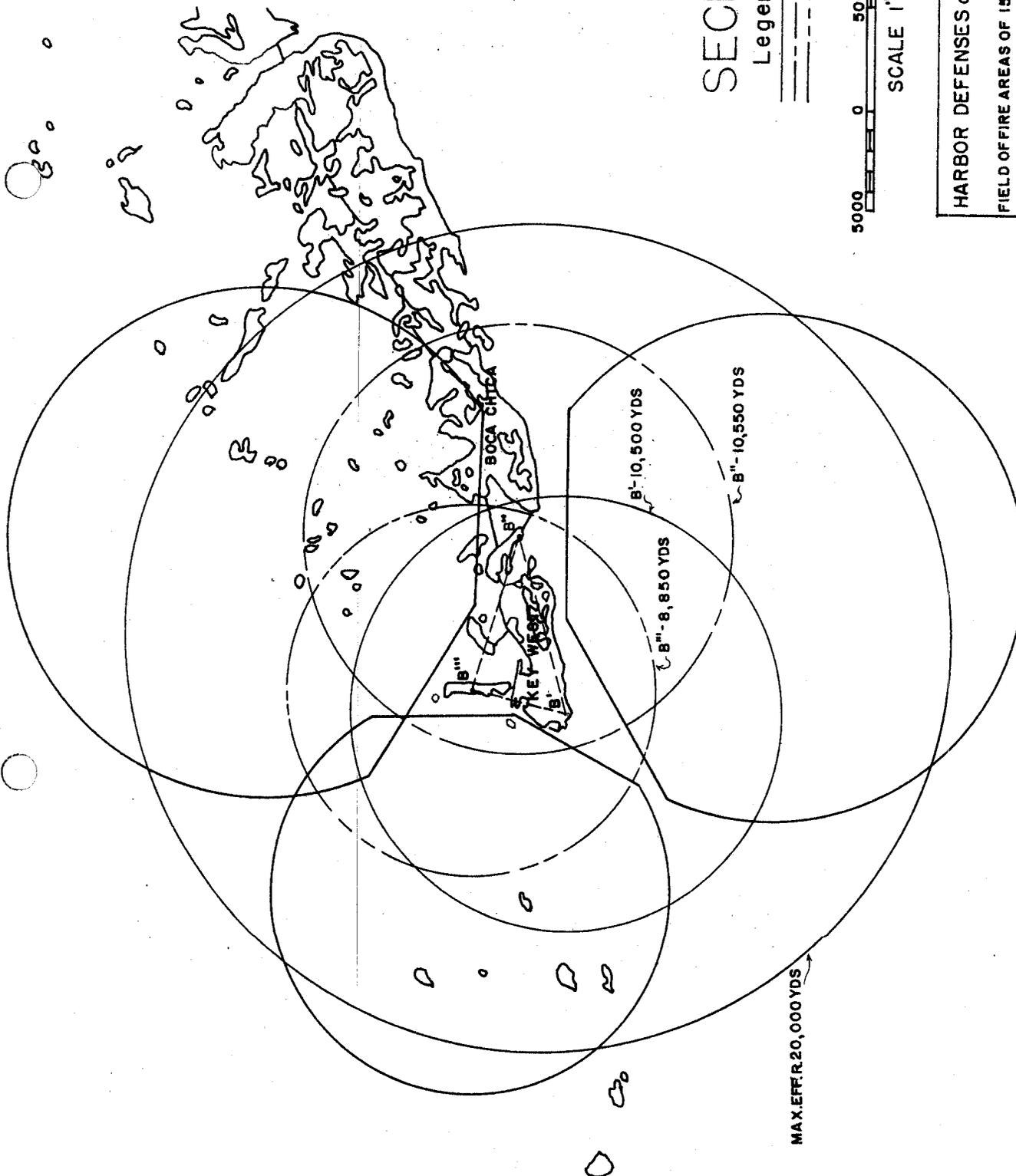


HARBOR DEFENSES of KEY WEST		Revised Date
FIELD of FIRE AREAS of 15° INTERSECTION		
B MAX. RANGES of D.P.F.		
B3 -6" GUNS	LOC. NO. 200	
Prepared By:	4 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 3 B	



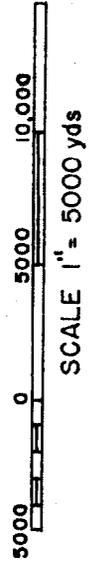
DECLASSIFIED
 Authority: NND 705 036
 By: K6-NAPA Date: 6/18/00

SECRET

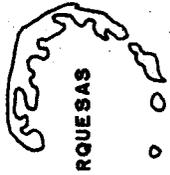


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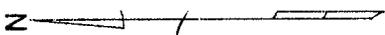
Legend
 B'
 B''
 B'''



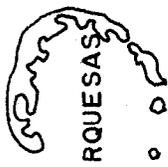
HARBOR DEFENSES OF KEY WEST		Revised
FIELD OF FIRE AREAS OF 15° INTERSECTION		Date
8 MAX. RANGES OF D.P.F.		
B4- 6" GUNS	LOC. NO. 203	
Prepared By:	4 APRIL 1945	
HQ. H.D. K.W.	EX. NO. 4 B	



DECLASSIFIED
 Authority: NND 705 036
 By: K6-NRA Date: 6/20/00



SECRET



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Scale 1" = 5000 yds.

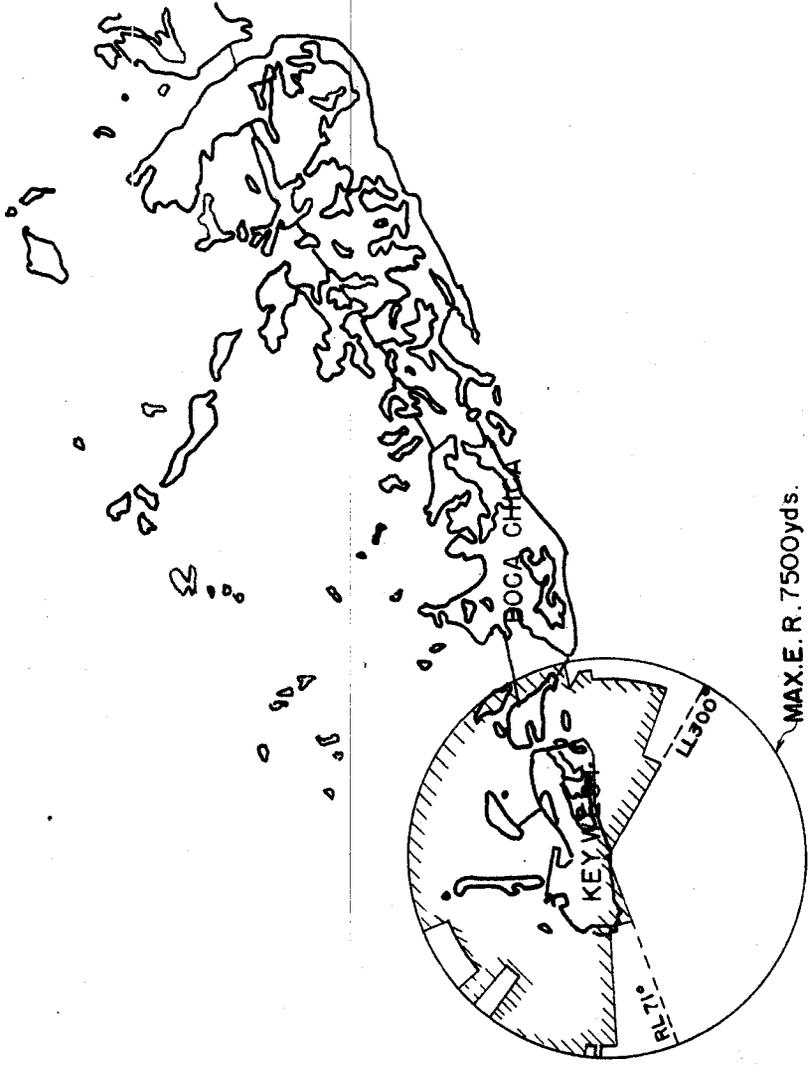
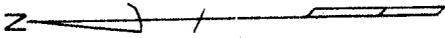


ring table range
yds.

DECLASSIFIED
 Authority: **MB705036**
 By: **KG-NARA** Date: **6/20/00**

HARBOR DEFENSES OF KEY WEST		Revised
FIELD OF FIRE & EFFECT OF MASK		Date
90mm AMTB BTRY.		
B-5	LOC. NO. 200	
Prepared By:	5 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 5 B	

SECRET



SECRET

DECLASSIFIED
Authority: NND 75 0236
By: K6-NAPA Date: 6/7/00

px. firing table range
500yds.



HARBOR DEFENSES of KEY WEST		Revised Date
FIELD of FIRE & EFFECT of MASK		
B6	90mm AMTB BTRY LOC. NO. 201	
Prepared By:	5 APRIL 1945	
HQ. H.D.K.W	EX. NO. 6B	

DECLASSIFIED

Authority NNb705.036
By KG NARA Date 6/8/00

SECRET

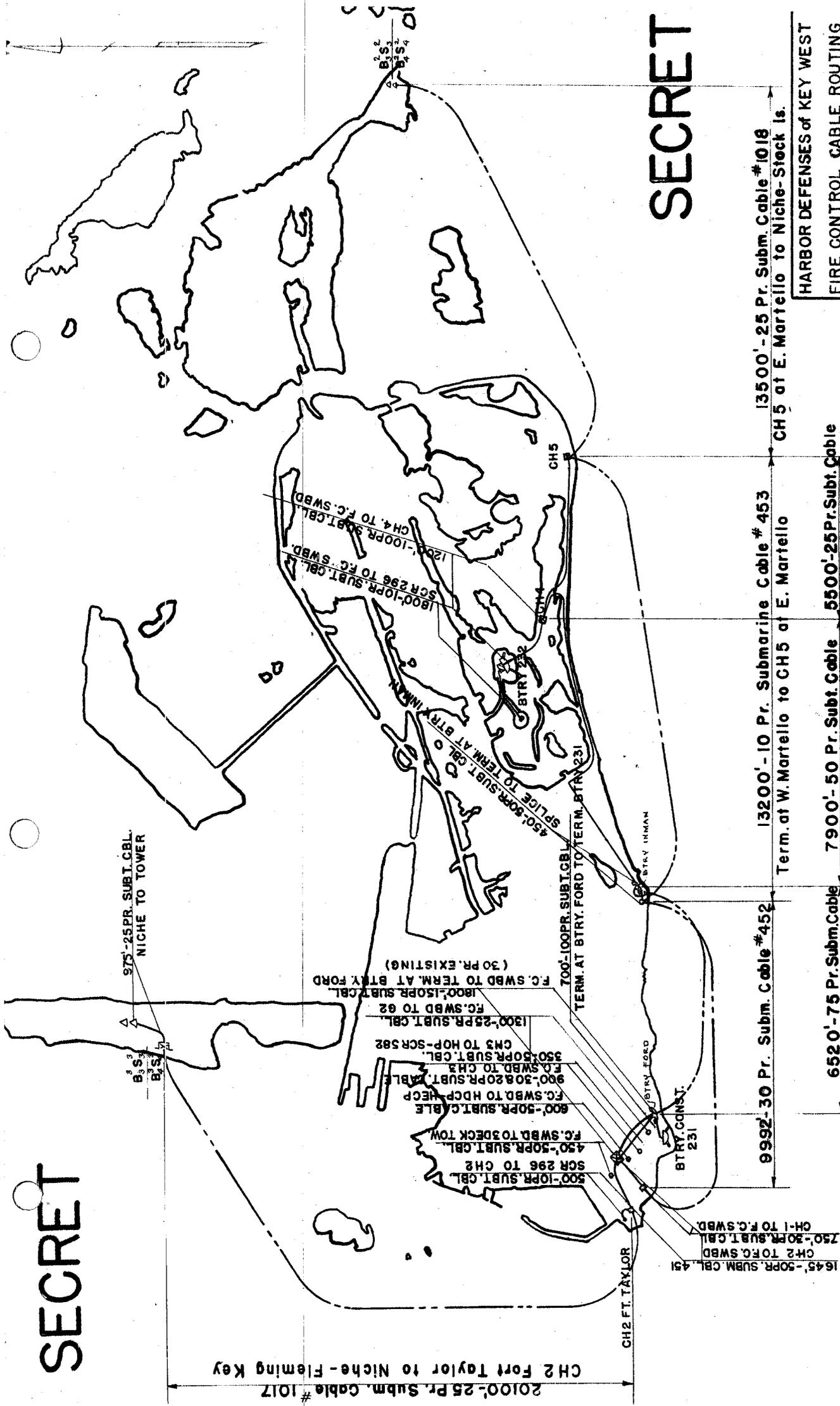
EXHIBIT 7B WITHDRAWN PENDING ISSUANCE
OF A REVISED CIRCUIT DIAGRAM BY THE
CHIEF SIGNAL OFFICER

