EMPLACEMENT BOOK

OF

BATTERY PECK

FT. HANCOCK, NEW JERSEY

CONFIDENTIAL

All papers contained herein have been regraded per authority shown. When removed, papers will be so annotated.

UNCLASSIFIED
REGRADED
ORDER SEC ARMY
BY TAG PER
AGAKC
SECRET RESTRICTED CONFIDENTIAL

EXPLANATION:

The Emplacement Book is a permanent record of important information concerning the Battery.

This book was revised and recopied 12 November 1946, by S-3 Section, HDNY, Fort Hancock, N.J. All entries contained herein were taken from the original Emplacement Book.

For instructions on keeping the Emplacement Book, see TM 4-245, dated April 1946.

Lyman L. Parks

LYMAN L. PARKS

Lt. Col. CAC.

S-3, HDNY.

INDEX

General Orders)
)
Number 78)

HEADQUARTERS OF THE ARMY
Adjutant General's Office
Washington, May 25, 1903

EXTRACT

1. The following order has been received from the War Department and is published to the Army for the information and guidance of all concerned:

War Department, Washington, March 30, 1903.

* * * * * * * * * * * * * * *

2. By direction of the President, and under the provisions of paragraph 216 of the Regulations, names of seacoasts Forts and batteries are announced as follows:

* * * * * * * * * * * * * * *

ON THE FORT HANCOCK, NEW JERSEY, MILITARY RESERVATION.

* * * * * * * * * * * * * * *

BATTERY PECK, in honor of 1st Lt., Fremont P. Peck, Ordnance Department, U.S. Army, who was accidently killed February 19, 1895, by the bursting of a gun at Sandy Hook Proving Grounds, New Jersey.

* * * * * * * * * * * * * * *

ELIHU ROOT
Secretary of War.

The specific batteries to which the foregoing names have been given will be communicated by letter to the department commander.

By Command of Lieutenant General Miles:

H.C.CORBIN
Adjutant General
Major General, U.S. Army.

A TRUE COPY

s/ V. SCHMIDT
t/ V. SCHMIDT
Captain, 7th Coast Artillery
H.D. Ordnance Officer.

For order relocating Battery Peck, reference is made to letter from War Dep't. Adjutant General's Office, Washington, February 22, 1943, to Commanding General, Eastern Defense Command.

Extract: - Par. 2 "Action recommended for relocating the guns of Battery Peck on the emplacement of Battery Gunnison, Fort Hancock, Harbor Defenses of New York, is approved."

Signed: Lester E. Jensen
Adjutant General

THIS IS A TRUE COPY:

s/ Vernon F. Sikes
t/ Vernon F. Sikes
Captain, 265th CA (HD)

2. MISSION:

a. Primary Mission.

The primary mission of Battery Peck is to defend the Harbor Defenses of New York, against various forms of naval attack. To protect in conjunction with the Air Forces, the Navy or fleet while leaving it's bases. To defeat hostile naval or air attack against the Harbor Defenses of New York, Naval bases, cities or other important areas. To defend with all suitable armament all beach or land attacks.

b. Secondary Mission:

Not Applicable.

c. List of installations or areas the battery is required to protect.

Not Applicable.

2. SAFETY:

On the following sheet is shown a chart, describing the extreme limits of the fields of fire for Battery Peck. Also shown are permanent installations located in the water area, and those ship channels which carry heavy ship traffic.

4. FIRE CONTROL AND POSITION FINDING SYSTEM:

a. Battery Peck has both standard and provisional position finding system. The standard system consists of the horizontal base, two station system, and the provisional system consists of the emergency one station using a CRF.

Date of installation:

Standard ; 1942

Provisional

b. List of stations:

(1) Battery Commander.

The battery Commander's station is located between the two guns.

(Formerly B C Gunnison)

(a) Date of construction: 1904.

(b) This station is solid concrete structure. It is bomb-proof but not gas-proof.

(c) Limiting azimuths of field of view

Left limit 170°

Right limit 325°

(d) Height of pedestal top from MLW : 30.389 feet.

(e) Sketch for this station.

(2) B^1 & S^1 Station:

This station is located in Navesink single station dug-in.

(a) Date of construction : 1942.

(b) This station is neither bomb-proof nor gas-proof.

(c) Limiting azimuths of field of view:

	right limit	left limit
observing instrument	51°	159°
spotting instrument	1°	181°

(d) Height of pedestal top above MLW;

B^1 93.00 feet.

S^1 94.04 feet.

(e) Equipment in station.

B^1 observing (right front pedestal)

S^1 spotting (right rear pedestal)

(3) B^2 & S^2 Station.

This station is located in "E" Tower Replacement (Spermaceti Cove), Ft; Hancock, N.J. The pedestal mounts left front (observing), left rear (spotting), are assigned to this battery.

(a) Date of construction 1943.

(b) This station is neither bomb-proof nor gas-proof.

(c)Limiting azimuths of field of view

	right limit	left limit
observing instrument	24°	124°
spotting instrument	5°	164°

(d) Height of pedestal top above MLW

B^2 35.25 feet

S^2 36.29 feet

(4) B^3 & S^3 Station.

This station is located in M1 Tower (Officer's Beadh Club), Ft. Hancock, N.J. The pedestal mounts left front (observing) and left rear (spotting) are assigned tothis battery.

(a) Date of construction: 1943.

(b) This station is splinter-proof from small arms fire. It is not gas-proof or bomb-proof.

(c) Limiting azimuths of field of view.

	left limit	right limit
observing instrument	88°	350°
spotting instrument	139°	328°

(d) Height of pedestal top above MLW:

B^3 Station	32.50 feet
S^3 Station	32.54 feet

(e) Equipment in station;

(5) Plotting Room.

This station is located under the BC station between the two guns.

This station is bomb-proof.

(a) Date of construction: 1904

(b) Limiting azimuths of field of view.

Not applicable.

(c) Equipment in station:

1 ea Board Plotting, M3, complete.	SN 27
1 ea Board Spotting, M3	SN 95
1 ea Corrector, Percentage, M1	SN 313
1 ea Range Correction Board M1A1	SN 662
1 ea Deflection Board M1	SN 687
7 ea Head & Chest sets HS-17-A	
9 ea EE-91 Telephones	
1 ea Bell, T.I. MC-153	

FROM		BC	B1	B2	B3	B4	S1	S2	S3	S4	GUN #1	GROUP I	SANDY HOOK LIGHT	201 STA.	
BC	AZIMUTH RANGE		358.322° 8,958.40	337.14° 3,620.86	169.811° 906.09	125.522° 2,353.58						352.727° 8,450.99			
B1	AZIMUTH RANGE			181.713° 5,525.69											
B2	AZIMUTH RANGE				160.277° 4,511.32										
B3	AZIMUTH RANGE					105.163° 1,818.59									
B4	AZIMUTH RANGE														
S1	AZIMUTH RANGE							181.713° 5,525.69							
S2	AZIMUTH RANGE								154.659° 5,202.89						
S3	AZIMUTH RANGE									91.006° 1,049.89					
S4	AZIMUTH RANGE														
GUN #1	AZIMUTH RANGE		352.393° 8,935.98	337.893° 3,596.24	169.190° 929.11	125.736° 2,377.10							109.929° 689.46	~~109.929°~~ ~~689.46~~	
GUN #2	AZIMUTH RANGE										0.041° 41.69		106.606° 676.41	~~106.606°~~ ~~676.41~~	
GROUP I	AZIMUTH RANGE														
SANDY HOOK LIGHT	AZIMUTH RANGE														
201 STA.	AZIMUTH RANGE														

c. Azimuths and lengths of base lines.

(See Sketch)

d. Check point data & orientation data for plotting room.

(See sketch)

e. Rectangular coordinates for the directing point of the battery, all stations, established datum points, and the principal landmarks.

Station or Datum Point	X	Y
DP (Gun #1)	100,421.15	55,818.78
Gun #2	100,421.18	55,860.47
B.C.	100,407.16	55,839.62
B^1	101,604.13	46,961.55
B^2	101,769.33	52,484.76
B^3	100,246.88	56,731.42
B^4	98,491.60	57,207.09
S^1	101,602.80	46,961.55
S^2	101,768.00	52,484.76
S^3	100,245.79	56,730.65
S^4	98,491.42	57,205.45
Roamer Shoal Light	98,708.19	62,282.30
West Bank Light	95,990.35	65,313.63
"A" Tower Tilden Center	109,222.30 (109 216.68)	67,701.69 (67 818.75) "A" Repl. Tower
Sandy Hook Light	99,772.98	56,053.78
Monmouth Tower	102,357.01	41,501.44
Coney Parachute Tower	101,406.13	69,563.21
CRF (Peck)	100,398.71	55,893.80

g. Distances and azimuths from the battery commander's station to all battery observation stations and the battalion's station.

Station	Azimuth from BC Station	Range from BC Station
B^1 (Navesink dug-in)	352.322°	8,958.40 yards
B^2 (("E" Tower)	337.14°	3,620.86 yards
B^3 (Ml Tower)	169.811°	906.09 yards
B^4	125.522°	2,353.58 yards
Group #1	352.727°	8,450.99 yards

h. A complete description of any improvised system (s) of position finding to be used in emergency. (See FM 4-15)

(1) Gun Commander's action.

(2) Emergency system. (CRF)

The uncorrected range and azimuth from the CRF to the target at the instant of observation is sent to the plotting room. In the plotting room the course of the target is plotted on the plotting board using only the gun arm. All data is run through the deflection board, percentage corrector, and all boards normally used in the standard horizontal base system. From the plotting room, the corrected range and azimuth is sent to the guns for firing.

The limiting azimuths of the field of view of the CRF are:

Left limit ---- 173°

Right limit --- 359°

Orientation data for CRF (Peck) to

Half Moon Hotel	180.353°	13,539.42 yds
Tilden Tower	216.482°	14,831.32 "
No. Tower Navesink	353.518°	7,801.02 "
So. Tower Navesink	353.352°	7,872.31 "

i. Maps or charts showing location of battery elements:

(1) Alternate position. (Where applicable)

Division of water areas into sub-areas and name of each sub-area.

(3) Fields of fire and surveillance.

(4) Effective range of fire control and position finding instrument.

(5) Dead areas.

(6) Ship channels.

(7) Soundings.

(8) Field of fire of adjacent batteries having similar mission.

(9)

6. COMMUNICATIONS.

a. Date and character of installation and dates of important modifications.

Standard communication system installed March 1914.

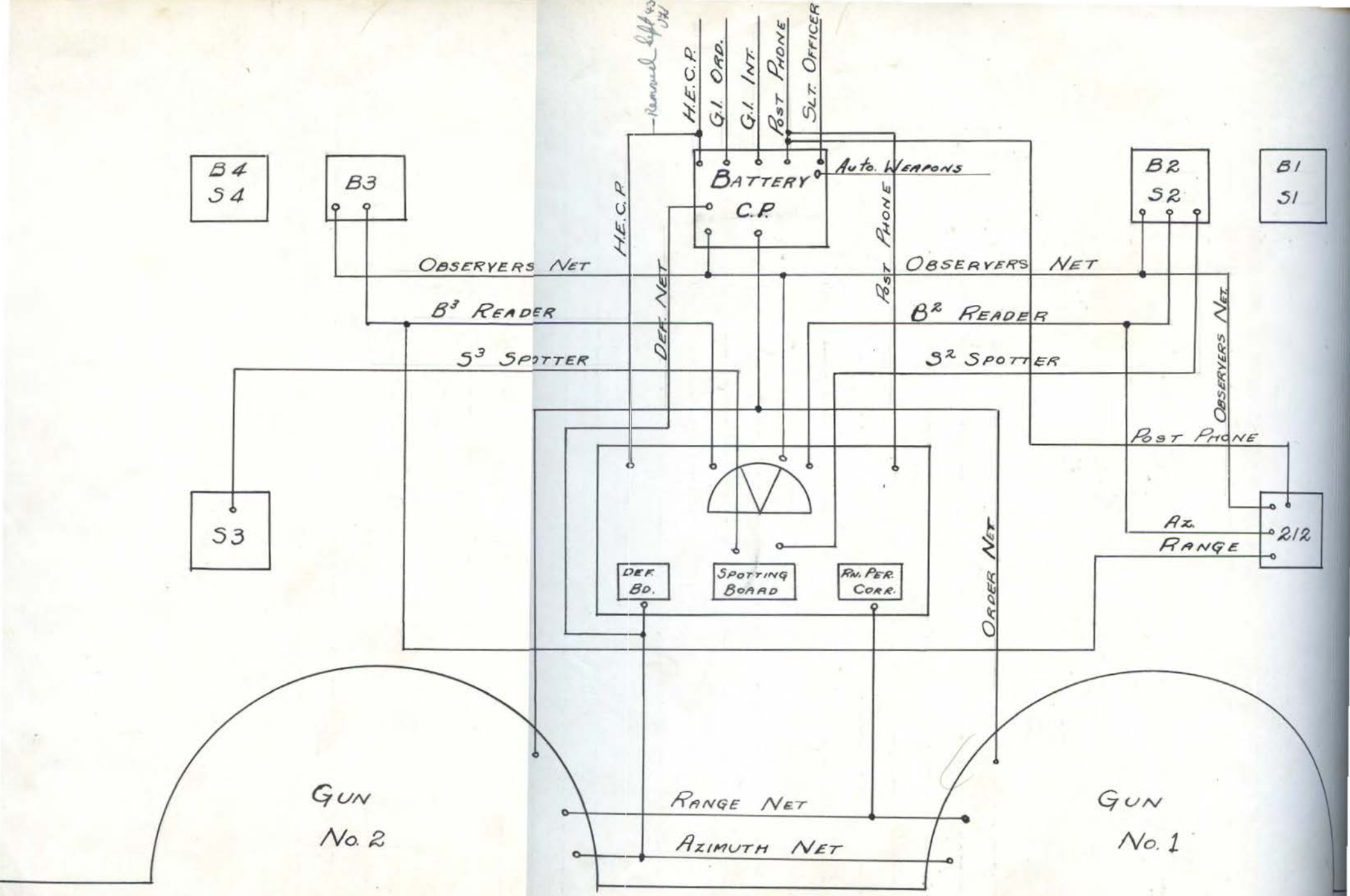
Date of important modifications:

October 1942. Provisional. One (1) phone installed in plotting room and one (1) in the CRF station, both leading to the Navy Signal Tower atop of Battery Potter.

