

OFFICE CHIEF OF COAST ARTILLERY

RECORD CARD

Survey
IG 333.1 Fort Banks, Mass.

DATE RECEIVED

Aug. 13/29.

August 5, 1929.

I.G., Hdqrs. 1st Corps Area, Army Base, Boston, Mass.

1. This survey was made June 14th and 28th in connection with the annual inspection.

The last survey was made by Colonel C.A. Romeyn, I.G.D., May 28th and 29th, and June 4th, 1928.

Report of survey * * * * *

IG 333.1 Survey-Ft. Banks, Mass.

1st Ind., Aug. 6/29. C.G., 1st C.A. - To The Inspector General.

333/3B

OFFICE CHIEF OF COAST ARTILLERY

RECORD CARD

~~CROSS REFERENCE~~

Rec'd.
Sept. 9, 1930.

July 1, 1930.

I.G., Hdqrs. 1st C.A., Boston, Mass.

Report of survey, Ft. Banks, Boston Harbor, made June 26-27, 1930 in connection with the annual inspection.

22. Conclusions

The Harbor Defenses of Boston are economically operated. It is believed that the reduction in garrison of Boston Harbor is false economy, there being now, I believe, an insufficient number of men available for proper care-taking of the several posts without a loss in professional training.

23. Recommendations

That one company of Coast Artillery be transferred from the 11th Coast Artillery to the 9th Coast Artillery.

333/3-C

Survey 1930

IG 333.1 HD Boston

1st Ind., Sept. 3, 1930. C.G., 1st C.A. - To The Inspector General.

1. This survey has been reviewed item by item.

2. The Commanding General does not concur in the recommendation of the Inspector with respect to transfer of one Coast Artillery Company.

It is believed that the present garrison has not been in caretaking status for sufficient time to recommend any increase at this time.

IG 333.1 (9)-H.D. of Boston,
Mass. (Ft. Banks) (S)

2d Ind.

War Department, IGO, Washington, September 8, 1930 - To the Chief of Coast Artillery.

The return of this paper to this office is requested.

For The Inspector General:

9

J. F. PRIESTON,
Colonel, I.G.D.,
Executive.

333/3-C

333/30

3d Ind.

War Department, O.C.C.A., September 10, 1930. To The Inspector General.

Noted. The Chief of Coast Artillery concurs in the statements contained in paragraph 2, 1st indorsement.

For the Chief of Coast Artillery:

H. L. STEELE,
Colonel, Coast Artillery Corps,
Executive Assistant.

SEP 12 1930

11:00
g

✓
gmc

333/3-C

OFFICE OF THE CHIEF OF COAST ARTILLERY

RECORD OF COMMUNICATION RECEIVED.

From: Lt. Col. L. B. Moody, I. G.D.

Dated:

March 7, 1932

To: C.G., 1st Corps Area THRU C.O., H.D. Boston, Ft. Banks.

Recd. OCCA:

July 27, 1932

Subject: Inspection, Harbor Defenses of Boston.

I. This inspection was made on various dates between February 16 and March 4, 1932, by Lt. Col. L. B. Moody, I.G.D. The last inspection was made by Col. C.A. Romeyn, I.G.D., June 18, 19 and 22, 1931.

II. Irregularities and Deficiencies.

(21) Only one 15-lb. capacity "Alemite" grease compressor supplied for entire harbor defense.

(30) Twelve inch guns on barbette carriages Model 1917, elevated with difficulty, said to be due to inability to force old grease out of bearings with the hand operated grease cups on the trunions. (Ft. Ruckman)

1st Ind. March 16, 1932 - Hq. H.D. of Boston THRU C.G., 1st C.A.D. to C.G. 1st Corps Area.

(21) Requisition for nine additional "Alemite" grease compressors has been submitted.

(30) (Ft. Ruckman) Recommend a lighter grease than No. 5 for winter use on all armament to be applied by high pressure grease guns using "Alemite" connections.

IG 333.1 H.D. Boston FY 1932

3rd Ind. July 14, 1932 - Hq. 1st Corps Area to The Inspector General.

II. (21 and 30): The Chief of Ordnance has stated in O.O. 400.356/11972 (Ft. Banks) that there was no authority for substituting Alemite fittings for grease cups on Coast Artillery. Par. 13 of letter dated Nov. 10, 1931, (A.G. 470 (10-29-31) Misc. C-M) "Instructions for Preservation of Seacoast Defense Materiel," stresses the importance of labor-saving devices. The use of "Alemite" on seacoast carriages in lieu of hand operated grease cups is a material labor saver and also gives better assurance of proper lubrication on carriages in the hands of caretakers. Further consideration by the War Dept. is recommended.

333.1/3-H

O.O. 333.1/3424 H. D. of Boston
IG 333.1 (11)-H.D. of Boston, Mass.
AG 333.1 H.D. of Boston (3-7-32) Misc.

11th Ind. DCC/mog

War Department, Ordnance Office, Washington, D. C. October 20, 1932.
To - The Chief of Coast Artillery.

1. Reference Section II (paragraphs 21 and 30), as noted in 3d indorsement, par. 1 (21 and 30) this matter is now under consideration by the Technical Staff to see whether or not it will be beneficial to install the Alemite fittings. There has been considerable correspondence between this office and the First Corps Area Ordnance Officer in this connection.

2. Section XV, -2d (1) (c), in regard to the excess stock on hand a letter has been written to the Ordnance Officer, First Corps Area, directing that he use this excess stock to supply needs of his Corps Area. It is much more economical to reduce the excess stocks in this manner than to have them shipped to an arsenal.

3. 3d indorsement, Section II (paragraph 29), steps have been taken to determine the disposition of these two 4" calibre guns.

For the Chief of Ordnance.

10/21/32
T. J. HAYES
Major, Ordnance Department
Executive Officer.

5-9-7

x

x

x

10th Ind. Forwarded by J. A. G.

333.1/3-H

GOCHRAN/flh

333.1/3-H

18th Ind.

War Dept., G.C.C.A., October 24, 1932 - To The Adjutant General.

1. The action taken by this office was in connection with par. 1 (21 & 30), 3rd Ind. hereon. It consisted in the initiation of separate correspondence with a view to having a restudy by the Chief of Ordnance and by the Coast Artillery Board made with a view to extending the use of Alamite fittings to the lubrication of seacoast guns.

2. In this connection attention is invited to par. 1, preceding 11th Ind.

For the Chief of Coast Artillery:

MAILED OCT 25 1932 104

W. F. HASE. ✓
Colonel, G.A.C.
Executive Assistant.

333.1/3-H

Form No. 71.

OFFICE OF THE CHIEF OF COAST ARTILLERY

RECORD OF COMMUNICATION RECEIVED.

From: Lt. Col. L.B.Moody, I.G.D., Hq. 1st Corps Area

Dated:

Jan. 9, 1933

To: CG, 1st Corps Area THRU CO, H.D. of Boston,
Ft. Banks, Mass.

Recd. OCCA:

March 28, 1933

Subject: Inspection of H.D. of Boston, Mass.

I. This inspection was made on various dates between December 7 and December 20, 1932, by Lt. Col. L.B.Moody, I.G.D. The last inspection was made by the same officer between Feb. 16 and March 4, 1932.

V. Buildings and Grounds.

3. The boat house in use at Ft. Warren requires a number of new piles and other repairs. This is considered rather urgent in view of the impossibility of definitely estimating the remaining strength of the piling.

XVI. Conclusions.

The majority of the activities reported on are in excellent condition. The remainder are satisfactory and gradually improving.

1st Ind. Jan. 26, 1933 - Hq. H.D. of Boston to CG, 1st Corps Area.

V. Building and Grounds:

3. The boathouse awaits decision by higher authority, as to whether it or two smaller boathouses shall be maintained. Meanwhile, to avoid further delay, a requisition for funds to cover necessary repairs is being forwarded.

FORWARDED THRU CHANNELS

9.7-5

333.1/3-I

QM-333.1 A (Boston, R.D.) 5th Ind.
War Department, OQMG, March 24, 1933. - To: Chief of Coast Artillery.

The foregoing Report of Inspection of the Harbor Defenses of Boston, Mass., has been noted in this office, and the following comments are submitted in connection therewith:

a. Sec. VI (2), Page 2, and Sec. XVII (5) Page 5: Test is now in progress with a view to improving the quality of the storm flag.

b. Sec. IX, (3) Utilities, Page 3: With reference to the recommendation of the Inspector, and comment thereon in 2nd Indorsement, when the First Corps Area requests a staff sergeant (construction) in place of a supply man, such replacement will be furnished.

For The Quartermaster General:

RICHARD T. ELLIS,
Colonel, Q.M.C.,
Assistant.

333.1/3-I

OFFICE OF THE CHIEF OF COAST ARTILLERY

RECORD OF COMMUNICATION RECEIVED.

From: Maj. Frank C. Mahin, I.G.D., Inspector, Hq. 1st Corps Area, Dated:
Army Base, Boston, Mass. Dec. 4, 1934

To: CG, 1st Corps Area THRU CG, 1st C.A.D., and CO, Ft. Banks, Recd. OCCA:
Mass. May 29, 1935

Subject: Annual Inspection, Ft. Banks and HD of Boston.

1. a. The annual inspection of Ft. Banks and the HD of Boston, was made by Maj. Frank C. Mahin, IGD, between Sept. 10, and Oct. 1, 1934.
- b. The last previous inspection of this command was made Dec. 7-20, 1932, by Lt. Col. L. B. Moody, I.G.D., and a partial inspection, including all funds and the hospital, by the same officer in Feb. 1934.
- c. All installations and activities were inspected.

9. Artillery Engineer:

a. All batteries, except two, have fully equipped fire control stations which are generally in excellent condition. The two that have no stations are the barbette mounted 12" and 16" batteries, the only modern long range installations in the Harbor Defenses. The Inspector was informed it was estimated it would take about 60 days before these batteries could be fired accurately but that this time would be lessened by the completion of the survey now being made by the Coast and Geodetic Survey.

It is recommended that the completion of the fire control installations for the long range 12" and 16" guns be given a high priority.

10. Conclusions:

d. That the fire control installations of the modern long range batteries are in complete

333.1

2nd Ind. Dec. 14, 1934 - Hq. HD of Boston to CG, 1st Corps Area, Boston, Mass.

10. d. That immediate completion of fire control installations of Batteries Long and Gardner is requested as these two batteries are essential for the defense of Boston Harbor.

IG 333.1 HD of Boston (12-4-34)

5th Ind. Apr. 26, 1935 - Hq. 1st Corps Area to The Inspector General.

9. a. Fire control installations for modern long range batteries are provided for in the approved harbor defense project.

9-7-5-2

Forwarded Thru Channels

333.1/3-J

QM 333.1 A (Banks)

8th Ind.

War Department, OQMG, Washington, May 23, 1935. To the Chief of Engineers.

1. The foregoing report of inspection of Fort Banks and the Harbor Defenses of Boston has been noted in this office and the following comment in connection therewith is submitted:

a. Par. 6 b, Water Transportation: The damaged vessel referred to, under date of March 11, 1935, was reported to be in excellent condition and requiring no repairs.

For The Quartermaster General:

F. J. RILEY,
Major, Q. M. C.,
Assistant.

* * * * *

333.1(Boston)62

333.1/3-J

IG 333.1-HD of Boston, Mass. (1935)

11th Ind. June 14, 1935 - IGO to T.A.G.

1. Attention is invited to the following:

a. Transfer of Post Exchange Ex-Steward.

Inspector: Par. 8a, page 4. (See below)

Commanding Officer: Par. 8c, 2d Ind., Page 7 (See below)

Corps Area Commander: Par. 1, 5th Ind., Page 9 (See below)

2. Return of this paper to this office is requested.

AG 333.1 HD of Boston (12-4-34) Enl.

12th Ind. June 20, 1935 - AGO to T.Q.M.G.

For remark.

QM 333.1 A (Banks)

13th Ind. June 22, 1935 - OQMG to Chief of CA

For whom this communication was apparently intended.

Excerpt of BASIC LETTER - Par. 8a, page 4.

8. Post Exchange:

a. There is one unusual condition in connection with this Exchange. About a year ago a board of officers determined that there was a shortage in the Exchange in excess of \$1700. This was a cumulative shortage extending over a period of about two years. The Exchange Steward, who is the First Sergeant of the Hq. Btry., while not actually admitting the embezzlement, offered to make full restitution for the shortage. To date he has paid over \$1100.00 and still has some \$627.00 to pay, which he is paying at the rate of \$50.00 per month. No disciplinary action has ever been taken against him and none is contemplated by the Commanding Officer.

It is recommended that since the Ex-Steward has already made such large payments in restitution he be permitted to complete the payments at the rate of \$50.00 per month, and that upon completion of his payments he be transferred to another post where his probable embezzlement will not be known by all of the personnel of his battery.

Excerpt of 2nd Ind., by Commanding Officer, Par. 8c., page 7.

8. c. The period covered by the Board of Officers was from Feb. 28, 1930 to July 31, 1933. The First Sergeant, Harry L. Mays, was the Battery Exchange Steward from June 1, 1930 to July 31, 1933 with four different Exchange Officers. The balance due the Battery Exchange, this date, is \$426.39. This promissory note is insured by the Credit Life Insurance, Springfield, Ohio. The final payment is due Aug. 31, 1935. It is recommended that 1st Sgt. Harry L. Mays be transferred, effective Sept. 30, 1935 to a station not within the 1st Corps Area.

Excerpt from 5th Ind., by Corps Area Commander, Par. 1, page 9.

1. Approved.

2
333.1/3-J

333.1/3-J

14th Ind.

War Department, O.C.C.A., June 25, 1935. - To The Adjutant General.

1. There is no objection on the part of this office to the transfer of the Post Exchange Ex-Steward as recommended by The Inspector and the Commanding Officer, Harbor Defenses of Boston and approved by the Corps Area Commander.

2. Transfer under the provisions of A.R. 615-200 or Sec. III, A.R. 615-210 appears to be indicated.

For the Chief of Coast Artillery:

3'30/8

H. T. BURGIN,
Lt. Colonel, C.A.C.,
Executive Assistant.

333.1/3-J

Copy for Chief of Coast Artillery
333.1/3-J

AG 333.1 H.D. of Boston (12-4-34) Enl. 15th Ind. VS/EIS/47

War Department, A.G.O., June 29, 1935. To the Commanding General, First
Corps Area.

For appropriate action with reference to the transfer of 1st Sgt.
Mays. The return of these papers with report of action is desired.

By order of the Secretary of War:

T. M. Spaulding

Adjutant General.

*File
R14*

333.1/3-J

OFFICE OF THE CHIEF OF COAST ARTILLERY

IG 333.1 (Harbor Defenses
of Boston)

RECORD OF COMMUNICATION RECEIVED.

From: Lt. Col. J. S. Smylie, I.G.D., Hq. 1st Corps Area, Army Base, Boston,
Mass.

Dated:

June 17, 1936

To: CG, 1st Corps Area THRU CG, 1st CA Dist. and CO, Ft. Banks, Mass.

Recd. OCCA:

Sept. 5, 1936

Subject: Annual inspection, Ft. Banks and HD of Boston, FY 1936.

1. a. The annual inspection of Ft. Banks and the HD of Boston was made by Lt. Col. John S. Smylie, I.G.D., June 8 - 11, 1936.

2. The Commanding Officer is Lt. Col. Rollin L. Tilton, 9th CA, who has been in command since June 1935. Between October 1934 and June 1935, Lt. Col. Paul D. Bunker, Capt. Manly B. Gibson, Capt. Charles S. Denny, and Major Joseph H. Gilbreth, CAC, were successively in command.

4. Building and Grounds.

b. At Ft. Banks; the medical detachment barracks need repairs, warehouses are overcrowded, the incinerator building is old and ramshackle, and the garage is very old. All barracks are crowded.

c. In the other posts of the harbor defense, occupied by small caretaking detachments, buildings on a maintenance status are in fair condition. Buildings not on a maintenance status are naturally deteriorating rapidly.

d. In these other posts are many fine barracks, storehouses, and quarters which are deteriorating from lack of being occupied. The costs incident to reopening and operating an island post prevent making use of these, while Ft. Banks is really over-crowded. At present, nurses' quarters are rented by the U.S. and 6 officers are on rental allowance (including 1 absent sick in hospital).

e. Docks, in general, are badly in need of repairs.

5. Personnel.

a. This is a hard working command. Morale is superior. It was noted that the only prisoners at time of inspection were casualties from other posts.

e. (1) Two officers (CAC) are sick in hospital and will probably remain in this status for an indefinite time. One warrant officer (QMC) was recently ordered retired; not yet replaced.

(2) Shortage of artillery officers necessitates the assignment to the Post Quartermaster of certain duties incident to police and upkeep of Ft. Banks which require his personal attention. No qualified non-commissioned officer is available to handle this work under general supervision of an officer. Consequently the Post Quartermaster is unable to give the close personal supervision to all his other duties which should be given. The Inspector feels that this invites possible future trouble in the Commissary. No solution is seen until at least one more officer can be assigned here for duty.

333.1/3-K

7. Transportation.

a. Motor. The ambulance is old and will need replacement within the next two years. Motor transportation for Ft. Banks is adequate and in good condition. In the sub-posts, transportation is largely provided by the personal cars of enlisted men, which is not a proper situation.

b. Animals. Three animals are in the sub-posts. No urgent need exists for more animals.

c. Water. Adequate for normal needs. This is handicapped in effectiveness by the condition of the docks.

* * *

9. Artillery Installations.

a. The two modern long range batteries are not supplied with fire control stations. The construction of towers and preparation of accurate orientation data are rather slow steps and it would be very desirable to complete these before the need for quick use of these batteries may arise.

* * *

d. In common with many other harbor defenses, the bulk of the mine cable is of doubtful value for use in war.

* * *

11. Conclusions.

a. That Ft. Banks and the HD of Boston are efficiently and economically operated and maintained.

b. That there is an acute shortage of officer personnel.

* * *

e. That Lt. Col. Rollin L. Tilton has been responsible for a marked improvement in administration of both Ft. Banks and the HD of Boston.

12. Recommendations.

* * *

b. That Lt. Col. Rollin L. Tilton, 9th C.A., be commended for the marked improvement in the administration of his present command.

* * *

1st Ind. June 24, 1936 - HQ. HD of Boston to CG, 1st Corps Area THRU CG,
1st CA Dist.

Noted. The paragraph and subparagraph numbers of the comments following refer to the corresponding number in the basic report.

4. Buildings and Grounds.

d. As stated by the Inspector, Ft. Banks is overcrowded and its supply facilities are taxed beyond capacity. The authorized enlisted strength of the garrison is now 255; deducting men entitled to quarters and caretakers in harbor posts, barrack space is required for 213; the authorized barrack capacity is 207. Warehouses, one temporary, are inadequate and utilities cramped in temporary buildings. Ft. Banks has the great advantage of being a mainland post but it is poorly located for supply and administration while the reservation does not lend itself to expansion. With any future increase in the strength of the H.D. serious thought should be given to the regarrisoning of Ft. Revere, the other mainland post.

* * *

5. Personnel.

e. (1) By letter 210.3 HD of B. Apr. 8, 1936, Subject; Assignment of officers, attention was invited to the indefinite absence of two C.A. officers and request was made for two more. This paper was returned by 3d Ind. AGO Apr. 21, 1936 stating that existing shortage of officers made it impossible to assign any, but that the need was noted and ^{more} would be assigned when possible. These H.D. cannot operate at maximum efficiency with less than six officers of C.A.