SECRET

HARBOR DEFENSES
CIRCUIT DIA

SECRET

SECRET



20100'-25 Pr. Subm. Cable #1017
 CH 2 Fort Taylor to Niche-Fleming Key

975'-25 Pr. Subm. Cable #1018
 NICHE TO TOWER

1645'-50 Pr. Subm. Cable #451
 CH 2 TO FC SWBD
 750'-30 Pr. Subm. Cable
 CH 1 TO FC SWBD

500'-10 Pr. Subm. Cable
 SCR 296 TO CH 2
 450'-50 Pr. Subm. Cable
 FC SWBD TO 3 DECK TOW
 600'-50 Pr. Subm. Cable
 FC SWBD TO HD CP HEP
 900'-30820 Pr. Subm. Cable
 FC SWBD TO CH 3
 350'-50 Pr. Subm. Cable
 FC SWBD TO CH 3
 1300'-25 Pr. Subm. Cable
 CH 3 TO HOP-SCR 582
 FC SWBD TO G2
 1800'-150 Pr. Subm. Cable
 FC SWBD TO TERM. AT BTRY FORD
 (30 PR. EXISTING)

700'-100 Pr. Subm. Cable
 TERM. AT BTRY FORD TO TERM. BTRY 231

50'-50 Pr. Subm. Cable
 SPLICE TO TERM. AT BTRY 231

1800'-10 Pr. Subm. Cable
 SCR 296 TO FC SWBD

1200'-10 Pr. Subm. Cable
 CH 4 TO FC SWBD

13500'-25 Pr. Subm. Cable #1018
 CH 5 at E. Martello to Niche-Stock Is.

13200'-10 Pr. Submarine Cable #453
 Term. at W. Martello to CH 5 at E. Martello

6520'-75 Pr. Subm. Cable
 Term. at Btry Ford to term.
 at Btry Inman

7900'-50 Pr. Subm. Cable
 Term. at Btry Inman to CH 4
 near Btry #232

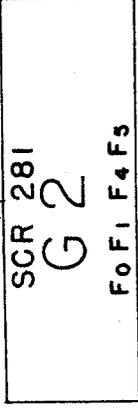
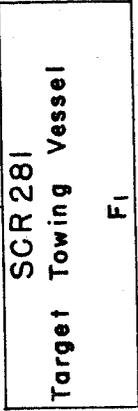
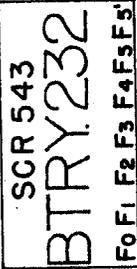
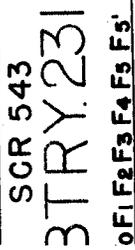
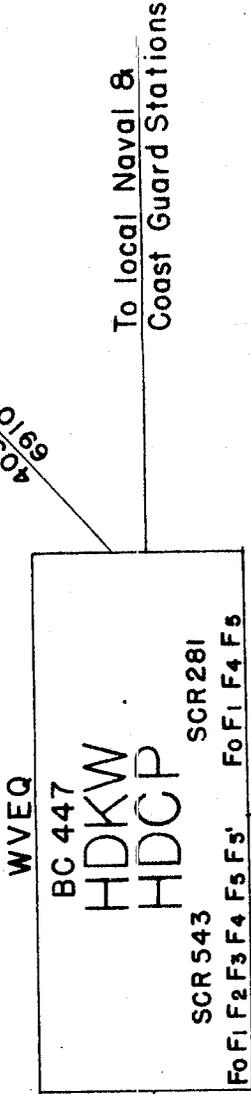
5500'-25 Pr. Subm. Cable
 CH 4 near Btry #232
 to CH 5 at E. Martello

HARBOR DEFENSES OF KEY WEST	
FIRE CONTROL CABLE ROUTING	
Prepared By:	12 APRIL 1945
HQ. H.D.K.W.	EX. NO. 8 B

SECRET

CHARLESTON

4035 KC
6910 KC



NOTE: The circuit with HD Charleston authorized by confidential letter EDC, dated 19 Dec. 44 file 676.3 and 7th Ind. there to, Hq. ASF, OCSig.O, Wash. D.C. 27 Feb. 45.

For frequency conversion see letter WD AGO, file 311.23, dated 25 June 45 subject "Frequency Assignments Coast Artillery Harbor Defense Communications."

Two Radio Set SCR 543 are allocated to the HD Command G for air & naval communications. They are shown on the exhibit allocated to the 6" batteries may be one of the contemporary radio sets, but not necessarily the standard procedure. (See page 1 - 4 June 1946)

SECRET

HARBOR DEFENSES of KEY WEST	
RADIO NET	
Prepared By:	13 APRIL 1945
HQ. H.D.K.W.	EX. NO. 10B

LOC. NO.	STATION	COORDINATES		LAMBERT YARDS)	BATTERY NO. 4			
		X	Y		BC	B ¹ S ¹	B ² S ²	B ³ S ³
200	HDOP	79,459.91		66,312.37	83,309.67			67,431.56
200	SCR-682	79,459.91		66,312.37	79,369.42			66,466.07
200	G-1	79,369.42		66,466.07	87,985.77			68,269.85
200	G-2	79,638.85		66,188.17	80,421.86			70,385.60
		BATTERY NO. 1			82,786.86			67,279.90
200	BC	79,688.70		66,064.43	83,274.60			67,344.08
"	CRF	79,688.70		66,064.43	83,344.61			67,344.10
"	DP	79,716.47		66,090.50	BATTERY NO. 5			
"	GUN No. 1	79,709.67		66,080.31	BC			66,316.30
"	GUN No. 2	79,728.23		66,089.48	DIRECTOR TR.			66,321.20
		BATTERY NO. 2			HEIGHT FINDER			66,311.40
201	BC	81,526.02		66,228.83	GUN NO. 1			66,319.07
"	CRF	81,526.02		66,228.83	GUN NO. 2			66,276.70
"	DP	81,529.10		66,206.76	GUN NO. 3			
"	GUN No. 1	81,518.56		66,205.00	MOBILE			
"	GUN No. 2	81,539.15		66,207.54	GUN NO. 4			
		BATTERY NO. 3			BATTERY NO. 6			
200	BC	79,579.69		66,082.46	BC			66,281.27
200	B ¹ S ¹	79,369.42		66,466.07	DIR. TRACKER			66,267.56
204	B ² S ²	87,985.77		68,269.85	HEIGHT FINDER			66,264.49
206	B ³ S ³	80,421.86		70,385.60	GUN NO. 1			66,211.65
200	SCR-296	78,923.88		66,375.52	GUN NO. 2			66,211.95
	GUN NO. 1	79,509.73		66,022.04	MOBILE			
	GUN NO. 2	79,579.72		66,022.89	GUN NO. 4			