August 1943. Battery Peck relocated, new standard communications installed in all stations.

b. Detailed and up to date schematic diagram of the battery comm. system.

(See next page)



FIRE CONTROL TELEPHONE SYSTEM FOR BATTERY PECK

7. EMPLACEMENTS.

a. Dates of construction and nature and date of major repairs and modifications.

	Gun #1	Gun #2
Dates of construction	1903	1903

b. Armament:

(1) Caliber	6 inch	6 inch
(2) Model	1900	1900
(3) Serial numbers	27	28
(4) Place & date of fabrication	Watervliet Arsenal	
	1903	1903
(5) Manufactured	U.S. Ordnance Department.	
(6) Mounting date & supervisor	1906	1906
	2nd Lt., W.F. Jones, CAC	
	Post Ordnance Officer.	
(7) Limits of elevation of piece as mounted and emplaced.	- 5° to + 20°	-5° to + 20°

c, Carriage.

(1) Model	Barbette 1900	Barbette 1900
(2) Serial number	12	17
(3) Place & date of fabrication	Rock Island Arsenal	(Same)
	1904	1904
(4) Date of mounting & supervisor	1906	1906
	2nd Lt., W.F. Jones, CAC	

Date dismounted	Date remounted	Supervisor
Gun #1 1 - 8 Apr. 1943	Gun #1 1 - 8 Apr. 1943	Maj. R.E. Johnston, Ord. Officer.
Gun #2 2,- 21 May 1943	Gun #2 2 - 21 May 1943	Maj. R.E. Johnston, Ord. Officer.
7 Mar. 1946		Maj. R.E. Johnston, Ord. Officer.

(5) Dates & results of all accurate tests for level of fixed guns with names of officers conducting tests.

Gun #1	Gun #2
June 6/10 O.K. Capt Joseph Wheeler, CAC.	June 6/10 O.K. Capt. Joseph Wheeler, CAC.
May /12-4¼' error. Capt. Moody, Armament Officer	May /12-O.K. Capt. Moody Armament Officer
August /12-4' left 1st Lt. R.S.Dodson, CAC.	June 12/16 1' right. 1st Lt. R.S.Dodson, CAC.
June 12/16-4' left. 1st Lt. R.S.Dodson, CAC.	Sept. /18-O.K. Unknown Ord. machinist.
July 9/17-O.K. 2nd Lt. Aaron Bradshaw, Jr. CAC.	Sept/ /25-O.K. 2nd Lt., G.E. Thrams, CAC.
Sept. /18-error corrected. Unknown Ord. machinist	Oct. /28-O.K. 2nd Lt G.E. Thrams, CAC.
Sept. /25-O.K. Unknown Ord. machinist.	May 29/43. Maj. R.E. Johnston Ord. Off.
Oct. /28-O.K. 2nd Lt G.E. Thrams, CAC	
Apr 26/43 Maj. R.E. Johnston, Ord. Officer	

(7) A tabular statement showing:

(a) Dates of painting carriage:

Gun #1	Gun #2
Apr. 1910	Apr. 1910
July 1911	July 1911
Apr.nl912	Apr. 1912
Nov. 1912	July 1912
Apr. 1914	Nov. 1912
Sept. 1914	Apr. 1914
April 1915	Apr. 1915
May 1916	May 1916
Apr. 1917	Apr. 1917
July 1918	July 1918
May 1920	June 1920
May 1921	Sept. 1922
May 1923	May 1923
Sept. 1923	Sept. 1923
Aug. 1924	Aug. 1924
May 1925	May 1925
June 1926	June 1926
June 1927	June 1927
June 1928	June 1928
Apr. 1929	Apr. 1929
June 1930	June 1930
July 1931	July 1931
May 1932	May 1932
June 1934	June 1934
May 1940	May 1940
Apr. 1941	May 1941
Aug. 1942	Aug. 1942
Apr. 1943	Apr. 1943
Feb. 1944	Feb. 1944

(b) Dates of cleaning recoil cylinders & connical paths.

Gun #1		Gun #2	
Recoil cylinders cleaned	Connical rollers & paths	Recoil cylinders cleaned	Connical rollers & paths
June 1910	Sept. 1910	June 1910	May 1920
Sept. 1910	May 1920	Sept. 1910	June 1926
Jan. 1911	May 1921	Jan. 1911	June 1927
Sept. 1911	June 1926	Sept. 1911	Oct. 1928
Apr. 1912	June 1927	July 1912	June 1930
Nov. 1912	Oct. 1928	Nov. 1912	Sept. 1931
Aug. 1914	June 1930	Aug. 1914	Apr. 1932
Mar. 1915	Sept. 1931	Mar. 1915	May 1933
Apr. 1915	Apr. 1932	Apr. 1915	Apr. 1934
Sept. 1915	May 1933	Sept. 1915	May 1940
May 1916	Apr. 1934	May 1916	Apr. 1943
July 1917	May 1940	July 1917	
Apr. 1918	Apr. 1943	May 1918	
May 1920		May 1920	
May 1921		May 1923	
May 1923		Sept. 1923	
Sept. 1923		July 1924	
July 1924		May 1925	
May 1925		Sept. 1926	
Sept. 1926		June 1927	
June 1927		Oct. 1928	
Oct. 1928		Sept. 1931	
Sept. 1931		July 1933	
July 1933		Oct. 1938	
Oct. 1938		May 1940	
May 1940		June 1942	
June 1942		Apr. 1943	
Apr. 1943			

(c) Dates of changing maintenance classification.

5 March 1946, ltr. rec'd fr. Maj. R.E. Johnston, Ord. Off., signed by Col. C.D.Y. Ostrom, to place battery Peck in long trem storage. Completed 15 April 1946, supervised by Armament foreman, Otto M. Hacker.

(d) On carriage sighting and fire control equipment.

	Gunn#1	Gun #2
(1) Models	1904	1904
(2) Serial numbers	10	81

f. Azimuths and distances.

(1) Height above datum plane of axis of cannon trunnions in firing position.

	Gun #1	Gun #2
	28.608 Feet	28.570 Feet

(2) Limits of traversing — Gun #1: All around fire; Gun #2: All around fire

(3) Azimuths and distances to other guns in the battery and to DP.

From	To	Azimuth	Range
Gun #1	Gun #2	180.041°	41.69 Yds
Gun #2	Gun #1	0.041°	41.69 Yda

(4) Azimuths and ranges to established datum points and prominent landmarks in the area from all guns & the DP

From	To	Azimuth	Range
Gun #1	Sandy Hook Light	109.929°	689.46 yds.
Gun #2	Sandy Hook Light	106.606°	676.41 yds.
Gun #1	Parachute Jump Tower	184.099°	13,779.69 Yds.
Gun #2	" " "	184.111°	13,738.08yds.
Gun #1	"A" Tower Tilden	216.243°	14,878.53 yds
Gun #2	" " "	216.338°	14,884.91 yds.
Gun #1	Half Moon Hotel	180.242°	13,614.33 yds.
Gun #2	" " "	180.242°	13,572.64 yds.

g. Ammunition supply.

(1) Capacities, in rounds, of projectile rooms and service magazines.

Maximum capacity: 800 rds, for the battery.

(2) Number of powder charges for which storage room is provided in the main storage magazine.

Maximum capacity: 800 rds. for the battery.

(3) Quantities and types and storage location of all ammunition components of the battery.

Date	Primers		Projectiles		Prop. charges	Fuzes
	Electric	Friction	AP	HE		
2/20/46	711	976	337	222	694	

All charges, propelling, are located in the powder room;
All shells are located in the lrojectile room.
All primers are located in the exterior fuze and primer cubicles.

(All above are located in the emplacement.)

(4) Kinds of hoists.

Hodge bach delivery, manufactured by Ellicot Machine Co., Baltimore, Md.
Not a satisfactory service of projectile.

h. Material alterations in gun & carriage

Date	Alterations & repairs made
Jan. 1910	Graduated elevating scales on #1 and #2 Guns
Dec. 1923	Range drums with brackets and pointers added #1 & #2 Guns.
Dec. 1923	Traversing stops added Guns #1 & #2.
Dec. 1923	Azimuths circles and pointers added.
Mar. 1925	Electrical equipment changes to suit new design.
Sept. 1925	Range scales regraduated Gun #1 & Gun #2.
May 1940	New firing circuits and electric wiring installed.
April 1944	Range drums replaced with elevation drums graduated in mil

(1) Defects which have proven incapable of remedy or which it has been officially decided not to remedy, authority for decision being given.

None.

(2) Any peculiarity of equipment requiring special care or unusual mode of operation.

3/6/46 Verbal Orders Hdqts 1st Army, also TB-9-54 ORD. & TM-4

Both gun barrels have been removed for long term storage, and are set on side of carriages on 12"x12" blocks, with a wo House over barrels. Carriages have been doped with rust Preventat as instructed.

Arm. Fore. Off

CONFIDENTIAL

Battery Peck relocated. Reference is made to letter from War Dept. Adjutant General's Office, Washington, D.C. 22 Feb. 1943, to Commanding General, Eastern Defense Command.

Gun emplacements modified April & May 1943.