* * *

2nd Ind. June 25, 1936 - Hq. 1st CA Dist to CG, 1st Corps Area.

Reference correspondingly numbered paragraphs of basic letter:

4 d. The recommendation of the harbor defense commander to regarrison Ft. Revere is not concurred in. Consideration should be given to placing the entire C.A. garrison at Ft. Andrews, turning over Ft. Banks to the Corps Area for hospital and administrative purposes and retaining only a small caretaking detachment there.

* * *

9 d. The importance of this harbor is such that the present 19-conductor mine system should be replaced as soon as possible by the most modern installation.

3d Ind. July 27, 1936 - Hq. 1st Corps Area To TAG.

* * *

4. The removal of the C.A. garrison from Ft. Banks to Ft. Andrews has been made the subject of a special study. The advantages and disadvantages of such a move are:

<u>Advantages:</u>	Housing facilities exist for the garrison at Ft. Andrews, if funds are provided for rehabilitating the post.
<u>Disadvantages:</u>	Rehabilitation of Ft. Andrews will cost considerable. Maintenance and upkeep will result in the added cost of keeping up two posts instead of one. Boat service to the mainland is indispensable. The "Anderson" is not a suitable type of boat and no other boats are available. In addition to the above, Ft. Banks is now equipped with hospital facilities, a post commissary, Quartermaster and Ordnance supply facilities.

5. Recommendations:

a. I strongly recommend that funds be provided in the next appropriation bill for the construction of barracks at Ft. Banks for 75 men for the CA troops at that station.

* * *

FORWARDED THRU CHANNELS.

333.1/3-K

QM 333.1 A (Boston, H.D.)

7th Ind.

War Department, CQMC, Washington, September 2, 1936. To the Chief of Coast Artillery.

1. The foregoing report of inspection of Fort Banks and the Harbor Defenses of Boston has been noted in this office and the following comments in connection therewith are submitted:

a. Par. 4 b-e; Par. 7 c; Par. 11 d; Par. 12 a, Buildings and Grounds: Barracks and Incinerator Building are not included in the Approved War Department Housing Program; a Commissary Warehouse and Q. M. Garage, including Shop, are included.

Request for the construction of barracks to house the increased garrison at Fort Banks should be submitted on Form 105, through channels, giving the detail of requirements and a plan showing the proposed site, together with details as to the utilities to serve the proposed barracks.

Fort Banks received \$6,300, Emergency Relief Funds, for Repairs and Improvements to Barracks, Quarters, Storehouses and Other Miscellaneous Public Buildings.

Repairs to the docks are included in the F.Y. 1938 estimates.

b. Par. 8 e (1); Par. 10 a, Q. M. C. Personnel: A warrant officer has recently been assigned to Fort Banks.

The reported shortage of enlisted men, Q. M. C., has been noted for consideration when additional personnel is authorized the Q. M. Corps.

c. Par. 10 l-m, Fatigue Clothing; Winter Cap: The criticism of these items is too vague for this office to make any definite comment in connection therewith.

Fatigue caps and winter caps are being considered in conjunction with the general study of Army headgear now being made by the Quartermaster Technical Committee.

For The Quartermaster General:

O. R. BISHNETT,
Colonel, Q. M. C.,
Assistant.

333.1/3-K

333.1/3-K

8th Ind.

War Department, Office, Chief of Coast Artillery, September 21, 1936. -
To The Inspector General.

1. The foregoing report of inspection of Fort Banks and the Harbor Defenses of Boston has been noted and the following comments thereon are submitted:-

a. Par. 4 b, c, and d. - As a matter of policy, it is believed that the limited barracks and quarters funds should be used for maintenance of permanent buildings essential to peacetime garrisons and that other buildings on caretaking posts in harbor defenses should be salvaged.

b. Par. 4 a. - For the past several years the lack of adequate maintenance funds has made it impossible to maintain many docks in serviceable condition and there appears to be little prospect that funds for fiscal year 1938 will be sufficient to cover more than temporary repairs. It is recommended that this particular item be referred to the Chief of Engineers.

c. Par. 7. - The following list indicates the motor transportation authorized for the 9th Coast Artillery, Harbor Defenses of Boston:-

- 1 - car, 8-pass.
- 1 - motorcycle, with side car
- 1 - truck, medium
- 1 - truck, pick-up
- 1 - truck, reconnaissance

The above motor transportation is necessary for this regiment and should be provided. The Chief of Coast Artillery has requested The Quartermaster General to take the necessary steps to supply the above vehicles from funds available fiscal year 1937.

d. Par. 9 a. - The deficiencies in fire control installation and equipment for the two long range batteries are carried on the consolidated priority list and will be provided when funds become available.

e. Par. 9 d. - The Harbor Defenses of Boston are on priority for supply of the single-conductor submarine mine system as soon as funds become available.

f. Par. 5, basic, and Par. 5, 1st Ind. - The allotment of Coast Artillery officers to the Harbor Defenses of Boston is six and six are assigned. It is understood that Lieutenant Leahy has been sick in the hospital for several months and probably will be retired. A replacement

for Lieutenant Leahy will be recommended by the Chief of Coast Artillery as soon as possible.

G- Par. 4.4. basic. Par. 4.4. 2d Ind., Para. 4 and 5 a. 3d Ind. - The authorized strength of the Coast Artillery personnel for the Harbor Defenses of Boston is six officers and 153 enlisted men. Prior to the increase in the army which took place only recently the Coast Artillery enlisted strength in the Harbor Defenses of Boston was 94. The several Coast Artillery posts in the Harbor Defenses of Boston have been on a caretaking basis since reorganization in 1920 and consequently important training in the maintenance and operation of submarine mines has suffered. It was with a view to reviving this important adjunct in the seacoast defenses of the Port of Boston that the Coast Artillery battery was increased to a total of 153 enlisted men.

From the Army List and Directory, it appears that in addition to the Coast Artillery detachment at Fort Banks, there are the Station Hospital detachment, First Ordnance Service Company, and the Quartermaster Corps detachment; a total enlisted strength of 77.

The Commanding Officer, Fort Banks, in Par. 4.4. 1st Ind. recommends re-garrisoning of Fort Revere provided an increase in strength of the garrison at Fort Banks is contemplated. In this connection, there appears to be no probability that any increase in Coast Artillery personnel will take place in the near future. The Commanding General, First Corps Area, in 1st Ind. recommends against re-garrisoning Fort Revere and recommends the building of a 75 man barracks at Fort Banks.

From the above, it would appear that the Coast Artillery personnel, the primary arm for the Harbor Defenses of Boston, is being crowded into quarters and barrack space by personnel of three services; namely, Medical Corps, Ordnance Department, and Quartermaster Corps. It is felt that in the interests of national defense, especially as regards reviving the submarine mine system, the Coast Artillery garrison should have primary interest and that steps should be taken to insure this personnel adequate quarters and barracks at Fort Banks. This condition may be brought about by moving sufficient of the service personnel to other stations or by building the necessary officers' quarters and barracks to accommodate the combined strength now at this station.

MAILED

SEP 25 1936

111208

A. H. SUMMERSLAND,
Major General,
Chief of Coast Artillery.

333.1/3-K

OFFICE OF THE CHIEF OF COAST ARTILLERY

RECORD OF COMMUNICATION RECEIVED

333.1 FY 1938-RA
(Ft. Banks, Mass.)

Dated Recd.
11/21/38 4/5/39

From: Col. W.E. Hunt, I.G.D., Corps Area
 Inspector Genl., 1st Corps Area.

To: Commanding General, 1st Corps Area.

Subject: Annual Inspection, F.Y. 1938, Fort Banks, Mass.

I. DATES OF PRESENT AND LAST INSPECTION, AND BY WHOM MADE.

1., This inspection was made by the undersigned June 24-25, inclusive, 1938.

2. The last previous inspection was made by the undersigned, assisted by Lt. Col. (then "major) F.G. Ringland, I.G.D., during the period May 12-17, inclusive, 1937.

XVI. CONCLUSIONS:

That the activities of Fort Banks have been efficiently administered.

XVII. RECOMMENDATIONS:

1. That early consideration be given to the allotment of funds necessary for the installation of adequate fire escapes on the Station Hospital. (Sec. XV)

2. That Form W.D., QMC 409 be revised so as to provide space for. and to require entries of, on first page of same, of the dates indicated in par. 2_b, Sec. XV, above.

THRU CHANNELS.

3 Incls:

1. Excess Engr. Equipment on hand since 1934.
2. Correspondence on Issued Trousers, Elastique.
3. Memo of minor irregularities and ~~ANXXXXX~~ deficiencies noted during the annual inspection of Ft. Banks, FY 1938.

333.1/3-N.

IG 333.1

OFFICE OF THE CHIEF OF COAST ARTILLERY.

RECORD OF COMMUNICATION RECEIVED

	Dated	Recd.
From: Hq., 1st Corps Area	10/5/37	1/31/38
To: CG, 1st Corps Area (THRU CHANNELS)		
Subject: Annual inspection, 1937, Fort Banks and H.D. Boston.		

I. This inspection was made during the period May 12-17, inclusive, 1937, by Colonel William E. Hunt, I.G.D., and Major F. G. Ringland, I.G.D. The last previous ~~report~~ inspection was made by Major John S. Smylie, I.G.D., June 8-11, 1936.

XIII. CONCLUSIONS.

That the activities of Fort Banks and of Boston Harbor Defenses have been very well administered.

XIV. RECOMMENDATIONS.

1. That consideration be given to:

- a. The recommendations of the HD Commander as stated in XI above.
- b. The removal of bodies in the Deer Island Cemetery at Fort Devens Reservation or to some site near Metropolitan Boston, which may be procured for use as a National Cemetery.

2 Incls:
(Copy ltr. 1/23/30 to C.O., HD Boston)
(" " " " T.A.G., W.D.)

THROUGH CHANNELS.....

7-2-9-5-8

333.1/3L

QM 333.1 A (Banks)

6th Ind.

War Department, OCMG, Washington, January 24, 1938. To the Chief of Coast Artillery.

1. The foregoing report of inspection of Fort Banks and the Harbor Defenses of Boston, Mass., has been noted in this office and the following comments in connection therewith are submitted:

a. Section III, Par. 2-4-6-7-8-9-10; Section XI, Par. a-c, Needed Improvements: The following items of construction for Fort Banks are included in the Revised W. D. Construction Program:

Nurses' Quarters
Ambulance Garage
Post Garage and Utility Shop.

These items have not yet been formally approved by the General Staff. There is no construction proposed for other stations of the Harbor Defenses of Boston, i.e., Forts Warren, Andrews and Standish.

A project for modification of the heating system of the Station Hospital has not been received in this office.

Project Estimates are now in this office covering Repairs to Wharves at Forts Andrews, Standish and Warren, which will be given consideration in connection with the distribution of the Secretary of War's Reserve and other savings. Project for Repairs to Wharf at Fort Duvall was not received.

Funds available locally will have to be used for other necessary repairs.

Under the last two allocations of Federal WPA funds, Fort Banks and the Harbor Defenses of Boston did not receive any funds, but the following State WPA funds were allocated last summer:

\$71,803 - Forts Banks and Heath
33,622 - Fort Andrews.

b. Section III, Par. 5, Fire Loss - Fort Strong: The claim of the United States vs. the City of Boston for the loss by fire of Building #11, Fort Strong, was referred to the Chief of Finance by 11th indorsement, OCMG, dated November 18, 1937, File QM 680.44 C-RE (Ft. Strong), for consideration under the provisions of Par. 8, AR 35-7280.

c. Section IX, Par. 4; Section XIV, Par. 1 b, Cemetery: This office has no record of a post cemetery at Fort Devens. Current burials are still being reported from time to time in Rest Haven Cemetery.

d. Section X, Par. 6, Sales Control Machine: The sales control machine will be placed in operation in the Sales Commissary at Fort Banks on February 1, 1938.

M 333.1 A (Banks), 6th Ind., 1/24/38, Cont'd.

g. Section X, Par. 8, Raincoats: The comments of the inspector have been referred to the Philadelphia Q. M. Depot for the information of that Depot and any action possible.

f. Section XI, Par. b, Q. M. C. Personnel: Request for additional civilian employees should be submitted through channels for consideration in connection with the F.Y. 1940 estimates.

For The Quartermaster General:

C. R. BRUNETT,
Colonel, Q. M. C.,
Assistant.

2 Incls.

OFFICE OF THE CHIEF OF COAST ARTILLERY
RECORD OF COMMUNICATION RECEIVED

333.1 RA
(AI Ft. Banks, Mass.)

Dated
4/15/39

Recd.
7/8/39

From: Col. W.E.Hunt, I.G.D., 1st Corps Area
Inspector General.

To: C.G., 1st Corps Area.

Subject: Annual Inspection of Fort Banks, Mass., F.Y. 1939.

I. DATES OF PRESENT AND LAST INSPECTION AND BY WHOM EACH
WAS MADE:

1. This inspection was made by the undersigned, assisted
by Lt. Col. P. L. Thomas, I.G.D., 3/24, 25 and 29, 1939.

2. The last previous Inspection was made by the under-
signed June 24-25, incl., 1938.

1 Incl:Rpt. of minor irregularities & deficiencies.

XVI. CONCLUSION:

That the activities of this Post have been efficiently ad-
ministered.

XVII. RECOMMENDATIONS:

That consideration be given to the recommendation of the
Posr Commander as stated in Sec. XIV above.

....
"SEC. XIV. RECOMMENDATIONS OF THE COMMANDING OFFICERS.

1. That the following item be added to T/A, CAC, 1/1/39, viz.:		
Items	For	Basis of Issue
	Peace	& Remarks

Shoes, f garrison, Pr.

1

per EM.

Open Channels.

333.1/3.0

QM 333.1 A (Ft. Banks, Mass.) 7th Ind.
War Department, OQM.G., July 6, 1939. To: The Chief of Coast Artillery.

1. The foregoing report of inspection of Fort Banks, Mass., has been noted in this office and the following comments in connection therewith are submitted:

a. Section IV, par. 4. - Repairs: During the fiscal year 1939, W.P.A. funds, both State and Federal, were allotted for repair purposes.

b. Section IV, par. 8; Section XV, par. 1 b (1). - Fire Escapes on Station Hospital: By letter dated April 17, 1939, file QM 632 C-RU (Ft. Banks), funds were allotted for the construction of fire escapes on the hospital.

c. Section VII, par. 1 d (2). - Sales Stores: It is recommended that these papers be referred to the Chief of Finance for remark.

For The Quartermaster General:

C. R. BENNETT,
Colonel, Q.M.G.,
Assistant.

1 Incl. n/c ✓

1 =

9-2-7-8

333.1/30

July

HEADQUARTERS
NORTH ATLANTIC COAST ARTILLERY DISTRICT
TEXTILE BUILDING, 99 CHAUNCY ST.
BOSTON, MASS., July 31, 1919.

From: The Commanding General, N. A. C. A. DISTRICT.
To: The Adjutant General of the Army, Washington, D. C.
Subject: Inspection of the Coast Defenses of Boston.

1. Inspection was made June 3rd to 12th, 1919. Records of these Headquarters show that the last inspection was made by Colonel C. A. Bennett, Commanding N. A. C. A. District, October 26th, 29th and 31st, 1917.

2. **Personnel:**
At date of inspection the Coast Artillery personnel in these defenses was as follows:

	<u>Officers:</u>	<u>Enlisted Men:</u>
Present	37	15 companies 420 1 band 12 N. C. S. 32 Total - 464

This personnel, not including Coast Artillery non-commissioned staff officers, was assigned as follows:

	<u>Officers:</u>	<u>Enlisted Men:</u>
Coast Defense Headquarters	5	0
<u>Fort Warren:</u>		
Field and staff	1	
10th band		12
7th Company	1	69
<u>Fort Revere:</u>		
Field and staff	1	
1st Company	3	31
5th Company	1	29
<u>Fort Strong:</u>		
Field and staff	3	
3rd Company	1	14
9th "	1	27
10th "	3	25
11th "	1	13
12th "	3	13

333.12 / 34

	<u>Officers</u>	<u>Enlisted Men:</u>
<u>Fort Andrews:</u>		
Field and staff	1	
6th Company	1	22
8th "	1	17
13th "	2	17
15th "	2	14
<u>Fort Banks</u>		
Field and staff	2	
2nd Company	2	46
4th "	1	38
14th "	1	45

The enlisted personnel is entirely inadequate to the needs of the Coast Defenses. Only a small detachment could be turned out for the inspection of armament and consequently no drills of any kind were attempted. No infantry inspection was held.

3. Instruction:

The depleted condition of the personnel in Coast Defenses has resulted in the suspension of all instruction, except in so far as it relates to care and preservation of materiel.

4. Materiel:

Materiel installed was in general in satisfactory condition.

5. Armament:

Guns and mortars have been dismounted from the following batteries, and no instructions have been received for remounting same:

Fort Revere:

2 guns Battery Field (2 - 5"R, Barbette Mounts).
3 " " Pepe (3 - 6"R, Disappearing Mounts).

Fort Strong:

1 gun Battery Hitchcock (3 - 10"R, Disappearing Mounts).

Fort Banks:

2 Mortars Battery Lincoln (8 - 12"M)
2 " " Kellogg (8 - 12"M)

Fort Andrews:

4 Mortars Battery Cushing (8 - 12"M)
2 " " Whitman (8 - 12"M)

If it is not the intention to remount these guns and mortars, the carriages to which they pertain, it is thought, should be removed from the emplacements and sent elsewhere or otherwise disposed of. At this time it is particularly undesirable to have useless materiel on hand when the smallness of the number of men makes it impossible, even by the employment of the greatest effort, to care properly for the armament and accessories installed.

6. Magazines:

In many cases stoppers of powder sample bottles were found to be loose. This existed only with a particular type of bottle, rather longer in proportion to its diameter and with a somewhat smaller mouth than the standard type. By turning one of these stoppers in its bottle it could be made to apparently fit tightly, but on close inspection it was found to bind in but two places, thus being ineffective in closing the mouth of the bottle against the escape of gas.

7. Submarine net materiel:

No proper storage place exists in the Coast Defenses for the housing of all net materiel. If left out doors, even with care, much of it will in time become so deteriorated as to be unfit for use.

8. Service and small arms practice:

No service or small arms practice has been held, due to the unsettled conditions in the Coast Defenses at the time of the organization of units for overseas service and later due to the lack of personnel.

9. Defects and irregularities:

Defects and irregularities that could be corrected were brought to the attention of the Coast Defense and Port Commanders at time of inspection and remedial action was ordered taken.

HMP*dbf.

John W. Ruckman
JOHN W. RUCKMAN,
Brigadier General, U. S. A.

Recd. Hq. N. E. Dept. AUG 2 - 1919

I.O.

333.1-C.D.Boston

1st Ind.

ABC ABC

HQ. NORTHEASTERN DEPT., Boston, Mass., Aug. 4, 1919.-To The Adjutant General of the Army, Washington, D.C.

Mifm.

36 AUG 7 1919
RECEIVED MISCEL. DIV
AUG 17 1919

333.12/3A

NLS/hja

June 19, 1925.

Tactical Inspection Harbor Defense of Boston, Fort Banks, Mass.

Commanding General,
First Corps Area,
Boston, Mass.