SECRET

HARBOR DEFENSES OF KEYWEST

ORIENTATION DATA

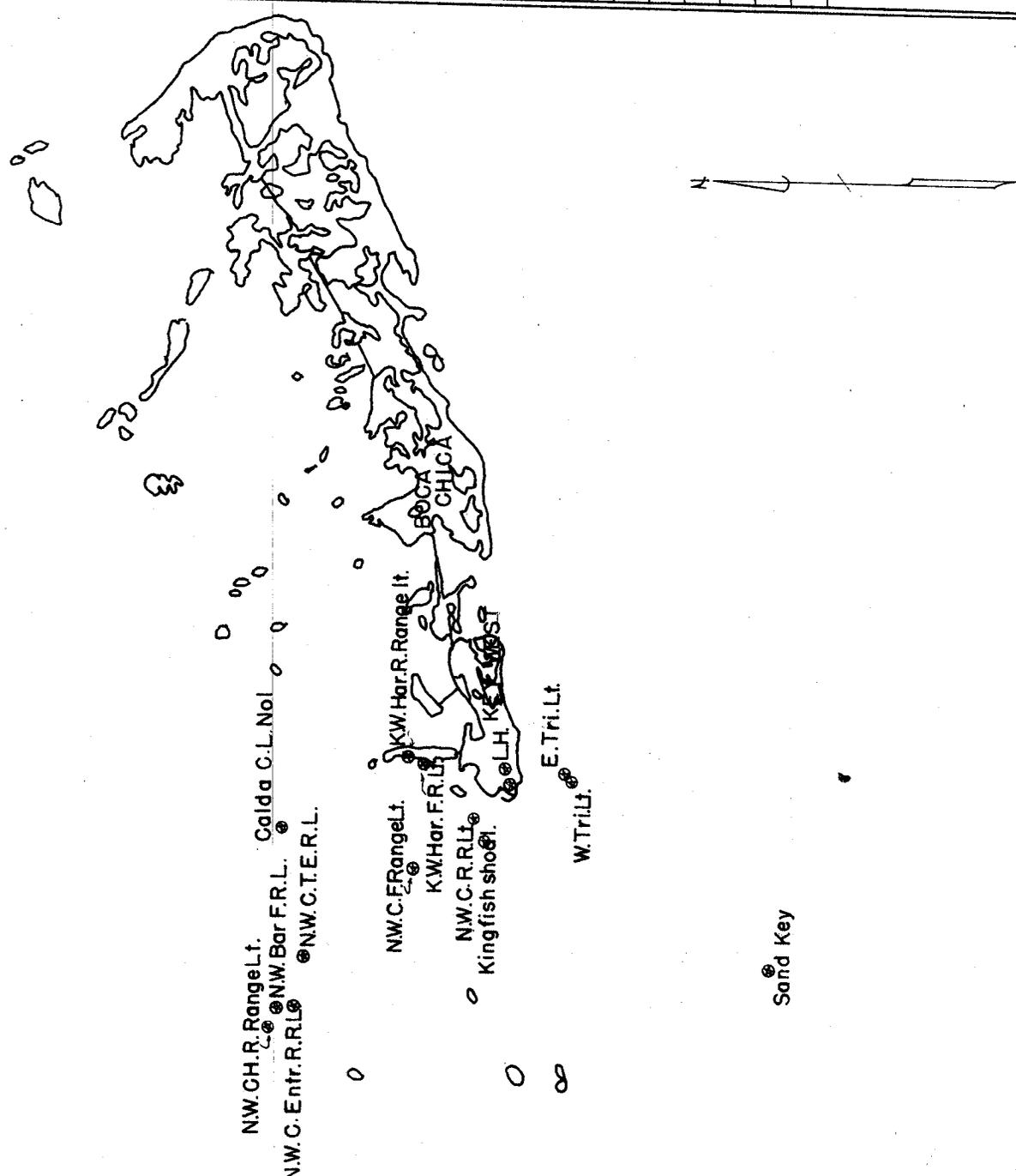
Prepared By: 9 APRIL 1945

HQ. H.D.K.W. EX. NO. 11-B

SECRET

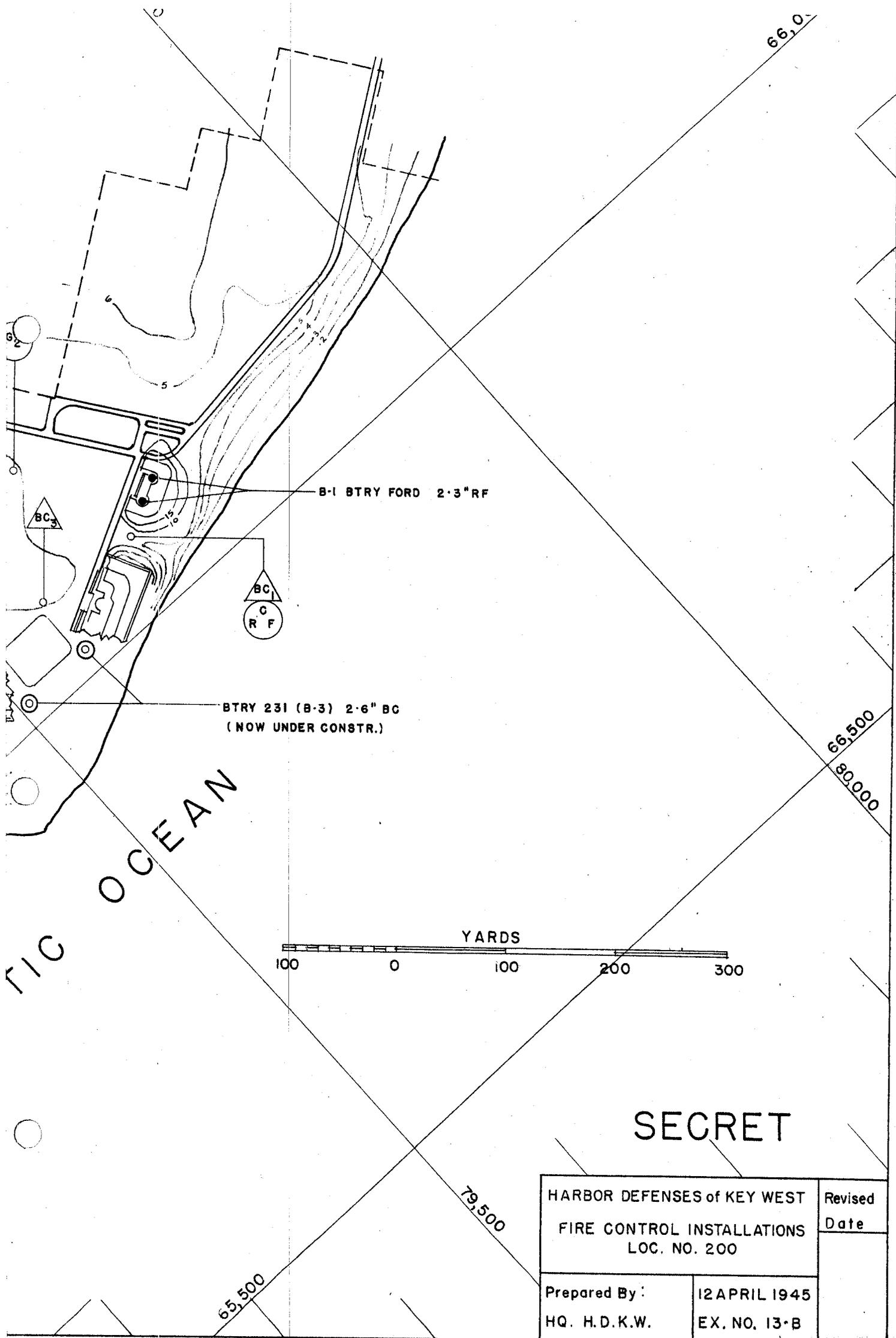
Lambert Grid
Coordinates (yards)

DATUM POINTS	X	Y
Key West Lighthouse	79,881.20	66,639
Caida Chan. Lt. No.1	72,081.92	75,260
Key West Cath. Ch. N.E. Spire	80,476.61	66,956
East Martello Tower	84,973.28	66,850
West Martello Tower	81,529.10	66,206
Sand Key Lighthouse	71,383.85	54,930
Key West Harbor Fr. Range Lt.	79,996.12	70,119
Key West Harbor Rear Range Lt.	80,316.45	70,826
Kingfish Shoal Lt.	76,808.77	67,513
N.W.Chan. inner Rear Range Lt.	77,778.18	67,934
N.W.Chan. inner Front Range Lt.	75,470.58	70,597
N.W.Chan. Turn East Ft. Range Lt.	71,747.16	75,208
N.W.Chan. Turn Rear Range Lt.	68,448.66	76,942
N.W.Chan. Entr. Rear Range Lt.	69,418.16	75,760
N.W.Bar Front Range Lt.	69,297.66	76,486
East Triangle Lt.	79,602.38	61,663
Amer. Shoal Lighthouse	111,047.56	63,581
Sombrero Key Lighthouse	156,290.84	76,183
Havana-American Trust Cigar Fact.	82,417.29	67,417
Naval Hospital	85,422.95	68,816
N.W. Passage Lighthouse	69,000.92	74,920
Naval Sound Station	79,410.21	64,121

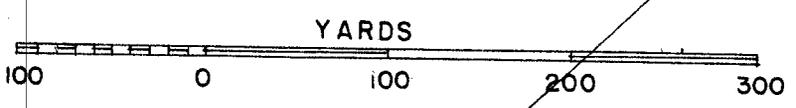


SECRET

HARBOR DEFENSES of KEY WEST		Re
ORIENTATION DATA		D
Prepared By:	9 APRIL 1945	
HQ. H. D. K. W.	EX. NO. 12 B	



ATLANTIC OCEAN

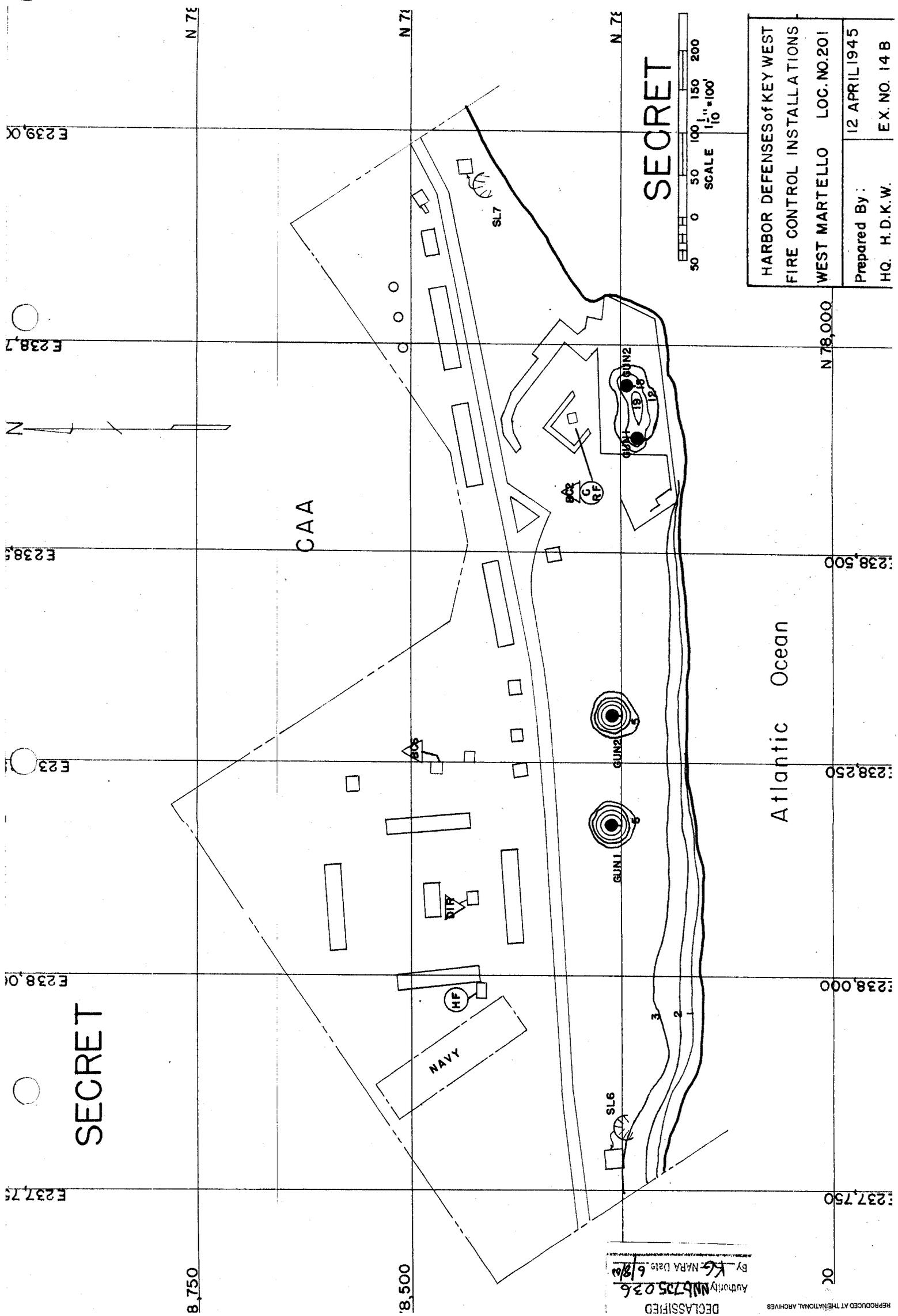


SECRET

HARBOR DEFENSES of KEY WEST FIRE CONTROL INSTALLATIONS LOC. NO. 200		Revised
		Date
Prepared By:	12 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 13-B	