1. Records of inspections made under higher authority than the Harbor Defense Commander, (Entry to be made of each defect noted, and of the remedial action taken)

Date	Inspector	Defect	Corrected
19 Dec. 1906	Capt. Ames, Armament Off	None	
21 June 1907	Col. C.S.Smith, O.D. Inspector	None	
29 May 1909	Col. Birnie, O.D.	None	
16 Sept. 1910	Chief of Coast Artillery	None	
4 Apr. 1914	Maj. Brady, CAC, I.G.	None	
21 July 1917	Lt. Col. Brady, CAC, I.G.	None	
June 1920	Col. Harris, CAC, I.G.	None	
9 Oct. 1922	Col. J.B. Mitchell, CAC Rep. Dist. Comdr.	None	
5 Jan. 1923	Maj. H.E. Pitts, CAC, I.G.	None	
12 Sept. 1923	Col. T.L. Ames, O.D. Ord. Insp	None	
16 Oct. 1923	Brig. Gen H.A. Drum, Dist. Comdr.	None	
7 Oct. 1924	Brig. Gen. J. Hagood, Dist. Comdr.	None	
6 Apr. 1925	Maj. Gen. C.P. Summerall, 2nd CA Comdr. XXXX	None	
22 May 1925	Col. J.B. Mitchell, Ch. of CA	None	
27 May 1926	Brig. Gen. Wm. M. Cruikshank, Dist. Comdr.	None	
7 June 1926	Maj. Gen. C.P. Summerall, 2nd CA Comdr.	None	
15 June 1927	Brig. Gen. Alston Hamilton, Dist. Comdr.	None	
2 Aug. 1927	Maj. Gen. McRae, 2nd CA Comdr	None	
14 Nov. 1927	Brig. Gen. Heintzelman, Dist. Comdr.	None	
12 Sept. 1927	Mr. Carpenter, Corps Area Armament foreman	No. 1 Gun bore dirty Appearance of rust	Corrected
23 Jan. 1928	Maj. Gen. Ely, 2nd Ca. Comdr	None	
22 Oct. 1928	Mr. Carpenter, CA Arm. Foreman	Bands on 2 dummy projectiles inspectex	
22 Jan 1929	Mr. Carpenter, CA Arm. Foreman	Rt. Trav. stop removed fr. carriage #12. removed 360° contact insul. strip missing.	Req. Dec. /28 Installed.
24 May 1928	Brig. Gen Heintzelman, Dist. Comdr. Rep 2nd CA Comdr.	Needed paint. Dirty az. circle. Poor blue prints. CRF not functioning.	28 May 1928
25 Apr. 1929	Brig. Gen. Heintzelman, Dist. Comdr	Grease cups stiff Paint over oil holes	May 1929 May 1929
5-17 Dec. 1929	Ord, Off. 2nd CA	Elev. worm gear case drain plug missing Loading tray out of order	Feb. 1930
12 June 1930	Brig. Gen, Hatch, Dist Comdr.	Water leak	15 June 1930
14 June 1930	Chief of CA	None	
5 Sept. 1930	Ord. Insp.	Traverses hard near left stop Az. pointer out of order	Corrected. Corrected.
25 Aug. 1931	Gen. Hatch, Dist. Comdr.	None	
18 Sept. 1931	Ord, Insp.	None	
14 Apr. 1932	CG 2nd Corps Area	None	
20 may 1932	I.G. 2nd CA	None	
9 June 1932	I.G. 2nd CA	None	
11 June 1932	I.G. 2nd CA	None	
17 Aug. 1932	Chief of CA	None	
22 Sept. 1932	Ord. Insp.	None	
21 Oct. 1932	Chief of CA	None	
19 Dec. 1932	CG 2nd CA Dist	None	
24 Feb. 1933	I.G. 2nd CA	None	
19 July 1933	Ord, Insp.	None	
25 Oct. 1933	Chief of CA & CG 2nd CAD	None	
21st Mar. 1934	I.G. 2nd Corps Area	None	
26 Apr. 1934	CG 2nd Corps Area	None	
18 May 1934	CG 2nd CA Dist	None	
20 Aug. 1934	I.G. 2nd CA	None	

Date	Inspector	Defect	Corrected
10 June 1937	Ordnance Inspector	Lighting system not equipped with bulb	Corrected
		Threds on breech block & rear end of chamber blurred.	Dressed
		New packing to be applied to piston rod.	Corrected
23 June 1937	Dist. Commander.	None	
7 July 1937	Gen. Inspector	none	
19 Sept. 1938	Ord. Inspector	Powder chamber pitted on Gun #28	Corrected.
28 Aug. 1941	Ord, Inspector	Gun #27. Breechblock carrier rusty, pinion gear & rack dirty & rusty.	All these
		cylinders require cleaning, threaded sectors, breech recess & breech-block burred. Excess loss motion in traversing mechanism.	dificiencies ha been corrected.
		Gun #28. Dirty bore, vent in spindle dirty. Az circle dirty. 360degree contact requires cleaning. Cylinders require cleaning.	
		Sub-caliber Tube #165. Need repainting, dirty bore.	" " "
		Sub-caliber Tube #128. Need repainting, dirty bore.	
		Gun #27. Sehment gear screws burred.	
		Gun #28. Rifling at muzzle burred, breech recess burred. Threaded sectors of breech recess & breechblock burred.	" " "
		Segment gear screws burred. Excess lost motion in traversing mechanism.	
		Sight,telescopic 3" No. 104 requires painting.	
		Az. inst. #571 & 520, optics cloudy.	
		Az. inst. #520, 1 pin split missing, 1 chain missing, requires painting.	
		Az. inst. #524 requires painting, optics cloudy.	
		Plot. Bd. #63, W.H. excess lost motion in index boxes.	" "
		Deflection Bd. #48 excess of requirement of this btry.	
		Range Finder, Horizontal #7, 15', elev. mech. screws missing, throwout clutch pin bent, optics cloudy.	
		Empalcement Book in poor condition, not up to date with required entries.	" " "
10 June 1942	Ord, Insp.	Az. worm crank handle broken. Scales, primary arms differ fr. gun arm 450 yds per inch req.	Corrected Not available

Date	Inspector	Defect	Corrected
12 Sept. 1934	Ord. Insp. 2nd CA	None	
14 May 1935	Ord. Insp. 2nd CA	None	
20 June 1935	Col. Nugent, C. of Staff, 2nd CA	None	
3 July 1935	2nd CA Dist. Comdr	None	
14 Mar. 1936	I.G. 2nd Corps Area	None	
14 May 1936	C.A.D. Commander	None	
18 May 1936	Ord. Insp. 2nd CA.	Firing circuit does not function	Corrected
27 Sept. 1943	Lt. Col. Bowman, I.G.D. NPSS	None	
21 Oct. 1943	New York-Philadelphia Sector	None	
17 June 1944	Maj. Gen. Grunnert, EDC.	None	
29 Aug. 1944	Maj. Gen. Gardner, NES.	None	
14 Feb. 1946	Mr. Harvey, Ord. Ammo. Insp	None	
I5 Aug. I947	Mr. Harvey, Ord. Ammo. Insp.	None	

10. FIRING TABLES.

List of firing tables and range scales required for use with all standard types of ammunition applicable to the battery, with filing location indicated of those on hand.

(See scales and charts on following pages.)

(Firing tables 6-D-1, 6-D-2, 6-C-2 may be found in large manila envelope in plotting room)

Form No. 963.

RANGE TABLE FOR 1-POUNDER SUBCALIBER TUBE.

Projectile = 1.1 lbs. Muzzle velocity = 2100 f. s. Caliber = 1.46 inches.

[Prepared under the direction of the Chief of Artillery by the Artillery Board, Fort Monroe, Va.]

Range, X.	Angle of departure, φ.		Change in elevation for 10 yards in range.	Time of flight, T.	Deviation for—		Slope of fall.
					Wind component of 10 miles per hour.	Drift.	
Yards.	°	′	*Min.*	*Sec.*	*Yards.*	*Yards.*	*1 on—*
100	0	04	0.4	0.14	0.02	0.02	859.4
200	0	08	0.5	0.30	0.06	0.03	429.7
300	0	13	0.6	0.48	0.10	0.05	245.6
400	0	19	0.6	0.67	0.18	0.06	156.3
500	**0**	**25**	**0.7**	**0.87**	**0.25**	**0.08**	**107.4**
600	0	32	0.7	1.09	0.35	0.12	80.0
700	0	39	0.8	1.32	0.45	0.19	61.4
800	0	47	0.9	1.57	0.55	0.27	48.4
900	0	56	1.0	1.83	0.76	0.38	39.5
1000	**1**	**06**	**1.1**	**2.11**	**0.93**	**0.53**	**32.7**
1100	1	17	1.2	2.40	1.30	0.72	27.5
1200	1	29	1.2	2.70	1.75	0.94	23.5
1300	1	41	1.4	3.01	2.35	1.21	20.3
1400	1	55	1.4	3.33	3.00	1.50	17.7
1500	**2**	**09**	**1.5**	**3.67**	**3.75**	**1.84**	**15.5**
1600	2	24	1.6	4.01	4.60	2.22	13.8
1700	2	40	1.7	4.37	5.50	2.64	12.3
1800	2	57	1.8	4.74	6.50	3.09	11.0
1900	3	15	1.9	5.11	7.55	3.60	9.9
2000	**3**	**34**	**2.0**	**5.50**	**8.67**	**4.13**	**9.0**
2100	3	54	2.1	5.90	9.80	4.66	8.2
2200	4	15	2.1	6.30	11.10	5.20	7.5
2300	4	36	2.2	6.72	12.40	5.76	6.8
2400	4	58	2.4	7.16	13.80	6.35	6.2
2500	**5**	**22**	**2.5**	**7.60**	**15.25**	**6.98**	**5.7**
2600	5	47	2.6	8.05	16.75	7.63	5.3
2700	6	13	2.7	8.52	18.30	8.32	4.9
2800	6	40	2.8	9.00	19.90	9.05	4.5
2900	7	08	2.9	9.50	21.50	9.83	4.1
3000	**7**	**37**	**3.0**	**10.01**	**23.15**	**10.65**	**3.8**
3100	8	07	3.2	10.54	24.80	11.54	3.5
3200	8	39	3.3	11.08	26.60	12.53	3.3
3300	9	12	3.4	11.64	28.40	13.61	3.1
3400	9	46	3.6	12.21	30.22	14.76	2.9
3500	**10**	**22**	**3.7**	**12.80**	**32.12**	**15.94**	**2.7**

FORT MONROE, VA.,
May 23, 1905.

(23564-372-5. 6-7-1905—1,000.)

RANGE TABLE FOR 6-INCH GUN.

Muzzle velocity, 2600 f. s. *Projectile (long-pointed), 108 lbs.*

[Prepared under the direction of the Chief of Coast Artillery, by the Coast Artillery Board.]