1. Under the provisions of paragraph 9, Army Regulations 265-10, the following report of a tactical inspection of the Harbor Defense of Boston, Fort Banks, Mass., June 15th and 16th, 1925, is submitted.
2. The 9th Coast Artillery is assigned to this defense. The regiment normally consists of a Headquarters Battery and seven firing batteries. All units are inactive except the Headquarters Battery and Batteries "A" and "C". The authorized strength is fourteen (14) officers, one (1) warrant officer and two hundred and seventy (270) enlisted men. In arriving at a conclusion as to the general efficiency of training; the battle efficiency of units and officers; and the readiness of the command for active field service, cognizance was taken of the inspections made of this command during their service practice in May and June, 1925.
3. The Headquarters Battery has been inspected as a general utility battery in the operation of power plants, searchlights, communications, care and preservation of materiel, and administrative; all of which were satisfactory.
4. Battery "A" has been inspected as a firing battery manning a ten inch gun battery in service practice under normal conditions and under a gas attack.
5. Battery "C" has been inspected as a firing battery manning a twelve inch mortar battery in service practice under normal conditions and in firing at an obscured target with firing data furnished from observation planes.
6. The Efficiency of Training and Instructions. The efficiency of training and instruction has been demonstrated by the successful conduct of artillery service practices with the three inch gun, six inch gun, both disappearing and barbette; ten inch guns and twelve inch mortars. All requirements as to latest developments of equipment and methods were used. Liaison with aircraft by panel and radio successfully established and used - sometimes supplementing terrestrial spotting, sometimes the only means of control. Radio between tug and shore successfully operated. Ballistic wind calculated and used. Reduced personnel required augmentation of each battery from personnel

333.12/2B

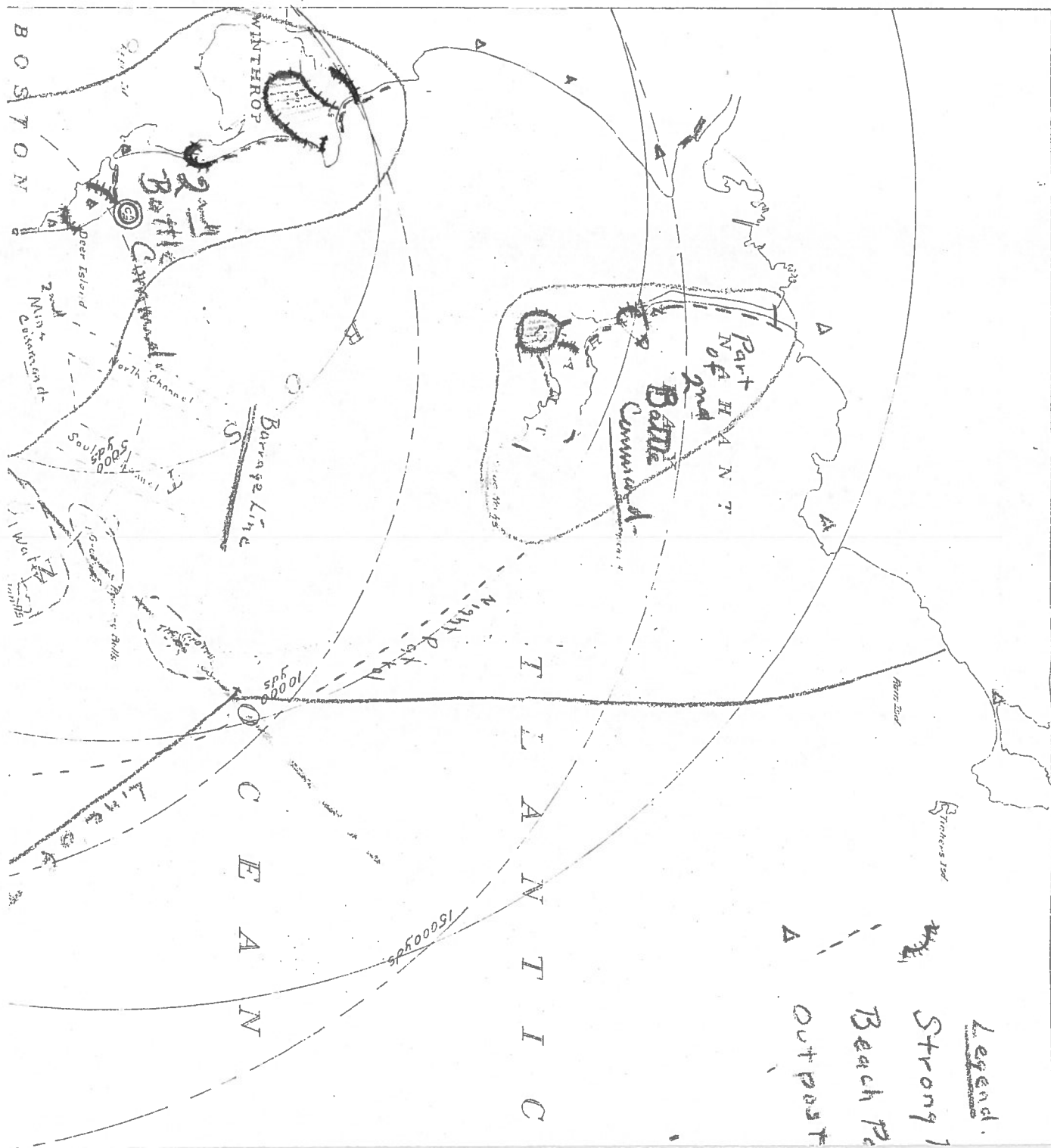
of other batteries.

7. The Battle Efficiency of Units. The battle efficiency of units was successfully demonstrated by the conduct of service target practice under a gas attack involving considerable personnel of all units. The battle efficiency was further demonstrated in successfully conducting a tactical problem simulating the defense of the mine fields against a raid and a command and communication problem simulating action repelling an attack in force on the harbor. (Copy of problem enclosed).

8. The Battle Efficiency of Officers. The battle efficiency of officers was satisfactorily demonstrated in the conduct of the above mentioned problems in which a majority of the officers were required to function in command of echelons higher than that to which regularly assigned. The manner in which they conducted their annual target practice was satisfactory.

9. The Readiness of Command for Active Field Service. The readiness of the active units of the 9th Coast Artillery, namely, Headquarters Battery and Batteries "A" and "C", for active field service is satisfactory. Satisfactory plans for reconstituting the inactive units have been prepared as well as plans for the employment of the other components of the Army to provide the necessary personnel to man the Harbor Defense.

J. D. BARNETT,
Brigadier General, U. S. A.,
Commanding.



Harbor Defenses,
June 16th,
10:03 A.M.

INFORMATION BULLETIN NO. 1.

To: - Commanding General, 1st Coast Artillery District.

Enemy fleet approaching Boston Harbor under smoke screen laid down by destroyers and airplanes. Will probably make an attack on the Harbor. All batteries are fully manned and ready for action.

KILBOURNE.

Harbor Defenses,
June 16th,
10:30 A.M.

INFORMATION BULLETIN NO. 2.

To: - Commanding General, 1st Coast Artillery District.

Enemy air attack repulsed by our Anti-Aircraft Guns.

Four enemy squadrons making attack on Boston Harbor from North East. Two squadrons headed North of Graves light and the others headed South of Graves Light.

Both leading squadrons under fire from our batteries. Visibility Good.

KILBOURNE.

Harbor Defenses,
June 16th,
11:15 A.M.

INFORMATION BULLETIN NO. 3.

To: - Commanding General, 1st Coast Artillery District.

Squadrons South of Graves Light apparently in confusion having lost three ships.

Enemy North of Graves Light also in confusion and retiring from this area. Will probably join ships to South.

Slight damage to our batteries.

Salvo points being used.

Enemy now retiring.

KILBOURNE.

333112/3 B

1st Battle Command

(1)

6/16/25.

O.P. Linsert. 8:56
1st Battle Command in Order.

END

8:57

(2)

6/16/25.

To: O.P. Linsert 8:58
Is it O.K. to check time?

8:59

(3)

6/16/25.

O.P. Linsert 9:25
C-2 report communication out between O.P. Allerton and O.P. Milbourne.

(4)

6/16/25.

O.P. Linsert
From O.P. Allerton 9:45. Wind light. Direction East. Visibility good.

END

9:52

(5)

6/16/25.

O.P. Linsert 9:55
O.P. Allerton 9:50 Dense smoke screen seen on horizon. Azimuth 255.
Time 9:56.

END

(6)

6/16/25.

O.P. Linsert
O.P. Allerton 9:55. Large enemy air force approaching harbor entrance.

END

(7)

6/16/25.

O.P. Linsert 10:07
O.P. Allerton 10:00. Destroyer flotilla throwing smoke screen. Azimuth 240. Range 20,000.

END

(8)

6/16/25.

O.P. Linsert 10:10
C-2 - 10:09 - Part of enemy aircraft dropping smoke screen close inshore.
One air squadron attacking mine planter at Nantasket B'. No further action.

END

33312/3B

(9) 6/16/25.
C.P. Linser 10:15
From C3. Enemy aircraft bombing mine fields. Several open circuits.
END

(10) 6/16/25.
C.P. Linser 10:20
C1 - Anti-Aircraft guns firing enemy planes.
END

(11) 6/16/25.
C.P. Linser 10:20
OP. Allerton. 10:15 - 3 fleet battleships hull down. Destroyers are now passing between ship and this station. from C1.
END

(12) 6/16/25.
C.P. Linser 10:25
Two aircraft brought down, others retired. Destroyers turning East. B' No further order.
END

(13) 6/16/25.
C.P. Linser 10:30
C1 - 10:25 - Enemy has opened fire. Two squadrons heading North Channel. Two for Mantasket Roads - Firing inaccurate. B' No further orders.
END

(14) 6/16/25.
C.P. Linser 10:37
C2 - 10:30 - Shells falling on Andrews. Increasing volume accuracy. Enemy range 18,000.
B' - All forts ordered to hold fire until enemy reaches outer line of resistance.
END

(15) 6/16/25.
C.P. Linser 10:40
B' from C1 - 10:36 - Battery Ripley now firing. Battery Sanders will open 8,000 yards. B' no further orders.
END

(16) 6/16/25.
C.P. Linser 10:44
C1 - 10:40 - 1 Gun Battery Ripley out of order.
B' - No further orders.
END

333.12/3-B

(17)

6/16/25.

C.P. Linsert 10:

02 - 10:40 - No communication with Allerton. Enemy South East of Graves concentrating on Ripley.
END

(18)

6/16/25.

C.P. Linsert 10:48

02 - B.C. Cushing will open fire on 2 enemy squadrons headed Northeast Roads when in range.
END

(19)

6/16/25.

C.P. Linsert 10:57

03 - 10:45 - Have loaded all pieces with improvised gun crew.
END

(20)

6/16/25.

C.P. Linsert 10:54

01 - Battery Sanders now firing. Gun crew officers at Battery Ripley joined # 2 Gun. Smoke screen less dim.
END

(21)

6/16/25.

C.P. Linsert 10:56

01 - 10:50 - All shots from enemy fire closed. Second ship rammed her. Balance of fleet passing Boston Light. END. Battery Cushing destroyed.
No Cook opening.

(22)

6/16/25.

C.P. Linsert 10:58

02 - 10:50 - Leading ship disabled by gun fire. Second ship rammed her. Balance of fleet passing Boston Light. P.C. Battery Cushing destroyed.
No Cook opening.
END

(23)

6/16/25.

C.P. Linsert 11:00

B.C. Cushing 10:50 - Battery Cushing firing on first ship of leading squadron.
END

(24)

6/16/25.

C.P. Linsert 11:03

01 - 10:53 - 1 gun Sanders out of action. Gun crew wiped out. Leading enemy vessel passing Boston Light headed for Warren.
END

(25)

6/16/25.

C.P. Linsert 11:06

03 - 10:55 - Enemy leading ship struck mine. Third line has turned out of power.
END

33302/3-3

(26)

6/16/25.

C.P. Linsert

01 - Battery Ripley silent 11:08.

(27)

6/16/25.

C.P. Linsert 11:10

01 - 11:05 - One ship only firing on Battery Sanders.

END

(28)

6/16/25.

C.P. Linsert 11:11

C.P. Allerton 11:00 - First ship silent. In apparent distress running to beach on Outer Brewster. Now following second ship.

END

(29)

6/16/25.

C.P. Linsert 11:14

02 - 11:05 - Enemy in confusion. Second squadron retiring.

END

333.12
3B1

FROM 2ND BATTLE COMMAND.

- (1)
Time _____ From C.P. Hoge 6/16/25
Second Battle Command in order and ready for drill.
- (2)
9:47 From C. P. Hoge 6/16/25
Report from Ol/6 states wind light easterly direction. Enemy air scouts patrolling off shore.
- (3)
9:50 From C.P. Hoge 6/16/25
Report from Nahant as follows: Smoke in distance Azimuth 270. to 280
- (4)
9:55 From C. P. Hoge 6/16/25
Report from Nahant Enemy aircraft approaching estimate four squadrons
- (5)
10:03 From C. P. Hoge 6/16/25
Report from Nahant about twelve destroyers on horizon are throwing a smoke screen azimuth 270.
- (6)
10:10 From C. P. Hoge 6/16/25
Enemy aircraft have damaged mine planter in West Channel. Reported from Nahant reported from Ol/6 Nahant, destroyers have turned running SW Still throwing smoke screen
- (7)
10:14 From C. P. Hoge 6/16/25
Correction on last message: North Channel instead of West Channel
- (8)
10:22 From C. P. Hoge 6/16/25
Enemy aircraft driven back. Gas bombed Burbeck. No casualties.
- (9)
10:24 From C. P. Hoge 6/16/25
Reported from Nahant Wind drifted to NW. Visibility improving. 4 enemy squadrons 4 ships each azimuth 270 to 280 hull down.
- (10)
10:35 From C. P. Hoge 6/16/25
Reported from Nahant enemy fleet headed toward Nantasket Roads and North Channel 2 Squadrons in each attack. 1 force due east of Graves range 13000 yards. The other 12 NE of Graves speed 800 yds per minute. Nahant under fire several houses on fire. Gardner is in action.
- (11)
333.12 10:38 From C. P. Hoge 6/16/25
3-8 Wintthrop on target 15000 yds. Azimuth 260

(12)

10:40:30 From C.P. Hoge 6/16/25
 Intelligence data given the Ft. Commanders as received. Caution to all forts to hold fire until enemy discloses mission and is within medium range.

(13)

10:43 From C. P. Hoge 6/16/25
 Enemy now NE of Graves from Cl/4 enemy NE of Graves. Firing increasing in volume and accuracy. Gardner silenced. Mahant on fire. Smoke prevents further observations.

(14)

10:57 From C. P. Hoge 6/16/25
 Reported from Cl/6 enemy near entrance of North Channel. All fire control stations out of action. Lincoln firing on salvo point No. 2 Winthrop using direct fire using bracketing method. Reported from Cl/5 Desire mines test for contact O.K. Cl/4 reports 5-6" guns on leading ship

(15)

11:06 From C. P. Hoge 6/16/25
 Reported from Cl/5 opened fire on enemy fleet going toward Nantasket Roads when within range. Leading ship and others in confusion escaping out to sea. Continuing to fire. All batteries are firing on enemy.

(16)

11:10 From C.P. Hoge 6/16/25
 Enemy passing the mine fields. 2 mines have fired. All batteries firing on enemy passing mine field. Leading ship settling in North Channel. Second ship passing her.

(17)

_____ From C. P. Hoge 6/16/25

333.12/3-B.

From: O. P. Allerton

To: O. P. Kilbourne.

Time: 9:45 P.M.

Time: 9:46:45

Wind right. Direction easterly. Visibility Good.

From: O. P. Allerton

To: O. P. Kilbourne.

Time: 9:50 P.M.

Time: 9:50:30

Dense smoke seen on horizon. Azimuth 255.

From: O. P. Allerton

To: O. P. Kilbourne.

Time: 9:55 P.M.

Time: 9:55:30

Large enemy airforce approaching harbor entrance.

From: O. P. Allerton

To: O. P. Kilbourne.

Time: 10:00 P.M.

Time: 10:00:50

Destroyer flotilla throwing smoke screen. Azimuth 240 Range 20,000 yds.

From: O. P. Allerton.

To: O. P. Kilbourne.

Time: 10:15 P.M.

Time: 10:15:30

Three fleets of battleships at Azimuth 230 hull down. Destroyers are now passing between ships and this station. Dense smoke screen.

333.12/3-B

Nahant

1.

Wind light. Direction easterly. Visibility Good. Enemy air scouts still patrolling off shore.

9:45 am.

C" 6 Nahant 6-16-25 am.

2.

Smoke in distance Azimuth from 270 to 280.

9:50 am.

C" 6 Nahant 6-16-25 am.

#3.

Enemy aircraft approaching estimate four squadrons

9:55 am.

C" 6 Nahant 6-16-25 a.m.

4.

About twelve destroyers on horizon running north through a smoke screen. Azimuth 270.

10:03 am.

C" 6 Nahant 6-16-25 am.

5.

Destroyers have turned now running south west still throwing smoke screen.

10:10 am.

C" 6 Nahant 6-16-25 am.

6.

Wind shifting to North west. Visibility improving. Four enemy squadrons four ships each at Azimuth 270 to 280 mill down.

10:20 am.

C" 6 Nahant 6-16-25 am.

7.

Enemy fleet now heading for Nantasket roads and North Channel two squadrons in each attack, one force due east of Graves 13000 yards, the other 12000 yards North East of Graves speed about 800 yards per minute. Nahant under fire, several houses burning. Gardiner is in action.

10:30 am.

C" 6 Nahant 6-16-25 am.

8.

Gardiner silenced. Nahant afire. Smoke prevents further observation.

10:40

333.12/3-B

seen held in Pacific Coast ports and the Blue Army at the authorized peace strength.

Simultaneously with the declaration of war the ^{Panama} ~~Panama~~ Canal was blocked by sinking in locks of vessels loaded with cement, and, on the same date a Black Naval force seized Samana Bay.

The combined fleets of Black are about double the strength of Blue in capital ships and equal in destroyers and submarines. The Black Armies, as maintained in peace, have about a 6 to 1 superiority over the forces Blue can mobilize immediately. Black has sufficient Merchant Marine to transport a complete Field Army in the first expedition and to augment this by an additional field army every three (3) months to a maximum of five (5) field armies.

SPECIAL SITUATION -- BLUE

June 5, 1925.

The Blue estimate of the situation is that Black plans to win a decision by seizing areas necessary to Blue's mobilization, that the main effort of Black will be made between Chesapeake Bay and Boston, that Black will endeavor to occupy New England Ports both as bases and to prevent threats to lines of sea communication, that the seizure of Samana Bay was for the purpose of resisting the transfer of the Blue Fleet to North Atlantic waters either through the canal (if the blocking operations in the canal failed) or via Cape Horn and the South Atlantic, and that attacks on the ports of New England are to be expected at any instant.

The Blue Plan is to concentrate in the Middle and North Atlantic Areas all available forces as practicable, amending mobilization plans accordingly, and to put in effect the Defensive Sea Area Plans and the Positive Coast Defense System from the Kennebec River, Maine to the entrance to Chesapeake Bay, inclusive.

The following troops will concentrate in the 1st Frontier Command. (Troops omitted).