SECRET

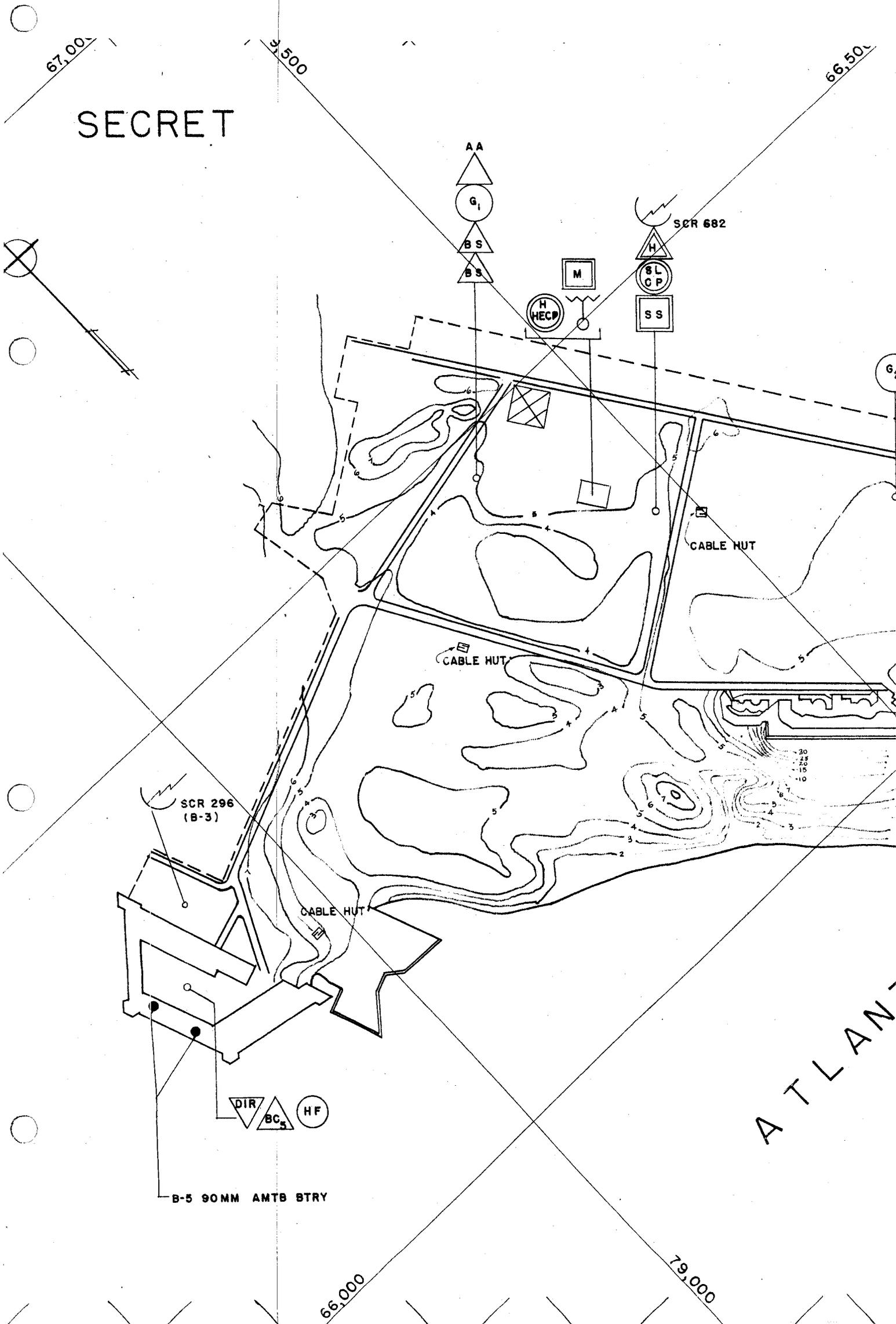
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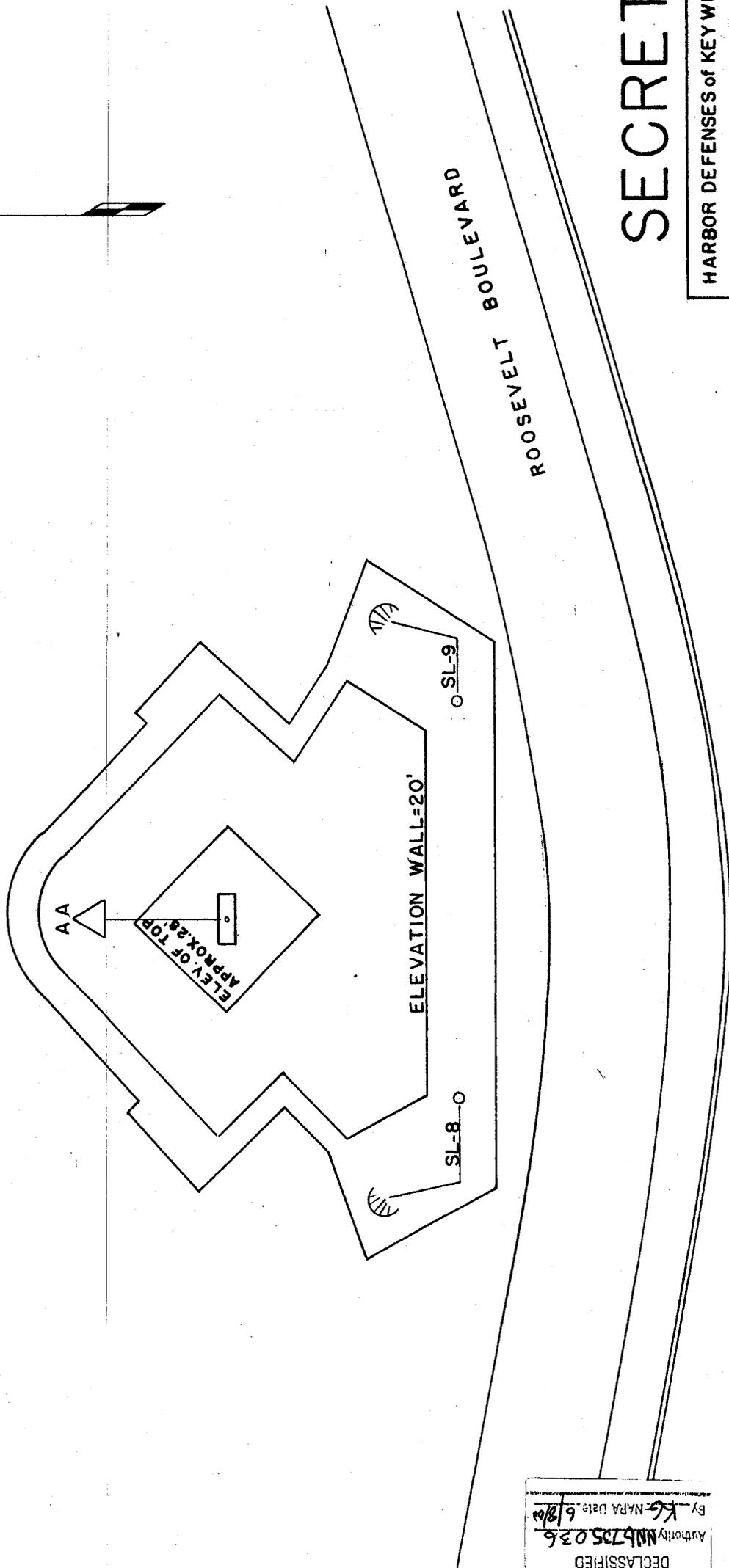
HARBOR DEFENSES OF KEY WEST	
FIRE CONTROL INSTALLATIONS	
WEST MARTELLO LOC. NO. 201	
Prepared By:	12 APRIL 1945
HQ. H.D.K.W.	EX. NO. 14 B

DECLASSIFIED
 Authority: NND 705 036
 By: K6-NRA Date: 6/18/00

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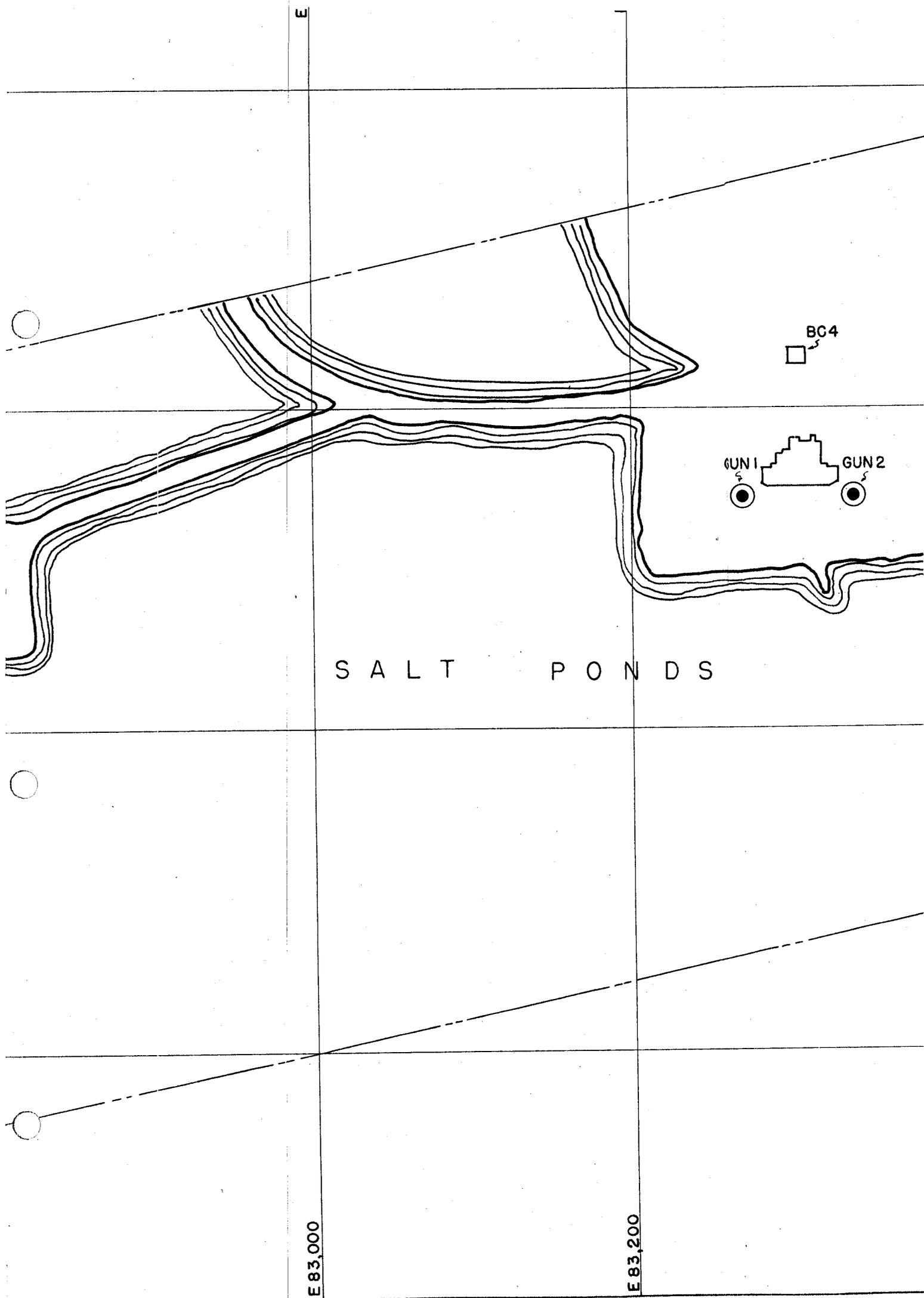
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	Date:
EAST MARTELLO LOC. NO.	
202 FIRE CONTROL INSTALLATION	
Prepared By :	10 April 1945
HQ. H.D.K.W.	EX. NO. 15-B

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 Authority: NNB705 036
 By: KG-NRA Date: 6/2/00



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HARBOR DEFENSES of KEY WEST FIRE CONTROL INSTALATIONS		Revised Date
SALT PONDS	LOC. 203	
Prepared By:	11 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 16 B	