Range.	Angle of departure.	Change in elevation for 10 yards in range.	Time of flight.	Angle of fall.	Slope of fall.	Maximum ordinate.	Striking velocity.	Perforation of Krupp armor. Impact. Normal.	Perforation of Krupp armor. Impact. 30° with normal.	Deflection for— Drift.	Deflection for— Wind component of 10 miles per hour.
Yards.	° ′	′	*Seconds.*	° ′	*1 on—*	*Feet.*	*f. s.*	*Inches.*	*Inches.*	*Degree.*	*Degree.*
1000	**0 25.8**	**0.3**	**1.20**	**0 27**	**127**	**6**	**2417**	**9.6**	**8.8**	**0.018**	**0.013**
1200	0 31.2	.3	1.45	0 33	103	9	2382			.022	.015
1400	0 36.8	.3	1.70	0 39	86.8	12	2347			.026	.018
1600	0 42.5	.3	1.96	0 46	74.6	16	2312			.030	.020
1800	0 48.3	.3	2.22	0 53	65.1	20	2277			.034	.023
2000	**0 54.2**	**.3**	**2.49**	**1 00**	**57.5**	**25**	**2243**	**8.6**	**7.9**	**.038**	**.025**
2200	1 00.2	.3	2.76	1 07	51.2	31	2209			.042	.027
2400	1 06.4	.3	3.03	1 15	46.0	37	2176			.047	.030
2600	1 12.7	.3	3.31	1 23	41.6	44	2143			.052	.033
2800	1 19.2	.3	3.59	1 31	37.8	52	2110			.057	.036
3000	**1 25.8**	**.3**	**3.88**	**1 40**	**34.5**	**60**	**2078**	**7.7**	**7.1**	**.062**	**.039**
3200	1 32.5	.3	4.17	1 49	31.7	70	2046			.067	.041
3400	1 39.4	.4	4.47	1 58	29.2	80	2015			.072	.044
3600	1 46.4	.4	4.77	2 08	27.0	91	1984			.078	.047
3800	1 53.6	.4	5.07	2 18	25.0	103	1953			.084	.050
4000	**2 00.9**	**.4**	**5.38**	**2 28**	**23.2**	**116**	**1922**	**6.8**	**6.3**	**.090**	**.053**
4200	2 08.4	.4	5.69	2 39	21.6	130	1891			.096	.056
4400	2 16.1	.4	6.01	2 50	20.2	145	1861			.102	.059
4600	2 23.9	.4	6.34	3 02	18.9	161	1832			.109	.063
4800	2 31.9	.4	6.67	3 14	17.7	179	1803			.116	.066
5000	**2 40.1**	**.4**	**7.01**	**3 26**	**16.6**	**198**	**1775**	**6.0**	**5.5**	**.123**	**.069**
5200	2 48.5	.4	7.35	3 39	15.6	218	1747			.130	.072
5400	2 57.1	.4	7.70	3 53	14.7	239	1720			.137	.076
5600	3 05.9	.5	8.05	4 07	13.9	262	1693			.145	.079
5800	3 14.8	.5	8.41	4 22	13.1	286	1666			.153	.083
6000	**3 23.9**	**.5**	**8.78**	**4 37**	**12.4**	**311**	**1639**	**5.2**	**4.8**	**.161**	**.086**
6200	3 33.2	.5	9.15	4 53	11.7	337	1613			.170	.090
6400	3 42.8	.5	9.53	5 10	11.1	365	1587			.179	.093
6600	3 52.7	.5	9.92	5 27	10.5	395	1562			.188	.097
6800	4 02.8	.5	10.31	5 45	9.94	428	1537			.197	.100
7000	**4 13.2**	**.5**	**10.70**	**6 03**	**9.43**	**463**	**1513**	**4.5**	**4.1**	**.207**	**.104**
7200	4 23.8	.5	11.10	6 22	8.95	499	1489			.217	.108
7400	4 34.7	.6	11.51	6 42	8.50	537	1465			.227	.112
7600	4 45.9	.6	11.93	7 03	8.08	577	1442			.238	.116
7800	4 57.3	.6	12.36	7 25	7.69	619	1420			.249	.120
8000	**5 09.0**	**.6**	**12.80**	**7 47**	**7.32**	**663**	**1399**	**3.9**	**3.6**	**.260**	**.124**
8200	5 21.0	.6	13.24	8 10	6.97	710	1378			.272	.128
8400	5 33.3	.6	13.69	8 34	6.64	760	1358			.284	.132
8600	5 45.9	.6	14.14	8 59	6.33	812	1338			.296	.136
8800	5 58.8	.7	14.60	9 24	6.04	867	1318			.309	.140
9000	**6 12.0**	**.7**	**15.07**	**9 50**	**5.77**	**924**	**1299**	**3.4**	**3.1**	**.322**	**.144**
9200	6 25.5	.7	15.55	10 17	5.51	984	1281			.336	.149
9400	6 39.4	.7	16.04	10 45	5.26	1048	1263			.350	.153
9600	6 53.7	.7	16.54	11 15	5.03	1115	1246			.365	.157
9800	7 08.3	.8	17.04	11 45	4.81	1184	1230			.380	.162
10000	**7 23.3**	**.8**	**17.55**	**12 16**	**4.60**	**1257**	**1215**	**3.1**	**2.9**	**.395**	**.166**
10200	7 38.7	.8	18.07	12 48	4.40	1333	1201			.411	.170
10400	7 44.5	.8	18.60	13 21	4.21	1413	1188			.428	.175
10600	8 00.7	.8	19.14	13 55	4.03	1498	1176			.445	.179
10800	8 17.3	.9	19.68	14 29	3.87	1587	1165			.463	.184
11000	**8 44.3**	**.9**	**20.23**	**15 04**	**3.72**	**1681**	**1154**	**2.8**	**2.6**	**.481**	**.188**
11200	9 01.8	.9	20.79	15 40	3.57	1778	1143			.499	.192
11400	9 19.7	.9	21.36	16 17	3.43	1879	1133			.518	.197
11600	9 38.0	.9	21.93	16 54	3.30	1985	1124			.537	.201
11800	9 56.8	1.0	22.51	17 32	3.17	2096	1116			.557	.206
12000	**10 16.0**	**1.0**	**23.10**	**18 11**	**3.05**	**2212**	**1109**	**2.6**	**2.4**	**.578**	**.210**
12200	10 35.7	1.0	23.70	18 50	2.94	2333	1102			.599	.215
12400	10 55.8	1.0	24.31	19 30	2.83	2459	1095			.620	.219
12600	11 16.4	1.1	24.92	20 11	2.73	2590	1089			.642	.224
12800	11 37.5	1.1	25.54	20 52	2.63	2726	1083			.664	.228
13000	**11 59.2**	**1.1**	**26.17**	**21 34**	**2.53**	**2868**	**1078**	**2.5**	**2.3**	**.686**	**.233**
13200	12 21.4	1.1	26.81	22 16	2.44	3016	1073			.709	.237
13400	12 44.1	1.2	27.46	22 59	2.35	3170	1068			.733	.242
13600	13 07.3	1.2	28.11	23 43	2.27	3331	1064			.757	.246
13800	13 31.1	1.2	28.78	24 28	2.19	3499	1060			.782	.251

Angles of Departure Corrected for Height of Gun, Curvature of the Earth and Jump

Battery Peck **Fort** Hancock **Caliber** 6-inch **Carriage** Barbette

Muzzle Velocity 2600 **f.s.** Based on range table dated 6-C-1, September 1925

Projectile 108 **lbs.**

Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation	
Yards	°	′	Yards	°	′	Yards	°	′	Yards	°	′	Yards	°	′
1000	−0	04	11000	8	44	21000			31000			41000		
1200	−0	07	11200	9	01	21200			31200			41200		
1400	0	16	11400	9	19	21400			31400			41400		
1600	0	25	11600	9	38	21600			31600			41600		
1800	0	33	11800	9	57	21800			31800			41800		
2000	0	40	12000	10	16	22000			32000			42000		
2200	0	48	12200	10	36	22200			32200			42200		
2400	0	56	12400	10	56	22400			32400			42400		
2600	1	03	12600	11	17	22600			32600			42600		
2800	1	10	12800	11	38	22800			32800			42800		
3000	1	17	13000	11	59	23000			33000			43000		
3200	1	25	13200	12	21	23200			33200			43200		
3400	1	32	13400	12	44	23400			33400			43400		
3600	1	40	13600	13	07	23600			33600			43600		
3800	1	48	13800	13	31	23800			33800			43800		
4000	1	55	14000	13	56	24000			34000			44000		
4200	2	03	14200	14	21	24200			34200			44200		
4400	2	11	14400	14	46	24400			34400			44400		
4600	2	20	14600	15	12	24600			34600			44600		
4800	2	28	14800	15	39	24800			34800			44800		
5000	2	36	15000	16	07	25000			35000			45000		
5200	2	44	15200	16	35	25200			35200			45200		
5400	2	53	15400	17	04	25400			35400			45400		
5600	3	02	15600	17	33	25600			35600			45600		
5800	3	12	15800	18	04	25800			35800			45800		
6000	3	21	16000	18	35	26000			36000			46000		
6200	3	31	16200	19	08	26200			36200			46200		
6400	3	40	16400	19	41	26400			36400			46400		
6600	3	50	16600	20	15	26600			36600			46600		
6800	4	00	16800	20	50	26800			36800			46800		
7000	4	11	17000	21	26	27000			37000			47000		
7200	4	22	17200			27200			37200			47200		
7400	4	33	17400			27400			37400			47400		
7600	4	44	17600			27600			37600			47600		
7800	4	55	17800			27800			37800			47800		
8000	5	07	18000			28000			38000			48000		
8200	5	19	18200			28200			38200			48200		
8400	5	32	18400			28400			38400			48400		
8600	5	45	18600			28600			38600			48600		
8800	5	58	18800			28800			38800			48800		
9000	6	11	19000			29000			39000			49000		
9200	6	25	19200			29200			39200			49200		
9400	6	39	19400			29400			39400			49400		
9600	6	53	19600			29600			39600			49600		
9800	7	08	19800			29800			39800			49800		
10000	7	23	20000			30000			40000			50000		
10200	7	38	20200			30200			40200			50200		
10400	7	54	20400			30400			40400			50400		
10600	8	10	20600			30600			40600			50600		
10800	8	27	20800			30800			40800			50800		

Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation		Range	Quadrant Elevation	
Yards	°	′	Yards	°	′	Yards	°	′	Yards	°	′	Yards	°	′
1000	−0	04	11000	8	44	21000			31000			41000		
1200	−0	07	11200	9	01	21200			31200			41200		
1400	0	16	11400	9	19	21400			31400			41400		
1600	0	25	11600	9	38	21600			31600			41600		
1800	0	33	11800	9	57	21800			31800			41800		
2000	0	40	12000	10	16	22000			32000			42000		
2200	0	48	12200	10	36	22200			32200			42200		
2400	0	56	12400	10	56	22400			32400			42400		
2600	1	03	12600	11	17	22600			32600			42600		
2800	1	10	12800	11	38	22800			32800			42800		
3000	1	17	13000	11	59	23000			33000			43000		
3200	1	25	13200	12	21	23200			33200			43200		
3400	1	32	13400	12	44	23400			33400			43400		
3600	1	40	13600	13	07	23600			33600			43600		
3800	1	48	13800	13	31	23800			33800			43800		
4000	1	55	14000	13	56	24000			34000			44000		
4200	2	03	14200	14	21	24200			34200			44200		
4400	2	11	14400	14	46	24400			34400			44400		
4600	2	20	14600	15	12	24600			34600			44600		
4800	2	28	14800	15	39	24800			34800			44800		
5000	2	36	15000	16	07	25000			35000			45000		
5200	2	44	15200	16	35	25200			35200			45200		
5400	2	53	15400	17	04	25400			35400			45400		
5600	3	02	15600	17	33	25600			35600			45600		
5800	3	12	15800	18	04	25800			35800			45800		
6000	3	21	16000	18	35	26000			36000			46000		
6200	3	31	16200	19	08	26200			36200			46200		
6400	3	40	16400	19	41	26400			36400			46400		
6600	3	50	16600	20	15	26600			36600			46600		
6800	4	00	16800	20	50	26800			36800			46800		
7000	4	11	17000	21	26	27000			37000			47000		
7200	4	22	17200			27200			37200			47200		
7400	4	33	17400			27400			37400			47400		
7600	4	44	17600			27600			37600			47600		
7800	4	55	17800			27800			37800			47800		
8000	5	07	18000			28000			38000			48000		
8200	5	19	18200			28200			38200			48200		
8400	5	32	18400			28400			38400			48400		
8600	5	45	18600			28600			38600			48600		
8800	5	58	18800			28800			38800			48800		
9000	6	11	19000			29000			39000			49000		
9200	6	25	19200			29200			39200			49200		
9400	6	39	19400			29400			39400			49400		
9600	6	53	19600			29600			39600			49600		
9800	7	08	19800			29800			39800			49800		
10000	7	23	20000			30000			40000			50000		
10200	7	38	20200			30200			40200			50200		
10400	7	54	20400			30400			40400			50400		
10600	8	10	20600			30600			40600			50600		
10800	8	27	20800			30800			40800			50800		
11000	8	44	21000			31000			41000			51000		

PREPARED UNDER THE DIRECTION OF THE CHIEF OF COAST ARTILLERY BY THE COAST ARTILLERY BOARD

C. A. School, Fort Monroe, Va., 12-3-23-1000

GKM

ABRIDGED RANGE TABLE FOR 6" SEACOAST GUNS

Mark II N. M. Shell, 90 lbs. Muzzle Velocity 2600 f/s.

Range	Angle of Departure:		Time of Flight.	Deflection for 10 mi/hr. Drift cross wind.	
Yards	°	'	Seconds	°	°
200	0	05.0	0.23	0.009	0.003
400	0	10.1	0.47	0.018	0.007
600	0	15.4	0.71	0.027	0.010
800	0	20.8	0.96	0.037	0.014
1000	0	26.3	1.21	0.046	0.017
1200	0	32.0	1.47	0.056	0.021
1400	0	37.8	1.73	0.065	0.024
1600	0	43.8	2.00	0.075	0.028
1800	0	50.0	2.27	0.085	0.031
2000	0	56.4	2.55	0.095	0.035
2200	1	02.9	2.84	0.105	0.039
2400	1	09.6	3.13	0.115	0.043
2600	1	16.6	3.43	0.126	0.047
2800	1	23.8	3.74	0.137	0.051
3000	1	31.3	4.05	0.148	0.055
3200	1	39.0	4.37	0.159	0.060
3400	1	46.9	4.70	0.171	0.064
3600	1	55.1	5.04	0.183	0.069
3800	2	03.5	5.38	0.195	0.073
4000	2	12.1	5.73	0.207	0.078
4200	2	21.0	6.09	0.220	0.083
4400	2	30.2	6.46	0.233	0.088
4600	2	39.8	6.84	0.246	0.093
4800	2	49.7	7.23	0.259	0.098
5000	3	00.0	7.62	0.273	0.103
5200	3	10.5	8.02	0.287	0.108
5400	3	21.5	8.44	0.301	0.114
5600	3	32.8	8.87	0.316	0.119
5800	3	44.4	9.30	0.331	0.125
6000	3	56.4	9.74	0.347	0.130
6200	4	08.8	10.19	0.363	0.136
6400	4	21.7	10.65	0.380	0.141
6600	4	35.0	11.12	0.397	0.147
6800	4	48.7	11.60	0.414	0.152
7000	5	02.9	12.09	0.432	0.158
7200	5	17.5	12.59	0.450	0.164
7400	5	32.6	13.10	0.469	0.170
7600	5	48.2	13.62	0.489	0.175
7800	6	04.3	14.14	0.509	0.181
8000	6	20.9	14.67	0.530	0.187
8200	6	38.0	15.21	0.552	0.193
8400	6	55.6	15.76	0.574	0.199
8600	7	13.7	16.32	0.596	0.205
8800	7	32.3	16.89	0.619	0.211
9000	7	51.4	17.48	0.643	0.217
9200	8	11.0	18.07	0.667	0.223
9400	8	31.2	18.67	0.692	0.229
9600	8	52.0	19.28	0.717	0.234
9800	9	13.4	19.89	0.743	0.240
10000	9	35.4	20.51	0.769	0.246
10200	9	57.8	21.14	0.796	0.252
10400	10	21.0	21.78	0.823	0.258
10600	10	44.7	22.43	0.851	0.263
10800	11	09.0	23.09	0.879	0.269

T.S. No. 194
No.v 17, 1920

ABRIDGED RANGE FOR 6" SEACOAST GUNS

Mark II H. S. Shell, 90 lbs. Muzzle Velocity 2600 f/s'.