The following Railway Artillery has been placed at disposal of the C.G. 1st C.A. District. (Omitted)

The National Guard Coast Artillery, 1st, 2nd, 3rd, and 4th Corps Areas has been ordered to expedite mobilization and to report at war stations without delay. National Guard Coast Artillery of other Corps Areas has been directed to recruit to war strength at home stations and then to proceed to Corps Areas as follows:

National Guard of Oregon and Washington to 1st C.A. District.
(Balance of C.A. National Guard omitted)

#####

#

333.12/3-B

June 1⁶

PROBLEM FOR TACTICAL INSPECTION, 1925

Coast Defenses of Boston

General Situation

On June 1st an European Coalition (Black) declared war against the United States (Blue). Blue had expected that the points in dispute would be settled by diplomacy. The Blue main fleet has been held in Pacific Coast ports and the Blue Army at the authorized peace strength.

Simultaneously with the declaration of war the ^{Panama} Canal was blocked by sinking in locks of vessels loaded with cement, and, on the same date a Black Naval force seized Samana Bay.

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SPECIAL SITUATION -- BLUE

June 5, 1925.

The Blue estimate of the situation is that Black plans to win a decision by seizing areas necessary to Blue's mobilization, that the main effort of Black will be made between Chesapeake Bay and Boston, that Black will endeavor to occupy New England Ports both as bases and to prevent threats to lines of sea communication, that the seizure of Samana Bay was for the purpose of resisting the transfer of the Blue Fleet to North Atlantic waters either through the canal (if the blocking operations in the canal failed) or via Cape Horn and the South Atlantic, and that attacks on the ports of New England are to be expected at any instant.

The Blue Plan is to concentrate in the Middle and North Atlantic Areas all available forces as practicable, amending mobilization plans accordingly, and to put in effect the Defensive Sea Area Plans and the Positive Coast Defense System from the Kennebec River, Maine to the entrance to Chesapeake Bay, inclusive.

The following troops will concentrate in the 1st Frontier Command. (Troops omitted).

The following Railway Artillery has been placed at disposal of the C.G. 1st C.A. District. (Omitted)

The National Guard Coast Artillery, 1st, 2nd, 3rd, and 4th Corps Areas has been ordered to expedite mobilization and to report at war stations without delay. National Guard Coast Artillery of other Corps Areas has been directed to recruit to war strength at home stations and then to proceed to Corps Areas as follows:

National Guard of Oregon and Washington to 1st C.A. District.
(Balance of C.A. National Guard omitted)

#

333.12/3-B

June 1⁶

Coast Artillery Personnel of Organized Reserves has been called to active service and directed to report to the C.G. of the Coast Artillery Districts to which assigned in peace.

SPECIAL SITUATION BLUE C.D. BOSTON

June 12, 1925

Naval district reports no Navy mine material on hand and estimate one (1) month necessary for procurement of mgs for submarine defense.

9th Coast Artillery has cadres of two (2) mine batteries fairly well trained and sufficient mine material for the mine project. Work is proceeding with hired crews for the mine planters and the outer groups in each of the main channels will be planted by June 15th.

9th Coast Artillery has sufficient personnel to man one (1) gun battery (1 piece) and one (1) mortar battery (1 pit) and to supply essential personnel for searchlights, power plants, and for communications of battle and fort command stations (1 relief).

241st Coast Artillery is proficient in service of batteries under target practice conditions but reduced personnel is capable of manning only a single piece or pit of major calibre armament. Has had no practical training in battle or fire command work and the specialists, while carefully selected and theoretically trained, have as a general thing, had no experience in operation of fire control systems (including searchlights) under service conditions.

615th Coast Artillery, newly organized, has well selected cadres but is untrained as a team.

On June 8th Black submarines attempted a reconnaissance of Boston Harbor - number unknown. One submarine was sunk by bomb from airplane.

On June 10th a large Black fleet entered Provincetown Harbor and began the establishment of an advanced base. advanced base.

On June 12th the Coast Defense Commander received the following letter of instructions.

HEADQUARTERS 1ST COAST ARTILLERY DISTRICT
Boston, Mass., June 11, 1925

Documents recovered by divers from the Black submarine sunk during recent reconnaissance indicate the mission of the reconnaissance to have been as follows:

First to determine the extent to which the harbor is protected by submarine mines.

Second to determine the feasibility of surprise landing operations at forts equipped with A&R.FE major calibre batteries.

It is known that a number of the Black submarines escaped and is probable that the mission was carried out. It is believed that an attack upon Boston Harbor is imminent, that the enemy plan is to clear the channels of mines and obstructions, simultaneously attempting to capture by landing operations Forts Revere, Andrews, Ruckman and Banks, and that these operations are to be followed by an attempt to force the entrance to Boston Harbor and the reduction of remaining forts by naval fire from the rear combined with fire from the captured batteries

A&R.FE

333,12/3 B

The _____th Infantry Brigade, reinforced by one (1) regiment Field Artillery (75s) both at peace strength have been ordered to report to you as artillery supports.

The ~~31st~~ Coast Artillery has been directed to proceed at once to war stations - you are authorized to change the assignments if you so desire.

The C.O. 615th Coast Artillery has been directed to report in person to you for such instructions as to the use of the personnel of that regiment as you may deem desirable.

No aircraft are available for assignment but the C.O. Air Port Boston has been instructed to furnish direct to you all information gathered by air patrols under his direction.

No reinforcement in way of R&RA Artillery can be supplied as all available is needed in Coast Defenses of Portland and Portsmouth which are similarly threatened.

The Naval District will establish a night patrol system off the entrance to the harbor beginning this date. Code _____ will be used.

The Artillery District Commander directs you so to dispose of the troops under your command as to defeat the probable enemy plan of operations at the same time maintaining dispositions to meet any other form of attack.

X
Commanding, 1st C.A. District.

333,12/3 B.

ESTIMATE OF THE SITUATION
(COAST DEFENSE COMMANDER)

ENEMY STRENGTH UNKNOWN. evidences of a prepared plan indicate that he will be in force. The submarine reconnaissance shows that his information of Blue strength is incomplete - probabilities are that he will bring a greater force than required rather than a lesser. The captured documents prove his unwillingness to attack in force until assured that the mine defense has been neutralized; they indicate, also, his dependence upon taking the defense by surprise. He is probably unaware that his plans have become known.

Of various forms of attack open, most probable is by simultaneous landings at Forts Ruckman, Revere, Andrews and Banks (and possibly others), trusting to the resulting confusion to enable mine sweepers to clear the channel.

The initial attack will be made at night, and probably at an early hour, in expectation of completing the mine sweeping operations in time to enable a fleet attack to be delivered at dawn the following day.

There will be no bombardment of forts until the actual fleet attack but operations by aircraft, both for bombing of forts not subjected to landing operations and for smoke screening all operations is to be expected.

The mission of this command is:-

First, to defeat the enemy preliminary effort in hope of postponing his main attack upon the harbor;

Second, to defeat any attempt to run past the forts;

Third, to organize the available forces for a prolonged defense, including defense against long range bombardment, as soon the threat of immediate attack is past.

DECISION OF THE COAST DEFENSE COMMANDER

1. To utilize the personnel of the Regular garrison as follows:-

First, to ensure communications between fort and battle commands and the Coast Defense Command Post;

Second, to operate all searchlights now installed;

Third, to expedite installation of submarine defense;

Fourth, to man the anti-aircraft guns of the 2nd Battle Command;

Fifth, to assist National Guard units in preparing for service;

Sixth, to man one pit for Battery Lincoln.

2. To utilize the 241st Coast Artillery as follows:-

First, to man batteries essential to the defeat of the probable enemy plan. To this end, the following batteries will be assigned to the 241st Coast Artillery and the regimental commander will select and direct the movement of units accordingly.

Battery Sanders, Fort Revere (1 battery)

Battery Ripley, Fort Revere (1 battery)

Battery McCook, Fort Andrews (1 battery)

Battery Bumpus, Fort Andrews (1 battery)

Battery Cushing, Fort Andrews (1 battery)

Battery Terrill, Fort Standish (2 batteries)

Battery Whipple, Fort Standish (1 battery)

Battery Williams, Fort Standish (1 battery)

Battery Gardner, Fort Ruckman (2 batteries)

AAQ batteries, 1st Battle Command (1 battery)

333.12/3 B

Second, the Hq. Battery personnel of the 241st C.A. to be distributed as a relief for the personnel of the 9th C.A. in operation of communications and searchlights, 1st Battle Command.

3. To utilize the cadres of the 615th C.A. as reliefs for the personnel of the 9th C.A. in operation of communications and searchlights, 2nd Battle Command.

4. To dispose of the reinforced Infantry Brigade as follows:-

- (a) Brig. Hq., 1 Reg. Inf. (less 1 Bn.) and 1 Bn. Field Arty. (less 1 battery) Fort Revere.
- (b) 1 Bn. Infantry, 1 battery Field Arty, Fort Andrews.
- (c) 1 Reg. Infantry (less 1 Bn), 1 Bn. Field Arty (less 1 battery), Nahant.
- (d) 1 Bn. Infantry, 1 battery Field Arty, Winthrop.

Mission:

- (a) Defense of Nantasket Peninsula from Strawberry Hill to Fort Revere, inclusive.
- (b) Defense of Paddock's Island.
- (c) Defense of Nahant Peninsula.
- (d) Defense of Winthrop - especially Forts Banks and Heath.

5. All commanders to hold their posts to extremity, being prepared to inflict the maximum damage upon all installations in event capture seems inevitable.

6. In event of the failure of the enemy initial attempt to capture the harbor by surprise attack to reorganize the command upon lines laid down in the defense plan and to proceed with the mobilization under approved plans.

HEADQUARTERS COAST DEFENSES OF BOSTON
Fort Banks, Mass.

Field Order)
No. 2.

13 June 1925 - 8:00 A.M.

Maps - C&G.S. #337 (Boston Harbor)

Water Area Chart C&D-B. - October 29, 1924.

Position Map. C&D-B. June 12, 1925.

1. a. Enemy navy remains in control of the Atlantic. Strength is unknown. Enemy capable of transporting a complete Field Army in first expedition. Large enemy fleet entered Provincetown Harbor on June 10th and began the establishment of an advanced base. Enemy submarines on June 8th attempted reconnaissance of Boston Harbor. One sunk by airplane bomb in deep water South East of Boston Light. Reliable information indicates mission of submarines was to determine extent of Boston Harbor Mine Fields and determine feasibility of surprise attack landing operations at forts equipped with "All around Fire" major calibre batteries. Information indicates that attacks on mine fields simultaneous with landing attacks on Forts Ruckman, Revere, Andrews, and Banks will be made soon.

b. The 9th Coast Artillery will today be augmented by the cadres of 615th Coast Artillery (O.R.).

The 241st Coast Artillery will today become part of this command, all units reporting to designated stations by midnight this date.

The ___th Brigade Infantry consisting of ___th and ___th Regiments and the ___th Field Artillery (75s) will become part of this Command. Units to arrive within Coast Defenses not later than noon 14 June.

The 13th Infantry has evacuated Boston Harbor.

At present there are no flank supports for these Coast Defenses other than supplied from this Command.

Friendly air patrols will be passing over these Coast Defenses. No air service will be available for artillery missions.

Cruisers "P" and "Q" and a number of our destroyers and merchantmen are somewhere in North Atlantic seeking harbor.

The Navy is charged with the duty of patrolling the outer limits of our Zone of Action, halting all vessels and with the assistance of C/5 and C/11 controlling all friendly sea traffic and anchorages. These patrols will be six (6) or less in number and will be identified during day by code (to be delivered to Battle and Fort Commanders.) At night they will patrol outside of the zone of searchlight illumination and will blanket all lights except blinkers.

For further information of supporting Naval vessels see Plan of Joint Army & Navy. Annex _____

2. a. This Command will:-

(1) Put forth every effort to detect and repulse raids and attacks on mine fields.

(2) Resist all naval and air attacks and prevent runby, using guns, mortars and mines.

(3) Prevent damage to, destruction, or capture of any elements of the defenses by landing parties or enemy sympathizers, using proper guards and strong points.

(4) Cover by gunfire if necessary, the entrance or exit of friendly war craft and identified merchantmen.

333.12/3 B

(5) Consistent with the foregoing proceed with the organization of positions to make this command a strong point in the Positive System of Coast Defense.

b.

(1) Lines of resistance seaward and barrage lines are shown on Position Map, C.D.B. June 12, 1925.

Inner line as shown on Position Map "Annex A" is established to control harbor traffic.

(2) Strong points and beach patrols will be established as shown on Position Map (Annex "A").

(3) Communications will be established to and observation posts placed at positions shown on map (Annex "A").

c.

(1) Sectors assigned to Battle Commanders are shown on Map Annex "A".

(2) Following fixed stations and commands will be manned.

1st Battle Command - (Hdq. Fort Warren)

Fort Command Revere - C/1

Battery Command Saunders.

" " Ripley.

Fort Command Andrews - C/2

Battery Command Cushing

" " McCook

" " Bumpus

1st Mine Command - Fort Warren.

2nd Battle Command - (Hdq. Deer Island)

Fort Command Standish - C/4

Battery Command Torrill

" " Whipple

" " Williams

Fort Command Strong - C/5

2nd Mine Command

Fort Command Heath - C/6

Battery Command Lincoln - (1 Pit)

Fixed Anti Aircraft - Banks & Heath.

3rd Battle Command - will be established at Fort Ruckman.

Battery Command ... Gardner.

d.

Troop Assignments.

9th Coast Artillery

Hdq. and Hdqrs., Battery ... Coast Defense C.P. and Staff.

Command Station:

2nd & 3rd Battle Com-

Strong, Heath, Ruckman.

Fort Commands, Standish

10, 11, 13, 14, 15.

Searchlights, 4, 5,

communications and signal stations.

Coast Defense Commun-

Battery "A" -----
Commands at Fort Strong and Fort Warren.

1st and 2nd Mine Com-

Battery "C" -----
Fort Banks.

Battery Lincoln -

333.12/3 B

The special mission of searchlights is to detect and then illuminate enemy approaching mine fields. An intermittent swooping of lights is preferable to a steady barrage.

b. The Infantry is charged with the beach control patrol; the organization development and defense of strong points indicated on Positive Map. Annex "A" and with the repulse of aircraft and illumination of beaches with flares in case of night attack.

The Infantry will guard all cable lines, huts, isolated searchlight and communication installations.

c. The Field Artillery is charged with the defense of beaches patrolled by the Infantry. It will enfilade these beaches and repulse landing parties. It will also support stray posts set up by the Infantry. Night signals will be arranged with Infantry for laying of beach barrage fire.

3X. (1) All strong points will be developed for machine gun use, barbed wire and trenches being used as necessary.

(2) The command has priority on road - WINTHROP - NAHANT.

(3) Vessels in Zone of Action not identified as friendly or escorted will be halted by ### shot sent across bows. On failure to halt vessels will be considered enemy.

(4) a. All Fort Command Stations will be notified when patrol vessel is being identified for purpose of familiarizing observers with friendly patrols. (Special order to C/1 - C/6, WINTHROP HEAD SIGNAL STATION - ALLERTON SIGNAL STATION, regarding codes and communication with patrol vessels not included in this Field Order).

b. Patrol vessels will be relieved during daytime only. Those going on duty to control approaches to NORTH CHANNEL will identify themselves in NORTH CHANNEL off GROVERS' CLIFF. Those going on duty to control approaches to WARREN WATER AREA will identify themselves in Channel off NARROWS LIGHT.

c. United States Naval craft going out, other than patrol vessels will not stop for identification. United States Naval craft coming in will be escorted by an identified patrol vessel or clearance will be transmitted in advance to Fort Standish from C.D.C.P.

d. Unless clearance orders have been received from C.D.C.P., outgoing commercial vessels will be halted and ordered to anchor in PRESIDENT ROADS or NANTUCKET ROADS. Single commercial vessels coming in will be permitted in daylight hours to pass through Zone of Action to Inner Limit, their movements being controlled by Navy. Commercial vessels in groups will be escorted by patrol vessels.

(5) SOUTH CHANNEL, BLACKROCK CHANNEL and WARREN WATER AREA, closed to all vessels except those occupied in mine and not laying.

(6) Incoming or outgoing submerged submarines will be considered as enemy.

(7) Aircraft not identified as that of the U.S. Army or Naval Air Forces will be considered enemy.

(8) Gas alarm systems will be installed, gas masks will be inspected and tested, and personnel put under proper gas discipline. Provisions will be made to protect telephone switchboard rooms, casemates, plotting rooms, etc., against gas.

(9) Searchlights will be put into action only in event of imminent attack. When tested for readiness on receipt of messages from patrol that an enemy is approaching, the test will be such as to serve also as an acknowledgement of the message.

(10) All traffic will use NORTH CHANNEL only.

(11) No tentage will remain pitched during daytime in vicinity of any battery, station or searchlight.

(12) Lights will be used only when required to carry on necessary night work. Lights so used will be shielded from overhead and seaward observation.

(13) Fort Commanders are responsible for and will hold their positions at all costs. In case capture of any fort becomes imminent, armament and stores will be destroyed.

4. For administrative details see "Administrative Order" (omitted).

5. a. Communications with sea patrols will be by radio, (code), and rocket. A red rocket or smoke bomb from a patrol vessel will indicate presence of enemy vessel. For further plan of Communications, see Annex "A" attached, (omitted).

b. C.DIC.P., closes at FORT BANKS at 11:00 A.M., June 13, 1925 and opens at Winthrop Golf Club Building at same hour and same date. Fire control, Post Telephone, and Commercial telephone system has been extended to this position.

C.P. 1st Battle Command at Fort Warren.

C.P. 2nd Battle Command at Deer Island.

C.P. --- C/1 --- FORT REVERE,	C.P. --- C/4 FORT STANDISH
" C/2 --- FORT ANDREWS,	" C/5 FORT STRONG,
" C/3 --- FORT WARREN,	" C/6 FORT BANKS,
	HEATH & RUCKMAN.

DISTRIBUTION:

CG 1st Corps Area -----1.
 CG 1st Coast Art'y District-----3.
 Commandant Navy Yard-----2.
 CO 9th Coast Artillery-----1.
 All units 9th Coast Art'y-----9,
 CO 241st Coast Artillery-----6,
 All units 241st Coast Art'y ----15,
 CO 615th Coast Artillery-----10,
 1st Battle Command-----3,
 2nd Battle Command-----3,
 All Fort Commanders-----6,
 All Mine Commanders-----2,
 Quartermaster-----1,
 Ordnance Officer-----1,
 Artillery Engineer-----1,
 CO ___th Brigade Infantry-----10,
 CO ___th Regiment Infantry-----12,
 CO ___th Regiment Infantry-----12,
 CO ___th Regiment Field Art'y--12

C.E. KILBOURNE,
 Colonel, 9th C.A.,
 Commanding.

333.12/3 B

HEIW/mm

ARMY BASE, BOSTON, MASS.

December 4, 1939

TO: Signal Officer, First Corps Area.

This inspection made November 29, 1939 by Herman H. Wagner, Ass't Electrical Engineer, S.S.L., in accordance with Travel Orders dated November 25, 1939.

1. Switchboard.

The switchboard formerly installed has been removed and disposed of in accordance with regulations since the last inspection. The old switchboard cables are still in place on the distributing frame and under the floor. It is recommended these cables be removed.

None.

None.

1. Motor Generator. Satisfactory.

2. Ringing Machine. Satisfactory.
3. Rectifier. None.
4. Ringing Vibrator. None.

Satisfactory.

The cables to the Distributing Frame are potheaded and the frame itself is the old fire control type mounting porcelain or composition terminal strips. It is recommended the fire control distributing frame be replaced with more modern equipment.

None.

None.

1.

IX. RECORDS

The cable maps and drawings pertaining to this post are those turned over to the Signal Corps by the Engineer Corps and are not up-to-date. These drawings are in the process of revision in the office of the Corps Area Signal Officer.