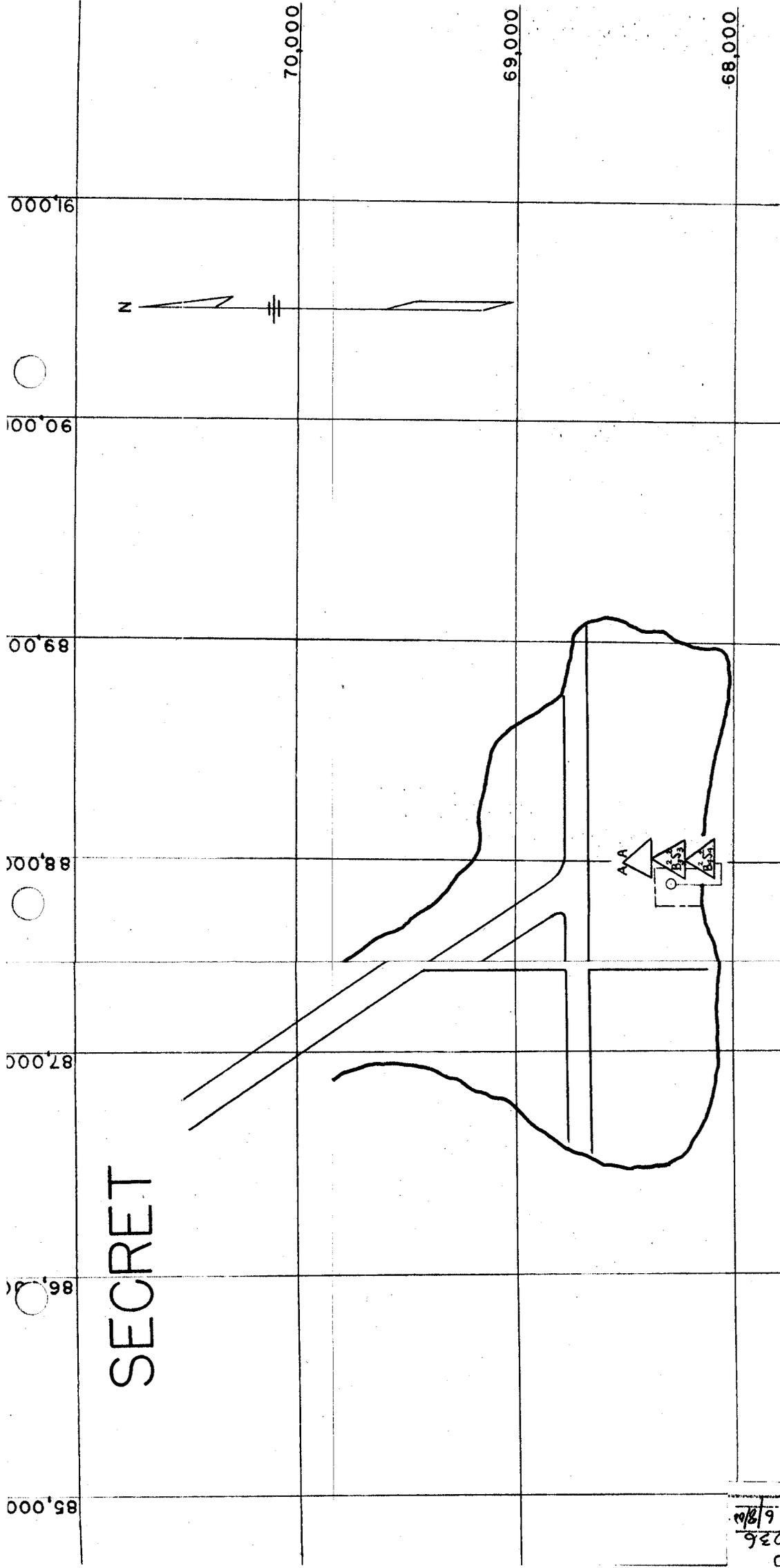


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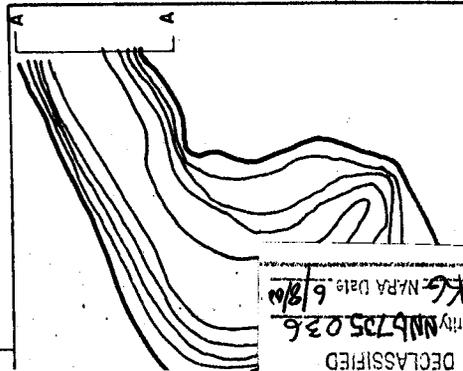
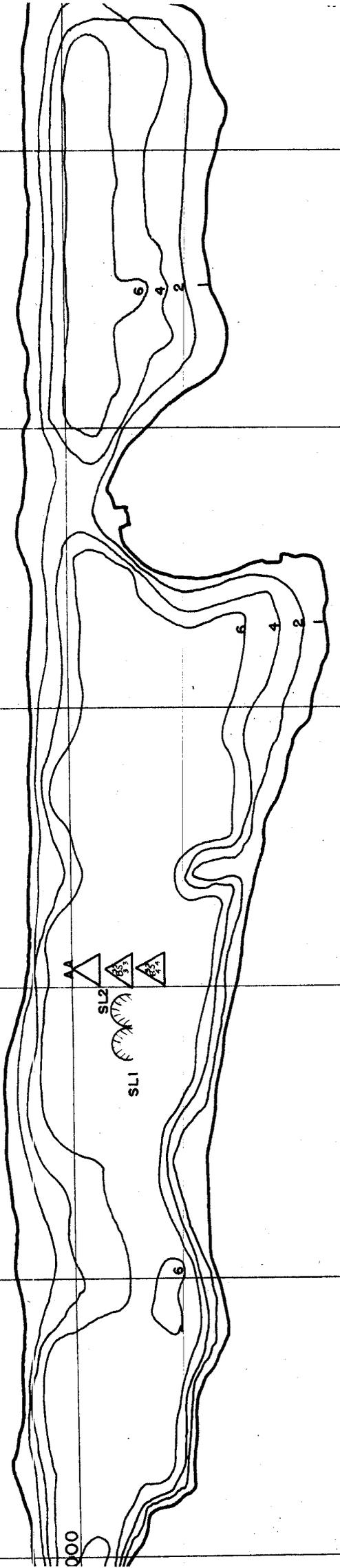
HARBOR DEFENSES of KEY WEST
STOCK ISLAND - LOC. NO. 204
FIRE CONTROL INSTALLATION

Prepared By: HQ. H.D.K.W.
13 APRIL 1944
EX. NO. 17 - B



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Authority: NND 705 036
By: KG-NAPA Date: 6/18/00

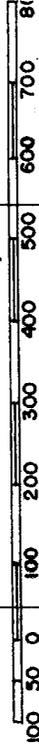
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 By: **KG** NARA Date: **6/8/00**

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Scale - 6" = 1,000'



80,000

81,000

HARBOR DEFENSES OF KEY WEST FLEMING KEY FIRE CONTROL INSTALLATION LOC. NO. 206	
Prepared By: HQ. H.D.K.W.	12 APRIL 1945 EX. NO. 18 B

70,000

70,500

71,000

71,500

SECRET

24,000yds.



Horizon from SCR 296 (B4)
24,000yds.

Horizon from
SCR 682
26,000yds.



MARQUESAS KEYS



SCR 296 KEY

Note:

Arc of detection in all cases is 360°

Clutter areas & dead areas are negligible due to the lack of height of objects and the flat terrain.

SECRET

SCALE 1"=5000yds.



HARBOR DEFENSES OF KEY WEST
RADAR INSTALLATIONS OTHER
THAN AA

Prepared By: 13 APRIL 1945
HQ. H.D.K.W. EX. NO. 19B

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Tactical No. 2	4 a	4
Tactical No. 3	4 c	4
Tactical No. 4	4 c	4
Tactical No. 5	4 c	4
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Tactical No. 8	4 c	4
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EXHIBITS

Location of Searchlights Elements
Field of Illumination

No.
1-C
2-C

- 1 -

S E C R E T

Authority NNP705 036
By K6 NARA Date 6/8/00

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S E C R E T

1. General.

- a. Since the Island of Key West at its highest point is only 16 feet above sea level, no advantage can be taken of natural height of site in locating seacoast searchlights.
 - b. No advance locations off the Island of Key West are available and suitable for the location of seacoast searchlights.
 - c. Due to the unlimited visibility which prevails locally, the dependable range of the 60" searchlight is assumed to be limited only by the height of site and normal range of the light.
 - d. Due to locating the 90mm AMTB batteries near the previously approved locations of certain seacoast searchlights, no additional searchlights for the AMTB batteries are provided. Searchlight No. 3, located on the right flank of Battery 5 and Searchlight No. 6, located on the right flank of Battery 6, will be released for employment in defense against motor torpedo boats.
 - e. In compliance with instructions contained in letter TAG Office, AG 660.2 (5-27-43)OB-S-E, 2 Jun 43, subject: "Requirements for Harbor Defense Searchlights", the employment and siting of 60-inch portable seacoast searchlights in these Harbor Defenses was reviewed. This Annex is based upon recommendations of this headquarters approved in 12th Ind., Hq. ASF, SPRMS 660.2 (16 Jun 43), 5 Oct 43, to letter, Hq. HDKW, 660.2, 16 Jun 43, subject: "Requirements for Harbor Defense Searchlights", upon subsequent recommendations made in 17th Ind., Hq. HDKW, 660.2, 9 Nov 43, to same letter, and letter, Office, Chief of Engineers, SPEPR, 28 February 1944, subject: "Replacement of Fixed-Type Searchlights Installed in Harbor Defenses," and letter, War Department, AGO AG 470.3 (11 Apr 44)OB-S-E, 1 April 1944, same subject. See Exhibit Nos. 1c and 2c.
2. Tactical Organization. All seacoast searchlights are placed under the tactical control of the Harbor Defense Command, but any or all of these may be released to either of the Commanders of Bn 1 or 2, who in turn may release them to the batteries of their command. Searchlights Nos. 3 and 6 may be released to Batteries 5 and 6, respectively, for employment in defense against motor torpedo boats.

- 2 -

S E C R E T

By RG NARA Date 6/8/00
 Authority NP705036

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3. List of seacoast searchlights follows:

Tactical No.	Location	Site	Type	Type of Mounting	Ht. of Ground	Ht. of Tower	Control Station	Type of Power Plant	Loc. of Power Plant	Place of Storage	On Hand or to be supplied
1	Fleming Key Loc. #206	SL-1	Portable	Steel Tower	8'	50'	B ³ S ³ B ₄ S ₄	Portable	Base of Tower	Ft Taylor	On Hand
2	Fleming Key Loc. #206	SL-2	Portable	Steel Tower	8'	50'	B ³ S ³ B ₄ S ₄	Portable	Base of Tower	Ft Taylor	On Hand
3	Fort Taylor Loc. #200	SL-3	Portable	Wood Platform	30'	3'	DC Bury 5	Portable	Base of Tower	Ft Taylor	On Hand
4	Fort Taylor Loc. #200	SL-4	Portable	Steel Tower	2'	50'	SL #5	Portable	Base of Tower	Ft Taylor	On Hand
5	Fort Taylor Loc. #200	SL-5	Portable	Steel Tower	5'	50'	SL #4	Portable	Base of Tower	Ft Taylor	On Hand
6	W. Martello Loc. #201	SL-6	Portable	Steel Tower	5'	50'	W. Martello Tower	Portable	Base of Tower	Ft Taylor	On Hand
7	W. Martello Loc. #201	SL-7	Portable	Wood Tower	5'	41'.5	DC Tower W. Martello	Portable	Base of Tower	Ft Taylor	On Hand
8	E. Martello Loc. #202	SL-8	Portable	Steel Tower	19'.9	26'	Tower E. Martello	Portable	E. Martello	Ft Taylor	On Hand
9	E. Martello Loc. #202	SL-9	Portable	Steel Tower	19'.9	26'	Tower E. Martello	Portable	E. Martello	Ft Taylor	On Hand

See Exhibit 2-C For fields of illumination.

NCTE: All fixed lights were taken down and replaced by portable lights see par 1e.

F-1
F-1
F-1
C-1
F-1
F-1
S-1

F-1
F-1
F-1
C-1
F-1
F-1
S-1

By Authority N6735036
Date 6/8/82

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S E C R E T

4. Construction Requirements.

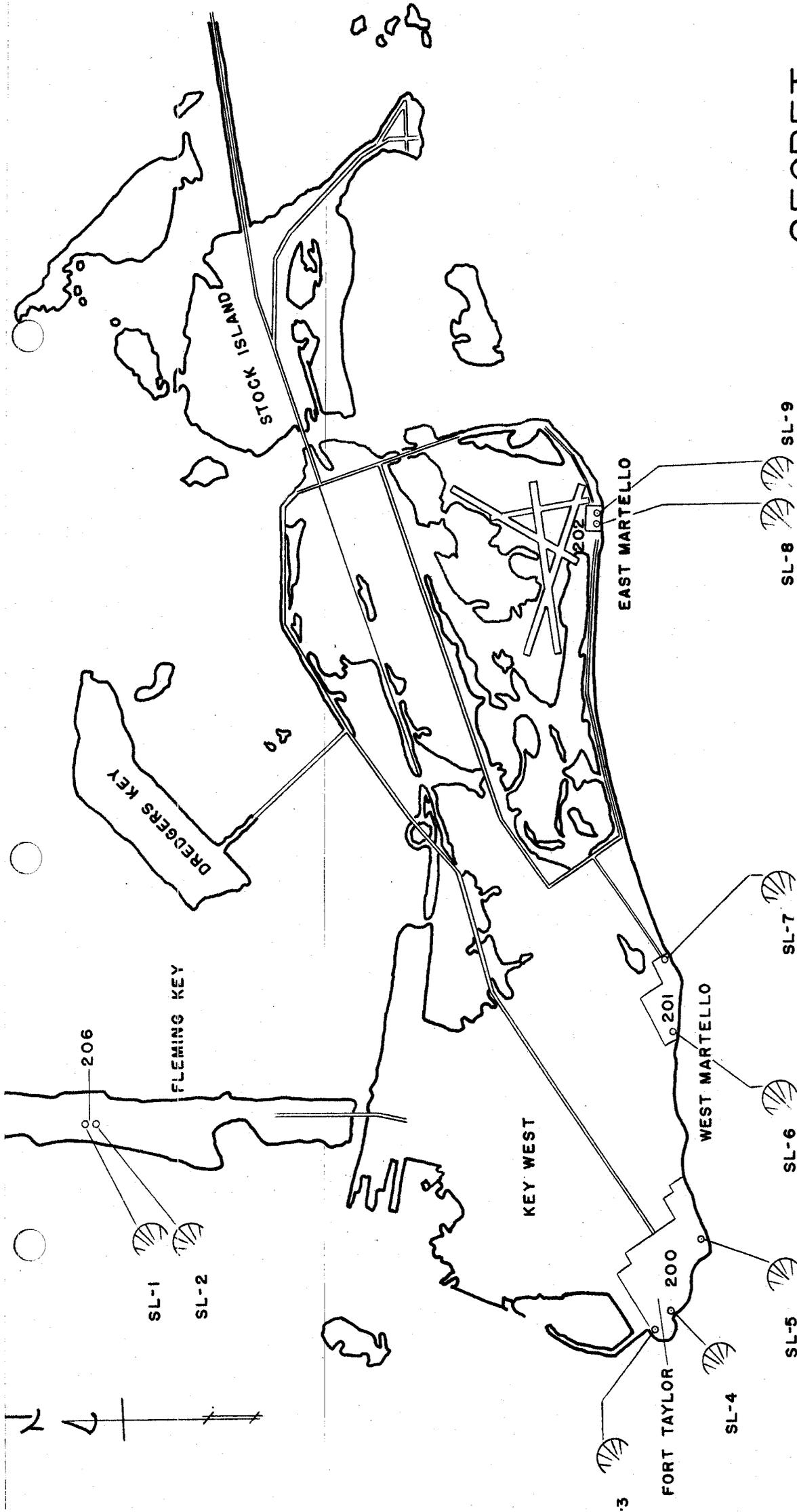
- a. The steel towers for tactical positions Numbers 1 and 2 are in storage at Post Engineers and can be erected in a short time. They were erected at Fleming Key in December 1943 but later removed and placed in storage.
- b. Tactical No. 6 and 7 requires a 50' steel tower.
- c. There are no requirements for Tactical Nos. 3, 4, 5, 8 and 9.