Range	Angle of Departure.		Time of Flight.	Deflection for 1o mi/hr Drift Cross Wind.	
Yards	o	'	Seconds	0	0
11000	11	33.9	23.75	0.907	0.275
11200	11	59.4	24.44	0.936	0.281
11400	12	25.6	25.13	0.965	0.286
11600	12	52.4	25.83	0.995	0.292
11800	13	19.8	26.53	1.026	0.297
12000	13	47.9	27.24	1.057	0.303
12200	14	16.7	27.96	1.089	0.308
12400	14	46.1	28.69	1.121	0.314
12600	15	16.2	29.43	1.153	0.319
12800	15	47.0	30.19	1.186	0.325
13000	16	18.5	30.96	1.219	0.330
13200	16	50.7	31.74	1.253	0.335
13400	17	23.7	32.53	1.287	0.341
13600	17	57.4	33.32	1.322	0.346
13800	18	31.8	34.12	1.357	0.352
14000	19	07.0	34.93	1.393	0.357
14200	19	43.0	35.75	1.429	0.362
14400	20	19.8	36.58	1.466	0.368
14600	20	57.5	37.43	1.503	0.373
14800	21	36.0	38.29	1.541	0.378
15000	22	15.3	39.16	1.580	0.383

This table is applicable when a fuze similar ballistically to the Mark V is used.

Technical Staff, Ordnance Dept., U.S.A.
Washington, D. C.

12. RECORDS OF FIRINGS.

Summary of all firings including trial shots and calibration firings, in forms prescribed by TM 2-245, dated April 1946.

a. Sub-Caliber Firings. (No record previous to April 1918)

Tube No.	Organization	Date	Rounds Fired	Total
Gun #1	4th CO CAC	4 April 1918	25	2964
Tube 165	4th CA CAC	17 April 1918	28	2992
	15th CA SH	20 May 1918	35	3027
	137th CA CAC	15 May 1923	50	3077
	137th CA CAC	16 May 1923	50	3127
	137th CO CAC	17 May 1923	100	3227
	137th CO CAC	18 May 1923	12	3239
	137th CO CAC	15 June 1923	71	3310
	137th CO CAC	16 June 1923	79	3389
	137th CO CAC	26 June 1923	150	3539
	137th CO CAC	28 June 1923	150	3689
	137th CO CAC	26 April 1924	23	3712
	137th CO CAC	24 May 1924	10	3722
	137th CO CAC	6 June 1924	74	3796
	137th CO CAC	17 June 1924	11	3801
	137th CO CAC	24 June 1924	44	3845
	137th CO CAC	25 June 1924	43	3888
	Btry D 7th CA	9 May 1925	28	3916
	Btry D 7th CA	16 May 1925	10	3926
	Btry D 7th CA	22 July 1925	17	3943
	Btry D 7th CA	23 July 1925	10	3953
	Btry D 7th CA	24 July 1925	53	4006
	Btry D 7th CA	27 July 1925	19	4025
	Btry B CMTC	12 Aug. 1925	18	4043
	Btry B CMTC	18 Aug. 1925	30	4073
	Btry B CMTC	24 Aug. 1925	7	4080
	Btry B CMTC	25 Aug. 1925	7	4087
	Btry D 7th CA	8 Sept. 1925	14	4101
	Btry D 7th CA	9 Sept. 1925	20	4121
	Btry D 7th CA	21 Sept. 1925	9	4130
	Btry D 7th CA	13 Apr 1926	21	4151
	Btry D 7th CA	14 Apr 1926	7	4158
	Btry D 7th CA	20 Apr 1926	14	4172
	Btry D 7th CA	21 Apr 1926	2	4174
	Btry D 7th CA	22 Apr 1926	14	4188
	Btry D 7th CA	26 Apr 1926	8	4196
	Btry D 7th CA	10 May 1926	25	4219

12. Records of Firings, (Cont'd)

Tube No.	Organization	Date	Rounds Fired	Total
Gun #1	Btry D 7th CA	11 May 1926	10	4229
Tube 165	Btry D 7th CA	12 May 1926	14	4243
	Btry D 7th CA	22 May 1926	23	4266
	BtrynB CMTC	19 Aug. 1926	13	4279
	Btry B CMTC	27 Aug. 1926	27	4306
	Btry D 7th CA	12,14,16 Apr. 1927	7	4313
	Btry D 7th CA	12,14,16 Apr. 1927	21	4334
	Btry D 7th CA	12,14,16 Apr. 1927	29	4363
	Btry D 7th CA	19-21 Apr. 1927	30	4393
	Btry D 7th CA	25 Apr. 1927	9	4402
	Btry D 7th CA	3 May 1927	10	4412
	Btry D 7th CA	21 May 1927	15	4427
	Btry D 7th CA	24 June 1927	43	4470
	Res. Off.	4 Aug. 1927	90	4560
	CMTC	17 Aug. 1927	120	4680
	Btry D 7th CA	13 Sept. 1927	50	4730
	Btry A CMTC	27 Aug. 1929	6	4736
	Btry M 245th CA	16 Nov. 1939	24	4760
	Btry K 245th CA	16 Dec. 1940	40	4800
	Btry K 245th CA	17 Dec 1940	60	4860
	Btry K 245th CA	9 Jan. 1941	50	4910
	Btry K 245th CA	29 July 1942	13	4923
	Btry K 245th CA	30 July 1942	31	4954
	Btry K 245th CA	31 July 1942	14	4968
	Btry K 245th CA	3 Aug. 1942	23	4991
	Btry E 265th CA	14 Sept. 1943	16	5007
	Btry E 265th CA	15 Sept. 1943	11	5018
	Btry E 265th CA	16 Sept. 1943	19	5037
	Btry E 265th CA	17 Sept. 1943	35	5072
	Btry E 265th CA	20 Sept. 1943	36	5108
	Btry E 265th CA	24 Sept. 1943	33	5141
	Btry C 245th CA	15 Mar. 1944	54	5195
	Btry C 245th CA	18 Mar. 1944	18	5213
	Btry C 245th CA	21 Mar. 1944	35	5248
	Btry C 245th CA	15 May 1944	17	5265
	Btry C 245th CA	16 May 1944	26	5291
	Btry C 245th CA	22 May 1944	50	5341
	Btry C 245th CA	23 May 1944	35	5376
	Btry E 245th CA	12 June 1944	10	5386
	Btry E 245th CA	13 June 1944	36	5422
	Btry E 245th CA	15 June 1944	19	5441

12. Records of Firings Cont'd

Tube No.	Organization	Date	Rounds Fired	Total
Gun #1	Btry E 245th CA	19 June 1944	56	5528
Tube 165	Btry C 245th CA	14 Aug. 1944	28	5556
	Btry C 245th CA	16 Aug. 1944	39	5595
	Btry C 245th CA	16 Aug. 1944	38	5633
	Btry C 245th CA	18 Aug. 1944	30	5663
	Btry C 245th CA	21 Aug. 1944	40	5703
	Btry C245th CA	22 Aug. 1944	8	5711
	Btry E 245th CA	5 Sept. 1944	21	5732
	Btry E 245th CA	7 Sept. 1944	20	5752
	Btry E 245th CA	8 Sept. 1944	29	5781
	Btry E 245th CA	26 Sept. 1944	20	5801
	Btry E 245th CA	27 Sept. 1944	70	5871
	Btry C245th CA	22 Dec. 1944	46	5917
	Btry C 245th CA	4 Dec. 1944	51	5968
	Btry C 245th CA	7 Feb. 1945	32	6000
	Btry C 245th CA	12 Feb. 1945	37	6037
	Btry C 245th CA	19 Feb. 1945	26	6063
	Btry C 245th CA	20 Feb. 1945	35	6098
	Btry C 245th CA	21 Feb. 1945	20	6118
	Btry C 245th CA	23 Feb. 1945	50	6168
	Btry C 245th CA	28 Feb. 1945	14	6182
	Btry C HDNY	26 May 1945	16	6198
	Btry C HDNY	28 May 1945	55	6253
	Btry C HDNY	29 May 1945	39	6292
	Btry C HDNY	13 July 1945	11	6303
	Btry C HDNY	1 Aug. 1945	16	6319
	Btry C HDNY	13 Aug. 1945	20	6339
	Btry C HDNY	20 Aug. 1945	33	6372
	Btry C HDNY	21 Aug. 1945	40	6412
	Btry C HDNY	27 Aug. 1945	10	6422

Btry D 7th CA	25 Apr. 1927	33	3335
Btry D 7th CA	3 May 1927	18	3353
Btry D 7th CA	21 May 1927	11	3364
Btry A 261 DNG	9 July 1928	68	3432
Btry A 261 DNG	11 July 1928	32	3464
Btry A 7th CA	25 July 1929	6	3470
Btry A 261 DNG	1 Aug. 1929	47	3517
Btry A 261 DNG	3 Aug. 1929	53	3570
Btry A CMTC	27 Aug. 1929	7	3577
Btry A 261 DNG	10,11,12 July 1930	58	3635
Btry L 245th CA	16 Nov. 1939	34	3669
Btry K 245th CA	16 Dec. 1940	40	3709
Btry K 245th CA	17 Dec. 1940	60	3769
Btry K 245th CA	9 Jan. 1941	50	3819
Btry K 245th CA	29 July 1942	13	3832
Btry K 245th CA	30 July 1942	31	3863
Btry K 245th CA	31 July 1942	13	3876
Btry K 245th CA	3 Aug. 1942	24	3900
Btry E 265th CA	14 Sept. 1943	22	3922
Btry E 265th CA	15 Sept. 1943	11	3933
Btry E 265th CA	16 Sept. 1943	14	3947
Btry E 265th CA	17 Sept. 1943	36	3983
Btry E 265th CA	20 Sept. 1943	36	4019
Btry E 265th CA	24 Sept. 1943	31	4050
Btry C 245th CA	15 Mar. 1944	50	4100
Btry C 245th CA	18 Mar. 1944	18	4118
Btry C 245th CA	21 Mar. 1944	19	4137
Btry C 245th CA	15 May 1944	16	4153
Btry C 245th CA	16 May 1944	26	4179
Btry C 245th CA	22 May 1944	50	4229
Btry C 245th CA	23 May 1944	33	4262
Btry E 245th CA	12 June 1944	10	4272
Btry E 245th CA	13 June 1944	34	4306
Btry E 245th CA	14 June 1944	17	4323

12. Records of Firings. (Cont'd)

Tube No.	Organization	Date	Rounds fired	Total
Gun #2	Btry E 245th CA	15 June 1944	30	4353
Tube 128	Btry E 245th CA	19 June 1944	54	4407
	Btry C 245th CA	14 Aug. 1944	26	4433
	Btry C 245th CA	16 Aug. 1944	40	4473
	Btry C 245th CA	17 Aug. 1944	40	4513
	Btry C 245th CA	18 Aug. 1944	21	4534
	Btry C 245th CA	21 Aug. 1944	40	4574
	Btry C 245th CA	22 Aug. 1944	6	4580
	Btry E 245th CA	5 Sept. 1944	21	4601
	Btry E 245th CA	7 Sept. 1944	20	4621
	Btry E 245th CA	8 Sept. 1944	29	4650
	Btry E 245th CA	27 Sept. 1944	70	4720
	Btry C 245th CA	22 Dec. 1944	47	4767
	Btry C 245th CA	4 Dec. 1944	50	4817
	Btry C 245th CA	7 Feb. 1945	32	4849
	Btry C 245th CA	12 Feb. 1945	40	4889
	Btry C 245th CA	19 Feb. 1945	28	4917
	Btry C 245th CA	20 Feb. 1945	34	4951
	Btry C 245th CA	21 Feb. 1945	13	4964
	Btry C 245th CA	23 Feb. 1945	49	5013
	Btry C 245th CA	28 Feb. 1945	14	5027
	Btry C HDNY	26 May 1945	22	5049
	Btry C HDNY	28 May 1945	14	5063
	Btry C HDNY	29 May 1945	40	5103
	Btry C HDNY	13 July 1945	5	5108
	Btry C HDNY	1 Aug. 1945	19	5127
	Btry C HDNY	13 Aug. 1945	20	5147
	Btry C HDNY	20 Aug. 1945	33	5180
	Btry C HDNY	21 Aug. 1945	40	5220
	Btry C HDNY	27 Aug. 1945	10	5230

Tube No 23 Mounted 15 June 1945

Unknown	27 March 1907	5	5
"	15 June 1908	5	10
"	12 May 1942	3	13
"	13 Nov. 1942	3	16

13. BATTERY COMMANDERS.

List of battery commanders, and units that have manned the battery, giving dates of service.