X. MISCELLANEOUS

No information under this heading applies to this post.

XI. STOREROOM

The equipment in the storeroom is neatly arranged and accurately tabulated and it is believed personnel responsible for its care deserve commendation.

XII. CONDUIT SYSTEM

Satisfactory, except that in event cables larger than 100-pair are installed it may be necessary to enlarge some of the manholes.

XIII. CABLE SYSTEM

The cables are all old (some of them over 30 years), and are all terminated in potheads. It is recommended the Corps Area Signal Officer prepare a project for the complete rehabilitation of the cable system for this post.

XIV. POLES, CROSSARMS, ETC.
None.XV. TERMINALS

It is recommended that in connection with the recommendation contained in paragraph XIII provision be made for the termination of all cables in sealed chamber type terminals similar to JB-10.

XVI. WIRES
None.XVII. TARGET RANGE COMMUNICATION SYSTEM
None.XVIII. TELEPHONE STATION EQUIPMENT
Satisfactory.XIX. TELEGRAPH STATION
None.XX. FIRE CONTROL SYSTEM

1. Station and batteries.

Satisfactory, except that a great majority of telephone equipment is the old CAT type equipment which, while appearing to be satisfactory, is not as efficient as that of later design.

2. Time interval apparatus, panel and circuits.
Satisfactory.

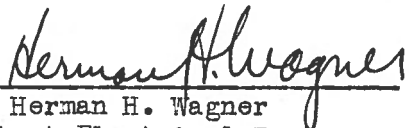
3. Fort Signal Station.
None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE

1. Since the last inspection the post telephone switchboard and storage battery have been placed on I & I Report and disposed of in accordance with existing regulations.

2. The radio station masts have been dismantled and placed on I & I and disposed of in accordance with regulations.

3. This post is on a caretaking status and the condition of the equipment indicates that the caretaking personnel have more effectively preserved the equipment than is found to be generally true elsewhere.



Herman H. Wagner
Assistant Electrical Engineer, S.S.L.

SigO 333.9-Ft. Andrews

1st Ind.

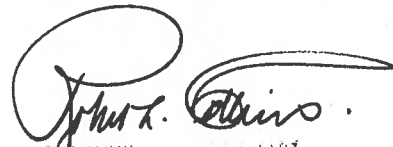
HHW/mm

Headquarters First Corps Area, Boston, Mass. December 8, 1939. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

1. For action in accordance with the provisions of paragraph 13 a, AR 105-20, September 29, 1938, and return of three copies to this headquarters.

2. The Corps Area Signal Officer will initiate action in accordance with the recommendations contained in paragraphs XIII and XV.

By order of Colonel Freeman:



ROBERT H. COLLINS
Colonel, A. G. D.
Adjutant General

333.14/3-EO

1. 0000A 333.14/3-E0 Dne. 1.

POST OR FORT FORT ANDREWS, MASS.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Complete

Rendered by Herman H. Wagner
Rank Assistant Electrical Engineer.
Date November 29, 1939

333.14/3-E0

Dne 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Andrews, Mass.Date November 29, 1939

TELEPHONE SWITCHBOARD NONE

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout.....
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS NONE

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			

Drawing number and date showing central office layout.....

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

SWITCHBOARD CABLE NONE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green		Relay, supervisory, answering	
Cap, lamp, red		Relay, supervisory, calling	
Cap, lamp, white		Relay	
Capacitor		Relay	
Coil, repeating		Signal	
Cord, connecting		Socket, lamp	
Key, ringing and listening		Weight, cord	
Key, listening		Apparatus not listed:	
Key, ringing			
Plug, cord			

OPERATOR'S TELEPHONE CIRCUIT NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction		Key, operator's switching	
Coil, repeating		Receiver	
Coil, retardation		Relay	
Capacitor		Plug, operator's set	
Cord, breast set		Transmitter	
Cord, receiver		Apparatus not listed:	
Cord, transmitter			

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS
NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, amperes.....		Resistor, ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

TRUNK CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitor.....		Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET NONE

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK NONE

	Number installed
Date installed.....	Monitor ccts.....
Manufacturer and code number.....	Inc. trk. ccts.....
Cct. dwg. number and date.....	Outgoing trk. ccts.....
Remarks.....	Cord ccts.....

 TARGET RANGE SYSTEM NONE
 (Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

AUTOMATIC SWITCHBOARD NONE
(Describe attendant's cabinet on sheets 1 to 4)

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION NONE

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

STORAGE BATTERIES NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....				Manufacturer's type			
A. H. capacity.....				hydrometer.....			
Manufacturer.....				Location.....			
Manufacturer's type.....				Furnishes power for.....			
Date installed.....				Trickle, float, or			
Date new elements				cycle charged.....			
installed.....				How often?.....			
In cabinet or on rack?.....				At what rate?.....			
Which side grounded?.....				Remarks.....			
Manufacturer's type							
thermometer.....							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Crocker-Wheeler	Burke Elec	Date installed.....	1908	
Manufacturer's type.....	CM	TEL.	Signal Corps type.....		
Kw. output.....	$\frac{1}{2}$	one	Order number and		
Operating voltage.....	110 DC	110 AC	date.....		
Cycles or d. c.....	DC	60 cy.	Location.....	F. C. Swbd. Room	
Generator serial number.....	992	126703	Charges what battery?.....	F. C. and P. T. Systems	
Motor serial number.....	991	126702			

code 43030

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....	A. C.			Manufacturer.....	Holtzer Cabot		
Date installed.....	Unknown			Manufacturer's			
Location.....	F. C. Swbd. Room			type.....	HS - Size 18		
Gen. type.....	MC No. 7432			Operating voltage.....	110 AC		
	volts 80, RPM 1150			Cycles or d. c.....	60 cy.		
				Ser. No.	205199		

2-10152

SHEET 6

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT NONE

Wall or floor type?	Manufacturer
Number of verticals	Manufacturer's type
Capacity, protector (vertical) side	Order number and date
Protectors equipped	Date installed
Capacity, strip (horizontal) side	Date additions made
Terminal strips equipped	Drawing numbers and dates showing layout of frame
Fuse protector capacity (pairs)	
Fuse protectors equipped	Remarks
Do outside lines connect to protectors, fuses, or terminal strips?	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom		Strip, terminal, 2-point	
Block, protector, top		Strip, terminal, 3-point	
Coil, heat		Strip, terminal, 4-point	
Dielectric (Mica)		Strip, terminal, 5-point	
Fuse, ampere		Test cord, feet	
Protector group		Test shoe	
Ring, jumper			

RELAY RACK NONE

Manufacturer	Date installed
Height	Drawing number and date showing layout
Number of bays	
Relay mounting capacity per bay	Remarks

COIL AND OTHER RACKS NONE

Manufacturer	Mounts what equipment?
Coil capacity	
Per cent equipped	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	Other equipment
FM-5	Swbd. Room	2	40	40				1	

POST OR FORT

FORT ANDREWS, MASS.

Date November 29, 1939

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	F.C. and Tel.	
Manufacturer's type			Location	F.C. Swbd. Rm.	
Signal Corps type	BD-17		Date installed	About 1908	
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston 51068		50-0-50 Amp. 15			
Circuit breaker	Roller-Smith		V.-250			
Motor starter	Ward Leonard		3/4 hp., 110 v.			
Rheostat						
Voltmeter	Weston - 32467		0-150			
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	1	Controller, zone signal		Switch key, set	
Bell, T. I., small	0	Hand set	1	Telephone, B. C.	9
Bell, zone sig		Head set	16	Telephone, desk	
Bell, ext. L. R.		Outlet, zone sig		Telephone, gun	2
Box, junc., std		Signal, firing, B. C.	1	Telephone, plotters	1
Box, junc., T. R.		Signal, firing, pit	4	Telephone, wall	6
Box, T. I., bell	2	Switch, hand set		Switchboards, BD-74	
Box, term., 2-strip	2	Switch, push, zone sig		Switchboards, BD-78	
Box, term., 4-strip	2	Switch box, base line		Other apparatus:	
Box, term., 8-strip		Switch box, cut-out		Strips 12-pr.	12
Box, term., 10 strip	1	Switch box, transfer		" 21-pr.	7
				Blocks Exten.	4

POST OR FORT FORT ANDREWS, MASS.Date November 29, 1939

TIME INTERVAL APPARATUS

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks
F.C. Swbd. Room	BD-15	1			
	EE-56	1	Leeds Northrop	L&N #487931	

METEOROLOGICAL EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION NONE

Material of mast			Year installed	
Height of mast			Year last painted	
Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets				

NIGHT SIGNALING EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST NONE

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT FORT ANDREWS, MASS.Date November 29, 1939

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
16-way MCD	132		2-way MCD	1236		3	8	
12-way MCD	132		Single CWD			3-foot		
10-way MCD	88					4-foot	45	
9-way MCD	793		4-way fiber					
8-way MCD	770					22" x 40"		
6-way MCD	54		2-way fiber	2294		Other sizes:		
4-way MCD	1673					2' x 3'	12	
3-way MCD	317		Single fiber	60		2'	2	
Single CD								
2-way CWD			Iron pipe					

Drawing number and date of conduit plant

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				25-pair	22	1741	
400-pair				20			
1	19	235		25-pair	19	984	
600-pair				12	16	2368	
1				15-pair			
600-pair	16	4004		12	16	5489	
3	16	1939		15-pair			
600-pair				10-pair	19	2438	
3	16	986					
400-pair				10-pair	22	1205	
6	16	480		Other sizes:			
400-pair				1-pr. 654	#0000	1273	
30	22	376					
50-pair				1-pr. 643	#10	1833	
30							
50-pair	19	146		Approximate number of Signal Corps poles			
20	19	1905		Approximate number of joint poles			
50-pair							

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant 107-114-101 April 20, 1927

POST OR FORT FORT ANDREWS, MASS.

Date November 29, 1939

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories.....	\$.....	Outside telephone plant.....	\$1000.00
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....	\$50.00	TOTAL.....	\$1050.00

FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system.....	\$16,705.00	Telephone and other equipment.....	\$1,375.00
F. C. power equipment.....	1,100.00	TOTAL.....	19,180.00

TRUNKS AND TIE LINES

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
			\$.....	\$.....	\$.....	\$.....

STATION EQUIPMENT

Manufacturer Western Electric Company

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		5			
Hand set.....					
Wall.....		1			
TOTAL.....		6			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
Banks 6	Caretakers Qtrs. 19	1					B	
" 6-2	" " 19a	1					B	
" 16	" " 27	1					B	
" 16-2	" " 27a	1					B	
" 76	WPA	1					C	
" 76-2	Dock			1			C	

POST OR FORT FORT ANDREWS, MASS.

Date November 22, 1939

SIGNAL EQUIPMENT STOCK NOT INSTALLED

Name of article	Signal Corps type	Manufacturer's code	Number on hand	Condition	Remarks or recommendation, stating whether surplus or required for use at post
Radio Transmitter	BC-86-B		1	Good	Surplus
" Receiver	BC-98-B		1	"	"
" Tuner	BC-138		1	"	"
" Transmitter	BC-129		4	"	"
" Receivers	BC-144		4	"	"
" Control Box	BC-130		4	"	"
" Dynamotor	BD-46		4	"	"
" Transmitter	T-12		6	"	"
" Head Set	P-11		5	"	"
" Transmitter	BC-127		1	"	"
" Switch Discond., 200 amp. 15 KV style 856247	Type S		1	"	"
" Motor Generator	MG-8		1	New	"
Box, BC Tel.	BE-42		6	Good	Required
Telephones, Wall	C.A.T.		12	"	"
Telephones, plotters	EE-25		5	"	"
Bell, loud ring.	MC-9		2	"	"
Radio Control Box	BC-142		1	"	Surplus
Key	J-38		22	"	"
Bell, TI, large	MC-10		3	"	Required
" TI, small	MC-8		4	"	"
Wavemeter, G.R. Co.	174BS Sen #21		1	"	Surplus
Battery	BB-29		22	"	"
"	BB-4		4	"	"
Radio Rec.	BC-131		1	"	"
Key	J-2		3	"	"
Insulator, Ohio Brass, Strain 30"	"		2	"	"
" Porcelain	" 18"		5	"	"
Vibroplex			1	"	"
Tube	VT 5		41	"	"
Windvane			1	"	Required
Chest	BC-43		1	"	Surplus
"	CH-2		1	"	"
Headset	P-11		1	"	"
Swbd.	BD-57		1	"	"
Insulator Guy, Strain 6"			18	"	"
Ground Rods	G 8-11		60	"	"
Panel	BD-44		1	"	"
Base Line Sw. Box			2	"	Required
Sw. Box	BC-99		2	"	"
Headset	EE-70		31	"	"
Tube	VT 4B		12	"	Surplus
"	VT 2		19	"	"
"	VT 22		9	"	"
Tel. BC			4	"	Required
Telephone, Wall	EE-71		18	"	"
Firing Signal	EE-22		3	"	"
" "	EE-23		2	"	"

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

Boston ARMY BASE, BOSTON, MASS.

HC/mm

IN REPLY SigO 333.9
REFER TO:

October 6, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Banks, Mass.,
for the period ending June 30, 1937.

TO: Signal Officer, First Corps Area, Boston Army Base, Boston, Mass.

Last Inspection Made: March 17, 1936 by L. L. Hill, Ass't Elec. Engr., S.S.L.

This Inspection Made: May 19, 1937 by H. Caldwell, Electrical Ass't, S.S.L.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET.

1. Switchboard.

- a. The Manual Switchboard was installed during June 1928.
- b. The switchboard provides for all local lines, also all administrative lines for the military activities in the harbor defense posts. The full capacity has been reached. Only three line units remain as spare.
- c. Deterioration of the equipment has been normal; however, the replacement of the plug shelf will be necessary in the near future.

2. Line Circuits.

- a. None are inoperative.
- b. Tests of outside circuits indicated no defects and all wire was in good condition.
- c. Colored lamp opals are used to indicate the class of service authorized.

3. Cord Circuits.

- a. The plugs, cords, supervisory lamps, keys and relays are in good condition and operating satisfactorily.

4. Trunk Circuits.

- a. Ten trunk circuits are equipped with "flash back" push buttons and to provide employment of these either as common battery trunks or local battery ring-down lines, the push buttons were connected as the original circuit plan contemplates. Comparatively long common battery lines are in use connecting the harbor posts and the transmission is not the best. An improvement in this can be made by installing local battery telephones on the lines and connecting to the switchboard trunk circuits.

- b. Complaints have been made of poor transmission from Fort Banks to Boston. No less than three switchboards are involved in the connections. The losses in these may be the cause of the trouble. The matter has been referred to the New England Telephone and Telegraph Company for solution.

5. Miscellaneous Circuits.

- a. The supervisory, night alarm, ringing circuits and keys, associated with the board are in good order and functioning properly.

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First Banks, Mass
10/6/37
O.C.A. 333.14/3-EF

10/6/37

II. AUTOMATIC EQUIPMENT.

None.

III. STORAGE BATTERY.

a. The equipment is in good condition and properly maintained. Hydrometers and thermometers are on hand.

b. The three types of charging apparatus provided guarantee a charging current supply. The full-wave rectifier is used for regular charging, by the "trickle" or "float" method.

c. Weekly storage battery report, form No. 43, is kept and submitted regularly.

d. During the inspection a temporary grounding wire was connected to the positive side of the battery supply circuit at the charging panel. This is intended to be replaced with a wire of substantial size, securely bonded to the cables of the system.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.1. Motor Generators.

a. The machines both direct to direct current and alternating to direct current are in good condition.

2. Ringing Machine.

a. This unit was replaced with a ringing vibrator during April, 1937.

3. Rectifier. Satisfactory.4. Ringing Vibrator.

a. The equipment was installed in April 1937 and replaces a motor driven ringer.

b. Apparently it causes no interference with radio since a receiver is operated successfully in the same room.

V. POWER PANEL.

a. The power panels are ample for all fire control and administrative telephone purposes.

b. The voltmeters, ammeters, circuit breakers and switches are operating properly.

VI. DISTRIBUTING FRAME.

a. The fire control frame which serves for making cross-connections for the administrative telephone system as well as the fire control system is in good condition.

b. It is rather congested due mostly to the type of terminal strips employed. Greater line capacity can be secured, however, when required, by replacing the strips and rearranging the cables.

c. The distributing frame for the administrative post telephone switchboard is in good condition. It serves only as a mounting for the switchboard protectors. It is not grounded thoroughly, since connection is made to the sheaths of two cables not grounded.

VII. WIRE CHIEF'S TEST EQUIPMENT.

a. The Test Set EE-65 is conveniently installed for testing from either the switchboard jacks or from the main frame.

333.14/3-EF

10/6/37

b. It is in good condition and entirely satisfactory for analyzing plant faults.

VIII. RELAY RACK.

None, except in switchboard which is in good condition.

IX. RECORDS.

a. Drawings of the cable and conduit systems are on hand but have not been revised in accordance with the present Signal Corps standards.

b. Manufacturer's drawings of the front and rear switchboard assemblies and circuits are also on hand.

c. The standard line record cards are not employed for keeping records of the lines. These could be employed satisfactorily in keeping the records of post administrative telephones.

d. In connection with the records of fire control lines a more durable and flexible record than a blue print pasted in the terminal boxes is sought. Blue prints become faded, stained and disfigured by insects when placed in stations and, therefore, become useless and must be replaced from time to time. A form for the records which will permit changes to be recorded and replacements made in stations without long delays is desired.

X. MISCELLANEOUS.

a. Three Coast Artillery men are assigned to duty as operators. Changes are made at the switchboard at 6:30 A.M., 12:30 P.M. and 6:30 P.M.

b. The schedule and service is satisfactory.

c. No city trunks can conveniently be released. No more are needed.

XI. STOREROOM.

a. The storeroom is satisfactory.

XII. CONDUIT SYSTEM.

a. The manholes are in good condition and of suitable size for installing cables up to 100 pairs.

b. All are constructed with frames and covers.

c. The cables were installed without racks in the manholes and it is not recommended that these be racked at this date, due to insufficient slack for the purpose and the difficulty in bending and forming the cables while in a spliced status.

XIII. AERIAL CABLE SYSTEM. None.

XIV. POLES, CROSSARMS, ETC. None.

XV. TERMINALS.

a. These are in fair condition. All belong to the underground system and are of various Signal Corps types.

XVI. WIRES.

No aerial wires.

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10/6/37

XVII. TARGET RANGE COMMUNICATION SYSTEM.

None installed.

XVIII. TELEPHONE STATION EQUIPMENT.

- a. The wiring and instruments are in good condition.
- b. All lines were tested for electrical defects and found in good condition.

XIX. TELEGRAPH STATION.

None.

XX. FIRE CONTROL SYSTEM.

1. Station and Batteries.

a. The following equipment is satisfactorily installed and operating properly:

- Base line switch boxes
- B.C. Signal Bells
- Time interval bells
- Cut-out switch boxes
- Telephone terminal blocks
- Firing signals
- Emplacement outlet boxes
- Junction boxes
- Terminal boxes
- Handset switches

b. No zone signal controllers, bells, lamps or outlets are installed.

c. All Coast Artillery type wall, plotters, gun, battery, commanders, handset and headset telephones are in good condition.

2. Time Interval Apparatus, Panel & Ccts. None installed.

3. Fort Signal Station. None.

4. Radio Station. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

1. Changes.

a. No changes of any great importance in the fire control or administrative system have been made since the last inspection.

b. The number of telephones installed have been increased to five.

c. No changes have been made in the number of trunk or tie lines in use.

d. Contracts with commercial companies remain the same.