5. Land acquisition - No requirements.

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S E C R E TBy KG NARA Date 6/8/00
Authority NP705 036

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SECRET

HARBOR DEFENSES OF KEY WEST	Revit
SEACOAST SEARCHLIGHTS	Ddt
Prepared By:	14 April 1945
HQ. H.D.K.W.	EX. NO. 1-C



S E C R E T

No underwater defense project is provided for the Harbor Defenses. Under directive contained in letter TAG, AG 660.3 (9-29-42)OB-S-E, 20 Oct 1942, subject: "Revision of Underwater Defense Projects", a Local Joint Army and Navy Planning Committee submitted a plan for an Underwater Defense Project for the Harbor Defenses of Key West. The Harbor Defense Commander, with the concurrence of the Commandant, Naval Operating Base, Key West, recommended against the establishment of submarine mine defenses in these Harbor Defenses, and this recommendation was approved by the War and Navy Departments, as indicated in letter TAG, AG 660.3 (10-20-42)OB-S-E, 20 Mar 1943, subject: "Revision of Underwater Defense Projects".

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 Authority NND 705 036
 By R6-NARA Date 6/2/00

S E C R E T

1. Tactical Organization.

- a. The one antiaircraft battery, a fixed 3 inch battery, in the Harbor Defenses was removed in December 1943 and substitution of a 120mm battery is proposed pursuant to 1st Indorsement, War Department, AGO AG 472.3 (9 Nov 43)OB-S-E, 26 November 1943 on letter, Headquarters, Eastern Defense Command, ORD 472.93/1097, 5 November 1943, subject: "Disposition of 3-Inch Gun Materiel."
Present supply of the 120mm materiel is not contemplated.
- b. The two 90mm AMTB batteries have a dual mission of Antiaircraft and Seacoast Defense.

2. a. Relations with other echelons.

- (1) There is no relation of the harbor defense antiaircraft defense to any sector or subsector antiaircraft defenses.
- (2) There is no AAAIS for this Harbor Defense at the present time.
- (3) The AWS for this area is located at Fourth Service Command in Atlanta, Georgia. Commercial telephone is used for communications.
- (4) The operational control of all antiaircraft artillery guns, automatic weapons, and searchlights in the Key West Antiaircraft Zone is exercised by the Harbor Defense Commander by local joint agreement with the Navy.
- b. Reinforcing units required. Reinforcing mobile antiaircraft units considered necessary to provide a complete defense in the event a category of defense is approved are one Automatic Weapons Battery, one Gun Battery, and one Searchlight Platoon.

3. a. Gun Defense.

- (1) See par 1a above in reference to fixed 3-Inch AA Guns removed and proposed 120mm gun battery.
- (2) Pursuant to Ltr. EDC, File CA-472, subject: "Dual Missions of AMTB Batteries", dated 6 September 1944, the two 90mm AMTB batteries have a dual mission of antiaircraft and seacoast defense.
- b. The antiaircraft searchlight defense is based upon five 60", portable, antiaircraft searchlights, and one SCR-268-B. See Exhibit #3E for positions. Inasmuch as the searchlights are portable and subject to constant change of position, the locations in Exhibit 3E are generally correct. Authority to have only one SCR-268-B on hand at this Harbor Defense instead of three as authorized in T/O & E 4-260-1 is in 2nd Ind. Headquarters Eastern Defense Command, 11 Oct 44, letter 413.44, Headquarters Harbor Defenses of Key West, 3 Oct 44, subject: "Radio Sets SCR-268."
- c. Automatic weapons defense. The automatic weapons, after completion of the project, authorized by T/O & E 4-260-1, and their assignment are tabulated below. See Exhibit #4E for their disposition.

- 2 -

S E C R E T

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 Authority: *NP735036*

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Caliber	No. of Guns	Assigned to	Location
.50 Cal MG	2	Battery No. 1	#200
.50 Cal MG	2	Battery No. 2	#201
.50 Cal MG	2	Battery No. 3	#200
40mm	2	Battery No. 3	#200
.50 Cal MG	2	Battery No. 4	#203
40mm	2	Battery No. 4	#203
.50 Cal MG	4	Battery No. 5	#200
37mm	2	Battery No. 5	#200
.50 Cal MG	4	Battery No. 6	#201
37mm	2	Battery No. 6	#201
.50 Cal MG	4	120mm	#200

- d. Antiaircraft Artillery Intelligence Service. This service is furnished by the Fourth Service Command in Atlanta, Georgia. Ref: Letter Army Service Forces, Headquarters Fourth Service Command, 5 March 1945, subject: "Organization and Operation for Air Defense."
- e. Fire Control Telephone Net. See Exhibit #5E.
- f. Radio Net, At present there is no radio net within this Harbor Defense.
- g. (1) See paragraph 1(a) in reference to 3" fixed antiaircraft gun battery and proposed 120mm gun battery. A searchlight storage shed of a size to house the five antiaircraft searchlights and related equipment was constructed in 1942. An SCR-268 shed, also constructed in 1942, is designed to store one such instrument. There is no designed storage for the other two instruments or for other radar equipment. See Exhibit #6E for locations of storage facilities.
- (2) Tabulation of guns, automatic weapons, and major fire control elements. (See next page)

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S E C R E T

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 Authority NND 735 036
 By R6-NRPA Date 6/8/00

Authority NN6735036

By KG NARA Date 6/8/00

E-1
E-1
E-1
O
E-1
E-1

7

Tactical No.	Type	Weapon or fire control equipment		
		Authorized	On Hand	Required
5	90mm-M1	4	2 (Mobile) 2 (Fixed)	0
6	90mm-M1	4	2 (Mobile) 2 (Fixed)	0
*120mm	120mm		0	
Automatic Weapons				
1	.50 cal. MG. AA	2	2	0
2	.50 cal. MG. AA	2	2	0
3	.50 cal. MG. AA	2	2	0
3	40mm. M1AA	2	2	0
4	.50 cal. MG. AA	2	2	0
4	40mm. M1AA	2	2	0
5	.50 cal. MG. AA. M2	4	4	0
5	37mm. M1A2	2	2	0
6	.50 cal. MG. AA. M2	4	4	0
6	37mm. M1A2	2	2	0
*120mm	.50 cal. MG. AAM2	4	0	0
FIRE CONTROL EQUIPMENT				
3	Director M5	2	2	0
4	Director M5	2	2	0
5	Director, AA. M9	1	1	0
	Finder, Ht. 13 ^{1/2} M2	1	1	0
	Set control equipment, AA. M1	1	1	0
6	Director, AA. M9	1	1	0
	Finder, Ht. 13 ^{1/2} M2	1	1	0
	Set Control equipment, AA. M1	1	1	0
*120mm	Director M10A1 or M7A1B1	1	0	1
	Finder, Ht. M1A2	1	0	1
	Radar SCR 584 or 545	1	0	1

*120mm Gun Battery is deferred.

S E C R E T

4. War Reserve and Battle Allowances of Ammunition.
 - a. Allowances of Ammunition for AA weapons are governed per current WD Directives as authorized by Ltr, WD, AGO, AG 471 (9 Jun 44)OB-S-D-M, 10 Jun 44, subj: "Day of Supply for Ammunition".
 - b. Suitable space for storage in compliance with provisions of TM 9-1900 is provided at Location #200.
5. Land Acquisition - No additional land is required.

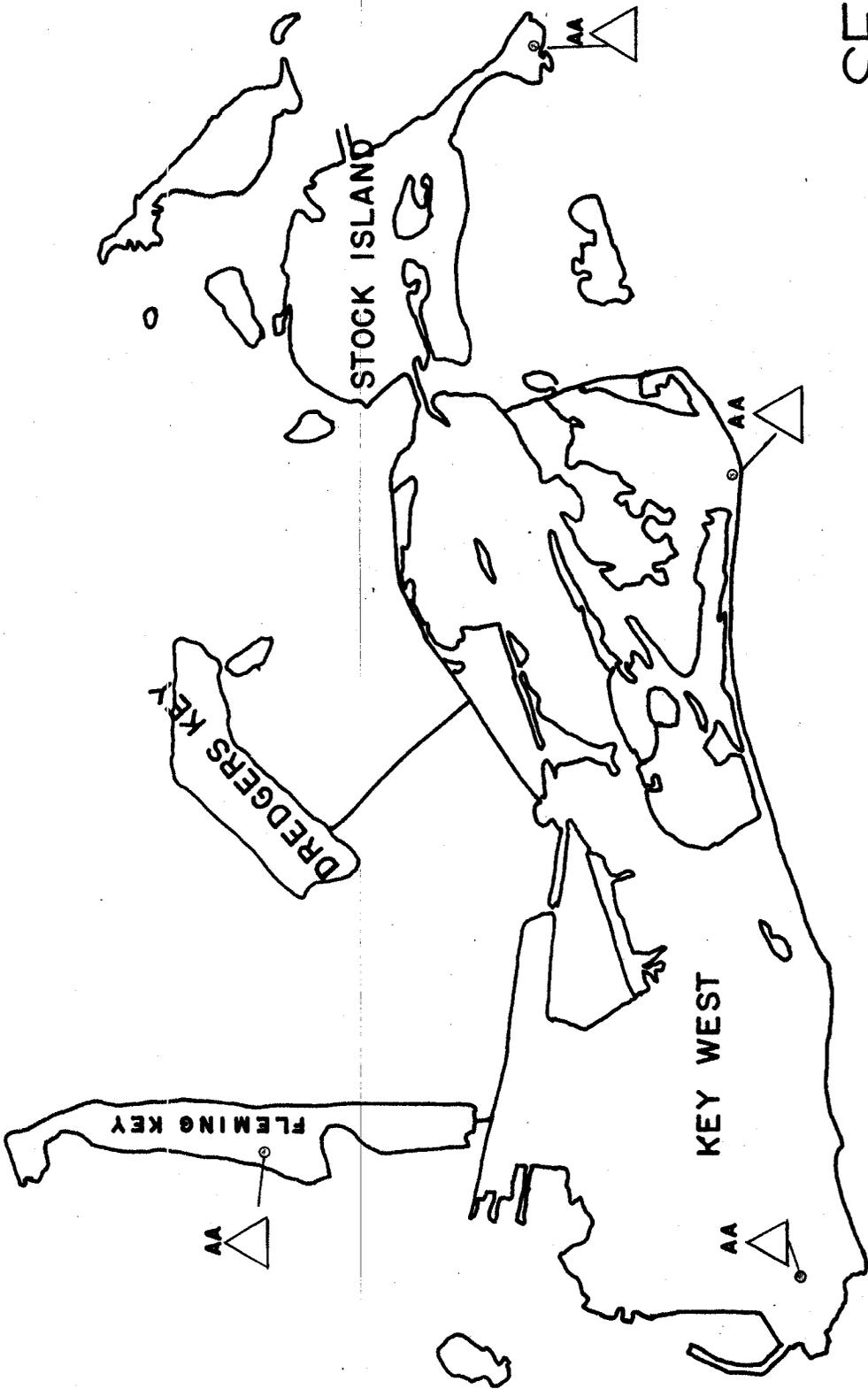
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By: R6 NARA Date: 6/8/00