None Post Ordnance Oct. 10, 1903 to 17 Mar. 1908.

W.W. Hamilton, Capt, CAC, 17 Mar. 1908 to 18 June 1909, 136th Co., CAC (Mine)

None Post Ordnance 18 June 1909 to 11 May 1910.

Joseph Wheeler, Jr. Capt. CAC, 136th Co. CAC (Mine) 11 May 1910 to 1 Apr. 1911.

C.J. Goodier, 1st Lt., CAC, 136th CO CAC (Mine) 1 Apr. 1911 to 15 Aug. 1911.

J.P. Robinson, Capt., CAC 136th CO CAC (Mine) 15 Aug. 1911 to 20 Apr. 1912.

W.S. Dowd, 1st Lt., CAC, 136th CO CAC (Mine) 20 Apr. 1912 to 15 Aug. 1912.

L.C. Brinton, Jr., Capt., CAC 136th CO (Mine) 15 Aug. 1912 to 15 Apr. 1914.

None Post Ordnance, 15 Apr. 1914 to 20 Apr. 1916.

R.S. Dosson, 1st Lt., CAC, 137th CO CAC (Mine) 20 Apr. 1916 to 4 Aug. 1916.

None Post Ordnance, 4 Aug. 1916 to 21 June 1917.

Aaron Bradshaw, Jr., 2nd Lt., CAC 7th CO Sandy Hook, 21 June 1917 to 20 Aug. 1917.

Aaron Bradshaw, Jr., 2nd Lt., CAC, 18th CO., CAC N.G.U.S.N.Y. 20 Aug. 1917 to 11 Dec. 1

A. Faine, 1st Lt., CAC, 18th Co., N.G.U.S.N.Y. 11 Dec 1917 to 11 Jan. 1918.

A.W. Forsberg, Capt., CARC, 4th CO., CAC Sandy Hook, 11 Jan. 1918 to 17 Apr. 1918.

H.S. Dickerson, Capt., CARC, 17th Apr. 1918 to 17 Nov. 1918. 15th CO., CAC

John Kennedy, 2nd Lt., CAC, 15th CO.,CAC, 17 Nov, 1918 to Dec. 1918.

John Kennedy, 2nd Lt., CAC, Ordnance Officer, Dec. 1918 to 12 Sept., 1921.

C.E. Atkinson, Capt., CAC, 5th CO., CAC, Sandy Hook, 13 Sept. 1921 to 1 June 1922.

C.E. Atkinson, Capt., CAC, 137th CO., CAC, 2 June 1922 to 15 July 1922.

H. Boudreau, Capt., CAC, 137th CO., CAC, 16 July 1922 to 30 June 1924.

H. Boudreau, Capt., CAC, Btry D, 7th CA, 1 July 1924 to 26 May 1925.

Webster F. Putman, 1st Lt., CAC, Btry D 7th CA 26 May 1925 21 Jan 1927.

L.C.Dennis, Capt., CAC, Btry D 7th CA 21 Jan 1927 to 15 May 1929.

C.L. Berry, Capt., CAC, Btry A 7th CA 16 May 1929 to 31 Jan. 1930.

V. Schmidt, Capt., CAC, 7th CA, Hq. Btry., 1 Feb. 1930 to 30 Aug. 1934.

Wm. C. McFadden, Capt., CAC, Hq. Btry. 7th CA 1 Sept. 1934 to 31 Dec. 1937

C.H. Gilbert, 1st Lt., CAC, Hq. Btry 7th CA, 1 Jan. 1938 to 3 Nov. 1939.

J.M.England, Capt., CAC, Btry A 7th CA, 3 Nov. 1939 to 13 Feb. 1940.

R.J. Fowler, Lt., CAC, Btry A 7th CA, 13 Feb. 1940 to 8 May 1940.

J.M. England, Maj. CAC, Btry A 7th CA, 9 May 1940 to 25 Sept., 1940.

G.E. Barker, Capt., CAC, Btry K 245th CA 25 Sept. 1940 to 1 Apr. 1941.

F.H. Baldwin, 1st Lt., CAC, Btry A 245th CA, 1 Apr 1941 to 5 May 1941.

C.G. Murphy, Capt., CAC, Btry K 245th CA, 5 May 1941 to 24 Aug. 1942.

E.L. Boyce, 1st Lt., CAC, Btry K 245th CA, 24 Aug. 1942 to 22 Feb. 1944.

Philip J. Lamasa, Capt., CAC, Btry C 245th CA, 22 Feb. 1944 to 15 Mar. 1945.

Emory L. Musselwhite, 1st Lt., CAC, Btry C 245th CA, 15 Mar. 1945 to 1 Apr., 1945.

Emory L. Musselwhite, 1st Lt., CAC, Btry C HDMY, 1 Apr 1945 to 28 May 1945.

Philip J. Lamasa, Capt., CAC, Btry C HDMY 28 May 1945 to 17 Nov. 1945.

Items of Ordnance equipment authorized for Battery Peck and not listed elsewhere in this book.

2 ea guns, 40mm, M1 - SN5946 - 20152. (At Btry)

2 ea guns, Machine, Browning, Cal.30, M1917A1 - SN 148104 - 37008 (At Btry)

2 ea gun, machine, Browning, Cal.50, M2, WC, Sn 350961 - 180576. (At Btry)

2 ea mount, tripod, MG, Cal.30 M1917A1, SN 122695 - 122688. (At Btry)

2 ea mount, MG, Cal .50, AA, M3 * SN 12445 - 12436. (At Btry)

1 ea scale, prediction, M1. (Auth. but not on hand)

1 ea system, data transmission. (Auth. but not on hand)

2 ea Thermometer, Powder temp.M1. (Auth. but not on hand)

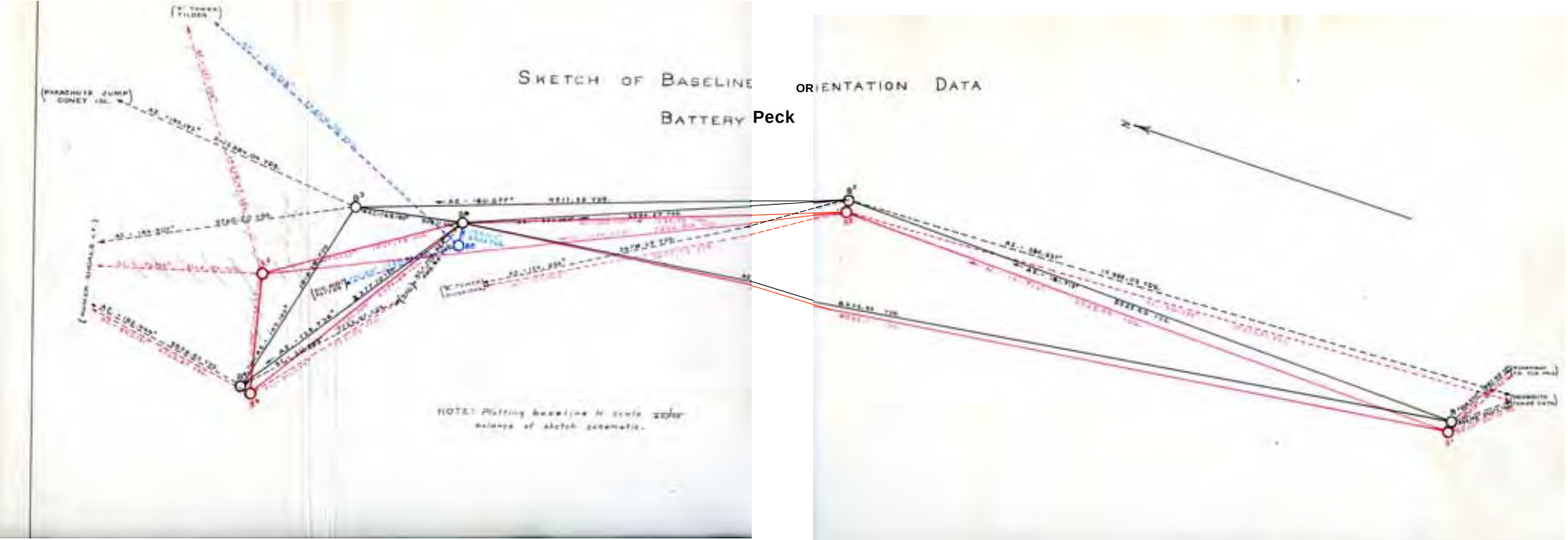
2 ea Director, M5A1 - SN23434 - 23898. (At Btry)

3 ea unit Geberating M5

(2) SN 13072 - 5191

(1) SN 45281 (Spare)

2 ea Indicator, Range, Mk1 (Auth. but not on hand)


SKETCH OF BASELINE ORIENTATION DATA
BATTERY Peck
(PARACHUTE JUMP CONEY IS.)
NOTE: Plotting baseline to scale either
balance of sketch schematic.

BTRX PECK

TO

FROM	B1		B2		D.P.	
	Az.	Dist. Yds.	Az.	Dist. Yds.	Az.	Dist. Yds.
B1	———	———	332.70	2644.7	147.29	695.8
B2	152.70	2644.7	———	———	151.57	3338.0
DP	327.29	695.8	331.57	3338.0	———	———

ORIENTATION DATA

	ROMER SHOAL LT.		B1 HARRIS			
	Az.	Dist.	Az.	Dist.		
B1	169.08	57139	220.15	14614		
B2	165.93	83168	211.27	15818		
BC	171.90	57103	222.76	14421		

CHECK POINTS

	CP No.1		CP No.2		CP No.3	
	Az.	Dist.	Az.	Dist.	Az.	Dist.
B1	189.98	60139	242.70	10 000	280.86	9483
B2	181.09	70360	227.89	10344	274.02	7039
DP	193.52	70143	246.64	10 089	290.32	10093

DATA FOR WHISTLER-HEARN BD.

DP IS 692.7 yds. Left and 65.6 yds. REAR of B1

DP IS 3337.3 yds Left and 65.6 yds REAR of B2

COMPILED FJS 7/15/42

AE FILE 303-D56

GENERAL NOTES

Elevations shown are in feet and refer to the plane of Mean Low Water which is 2.33 feet below Mean Sea Level at Sandy Hook, New Jersey.

True North conforms to the Special Lambert System as developed by the U.S.C. & G. Survey for Sandy Hook, New Jersey.

Where new concrete was poured against old concrete, the old concrete surface was thoroughly cleaned and roughened to provide bond

All exposed concrete corners have 1" chamfer.

All steel reinforcement has 3" cover unless otherwise noted.

Expansion joints are painted with two coats of asphalt primer.

Welding symbols conform to the standards of the American Welding Society.

CONFIDENTIAL

HARBOR DEFENSES OF NEW YORK

BATTERY GUNNISON ~~PECK~~

ALTERATIONS & ADDITIONS

GENERAL PLAN AND DETAILS

FORT HANCOCK NEW JERSEY

IN 8 SHEETS SHEET NO. 1

SCALE AS SHOWN

U. S. ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, FEB. 16, 1943.

Submitted:	Recommended:	Approved:
Stanley S. Haendel	Charles H. Pond	E. O. Garbisch
Engineer.	Lt. Col., Corps of Engineers.	Lt. Col., Corps of Engineers.

FILE NO. FNY 2073

Ltr. AG 660.2 (2-18-43) OB-S-2, TAGO, dated 22 Feb 1943, Subject "Relocation of Btry. Peck" (Modernization of Harbor

(1)

COAST ARTILLERY

Target Practice Report

Seacoast Armament

Kind of service practice.....RECORD..... DAY.....
(Preliminary or record) (Day or night)

Harbor defenses of.....NEW YORK.....

Fort .....HANCOCK N.J.....