2. Recommendations.

a. It is recommended that the protector frame, switchboard and battery be thoroughly grounded by the use of No. 10 copper wire, or larger, properly soldered to the cables of the underground system.

b. The slate panels and switches of the power switchboard have become discolored possibly from coal fumes. It is recommended that these be brightened up by the application of a suitable stain to the slate and polish to the metal parts of instruments and switches.

10/6/37


c. In connection with the records of the post telephone it is recommended that the Signal Corps standard line record cards be maintained for record of the equipment and connections.

d. Equipment on hand which is surplus in the harbor defenses is as follows:

12 Bells, Edison battery, BA-14
20 Switch boxes, T.I. Bell, BC-117-A.

e. The latter item of boxes was supplied the post on requisition as a substitute for "Switch Key Sets" EE-79. To use as such, a separate telephone would be required and the designation plates indicating lines would have to be changed, therefore no use was made of these boxes.

f. Additional cable circuits are required at the plotting rooms for Battery Lincoln and Battery Kellogg. The installation of cables and rewiring of the stations can be done any time the equipment is supplied. This work is necessary for the operation of the batteries, in accordance with the revised fire control plan.


Henry Caldwell,
Electrical Ass't, S.S.L.

SigO 333.9

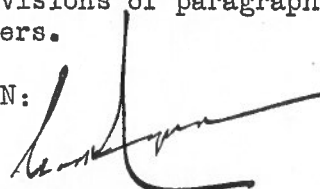
1st Ind.

HC/mm

Headquarters First Corps Area, Boston, Mass. October 9, 1937. Thru: Commanding General, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 (a) AR 105-20 and return of three copies to this headquarters.

By command of Brigadier General WILSON:


CLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

333.14/3-EF

5-

2nd Ind. /hgc
HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., October 11, 1937. To Commanding Officer, HD of Boston, Fort Banks, Mass.

AD
F. L. T.

Rec'd HD of Bos' OCT 12 1937
AE

AE-333.9

3rd Ind.

/jms

HQ. HD OF BOSTON, FORT BANKS, MASS., November 4, 1937 - To: Commanding General, First Corps Area, Army Base, Boston, Mass., THRU: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and discrepancies noted.
2. Reference recommendations made in paragraph XXI 2, the following is reported:
 - a. The protector frame, switchboard and battery have been thoroughly grounded.
 - b. The slate panels and all metal thereon have been thoroughly cleaned and metal switches, etc., have been polished.
 - c. Standard line record cards are not on hand but will be obtained and when received will be employed.
 - d. The 12 cells, Edison Battery, BA-14, are serviceable and excess and have been reported as such to the Corps Area Signal Officer for disposition.
 - e. The 20 switchboxes, BC-117-A, now on hand were obtained on requisition as a replacement for switchboxes BC-94 which had become obsolete. It was found that the switchbox BC-117-A is not a suitable substitute for switchbox BC-94 and this fact was reported to the Corps Area Signal Officer in letter dated April 13, 1937, and at that time disposition of the BC-117-A switchboxes was requested. Instructions contained in 2nd Indorsement on the above mentioned letter by the Chief Signal Officer are quoted "The question of suitable equipment is being referred to the Coast Artillery Corps for recommendation. It is expected that definite information will be available by September, 1937. Pending the availability of suitable equipment, it is requested that the present equipment be used." Consequently, until "suitable equipment" has been authorized and received in this harbor defense the present equipment will be kept on hand.
 - f. The installation of additional cable circuits and the rewiring of plotting rooms for Battery Lincoln and Battery Kellogg will be made as soon as personnel and equipment are available.

RECEIVED G.A.D. NOV 2 1937

J. H. GIBRETH
J. H. GIBRETH,
Major, 9th C.A.,
Commanding.

333.14/3-EF

-6-

4th Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Nov. 8, 1937-To Commanding General, First Corps Area, Boston, Mass.

RES
R. E. G.

REC'D 1st SIG O.F. B.A. NOV 8 1937

SigO 333.9-Ft Banks

5th Ind.

MJW/mm

Headquarters First Corps Area, Boston, Mass. November 9, 1937. To: The Adjutant General, War Department, Washington, D. C.

1. Approved.

*No record
OCCA*
2. With reference to paragraph 2 e, foregoing 3d Indorsement, attention is invited to 2nd Indorsement, OCSigO, Washington, May 6, 1937, to Signal Officer, First Corps Area, file R-7559 (4-13-37) on letter from the Signal Officer, Fort Banks, Mass., dated April 13, 1937, file AE-413.42, subject "Telephone Equipment on Requisition #136-8-SC-37". In this connection information is requested as to when suitable equipment will be available.

For the Commanding General:

4 Received A. G. O. NOV 11 1937

[Signature]
OLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

NOV 12 8 59 AM '37
OFFICE OF THE
CHIEF SIGNAL OFFICER

RECEIVED

333.1 (Fort Banks, Mass)(10-6-37)

6th Ind.

9

War Dept., Washington, November 30, 1937 - To the Chief of Coast Artillery.

676.1/BQ
With reference to paragraph 2 of 5th Indorsement hereon, it is advised that the Signal Officer, 1st Corps Area has been requested to employ separate fire control telephones for use as commander's telephones at locations where Switchboxes BC-117-A are installed, as contemplated in 3d Indorsement of February 8, 1934, file 676.1/BQ from your office on letter dated December 15, 1933 from this office, subject "EE-78 (Telephone, Handset Switch), EE-79 (Telephone, Switch Key Set), file 413.4-(EE-78)(EE-79).

For the Chief Signal Officer:

[Signature]
Geo. P. Bush,
Major, Signal Corps.

7-6 REC'D DEC 1 1937 O.C.C.A. 1 Inc,

*File
H. 11/14/37
NR*

333.14/3-EF

2nd Ind.

/hgs

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., October 11, 1937. To Commanding Officer, HD of Boston, Fort Banks, Mass.

F. L. T.

AE-333.9

3rd Ind.

/jms

HQ. HD OF BOSTON, FORT BANKS, MASS., November 4, 1937 - To: Commanding General, First Corps Area, Army Base, Boston, Mass., THRU: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

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 - b. The slate panels and all metal thereon have been thoroughly cleaned and metal switches, etc., have been polished.
 - c. Standard line record cards are not on hand but will be obtained and when received will be employed.
 - d. The 12 cells, Edison Battery, BA-14, are serviceable and excess and have been reported as such to the Corps Area Signal Officer for disposition.
 - e. The 20 switchboxes, BC-117-A, now on hand were obtained on requisition as a replacement for switchboxes BC-94 which had become obsolete. It was found that the switchbox BC-117-A is not a suitable substitute for switchbox BC-94 and this fact was reported to the Corps Area Signal Officer in letter dated April 13, 1937, and at that time disposition of the BC-117-A switchboxes was requested. Instructions contained in 2nd Indorsement on the above mentioned letter by the Chief Signal Officer are quoted "The question of suitable equipment is being referred to the Coast Artillery Corps for recommendation. It is expected that definite information will be available by September, 1937. Pending the availability of suitable equipment, it is requested that the present equipment be used." Consequently, until "suitable equipment" has been authorized and received in this harbor defense the present equipment will be kept on hand.
 - f. The installation of additional cable circuits and the rewiring of plotting rooms for Battery Lincoln and Battery Kellogg will be made as soon as personnel and equipment are available.

J. H. GIBRETH,
Major, 9th C.A.,
Commanding.

[Handwritten signature]

333.14/3-EH

SigO 333.9-Ft Banks

5th Ind.

MAJW/mm

Headquarters First Corps Area, Boston, Mass. November 9, 1937. To: The Adjutant General, War Department, Washington, D. C.

1. Approved.

2. With reference to paragraph 2 e, foregoing 3d Indorsement, attention is invited to 2nd Indorsement, OCSigO, Washington, May 6, 1937, to Signal Officer, First Corps Area, file R-7559 (4-13-37) on letter from the Signal Officer, Fort Banks, Mass., dated April 13, 1937, file AE-413.42, subject "Telephone Equipment on Requisition #136-8-SC-37". In this connection information is requested as to when suitable equipment will be available.

For the Commanding General:

333.1 (Fort Banks, Mass)(10-6-37)

6th Ind.

9

War Dept., Washington, November 30, 1937 - To the Chief of Coast Artillery.

With reference to paragraph 2 of 5th Indorsement hereon, it is advised that the Signal Officer, 1st Corps Area has been requested to employ separate fire control telephones for use as commander's telephones at locations where Switchboxes BC-117-A are installed, as contemplated in 3d Indorsement of February 8, 1934, file 676.1/BQ from your office on letter dated December 15, 1933 from this office, subject "EE-78 (Telephone, Handset Switch), EE-79 (Telephone, Switch Key Set), file 413.4-(EE-78)(EE-79).

For the Chief Signal Officer:

Geo. P. Bush,
Major, Signal Corps.

1
O.C.C.A. 333.14/3-EF
Page 1

POST OR FORT Fort Banks

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of ~~sheet~~ complete report, pages 1 through 13.

Rendered by _____

Rank Henry Caldwell,
Electrical Assistant, S.S.L.

Date May 19, 1937.

333.14/3-EF
Page 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT BanksDate May 19, 1937.

TELEPHONE SWITCHBOARD

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed <u>June 1928</u>	Magneto lines equipped
Manufacturer <u>Leich</u>	Trunk circuits wired <u>20</u>
Manufacturer's type <u>100 P.B.X.</u>	Trunk circuits equipped <u>10</u>
Manufacturer's Serial No. <u>1638</u>	Operating voltage <u>30</u>
Signal Corps Serial No. <u>2528</u>	Distance telephone system is outside B. R. area of telephone company <u>Inside Base Rate Area</u>
Order number and date <u>612 Chief Depot 12/24/27</u>	Trunk loop resistance in ohms
Common battery or magneto? <u>common 12, 24, 25, 25x</u>	Are line cables to switchboard under floor or on overhead rack? <u>In Cabinets</u>
Multiple or nonmultiple? <u>non multiple</u>	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple	Are all positions equipped for service?
Number of positions <u>one</u>	Is switchboard used as attendant's cabinet of an automatic system? <u>No</u>
Cord pairs per position <u>12 prs.</u>	Location of switchboard <u>Protected Switchboard Room</u>
Common battery lines wired <u>100</u>	
Common battery lines equipped <u>100</u>	Drawing number and date of face and rear equipment layout... <u>Leich B-418 (Rear)</u>
Magneto lines wired <u>- -</u>	

SWITCHBOARD CIRCUIT DRAWINGS

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit	<u>B 373 Fig. 1</u>	Generator circuit	<u>B 373 Fig. 5</u>
Cord circuit, local	<u>" " 4</u>	Operator's circuit	<u>" " 8</u>
Cord circuit, universal	<u>" " 2</u>	Trunk circuit	<u>" " 9</u>
Pilot circuit	<u>" " 2</u>	Other circuits	
Fuse alarm circuit	<u>" " 3</u>		
Night alarm circuit	<u>" " 3</u>		
Dial circuit			
Drawing number and date showing central office layout			

POST OR FORT BanksDate May 19, 1937.

SWITCHBOARD CABLE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables
100			Local line equip. and Protectors	8 ft.	(form)
10			Trunk equip. and Protectors	10 ft.	1

CORD CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green	#9	Relay, supervisory, answering	110-C
Cap, lamp, red	#9	Relay, supervisory, calling	110-C
Cap, lamp, white	#9	Relay	- "
Capacitor	#22	Relay	- "
Coil, repeating	- -	Signal Sup.	
Cord, connecting	GC-61	Socket, lamp	62
Key, ringing and listening	42-C	Weight, cord	
Key, listening	- -	Apparatus not listed:	
Key, ringing	42-C		
Plug, cord	14		

OPERATOR'S TELEPHONE CIRCUIT

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction	8A	Key, operator's switching	812
Coil, repeating	- -	Receiver	WE 528
Coil, retardation	5D	Relay	
Capacitor	#22	Plug, operator's set	14
Cord, breast set	L4B 6 ft.	Transmitter	WE 18 CW
Cord, receiver		Apparatus not listed:	
Cord, transmitter			

POST OR FORT

Banks

Date May 19, 1937.

AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	DS-1 30V
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....	2 B	Receptacle.....	
Cap, lamp, green.....	4 G	Relay, fuse alarm.....	
Cap, lamp, red.....	4	Relay, night alarm.....	2 B
Cap, lamp, white.....		Relay, pilot.....	115 B
Coil, retard, dial cct.....	5 A	Relay.....	
Capacitor, signal cct.....	10 A	Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, 10 amperes.....	DW 1416	Resistor, ohms, test cct.....	
Generator, hand.....	61	Ringer (buzzer), gen. cct.....	1A-80
Key, dial switching cct.....	834	Socket, lamp.....	
Key, generator switching.....	800	Apparatus not listed:	
Key, generator reversing.....	800		
Key, night alarm.....	801		

LINE CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....	8	Relay, line.....	160 A
Cap, lamp, green.....	12	Signal, magneto.....	
Cap, lamp, white.....	12	Socket, lamp.....	23
Jack, line.....	63	Apparatus not listed:	
Lamp, line.....	15 A		
Relay, cut-off.....	160 A		

POST OR FORT BanksDate May 19, 1937.

TRUNK CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	102 C
Cap, lamp, trunk.....	12	Relay, ring-up.....	101 A
Capacitor.....	22 A	Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....	5 A	Relay.....	
Coil, repeating.....	13 A	Signal.....	
Coil, resistance.....	5 A	Socket, lamp.....	23
Jack, line.....	65	Apparatus not listed:	
Jack, night.....	63		
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET

Date installed.....	EE-65	Manufacturer's type of voltmeter.....	Weston Mod. 267
Manufacturer and code number.....	Weston Mod. 267	Range of voltmeter.....	0-50
Location.....	F.C. Swbd. Room	Circuit dwg. number and date.....	
		Remarks.....	Good Condition

CHIEF OPERATOR'S DESK None

	Number installed
Date installed.....	Monitor ccts.....
Manufacturer and code number.....	Inc. trk. ccts.....
Cct. dwg. number and date.....	Outgoing trk. ccts.....
Remarks.....	Cord ccts.....

 TARGET RANGE SYSTEM None
 (Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT **Banks**Date **May 19, 1937**

AUTOMATIC SWITCHBOARD **None**
(Describe attendant's cabinet on sheets 1 to 4)

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION **None.**

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT

Banks

Date May 19, 1937.

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....	15			Manufacturer's type	Type E	E.S.B. Co.	
A. H. capacity.....	80			hydrometer.....			
Manufacturer.....	Willard			Location.....	Prot. Subd. Room		
Manufacturer's type.....	E-5			Furnishes power for.....	PT & F.C. Systems		
Date installed.....	Unknown			Trickle, float, or			
Date new elements				cycle charged.....	Trickle charging		
installed.....				How often?.....			
In cabinet or on rack?.....	Open Rack			At what rate?.....			
Which side grounded?.....	Positive			Remarks.....			
Manufacturer's type.....	#7165						
thermometer.....	ESB Co.						

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Burk El. Co.	Holts Cabot	Date installed.....	10/29/25	about 1908
Manufacturer's type.....	T.E.L.	M.	Signal Corps type.....		
Kw. output.....	1	1.5 KW	Order number and		
Operating voltage.....	110 AC	110 DC	date.....		
Cycles or d. c.....	60 Cy.	D.C.	Location.....	Subd. Rm.	Subd. Rm.
Generator serial number.....	126740	43743	Charges what battery?.....	Tel. and F.C. Systems	
Motor serial number.....	126741	43742			

RECTIFIERS FOR POST TELEPHONE SYSTEM

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Westinghouse	Rectigon	Date installed.....	1935	
Manufacturer's type.....	823723		Location.....	Subd. Room	
Amperes.....	1-2 amp.		Charges what battery?.....	9 to 24 cells	
Voltage output.....	19-52		Bulb code number.....		
Operating voltage.....	110 A.C.				
Cycles.....	60				

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....	Telering			Manufacturer.....	Telkor Inc., Elmira, O.		
Date installed.....	April, 1937			Manufacturer's			
Location.....	Subd. Room			type.....	Model Ex.		
				Operating voltage.....	110 A.C.		
				Cycles or d. c.....	60 cycles		

POST OR FORT

Banks

Date May 19, 1937.

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT

Wall or floor type? Cabinet

Manufacturer Cooke protectors

Number of verticals 4

Manufacturer's type No. 8

Capacity, protector (vertical) side 120

Order number and date

Protectors equipped 110

Date installed January, 1919.

Capacity, strip (horizontal) side Vertical 6-20 pr.

Date additions made

Terminal strips equipped 6-20 pr.

Drawing numbers and dates showing layout of frame

Fuse protector capacity (pairs)

(D-401-B 2/14/33)

Fuse protectors equipped

Remarks

Do outside lines connect to protectors, fuses, or terminal strips? Terminal Strips

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom	Cook #8	Strip, terminal, 2-point	5-20 pr.
Block, protector, top	#8	Strip, terminal, 3-point	
Coil, heat	#8	Strip, terminal, 4-point	
Dielectric (Mica)		Strip, terminal, 5-point	
Fuse, _____ ampere		Test cord, _____ feet	
Protector group		Test shoe	None
Ring, jumper			

RELAY RACK None, except in Swbd.

Manufacturer

Date installed

Height

Drawing number and date showing layout

Number of bays

Remarks

Relay mounting capacity per bay

Panel COIL AND OTHER RACKS

Manufacturer Constructed locally

Mounts what equipment? Firing Signal Relays.

Coil capacity 8 Relays

Per cent equipped

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT					
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels
FM-5	F.C. Swbd. Rm.	1		23	7	0	0	0

POST OR FORT

Banks

Date May 19, 1937.

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	F.C. & Post. Tel.	
Manufacturer's type			Location	Swbd. Room	
Signal Corps type	Model	1904	Date installed	1908, approx.	
Order number and date					

Apparatus	No. 1 Panel DC-DC			No. 2 Panel AC-DC		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston	45721	50-0-50	Weston		50-0-50
Circuit breaker	Roller-Smith	63327	A-30 V-250	Roller Smith	53778	A-20 V-40 D.C.
Motor starter	Ward-Leonard Ser. #149231	SUE-116	2 H.P. V 125			
Rheostat	Cutler-Hammer #11111 H96	11187	A-1 V-160	Ward-Leonard		
Voltmeter	Weston #29982		0-150	Weston 28598		0-150
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	2	Controller, zone signal	0	Switch key, set	0
Bell, T. I., small	2	Hand set	0	Telephone, B. C.	9
Bell, zone sig.	0	Head set	19	Telephone, desk	0
Bell, ext. L. R.	0	Outlet, zone sig.	0	Telephone, gun	0
Box, junc., std.	1	Signal, firing, B. C.	0	Telephone, plotters	0
Box, junc., T. R.	1	Signal, firing, pit	4	Telephone, wall C.A.T.	10
Box, T. I., bell	2	Switch, hand set	0	Switchboards, BD-74	0
Box, term., 2-strip	2	Switch, push, zone sig.	0	Switchboards, BD-78	0
Box, term., 4-strip	0	Switch box, base line	2	Other apparatus:	
Box, term., 8-strip	0	Switch box, cut-out	1		
Box, term., _____ strip		Switch box, transfer	0		
		Switches 5 P.D.T.	4		

POST OR FORT **Banks**Date **May 19, 1937.**TIME INTERVAL APPARATUS **None.**

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks

METEOROLOGICAL EQUIPMENT **None.**

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION **None**

Material of mast	Year installed
Height of mast	Year last painted

Apparatus	Signal Corps type	Number installed	Books	Edition (year)

NIGHT SIGNALING EQUIPMENT **None**

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used
Hospital Bldg. #20	Contract	None			
Med. Barracks #6	# 1048-sc-8	None			
	(Sched. "B"				
	dated 6/2/27)				

POST OR FORT BanksDate May 19, 1937.