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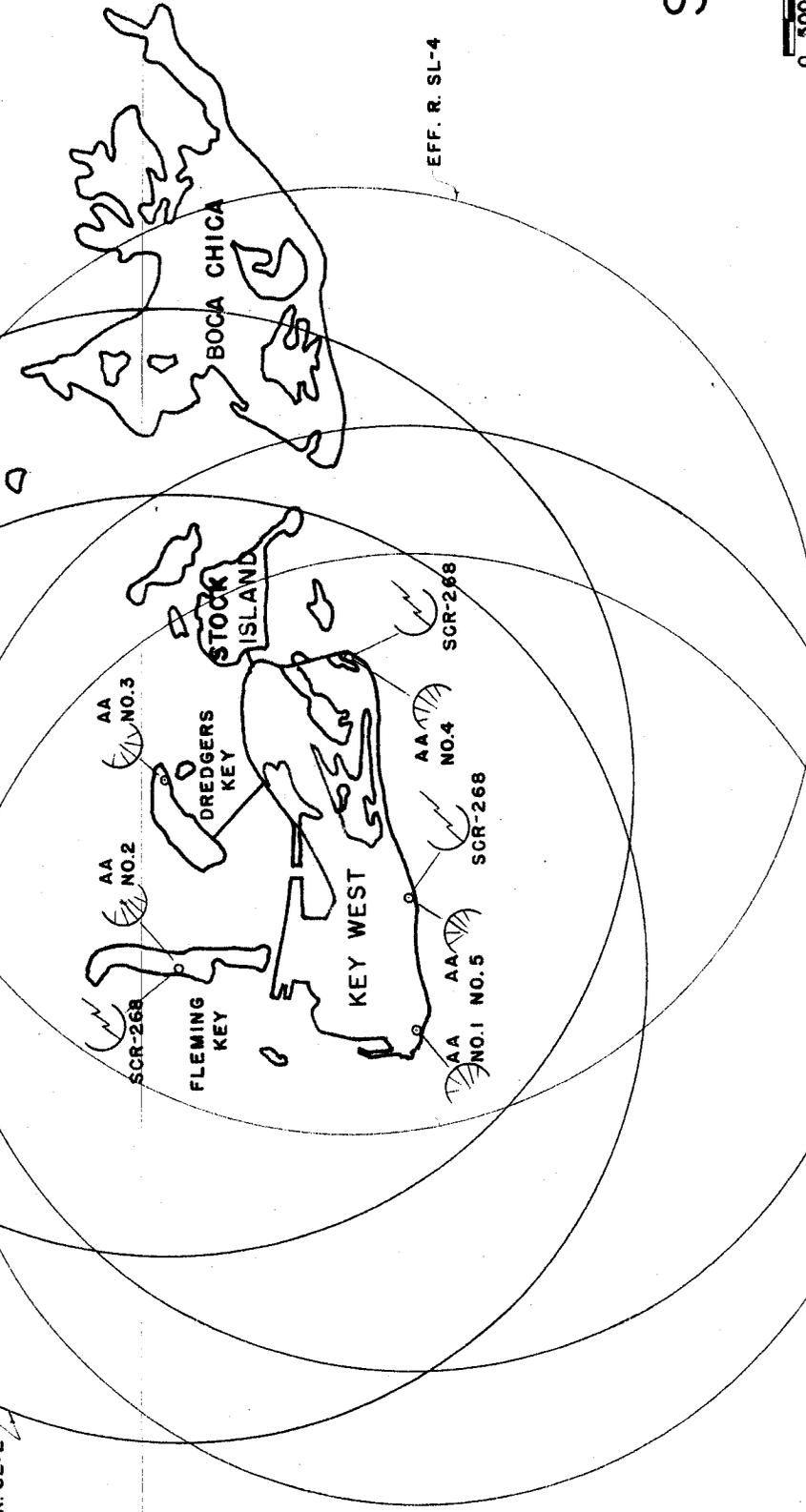
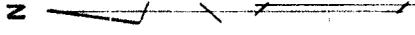
HARBOR DEFENSES of KEY WEST Revised		Date
LOCATIONS of AAOP'S (ARMY)		
Prepared By:	14 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 1E	

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 Authority: NMB705 036
 By: K6: NARA Date: 6/8/00

RET

EFF. R. SL-3

EFF. R. SL-2



EFF. R. SL-4

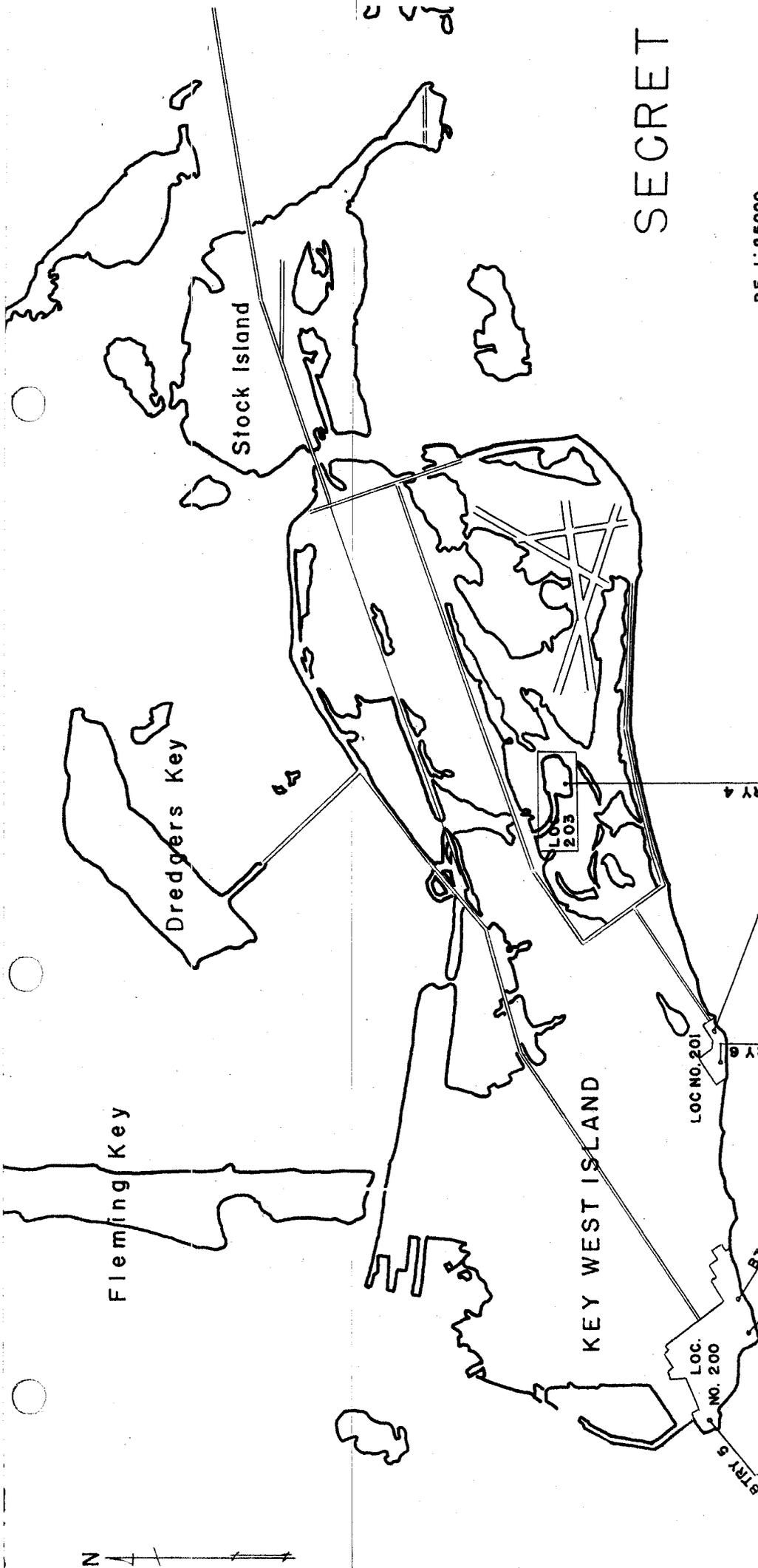
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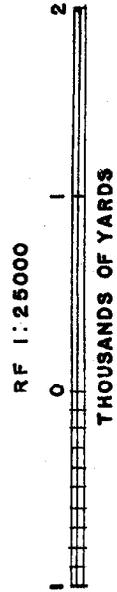


HARBOR DEFENSES OF KEY WEST		Revised
ANTIAIRCRAFT SEARCHLIGHTS		Date
and SCR-268'S		
Prepared By:	18 APRIL 1945	
HQ. H.D.K.W.	EX. NO. 3E	

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 Authority: NND 705 036
 By: KG-NRPA Date: 6/2/00

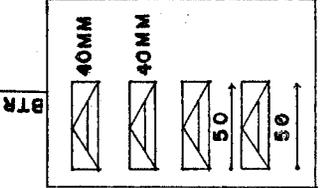
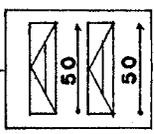
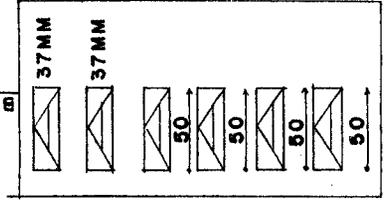
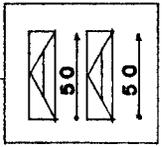
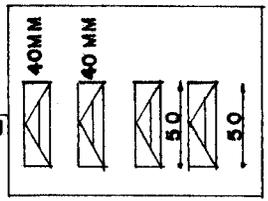