Organization: Battery..K....., 245th....Coast Artillery (.HD....)

Date of firing .....AUGUST 7,1942.....

Battery .....PECK.....
(Name of battery)

.....6 Inch.....M-1900.....
(Caliber and model of gun)

.....Barbette...M-1900.....
(Type and model of carriage)

Score.85.3..... Score..... Rating.....
(Group commander) (By C. of C. A.) (By C. of C. A.)

This copy for ..COAST ARTILLERY DISTRICT COMMANDER.....

Fort Monroe—4-8-41—2000

Form 23.

TABULAR ANALYSIS

Fort Hancock, N. J. Harbor Defenses of New York

Organization Battery 'K' 245th Coast Artillery. Name of battery Battery Peck

Caliber and model of gun 6 inch M-1900 Kind and model of carriage Barbette M-1900

Date of practice August 7, 1942 Kind of practice Record Service Practice (Day) (~~Night~~)

Length of base line 4063.06 Yds. Distance and azimuth from primary station to battery D. P. 1227.49 Yds Azimuth 270.09

Graphical Analysis	Line No.	Shot No.	T-1	T-2	T-3	T-4	T-5	T-6	1	2	3	4	5	6	7	8	9	10	11	12
		Gun No.	2	1	2	1	2	1	2	1	2	1	2	1	1	2	2	1	2	1
	1	Zone																		
	2	Actual range to target at instant of splash (From replot)	11900	11900	11490	11490	11150	11150	11020	11000	11000	11000	10970	10970	10910	10860	10830	10830	10830	10830
	3	Ballistic correction which should have been applied (Reoperation Range Correction Board)	-240	-240	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220	-220
	4	Line 2 plus Line 3	11660	11660	11270	11270	10930	10930	10800	10780	10780	10780	10750	10750	10690	10640	10610	10610	10610	10610
	5	B.C. Correction actually ordered (B.C. Record)	0	0	-240	-240	-440	-440	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320
	6	Range at which piece should have been laid (4 plus 5)	11660	11660	11030	11030	10490	10490	10480	10460	10460	10460	10430	10430	10370	10320	10290	10290	10290	10290
	7	Range at which piece was actually laid (Elevation checker's record)	11660	11660	11040	11040	10490	10490	10500	10460	10460	10460	10430	10460	10370	10330	10310	10310	10290	10310
Graph of errors	8	Personnel errors exclusive of spotting errors and errors made in ordering B.C. Correction (7 minus 6)	0	0	∤10	∤10	0	0	∤20	0	0	0	0	∤30	0	∤10	∤20	∤20	0	∤20
O	9	Range deviation of splash (Form 26)	∤67	∤281	∤141	∤60	-273	-211	-24	-54	-81	-75	-137	∤8	-14	-190	-105	∤14	∤468	-26
●	9a	Deviation of salvo center of impact (When spotting is by salvo). (From Line 9)																		
	10	Repeat Line 5	0	0	-240	-240	-440	-440	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320	-320
	11	Deviation stripped of B.C. Corrections (9 minus 10)	∤67	∤281	∤381	∤300	∤167	∤229	∤296	∤266	∤239	∤245	∤183	∤328	∤306	∤130	∤215	∤334	∤788	∤294
	12	Repeat Line 8	0	0	∤10	∤10	0	0	∤20	0	0	0	0	∤30	0	∤10	∤20	∤20	0	∤20
	13	Deviation stripped of B.C. Correction and personnel errors (11 minus 12)	∤67	∤281	∤371	∤290	∤167	∤229	∤276	∤266	∤239	∤245	∤183	∤298	∤306	∤120	∤195	∤314	∤788	∤274
	14	Center of impact under conditions of Line 13, excluding wild shots	∤234	∤234	∤234	∤234	∤234	∤234	∤249	∤249	∤249	∤249	∤249	∤249	∤249	∤249	∤249	∤249	Wild	∤249
	15	Armament error (13 minus 14)	-167	∤47	∤137	∤56	-67	-5	∤27	∤17	-10	-4	-66	∤49	∤57	-129	-54	∤65	Wild	∤25
9	6	Deviation reported by spotting section (B.C. Record)	0	0	0	0	S	S	S	H	S	H	S	H	H	S	S	S	S	H

NOTE.—If range or depression position finder was used in the target practice, Form 23a will be submitted.

	TRIAL	RECORD
Average armament error (arithmetical mean of entries in line 15, excluding wild shots)	80	54
DAPE (.845 X average armament error)	68	46
Average actual range (arithmetical mean of entries in line 2)	11513	10858

Battery Commander.

FORM 23

Form-4-21-42-5000 CAB 10—W.O. 1800—D1

Form 25

MATERIEL AND POWDER REPORT (SEACOAST GUNS)

Fort: Hancock New Jersey — Harbor Defenses: of New York

Organization: Btry K 245th Coast Artillery. — Name of Battery: Battery Peck

Caliber and model of gun: 6" M-1900 — Kind and model of carriage: Barbette M-1900

Date of practice: August 7, 1942 — Kind of practice: Record Service (Day) [illegible]

Tactical number of piece	1	2
Zone	---	---
Number of shots	12	12
Average actual range	11022	11022
Assumed MV, 70° (1)	2626	2626
Deviation of CI (2) (Yards)	∕277	∕259
Deviation in f/s MV	∕62	∕58
Developed MV, 70°	2688	2684

(1) The assumed MV for each gun is determined by subtracting the calibration correction from the assumed MV of the reference piece.
(2) The algebraic mean of the entries on line 13, Form 23, for each gun separately.

Actual range—maximum: 11900 minimum: 10700

Average azimuth (zero south)—TS: 259.15 RS: 252.65

D.A.P.E. (range): TS: 68 RS: 46

Average lateral deviation (yards): TS: 64 RS: 13

METEOROLOGICAL DATA (INDICATE zone(s) used)

MFH	MFH	30080	
	0	220798	
	1	230898	
	2	250598	
	3	350199	xx
	4	550399	
	5	580399	
Time taken		1314	
Time used		1422	
Tide		∕1.9	
Air temperature		80°F	

AMMUNITION

POWDER

Lot: X-1674 Year: 1918 Mfr. initials: DuPont "P"

Weight of charge:

Zone: --- lbs.: 27 oz.: 2

Zone: --- lbs.: --- oz.: ---

Type of charge: Increment Normal pressure: 31,550

Temperature of powder: 80° Normal MV, 70°: 2600

PROJECTILE

Lot No.: Rotating band: Unknown

Weight: 89.5 lbs Kind:

PRIMERS

Lot No.: 303-3 Mfr. initials: Picatinny

Kind: Electric M-30 How fired: Electric

Firing tables used:

RECAPITULATION OF PRESSURES

Tactical No. of piece	No shots	1st Gage	2d Gage	Average
1	2	31500	31600	31550
2	2	31575	31500	31538

CARRIAGE

Valve settings—Disappearing Carriages

	Gun No. 1	Gun No. 2
Throttling	---	---
Buffer	---	---

Tactical No. of piece	Reg. No. of piece	Initials of manufacturer	Reg. No. of carriage	Initials of manufacturer	Serial No. of shots: Before practice	Serial No. of shots: After practice
1	27	W	12	R.I.A.	493	505
2	28	W	17	W	333	345

RECORD OF SUBCALIBER PRACTICES

Date	7/29/42	7/30/42	7/31/42	8/3/42				Total Shots
Shots fired	26	62	27	47				162

NOTE: When abbreviated report only is required, the developed armament probable error, and the developed muzzle velocity may be omitted.

(OVER)

Form 25

Fort Monroe—3-30-42—3000—CAB 18—W. O. 1591—B176

The following malfunctions, defects, or failures of Ordnance matérial developed in preparation for during this practice (describe fully):

One primer stuck in #2 Gun despite the fact that all prim were measured for size prior to the practice and despite the f that the primer seat was kept cleaned by the Chief of Breech, necessitated the removal of the fired primer by means of a pli

Charles A Murphy

Captain, C. A., Comdg. Bty

Form 27

SCORE SHEET
REGULAR ARMY SEACOAST TARGET PRACTICES

Organization Btry K 245th Coast Artillery. Fort Hancock New Jersey

Name of Battery Peck Caliber and Model of Gun 6" M-1900

Date of Practice Aug 7, 1942 Type of practice Record Service (Day) (Night)

"A" Component—Hitting

Mean Actual Range 10.858 Yds. Angle of fall (nearest even 100 yards range) 21°05'

Broadside Target (A')

From Table III, ½ DS = 14 yds.

$P = \frac{\frac{1}{2}\,DS}{DAPE} = \frac{14}{53} = .264$

From Table II $P' = .14$

$A' = \frac{H'}{SP'} \times 15 = \frac{3}{18 \times .14} \times 15 = 17.86$

Bow-on Target (A")

From Table III, ½ DS = 46 yds.

$F''_r = \frac{\frac{1}{2}\,DS}{DAPE} = \frac{46}{53} = .868$

From Table II, $P_r'' = .44$

From Table I, PE direction = 8 yds.

$F_d'' = \frac{\frac{1}{2} \text{ width of target}}{PE \text{ in direction}} = \frac{5}{8} = .625$

From Table II, $P_d'' = .32$

$A'' = \frac{H''}{SP_r'' \times P_d''} \times 15 = \frac{2}{18 \times .44 \times .32} \times 15 = 11.86$

$A = A' + A'' \quad 17.86 + 11.86 = 29.7$

"B" Component—Accuracy

From Table I, PE = 53 d (Mean of line 9, Form 23) = 92

$B = 36\left(\frac{PE + DAPE}{d}\right) - 10 = 36\left(\frac{53 + 46}{92}\right) - 10 \quad 28.7 - 10 = 28.7$

"C" Component—Time

From Table C 4-235 Supp.

$C = \left(\frac{gt}{KS}\right)^2 = \left(\frac{2 \times 142.5}{15 \times 18}\right)^2 = 1.06 \quad = 18.5$

"E" Component—Preparation of fire

	Range	Direction
Probable errors from Table I	53	8
Average stripped dev., trial fire (Algebraic Mean T. S.—Line 11 Form 23)	237	64

Value of E 0 = 0.0

"R" Component (Range and speed of target)

$R = B\left(\frac{\text{Actual range} - \text{Normal range}}{\text{Normal range}} + \frac{\sqrt{M}}{50}\right) = .293 \times 28.7$

$= \left(\frac{10858 - 10000}{10000} + \frac{\sqrt{107}}{50}\right)$ (show as plus or minus) $\quad .1086 + .207 = .41 \quad = 8.4$

Total Score = A + B + C + E + R $\quad 29.7 + 28.7 + 18.5 + 0.0 + 8.4 = 85.3$

I certify that the above score, including all basic data used in the computation thereof, is true and correct according to current target practice regulations.

Charles F. Murphy Capt C.A.

Battery Commander.

I certify that I have checked the computations of the above score and have verified all target practice data used therein.

C. Grundstad

Battalion or Group Commander

Major 245th CA

Form 27

Fort Monroe—8-20-41—2000—W.O. 385—Form CAB 19

Battery K
245th Coast Artillery (HD)
Fort Hancock, N. J.

August 12, 1942.

SUBJECT: Battery Commander's Narrative Report.

1. This Battery fired a Record Service Practice on August 7, 1942. The Armament used was, Battery Peck, 6" guns mounted on Barbette Carriages. The weather was clear and visibility was good.

2. The battery is equipped with both Horizontal Base and a 15' Bausch and Lomb C.R.F. The practice was conducted using the horizontal base. Predictions were made by the plotter on the plotting board.

3. In the opinion of the battery commander, no suitable station was available for unilateral spotting so bilateral spotting was used. An M-3 Spotting Board was used, giving sensings only, a half P.E. either side of the target line being considered a hit. In training on the Spotting Theatre, Sub-Caliber and spotting practices fired by other batteries, the spotting section functioned excellently. However, in this practice several wrong sensings by the Spotting Section prevented proper adjustment of fire.

4. Study of past firings of 6" guns from the C.A. Memos showed that these guns shoot to the left. A correction of 0.25° was applied, but the results would indicate that the guns of this battery should have a correction of from 0.60° to 0.70° applied.

5. Lateral Corrections were made by using azimuth instruments set up near each gun. The deflection scales on the guns have been modified to read 6.00 normal, so that the corrections from the azimuth instruments had to be modified. This was done by means of a conversion slide rule. The corrections were applied directly and separately to each gun.