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	284	0	9-W MCO	506	0	6-foot		
4-way MCD	4600	0	Single CWD			5 ft. dia.	27	none
2-way MCD	1613	0	4-way fiber			4-foot		
Single CD	311	0	2-way fiber	628	0	22" x 40"		
2-way CWD	145	0	Single fiber			Other sizes:		
			Iron pipe	1150	Estimated			

Drawing number and date of conduit plant A-100-1a, dated 1933 & A100-2 dated 1929.

CABLE SYSTEM
(Give approximate total lengths installed)

type	Gage	Feet	Added since last report		Gage	Feet	Added since last report
100 pair 213	16	283	none	30 pair 405	19	5405	none
100 pair 214	16	190		20 pair 403	19	2377	
100 pair 216	16	452		6 pair 215	16	1282	
100 pair 251		2200		15-pair 402	19	851	
100 pair 512		600		10-pair 401	19	3457	
100-pair				10-pair 411	22	540	
100-pair				Other sizes:			
75-pair 408	19	4987		RLC & A 218	16	345	
50-pair 407	19	743		1 pr. 643	10	1510	
50-pair				Approximate number of Signal Corps poles <u>none</u>			
				Approximate number of joint poles <u>N.E. T & Tel. Co. pole</u>			

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair FX			
50-pair				10-pair		8	
25-pair				Other sizes:			
20-pair				10 pr.		3	
				5 pr.		3	

Drawing number and date of cable plant A-100-1a, 1933, A100-2, 1929.

POST OR FORT **Banks**Date **May 19, 1937.**

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories.....	\$ 900.00	Outside telephone plant.....	\$ 2000.00
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....	1000.00	TOTAL.....	\$3900.00

FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system.....	\$ 22560.00	Telephone and other equipment.....	\$ 800.00
F. C. power equipment.....	1500.00	TOTAL.....	24,360.00

TRUNKS AND TIE LINES

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
Bos. Army Base, Boston	N.E.T. & T.Co.	1	\$ 228.00	\$ (To accounts Army Base)		
Winthrop	"	3	58.44			

STATION EQUIPMENT

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		75	3	3	
Hand set.....	21				
Wall.....		8			
TOTAL.....	21	83	3	3	

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
	Ft. Banks (71 lines)	27	18	1	0		A	
		39	3	0	0		B	
		9	0	7	0		C	
	Totals	75	21	8	0			

Date May 19, 1937.

[illegible]

U. S. GOVERNMENT PRINTING OFFICE

335. 14/3 - EF Inc 1

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HC/mm

IN REPLY SigO 333.9-Ft. Banks
REFER TO:

Boston ARMY BASE, BOSTON, MASS.

August 8, 1938.

SUBJECT: Inspection of Signal Corps Wire Plant in Place at Fort Banks, Mass., for the period ending June 30, 1938.

TO: Signal Officer, First Corps Area, Boston Army Base, Boston, Mass.

Last Inspection Made May 19, 1937, by H. Caldwell, Electrical Ass't, S.S.L.

This Inspection Made July 5, 1938 by H. Caldwell, Electrical Ass't, S.S.L.

I. SWITCHBOARD, MANUAL, AND ATTENDANTS CABINET.

1. Switchboard.

a. The administrative telephone switchboard remains in the same good condition as noted in reports of the past ten years during which time it has been in service. No serious deterioration or damage to parts has been noted.

b. The necessity for a switchboard with greater capacity is not as great now as it was a year ago since a reduction has been made in lines connected and ten spare circuits are now available.

c. The line, cord, trunk and miscellaneous circuits are in good condition.

II. AUTOMATIC EQUIPMENT.

None.

III. STORAGE BATTERY.

a. The battery is sufficiently large for the system.

b. It is charged regularly by the trickle method. However, the batteries may be charged by the "cycle" method by either of two machines installed for the purpose.

c. Storage battery report, Form #43 is kept and submitted regularly.

d. The plates are neither sulphated, buckled nor cracked, and the battery as a whole is in good condition.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.

1. Motor Generator.

a. Two machines are available for charging - one for direct current and one for alternating current operation. They are in good condition and operating properly.

2. Ringing Machine. None installed.

3. Rectifier.

a. This equipment is securely mounted, is properly adjusted and operates satisfactorily.

8/8/38

4. Ringling Vibrator.

- a. The equipment is securely mounted, is clean and properly adjusted.
- b. It has given no trouble and does not interfere with radio reception.

V. POWER PANEL.

- a. The panels are ample for all purposes and are securely mounted and braced.
- b. The slate bases need a coating of stain to improve their appearance.
- c. The voltmeters, ammeters, circuit breakers and switches are all operating properly.

VI. DISTRIBUTING FRAME. (Fire Control Type)

- a. The equipment is securely mounted and braced and is suitably painted.
- b. The frame is congested with cable forms. However, the facilities for cross connections are unobstructed.

VII. WIRE CHIEF'S TEST EQUIPMENT.

- a. A test set type EE-65 is made available and arranged for readily testing the lines and cables.
- b. Other instruments are also available at the storeroom.

VIII. RELAY RACK. None

IX. RECORDS.

- a. Drawings of the cable and manhole system are on hand but are not drawn to the present Signal Corps standard.
- b. Manufacturers' drawings of the front and rear switchboard assemblies and circuits are also on hand.
- c. The Signal Corps standard line record cards are not in use.
- d. Battery records are properly kept and form #43 is submitted regularly.
- e. Property records are satisfactory.
- f. The use of all facilities are covered by suitable licenses.

X. MISCELLANEOUS.

- a. The operators for the post administrative telephone switchboard are Coast Artillery men. Three are provided.
- b. One man only can be employed on the board at a time; the schedule for reliefs is at 6:30 AM, 12:30 PM and 6:30 PM.
- c. The schedule and service is satisfactory.
- d. Additional operators are not needed.
- e. Local directories are not provided.
- f. Checks of traffic are made when requested.
- g. Telephones are properly classified.
- h. The number of trunk lines cannot be conveniently reduced. No more are required.

8/8/38

XI. STOREROOM.

- a. The storeroom is suitably located, and is neat and clean.
- b. The equipment is properly stored and ample supplies are on hand.
- c. Equipment in excess of that required is not allowed to accumulate.
- d. Articles not now required and available for disposition are as follows:

7 Linemen test sets (magneto and receiver)
2 " magnetos

XII. CONDUIT SYSTEM.

- a. No increase in the number of ducts or the number of manholes in the system has been made since the last inspection.
- b. On the other hand, a manhole in an area which has been filled and graded was buried several feet. To render the conduit run serviceable, the walls of the manhole should be built up and the cover installed to conform to the final ground line, or level.
- c. All manholes have covers and are readily accessible, except as noted above.
- d. Manholes Nos. 1 and 1 a retain water during the rainy season and do not drain readily.
- e. Manholes are not provided with cable racks.

XIII. CABLE SYSTEM.

- a. Aerial cable is not employed on the post.
- b. The terminal to terminal insulation of the underground cables is satisfactory for good telephonic communication.
- c. The cables are not properly racked in the manholes and cannot be, because of insufficient slack for the purpose.
- d. The short cable from the terminal box in Battery Kellogg to the firing signal at the battery is defective and cannot be used in its present condition.
- e. A short telephone communication cable is also defective, having been cut by PWA workers. It will be repaired by local personnel.

XIV. POLES, CROSSARMS, ETC.
NoneXV. TERMINALS.

- a. The wiring of the terminals has been straightened up and the terminals are now in good condition.

XVI. WIRES.

No open wire system installed.

XVII. TARGET RANGE COMMUNICATION SYSTEM.
None installed.XVIII. TELEPHONE STATION EQUIPMENT.

- a. The stations were tested for line defects and were found to be in satisfactory operating condition.
- b. Telephones are suitably mounted and the wiring is satisfactory in general. In the basement of the Commissary the wiring is not securely installed.

A complete overhauling is recommended. X

XIX. TELEGRAPH STATION.

None.

XX. FIRE CONTROL SYSTEM.

1. Stations and Batteries.

- a. The telephones in the stations are securely installed.
- b. Moisture conditions in the stations are normal, consequently the wiring is not noticeably affected. The woodwork of the instruments has been refinished recently.
- c. Each line and instrument was tested for its specific requirements.
- d. The time interval bell system is also ⁱⁿ good order, and operating properly.

2. Battery Emplacements.

- a. The battery commander's telephones, firing signals and time interval bells are securely installed and suitably painted.
- b. All telephones and bells are in working condition.
- c. The firing signals are not connected to their designated battery commander's stations. X

d. At Battery Kellogg the cable to the emplacement firing signals is defective and replacement is necessary. X

3. Time Interval Apparatus, Panel & Circuits.

- a. No time interval mechanism or panel are installed.

4. Fort Signal Station. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS.

a. Changes in system since last inspection:

- (1) Telephones added - 3
- (2) Trunks added - none
- (3) Trunks discontinued - none
- (4) The necessary cable has been received at the post for installation between the switchboard room and the plotting rooms for Batteries Lincoln and Kellogg. This new cable will provide the necessary lines required in the revised fire control system.
- (5) The necessity for locating and raising the walls of a buried manhole in the conduit line leading to Fort Heath, as noted in paragraph XII b will be apparent.

b. Other matters which require attention are as follows:

- (1) Defective cable at Battery Kellogg required for the B.C. firing signals. X
- (2) Defective cable in the post telephone system at the barracks. X
- (3) The disposal of 9 linemen's magneto test sets. X

H. Caldwell
H. Caldwell,
Electrical Ass't, S.S.L.

SigO 333.9-Fort Banks

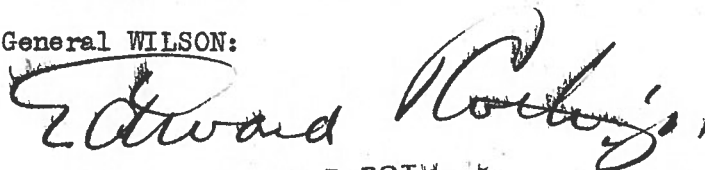
1st Ind.

HC/mm

Headquarters First Corps Area, Boston, Mass. August 15, 1938. Thru: Commanding General, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 a, AR-105-20, and return of three copies to this headquarters.

By command of Brigadier General WILSON:



EDWARD ROTH, JR.
Lieut. Colonel, A. C. D.
Acting Adjutant General.

2nd Ind.

/hgc

Hq. 1st C. A. Dist., Boston Army Base, Boston, Mass., August 17, 1938--To C.O.,
HD of Boston, Ft. Banks, Mass.

Rec'd HD of Boston AUG 18 1938

*OK
check
in file*

my
B. V.

AE-333.9 - Fort Banks

3rd Ind.

Headquarters Harbor Defenses of Boston, Fort Banks, Mass., August 19, 1938 - -To: Commanding General, First Corps Area, Army Base, Boston, Mass. Thru: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and discrepancies noted.
2. Changes recommended and discrepancies noted by Signal Corps Inspector in his report, basic communication, under paragraphs indicated, will be accomplished as follows:
 - a. Paragraph I b. Slate panel has been cleaned and coat of stain applied.
 - b. Paragraph IX a. Drawings of cable and man-hole systems are being revised to comply with Signal Corps standards.
 - c. Paragraph IX c. Signal Corps standard record cards are not in use due to the inability of obtaining this form. The forms were requisitioned on requisition No. 136-3-SC-38, November 17, 1937, but have not been received.
 - d. Paragraph XI d. The excess property in storage will be reported to the Corps Area Signal Officer for disposition.

AE-333.9 - 3rd Ind. (8-19-38) Cont'd

e. Paragraph XII b. The man-hole in cable system which has been covered by fill will be uncovered and built up.

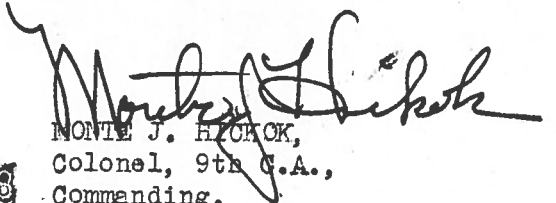
f. Paragraph XIII e. The defective cable has been replaced by local personnel.

g. Paragraph XVIII b. The wiring on basement of Commissary has been overhauled and secured properly.

h. Paragraph XX 2c. The firing signals have not been connected due to insufficient cable pairs. New cable, now on hand, will be installed.

i. Paragraph XX 2d. See above paragraph.


j. Paragraph XX 3a. Time interval mechanism for supplying T. I. power to apparatus at Fort Banks is located at Fort Heath.


MONTE J. HOCK,
Colonel, 9th C.A.,
Commanding.

4th Ind.

Hq. 1st C. A. Dist., Boston Army Base, Boston, Mass., August 23, 1938--To
Commanding General, First Corps Area, Boston, Mass.

/hgc


R. T. C.

REC'D O SIG O. F. C. A. AUG 24 1938

SigO 333.9-Fort Banks

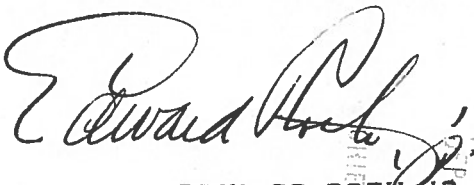
5th Ind.

EEC/rec

Headquarters First Corps Area, Boston, Mass. September 1, 1938. To:
The Adjutant General, War Department, Washington, D. C.

Approved.

For the Commanding General:


EDWARD ROTH, JR.
Lieut. Colonel, A. G. D.
Acting Adjutant General.

10 Received A. G. D. SEP 6 1938

RECEIVED
SEP 2 54 PM '38
OFFICE OF THE
ADJUTANT GENERAL

POST OR

A. D. P. C. E.

72

POST OR FORT FORT BANKS, MASS.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Title sheet, and #11

Rendered by H. CALDWELL,
Rank Electrical Ass't, S.S.I.
Date July 5, 1938.

1. OCCA 333.14/3EM Doc. 11

POST OR FORT FORT BANKS, MASS.

Date July 5, 1938.

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS

	Value		Value
Telephone switchboard and accessories.....	\$900.00	Outside telephone plant.....	\$ 2000.00
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....	1000.00	TOTAL.....	\$3900.00

FIRE-CONTROL SYSTEM

	Value		Value
Cables and conduit system.....	\$22,560.00	Telephone and other equipment.....	\$ 800.00
F. C. power equipment.....	1,500.00	TOTAL.....	24,860.00

TRUNKS AND TIE LINES

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
Boston Army Base	N.E.T. & T. Co.	1	\$228.00	} Charged to Army Base telephone acc't		
Winthrop	"	3	58.44			

STATION EQUIPMENT

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		81	3	1	
Hand set.....		19			
Wall.....		7			
TOTAL.....		107			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
	88 - Main Lines	20	11	0			A	
		39	1	5			B	
		7	0	5			C	
	43 - Extensions	14	4	0			A	
		20	3	0			B	
		1	0	1			C	
		101	19	11	(Includes 18 lines to Harbor Posts.)			

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HC/mm

Boston ARMY BASE, BOSTON, MASS.

IN REPLY SigO 333.9 -Deer Island, Mass.
REFER TO:

October 27, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Deer Island, Mass.,
for the period ending June 30, 1937.

TO: Signal Officer, First Corps Area.

Last Inspection made: March 19, 1936, by L. L. Hill, Ass't Elec. Engr., SSL.

This Inspection made: September 1, 1937, by Henry Caldwell, Elec. Ass't SSL.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET.

No post administrative telephone switchboard installed.

II. AUTOMATIC EQUIPMENT.

None.

III. STORAGE BATTERY.

None.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.

None.

V. POWER PANEL.

None.

VI. DISTRIBUTING FRAME.

None.

VII. WIRE CHIEF'S TEST EQUIPMENT.

None.

VIII. RELAY RACK.

None.

IX. RECORDS.

The records are kept at Fort Banks. Condition satisfactory.

L. O.CCA. 333.14/3 EB

333.14/3-EB

10/27/37

X. MISCELLANEOUS.

This heading pertains to the operation of the post telephone system and there is nothing to report.

XI. STOREROOM.

None.

XII. CONDUIT SYSTEM.

1. The conduit and manholes are in satisfactory condition. They are of sufficient size to accommodate any cables which may be used on the reservation.
2. All cables are not racked, or can be unless sufficient slack for the purpose is spliced in. The cables otherwise are in satisfactory condition.

XIII. AERIAL CABLE SYSTEM.

None.

XIV. POLES, CROSSARMS, ETC.

None.

XV. TERMINALS.

Good condition. All Signal Corps type.

XVI. WIRES.

None.

XVII. TARGET RANGE COMMUNICATION SYSTEM.

None.

XVIII. TELEPHONE STATION EQUIPMENT.

None.

XIX. TELEGRAPH STATION.

None.

XX. FIRE CONTROL SYSTEM.

1. Stations.

The following equipment is in good condition:

Telephones	Wall C.A.T.
"	Desk C.A.T.
"	B.C.
"	Hand Sets
"	Head Sets

Time Interval Bells

Terminal Boxes

Terminal Strips

Terminal Blocks

2.

333.14/3-EO

SigO 333.9-Deer Island, Mass.

10/27/37

2. Time Interval Apparatus, Panel & Circuits.
None installed.
3. Signal Stations. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

- a. No changes have been made in the communications system.
- b. An excavation has been made for a new switchboard room and a fire control station but construction work has been discontinued.
- c. No recommendations are made.



Henry Caldwell,
Electrical Assistant, S.S.L.

SigO 333.9-Deer Island, Mass.

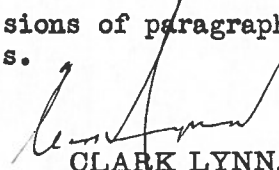
1st Ind.

HC/mm

Headquarters First Corps Area, Boston, Mass. October 28, 1937. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 (a) AR 105-20 and return of three copies to this headquarters.

By command of Brigadier General WILSON:


CLARK LYNN,
Colonel, A.G.D.,
Adjutant General,

1 OCCA 333.14/3EB Inc. 11

POST OR FORT Deer Island

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets 1 to 13 Inclusive

Rendered by

Henry Caldwell

Rank Henry Caldwell,
Electrical Assistant, S.S.D.

Date September 1, 1937.

333.14/3-EB Inc. 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Deer Island, Mass.

Date September 1, 1937.

TELEPHONE SWITCHBOARD NONE

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout...
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS NONE

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			
Drawing number and date showing central office layout.....			

POST OR FORT Deer Island, Mass.Date September 1, 1937

SWITCHBOARD CABLE NONE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green		Relay, supervisory, answering	
Cap, lamp, red		Relay, supervisory, calling	
Cap, lamp, white		Relay	
Capacitor		Relay	
Coil, repeating		Signal	
Cord, connecting		Socket, lamp	
Key, ringing and listening		Weight, cord	
Key, listening		Apparatus not listed:	
Key, ringing			
Plug, cord			

OPERATOR'S TELEPHONE CIRCUIT NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction		Key, operator's switching	
Coil, repeating		Receiver	
Coil, retardation		Relay	
Capacitor		Plug, operator's set	
Cord, breast set		Transmitter	
Cord, receiver		Apparatus not listed:	
Cord, transmitter			

POST OR FORT Deer Island, Mass.Date September 1, 1937.AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS
NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, amperes.....		Resistor, ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT Deer Island, Mass.Date September 1, 1937.