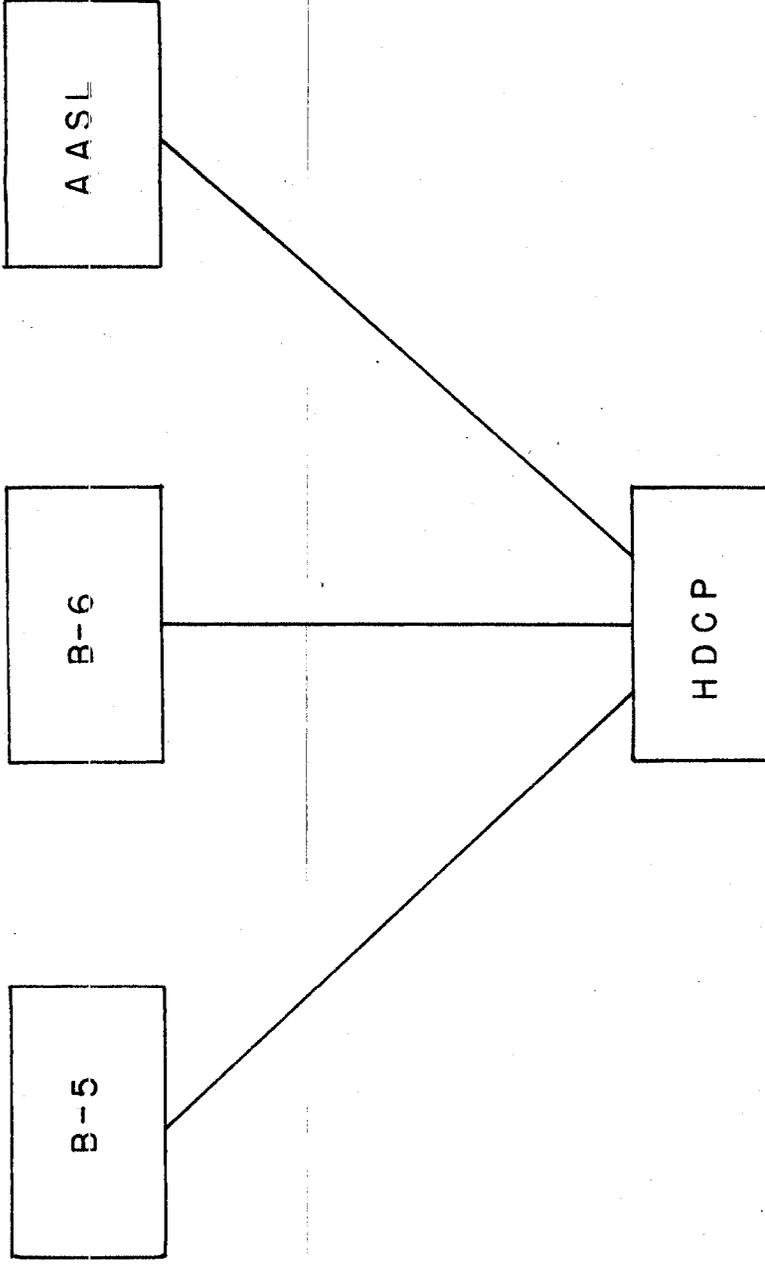
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HARBOR DEFENSES OF KEY WEST
AUTOMATIC WEAPONS

Prepared By: 19 APRIL 1945
HQ. H.D.K.W. EX. NO. 4-E





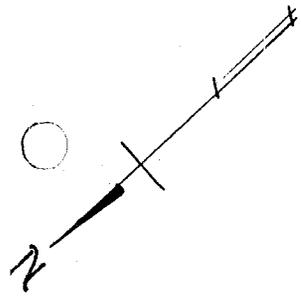
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HARBOR DEFENSES OF KEY WEST

AA TELEPHONE NET

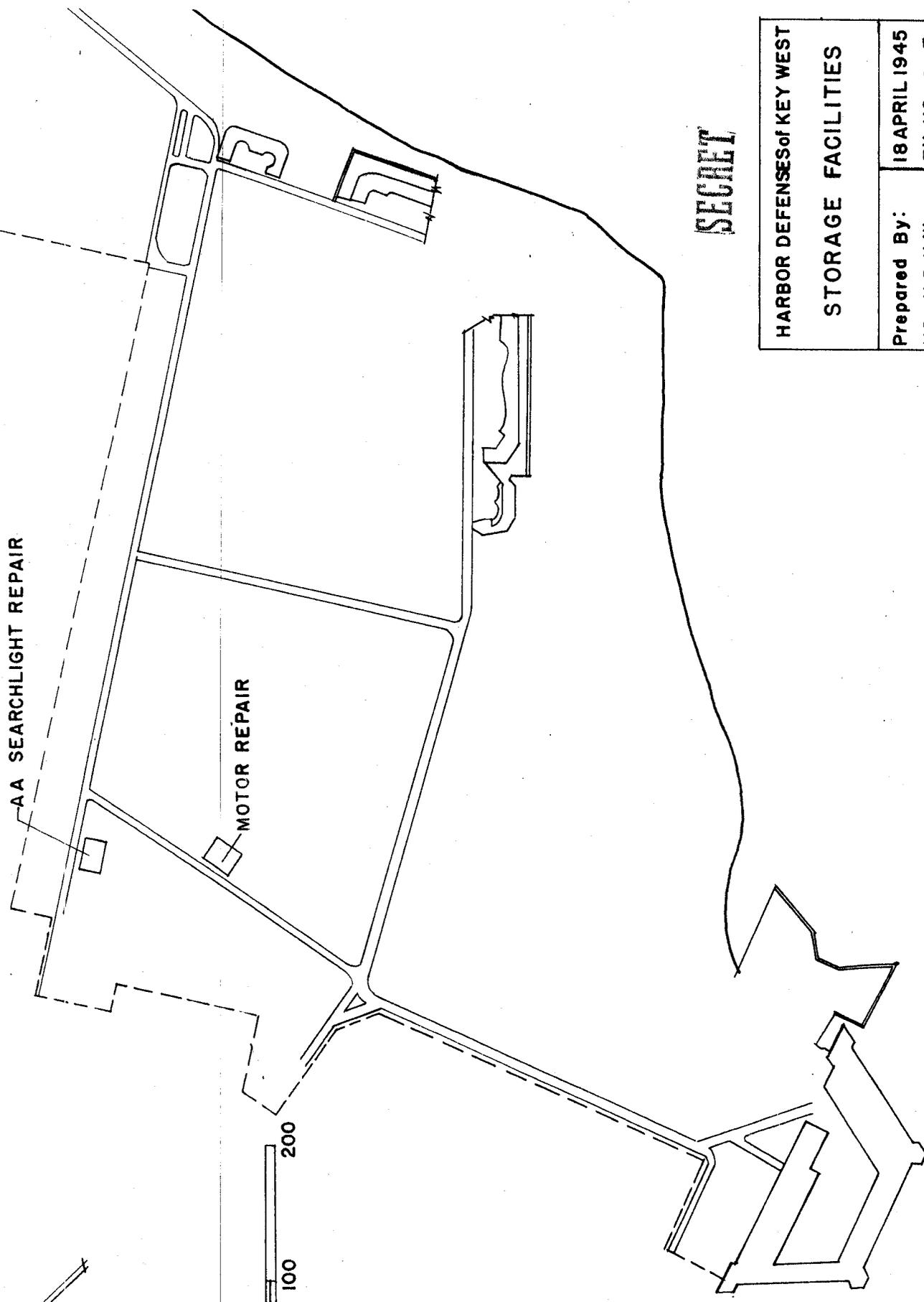
Prepared By:	17 APRIL 1944
HQ. H.D.K.W.	EX. NO. 5 - E

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AA SEARCHLIGHT REPAIR

MOTOR REPAIR



SECRET

HARBOR DEFENSES OF KEY WEST	
STORAGE FACILITIES	
Prepared By:	18 APRIL 1945
HQ. H.D.K.W.	EX. NO. 6 - E

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 By: KG-NRPA Date: 6/8/00

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Tabulation of gas-proofed installations	2	2

S E C R E T

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By *KG* NARA Date *6/2/00*

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1. a. The only installations under the project that are provided with standard gas-proofing are the fire control switchboard and radio room, the plotting rooms and latrines of Battery Construction 231 and Battery Construction 232, and the combined Harbor Defense Command Post - Harbor Entrance Control Post.
 - b. For personnel operating outside of these installations, reliance is placed on gas masks, protective clothing, and decontamination of personnel, structures, and areas.
2. The following tabulation shows pertinent details of each installation for which collective protective equipment is to be provided.

Instl.	Type of Structure	Degree of Protection	Purpose	Strength of Detail	Capacity Cubic Ft.	No. collective Protectors	No. collective Canisters	No. Reserve Canisters*
FGSMBD	Concrete, dirt cover	Splinter-proof.	Communication center	10	11,000	2	4	8
Const. 231	Concrete, dirt cover	Bomb-proof.	Plotting room & Latrines	22	7,362	1	2	4
Const. 232	Concrete, dirt cover	Bomb-proof.	Plotting rooms, Latrines & Fire control swbd room	22	6,914	1	2	4
HDGCP HECP	Concrete, dirt cover	Splinter-proof.	Command Post	35	27,805	1	3	6

*One-half reserve canisters are held in local storage and one-half are stored by the Chief of Chemical Warfare Service, earmarked for this Harbor Defense.

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 Authority NND735036
 By R6 NARA Date 6/8/02

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Summary of Ordnance equipment		6-G
Summary of Chemical Warfare Service equipment		7-G

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S E C R E T

By RG NARA Date 6/8/00
 Authority NP735 036

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1. See Exhibit 1-G for consolidated summary of Harbor Defense elements. See Exhibit 2-G for consolidated summary of Battery elements. For Consolidated summary of major items of equipment required, see Exhibit 3-G for Quartermaster, 4-G for Engineer, 5-G for Signal, 6-G for Ordnance and 7-G for Chemical Warfare Service. Basis for the determination of equipment requirements is T/O and E 4-260-1 with Change 3, 28 September 1944.

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SECRETBy KG NARA Date 6/2/00
Authority MB735036

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S E C R E T

CONSOLIDATED SUMMARY OF HARBOR DEFENSE ELEMENTS

HARBOR DEFENSES OF KEY WEST

1 June 1945

INSTALLATION	NUMBER
H. D. Command Post	1
H. D. Observation Post	1
Harbor Entrance Control Post	1
Gun Bn Command Post	2
H. D. & Fort Signal Station	1
Forts	1
Fire Control Switchboard Installations	2
Searchlight Command Post	1
Meteorological Station	1
Portable Seacoast Searchlights	9
Searchlight Oper. (Cont.) Post (F or P)	9
SCR-682	1

EXHIBIT 1-G

NOTE:

In addition to nine (9) portable SC searchlights listed above, five (5) portable searchlights are being retained in the HD as AA lights pending approval of the installation of an AA gun Battery. (See Change No 1 - 4 June 1946)

- 1 -

S E C R E T

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By: K6 NARA Date: 6/18/00

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CONSOLIDATED SUMMARY OF BATTERY INSTALLATIONS

HARBOR DEFENSES OF KEY WEST

BATTERY	OBS. STATION	BC STA.
No. 1	0	1
No. 2	0	1
No. 5	0	H.F. Dir. 1
No. 6	H.F. Dir.	1

CONSOLIDATED SUMMARY OF BATTERY INSTALLATIONS

HARBOR DEFENSES OF KEY WEST

Battery	Flank Obs. Sta. 90 ft.	Other Obs. Sta. 125 Ft.	BC Sta.	Spotting Sta.	Maga- zines	Battery Power Plant	SCR- 296
No. 3	2	1	1*	3	1	1	1
No. 4	2	1	1*	3	1	1	1

*Have a height of instrument greater than 74 feet.

EXHIBIT 2-G

- 1 -

S E C R E T

Authority NND 6735 036
By *KG* NARA Date *6/2/00*

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CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT
(Quartermaster Requirements for Complete Project)

1 June 1945

Stock or Catalog No.	Article	Total Number Required
35-B	Emplacement Books.	6
35-B	Books, Jane's All Worlds Fighting Ships.	4
35-B	Books, Jane's All Worlds Aircraft.	2
35-B	Lloyd's Register of Ships.	1
35-B	Fort Record Book .	1
35-B	Book, Merchant Vessels of U. S. including Yachts and Government Vessels U. S. Dept. of Commerce.	1

EXHIBIT 3-G

S E C R E T

By KG NARA Date 6/2/00
Authority 50735 036

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CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT
(Engineer Requirements for Complete Project)

1 June 1945

Stock or Catalog No.	Article	Total Number Required
17-8344.600-320	Searchlights 60 in. Portable	14
49-320.0-03	Camouflage Net Set No. 3	8
49-320.0-04	Camouflage Net Set No. 4	8
17-6390.600.100	Kit, Spread Beam Attachment, Searchlight, 60 in. Portable, Type 1	9

NOTE:
Five (5) of the searchlights 60" portable are being retained in the H D as AA lights pending approval of the installation of an AA gun Battery.
(See Chge 1- 4 June 46)

EXHIBIT 4-G

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By RG-NARA Date 6/8/00