6. Despite the fact that all primers were tested for size prior to the firing, and the fact that the Chief of Breech kept the primer seat clean, one of the primers stuck in the No. 2 gun, necessitating the removal of the primer by pliers. Excepting this, all material functioned satisfactorily. This failure occured on the third shot of the first four record shots of No. 2 gun. No. 1 gun fired its fourth shot and No. 2 gun was ready for action 49 seconds after the primer stuck and was loaded and fired. Time was then taken for adjustment, but the first seven rounds indicated that no adjustment was necessary no matter which way the eighth shot landed, so the practice was continued without waiting for the sense of the eighth shot.

7. During the firing of the last string of 5 record salvos, the range setter on No. 1 gun was forced to leave the gun due to shock and an injury to his ear which deafened him temporarily. The gun commander immediately took over as range setter, and the First Sergeant of the Battery, who was standing by, was ordered to take over as gun commander. These changes were made without any loss of time and the crew continued to function excellently.

CHARLES G. MURPHY
Capt., 245th C.A.(HD)
Comdg. Battery K.

353.17

1st Ind.

COMMANDING OFFICER, Group II, Fort Hancock, N. J. August 12, 1942.
TO: The Adjutant General, United States Army, Washington, D. C.
(Thru Channels)

1. In the conduct of this practice the provisions of TM No. 1 Headquarters Harbor Defenses of New York, dated May 7, 1942, and of TM 4-235 WD were complied with.

2. The Groupment Commander ordered the tug to commence towing at 140100, and ordered the Group Commander to assign the target to the Battery as soon as it come within the field of fire of the Battery. The command "Commence Firing" was given to the Battery Commander from the Group II station at 142121 and the first round was fired at 142227.

3. The bracketing method of fire adjustment was used during the conduct of this practice. All the principals of this method of fire adjustment were followed. However, errors in sensing on the part of the spotting section, particularly for the first four record shots marred the fire adjustment. The first four shots were sensed as, short-hit-short-hit. Had they been sensed correctly as four shorts an up correction of 1.0% would have been applied. From the results of the remaining shots it would appear that had this correction been applied 50% of the following shots would have been affected favorably and 50% affected unfavorably. Incorrect sensing were also made on the 10th, 11th and 16th record shots. Recoperation of the fire adjustment chart using the correct sensing that should have been given indicates that these incorrect sensings had no affect on the fire adjustment.

4. Record shot No. 11 was classified as a "wild shot". There seems to be no reasonable explanation for the excessive deviation of the shot.

5. With the exception of the spotting errors, personnel errors were held to a minimum, the greatest of which did not exceed 30 yards.

6. I certify that I have recomputed the score and have checked all records and reports pertaining to this practice.

C. J. LUNDBLAD
Major, 245th C.A.(HD)
Group Commander.

2nd Ind.

HEADQUARTERS HANCOCK GROUPMENT, Ft. Hancock, N.J., August 14, 1942.
TO: The Commanding General, Harbor Defenses of New York, Fort Hancock, N.J.

1. Examined and forwarded.

2. The target's course was prescribed by the Groupment Commander and was not known to the Group or Battery Commander prior to this practice.

3. The Groupment Commander ordered the tug on course at 140100 and commanded the Group Commander to "Commence Firing when the target is in the field of fire".

4. Your attention is invited to paragraph 7 of the Battery Commander's Narrative Report. The Battery handled this unforeseen situation in a very expeditious manner.

J. C. HAW,
Colonel, 52nd C.A. (Ry),
Commanding.

SJ 353.17/80-245CA 4th Ind. /jv

HQ. NEW YORK-PHILADELPHIA SECTOR, Fort Hamilton, New York, August 21, 1942.
TO: Commanding General, Eastern Defense Command and First Army, Governors Island, New York.

1. It is believed that the large lateral deviations of the first two ranging shots are the result of the short elapsed time between targets assignment and opening fire.

2. The fall of the record shots as shown on Graphical Analysis would tend to indicate that the C. I. of all trial shots as shown is incorrect. It would seem that an error had been made in setting of number two (2) gun for trial shot number three(3).

3. Assuming this premise to be correct the second salvo would have bracketed the target, eliminating the second correction.

4. It is recommended that this practice be rated Very Good based on a score of 85.3.

R. E. HAINES,
Brigadier General, U. S. Army,
Commanding.

COPY FOR:

Commanding General,
New York-Philadelphia Sector,
Fort Hamilton, New York.

6th Ind.

/ljs

Subject: Target Practice Report - Btry. "K", 245th CA (HD), August 7, 1942.

NEW YORK-PHILADELPHIA SECTOR, Fort Hamilton, New York, August 29, 1942.

To: Commanding General, Harbor Defenses of New York, Fort Hancock, N. J.

CA-353.17/200

5th Ind.

1. Forwarded.

HEADQUARTERS EASTERN DEFENSE COMMAND AND FIRST ARMY, Governors Island, N. Y., AUG 28 1942

To: Commanding General, Army Ground Forces, War Department, Washington, D. C.

By command of Brigadier General HAINES:

This practice is rated "Very Good", on the basis of a score of 85.3

For the Commanding General:

EARL RISCOE,
Colonel, C.A.C.,
Executive.

S. E. SENIOR,
Lt. Col., A. G. D.,
Ass't Adjutant General

DISPATCHED - AV FIRST ARMY (AGO) AUG 28 1942

RECEIVED NY-P SEC AUG 29 1942

7th Ind.

/jw

HEADQUARTERS HARBOR DEFENSES OF NEW YORK, Fort Hancock, N.J., September 14, 1942.

To: Commanding Officer, Hancock Groupment, Fort Hancock, N. J.

1. Attention is invited to 5th Ind.

2. Enclosed copy of target practice report of Battery "K", 245th C.A. returned herewith for file.

A COPY FOR:
Commanding General,
New York-Philadelphia Sector,
Fort Hamilton, New York.

By command of Brigadier General HAINES:

R. F. HEITLAND,
Lt. Col., 245th C.A.,
Executive.

8th Ind.

HANCOCK GROUPMENT, Fort Hancock N.J. September 13, 1942.

To: Commanding Officer, Battery K, 245th C.A.(HD) Fort Hancock N.J.

1. Attention is invited to 5th Ind.

2. Enclosed copy of target practice report of Battery K, 245th C.A. returned herewith for file.

For the Groupment Commander:

WALTER A. HEESCH
Captain 245th C.A.
S-3 Hancock Groupment

CA-353.17/80-245CA

83 353.17/80-245CA 6th Ind. /ljs

HQ. NEW YORK-PHILADELPHIA SECTOR, Fort Hamilton, New York, August 29, 1942.
TO: Commanding General, Harbor Defenses of New York, Fort Hancock, N. J.

1. Forwarded.

2. Attention invited to 5th Ind.

By command of Brigadier General HAINES:

EARL BISCOE,
Colonel, C.A.C.,
Executive.

353.17/85 7th Ind. /jw

HEADQUARTERS HARBOR DEFENSES OF NEW YORK, Fort Hancock, N.J., September 4, 1942. - TO: Commanding Officer, Hancock Groupment, Fort Hancock, N. J.

1. Attention is invited to 5th Ind.

2. Enclosed copy of target practice report of Battery "K", 245th C. A. returned herewith for file.

By command of Brigadier General GAGE:

E. F. HEIDLAND,
Lt. Col., 245th CA.,
Executive.

8th Ind.

HQ. HANCOCK GROUPMENT, Fort Hancock N.J. September 13, 1942.
TO: Commanding Officer, Battery K, 245th C.A.(HD) Fort Hancock N.J.

1. Attention is invited to 5th Ind.

2. Enclosed copy of target practice report of Battery K, 245th C.A. returned herewith for file.

For the Groupment Commander:

WALTER A. HEESCH
Captain 245th C.A.
S-3 Hancock Groupment

353.17/85 7th Ind. /jw

HEADQUARTERS HARBOR DEFENSES OF NEW YORK, Fort Hancock, N.J., September 4, 1942. - TO: Commanding Officer, Hancock Groupment, Fort Hancock, N. J.

1. Attention is invited to 5th Ind.

2. Enclosed copy of target practice report of Battery "K", 245th C. A. returned herewith for file.

By command of Brigadier General GAGE:

H. F. HEIDLAND,
Lt. Col., 245th CA.,
Executive.

8th Ind.

HQ. HANCOCK GROUPMENT, Fort Hancock N.J. September 13, 1942.
TO: Commanding Officer, Battery K, 245th C.A.(HD) Fort Hancock N.J.

1. Attention is invited to 5th Ind.

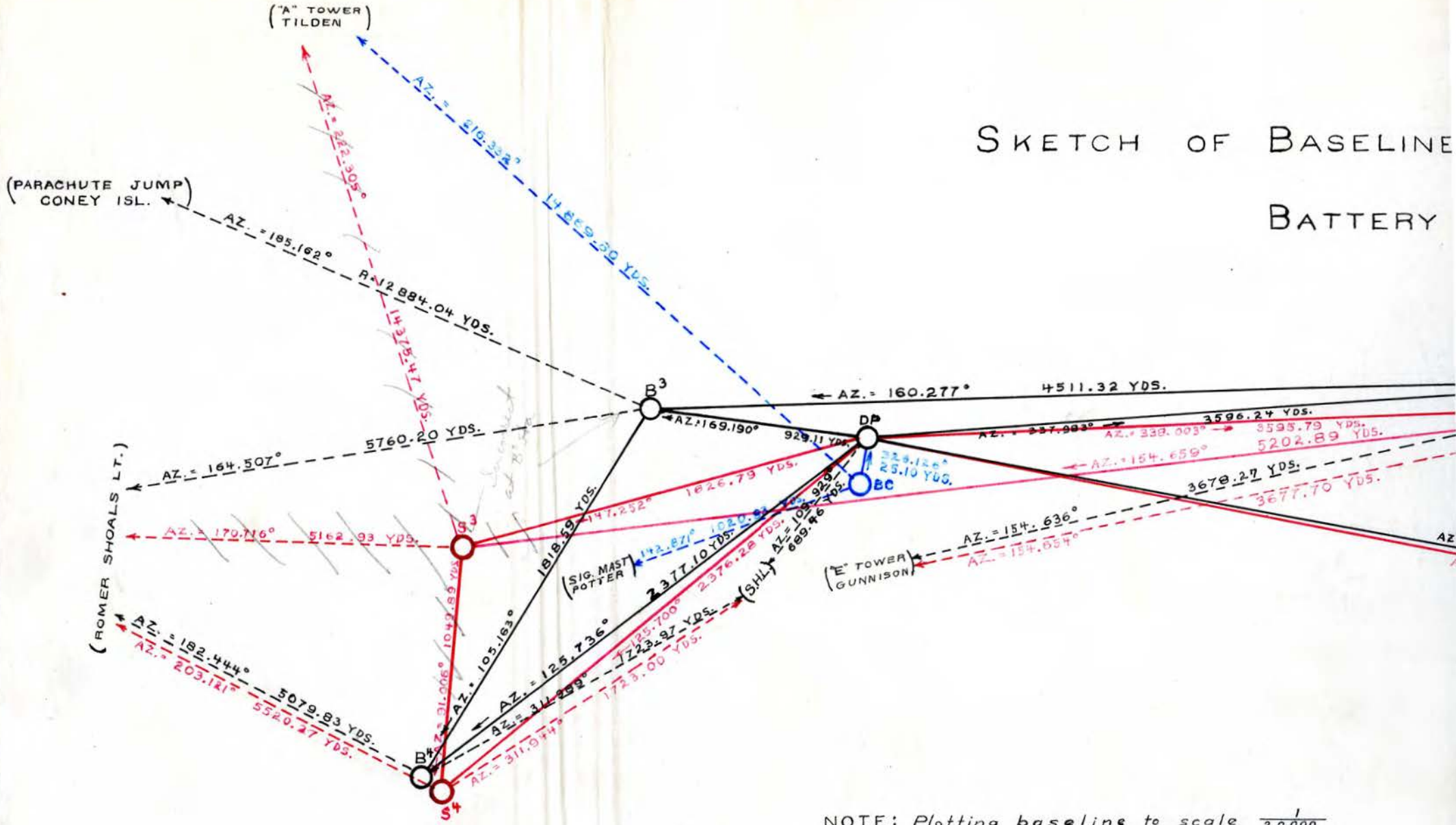
2. Enclosed copy of target practice report of Battery K, 245th C.A. returned herewith for file.

For the Groupment Commander:

WALTER A. HEESCH
Captain 245th C.A.
S-3 Hancock Groupment

SKETCH OF BASELINE

BATTERY



NOTE: *Plotting baseline to scale* $\frac{1}{20{,}000}$
balance of sketch schematic.

IENTATION DATA