TRUNK CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitor.....		Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET NONE

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK NONE

		Number installed
Date installed.....	Monitor ccts.....	
Manufacturer and code number.....	Inc. trk. ccts.....	
Cct. dwg. number and date.....	Outgoing trk. ccts.....	
Remarks.....	Cord ccts.....	

 TARGET RANGE SYSTEM NONE
 (Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Deer Island, Mass.Date September 1, 1937.

AUTOMATIC SWITCHBOARD NONE
(Describe attendant's cabinet on sheets 1 to 4)

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION NONE

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT Deer Island, Mass.Date September 1, 1937.

STORAGE BATTERIES NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....				Manufacturer's type			
A. H. capacity.....				hydrometer.....			
Manufacturer.....				Location.....			
Manufacturer's type.....				Furnishes power for.....			
Date installed.....				Trickle, float, or			
Date new elements				cycle charged.....			
installed.....				How often?.....			
In cabinet or on rack?.....				At what rate?.....			
Which side grounded?.....				Remarks.....			
Manufacturer's type							
thermometer.....							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Signal Corps type.....		
Kw. output.....			Order number and		
Operating voltage.....			date.....		
Cycles or d. c.....			Location.....		
Generator serial number.....			Charges what battery?.....		
Motor serial number.....					

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's			
Location.....				type.....			
				Operating voltage.....			
				Cycles or d. c.....			

POST OR FORT Deer Island, Mass.Date September 1, 1937.DISTRIBUTING FRAME AND PROTECTING EQUIPMENT **NONE**

Wall or floor type.....	Manufacturer.....
Number of verticals.....	Manufacturer's type.....
Capacity, protector (vertical) side.....	Order number and date.....
Protectors equipped.....	Date installed.....
Capacity, strip (horizontal) side.....	Date additions made.....
Terminal strips equipped.....	Drawing numbers and dates showing layout of frame.....
Fuse protector capacity (pairs).....	Remarks.....
Fuse protectors equipped.....	
Do outside lines connect to protectors, fuses, or terminal strips?.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom.....		Strip, terminal, 2-point.....	
Block, protector, top.....		Strip, terminal, 3-point.....	
Coil, heat.....		Strip, terminal, 4-point.....	
Dielectric (Mica).....		Strip, terminal, 5-point.....	
Fuse, ampere.....		Test cord, feet.....	
Protector group.....		Test shoe.....	
Ring, jumper.....			

RELAY RACK **NONE**

Manufacturer.....	Date installed.....
Height.....	Drawing number and date showing layout.....
Number of bays.....	Remarks.....
Relay mounting capacity per bay.....	

COIL AND OTHER RACKS **NONE**

Manufacturer.....	Mounts what equipment?.....
Coil capacity.....	
Per cent equipped.....	

FIRE CONTROL DISTRIBUTING FRAMES **NONE**

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	Other equipment

POST OR FORT Deer Island, Mass.Date September 1, 1937POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD ~~NONE~~

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Controls what batteries?.....		
Manufacturer's type.....			Location.....		
Signal Corps type.....			Date installed.....		
Order number and date.....					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter.....						
Circuit breaker.....						
Motor starter.....						
Rheostat.....						
Voltmeter.....						
Other equipment:						

FIRE-CONTROL EQUIPMENT ~~NONE~~

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large.....	0	Controller, zone signal.....	0	Switch key, set.....	0
Bell, T. I., small.....	6	Hand set.....	5	Telephone, B. C.....	3
Bell, zone sig.....	0	Head set.....	18	Telephone, desk.....	6
Bell, ext. L. R.....	2	Outlet, zone sig.....	0	Telephone, guh.....	0
Box, junc., std.....	0	Signal, firing, B. C.....	0	Telephone, plotters.....	0
Box, junc., T. R.....	0	Signal, firing, pit.....	0	Telephone, wall.....	20
Box, T. I., bell.....	0	Switch, hand set.....	2	Switchboards, BD-74.....	0
Box, term., 2-strip.....	5	Switch, push, zone sig.....	0	Switchboards, BD-78.....	0
Box, term., 4-strip.....	1	Switch box, base line.....	0	Other apparatus:	
Box, term., 2 10-strip.....	1	Switch box, cut-out.....	2	Blocks Tel. Exten.....	7
Box, term., 12 1-strip.....	1	Switch box, transfer.....	0	Strips, 12 pr.....	19
Coils, Ret.....	5			" 21 pr.....	15

POST OR FORT Deer Island, Mass. Date September 1, 1937.

TIME INTERVAL APPARATUS NONE

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks

METEOROLOGICAL EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION NONE

Material of mast			Year installed	
Height of mast			Year last painted	
Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets.....				

NIGHT SIGNALING EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST NONE

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT Deer Island, Mass.Date September 1, 1937.

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
9D MCD	42		Single CWD			5	12	
6-way MCD	182					4-foot		
8D MCD	198							
4-way MCD	461		4-way fiber			4-foot		
3D MCD	59		2-way fiber			22" x 40"		
2-way MCD	15					Other sizes:		
Single CD	131		Single fiber					
2-way CWD			Iron pipe					

Drawing number and date of conduit plant.....

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
30 pr XXX	19	3160	Ty 310	25-pair			
500 pair				6 LCA	#12 Stranded	3852	Ty 56
20 pr. XXX	19	3160	" 308	22 pair			
100 pair							
20	19	490	" 324	15-pair			
100 pair							
15	19	1484	" 322	12	#12 strand	629	Ty 216
100 pair XXX				12 pair			
150-pair				10-pair	19	555	Ty 401
100-pair				10-pair LCA	19	500	Ty 306
100-pair				Other sizes:			
75-pair				1-pr	#12 strand	895	Ty 213
50-pair							
50-pair				Approximate number of Signal Corps poles.....			
				Approximate number of joint poles.....			

TERMINALS (state number of each) **NONE**

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant.....

POST OR FORT Deer Island, Mass.Date September 1, 1937PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE NONE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS

	Value		Value
Telephone switchboard and accessories.....	\$.....	Outside telephone plant.....	\$.....
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....		TOTAL.....	

FIRE-CONTROL SYSTEM

	Value		Value
Cables and conduit system.....	\$ 7720.00	Telephone and other equipment.....	\$ 1400.00
F. C. power equipment.....		TOTAL.....	9120.00

TRUNKS AND TIE LINES none

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
			\$.....	\$.....	\$.....	\$.....

STATION EQUIPMENT NONE

Manufacturer.....

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....					
Hand set.....					
Wall.....					
TOTAL.....					

LIST OF TELEPHONES NONE

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HC/mm

Boston ARMY BASE, BOSTON, MASS.

IN REPLY
REFER TO: SigO 333.9-Ft. Duvall, Mass.

December 6, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Duvall, for the period ending June 30, 1937.

TO: Signal Officer, First Corps Area, Boston Army Base, Boston, Mass.

Last Inspection made March 26, 1936 by L. L. Hill, Ass't Electrical Engr., S.S.L.

This Inspection made September 9, 1937 by H. Caldwell, Electrical Ass't, S.S.L.

I. SWITCHBOARD, MANUAL AND ATTENDANTS CABINET
None.

II. AUTOMATIC EQUIPMENT
None.

III. STORAGE BATTERY
None.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT
None.

V. POWER PANEL
None.

VI. DISTRIBUTING FRAME
None.

VII. WIRE CHIEF'S TEST EQUIPMENT
None.

VIII. RELAY RACK
None.

IX. RECORDS

The records on hand are satisfactory. However, they should be revised to conform to present Signal Corps standards.

X. MISCELLANEOUS
Nothing to record.

XI. STOREROOM
None.

1 OCCA 333.14/3-EJ

333.14/3-EJ

SigO 333.9-Ft. Duvall

12/6/37

XII. CONDUIT SYSTEM
Satisfactory.

XIII. CABLE SYSTEM
Satisfactory.

XIV. POLES, CROSSARMS, ETC.
None.

XV. TERMINALS
None.

XVI. WIRES
None.

XVII. TARGET RANGE COMMUNICATION SYSTEM
None.

XVIII. TELEPHONE STATION EQUIPMENT
None.

XIX. TELEGRAPH STATION
None.

XX. FIRE CONTROL SYSTEM
All telephones have been removed from the stations and placed in storage for preservation.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE
None.



H. Caldwell
Electrical Ass't, S.S.L.

SigO 333.9-Ft. Duvall

1st Ind.

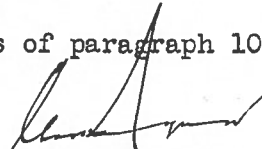
/mm

Headquarters First Corps Area, Boston, Mass. December 6, 1937. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 (a) AR 105-20 and return of three copies to this headquarters.

By command of Major General Conner:

Red 1st C.A.D. DEC 7 - 1937



OLARK LYNN,
Colonel, A. G. D.,
Adjutant General

2.

333.14/3-EJ

OCCA 333.14/3-EJ Sm. 1

POST OR FORT Fort Duvall

DESCRIPTIVE DATA RECORD OF SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Title, 8, 10 and 11

Rendered by

H. Caldwell

H. Caldwell

Rank

Electrical Asst., S.S.I.

Date

Sept. 9, 1937.

POST OR FORT Fort Duvall, Mass.

Date Sept. 9, 1937

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD NONE.

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Controls what batteries?.....		
Manufacturer's type.....			Location.....		
Signal Corps type.....			Date installed.....		
Order number and date.....					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter.....						
Circuit breaker.....						
Motor starter.....						
Rheostat.....						
Voltmeter.....						
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number Installed	Apparatus	Number Installed	Apparatus	Number Installed
Bell, T. I., large.....	2	Controller, zone signal.....		Switch key, set.....	
Bell, T. I., small.....	1	Hand set.....		Telephone, B. C.....	
Bell, zone sig.....		Head set.....	7	Telephone, desk.....	
Bell, ext. L. R.....		Outlet, zone sig.....		Telephone, gun.....	2
Box, junc., std.....		Signal, firing, B. C.....		Telephone, plotters.....	
Box, junc., T. R.....		Signal, firing, pit.....		Telephone, wall.....	5
Box, T. I., bell.....	2	Switch, hand set.....		Switchboards, BD-74.....	
Box, term., 2-strip.....		Switch, push, zone sig.....		Switchboards, BD-78.....	
Box, term., 4-strip.....		Switch box, base line.....		Other apparatus: Blocks Ex.....	4
Box, term., 8-strip.....	1	Switch box, cut-out.....		Strips 21 pr.....	10
Box, term., _____ strip.....		Switch box, transfer.....			
Term. T.M. 88.....	4	Frame FM-7.....	1		

POST OR FORT Fort Duvall, Mass.Date Sept. 9, 1937.

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD			Single CWD			6-foot		
4-way MCD	61		4-way fiber			4-foot		
12-MCD	107		2-way fiber			22" x 40"		
2-way MCD			Single fiber			Other sizes:		
Single CD			Iron pipe					
2-way CWD								

Drawing number and date of conduit plant.....

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				25-pair			
400-pair				25-pair			
300-pair				15-pair	19	220	
200-pair				15-pair			
150-pair				10-pair			
100-pair				10-pair			
100-pair				Other sizes:			
75-pair				1 pr.	17	925	
50-pair	19	365		Approximate number of Signal Corps poles.....			
50-pair				Approximate number of joint poles.....			

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant.....

POST OR FORT Fort DuvallDate Sept. 9, 1937.PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories.....	\$.....	Outside telephone plant.....	\$.....
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....		TOTAL.....	

FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system.....	\$940.00	Telephone and other equipment.....	\$ 430.00
F. C. power equipment.....		TOTAL.....	\$1370.00

TRUNKS AND TIE LINES NONE

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
.....	\$.....	\$.....	\$.....	\$.....
.....
.....
.....
.....
.....
.....
.....
.....

STATION EQUIPMENT

Manufacturer.....					
Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		2			
Hand set.....					
Wall.....					
TOTAL.....					

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
	Caretaker	2					B	
.....
.....
.....
.....
.....
.....

HEADQUARTERS FIRST CORPS AREA
OFFICE OF THE SIGNAL OFFICER

HC/rec

Boston ARMY BASE, BOSTON, MASS.

IN REPLY

REFER TO: SigO 333.9 (Fort Heath)

October 14, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Heath
for the period ending June 30, 1937.

TO: Signal Officer, First Corps Area, Boston, Mass.

Last inspection made: March 18, 1936 by L. L. Hill, Assistant Electrical
Engineer, S.S.L.

This inspection made: June 3, 1937 by H. Caldwell, Electrical Assistant,
S.S.L.

- I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET.
None, except fire control.
- II. AUTOMATIC EQUIPMENT. None.
- III. STORAGE BATTERY.
Fifteen type E-5 cells are installed. The deterioration is about
60 per cent. These are kept in a dry condition for preservation.
- IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.
Operates properly and in satisfactory condition.
- V. POWER PANEL.
The motor starter, field resistance, circuit breaker, switches,
voltmeter and ammeter are in good condition and operate satis-
factorily
- VI. DISTRIBUTING FRAME.
Satisfactory; a fire control type only is installed.
- VII. WIRE CHIEF'S TEST EQUIPMENT.
None permanently installed.
- VIII. RELAY RACK. None.

333.14/3-EC

1. OCCA. 333.14/3 EC

10/14/37

IX. RECORDS.

The records of the plant are not up to date or in accordance with the latest Signal Corps standards. ✓

X. MISCELLANEOUS.

This heading pertains to the operation of a post administrative telephone system and there is nothing to report at this post.

XI. STOREROOM.

Satisfactory; no equipment is stored.

XII. CONDUIT SYSTEM.

Satisfactory; the average size of manholes is 4 feet in diameter. The cables are tagged for identification.

XIII. CABLE SYSTEM. None.XIV. POLES, CROSSARMS, ETC. None.XV. TERMINALS.

All are of the standard fire control type and are in good condition.

XVI. WIRES. Aerial - none.XVII. TARGET RANGE COMMUNICATION SYSTEM. None.XVIII. TELEPHONE STATION EQUIPMENT. Satisfactory.XIX. TELEGRAPH STATION. NoneXX. FIRE CONTROL SYSTEM.

1. The greater part of the equipment installed here is of the original installation placed in operation about 1908. The average depreciation has been low, thus with the same care and maintenance as heretofor it is expected this apparatus will give good service for a long time without extensive replacements.

2. Stations and Batteries.

a. The following equipment located in the stations is in good condition:

Base line and transfer switch boxes
Cut out switch boxes
Switch key sets
Wall telephones and extensions
Time interval bells
Battery Commanders firing signals
Terminals and connecting equipment
Head and hand set telephones.

10/14/37

- b. The following equipment located in the batteries, power plants and search lights is also in good condition.
 - Telephones, with waterproof cases
 - Time interval bells, with waterproof cases
 - Headset telephones
 - Junction and emplacement outlet boxes.
- 3. Time Interval Apparatus, Panel and Circuits.
 - a. The time interval mechanism type EE-56 and panel type BD-15 are in good condition and operate properly.
- 4. Fort Signal Stations. None.
- 5. The other units of equipment noted under various headings herein pertain particularly to the fire control communication system also.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

- 1. Changes in system since last inspection have consisted of a rearrangement of circuits and instruments to conform with the recently approved fire control plan.
- 2. The approved plan also requires changes in the cable system to provide the required number of circuits, namely:
 - a. An extension of the cable system from plotting room Winthrop to the antiaircraft battery.
 - b. The installation of an additional 25 pair cable between plotting room Winthrop and manhole number 20 to be spliced to existing cable to the Switchboard Room.
 - c. The installation of a 50 pair cable between B'S'-BC Kellogg and the switchboard room.
- 3. The work can be done at any time and is necessary for the adaption of the new fire control switchboard with improved circuits and methods of operation.

H. Caldwell

H. CALDWELL,
Electrical Assistant, S.S.I.

SigO 333.9 (Fort Heath)

1st Ind.

EEC/rec

Headquarters First Corps Area, Boston, Mass. October 14, 1937. Thru:
Commanding General, First Coast Artillery District. To: Commanding
Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10
(a) AR 105-20 and return of three copies to this headquarters.


By command of Brigadier General NUTTMAN:

R. E. Fraile
R. E. FRAILE,
MAJOR, A. G. D.
ASST. ADJUTANT GENERAL

333.14/3-EC

2d Ind.
HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Oct. 15,
1937-To Commanding Officer, HD of Boston, Fort Banks, Mass.

Rec'd HD of Boston OCT 16 1937


F. L. T.

AE-333.9

3rd Ind.

/jms

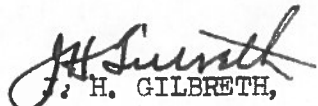
HQ. HD OF BOSTON, FORT BANKS, MASS., November 4, 1937 - To: Commanding
General, First Corps Area, Army Base, Boston, Mass., THRU: Commanding General,
First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and discrepancies
noted.

2. The installation of additional cables, as recommended in paragraph
XXI a, b and c will be made as soon as practicable and when necessary personnel
and equipment are available.

TM

Rec'd 1st C.A.D. NOV 8 1937


J. H. GILBRETH,
Major, 9th C.A.,
Commanding.

4th Ind.
HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Nov. 8,
1937-To Commanding General, First Corps Area, Boston, Mass.

REF
R. E. G.

REC'D O SIG O.F.C.A. NOV 8 1937

SigO 333.9-Fort Heath

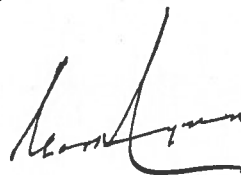
5th Ind.

EEC/mm

Headquarters First Corps Area, Boston, Mass. November 9, 1937. To: The Adjutant
General, War Department, Washington, D. C.

Approved.

For the Commanding General:



4 Received A. G. O. NOV 11 1937

CLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

RECEIVED
NOV 12 9 00 AM '37
OFFICE OF THE
CHIEF SIGNAL OFFICER

333.14/3-EC

1 OCCA 333.14/3 EC Juc. 1.

POST OR FORT Fort Heath, Mass.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets complete

Rendered by H. Caldwell
H. CALDWELL,
Rank Electrical Assistant, S.S.I.
Date June 3, 1937.

333.14/3-EC - Juc. 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Fort Heath, Mass.Date June 3, 1937

TELEPHONE SWITCHBOARD

(Use another sheet for fire-alarm or separate fire-control switchboards)

None

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout...
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			
Drawing number and date showing central office layout.....			

POST OR FORT Fort Heath, Mass.Date June 3, 1937

SWITCHBOARD CABLE

None

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS

None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green		Relay, supervisory, answering	
Cap, lamp, red		Relay, supervisory, calling	
Cap, lamp, white		Relay	
Capacitor		Relay	
Coil, repeating		Signal	
Cord, connecting		Socket, lamp	
Key, ringing and listening		Weight, cord	
Key, listening		Apparatus not listed:	
Key, ringing			
Plug, cord			

OPERATOR'S TELEPHONE CIRCUIT

None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction		Key, operator's switching	
Coil, repeating		Receiver	
Coil, retardation		Relay	
Capacitator		Plug, operator's set	
Cord, breast set		Transmitter	
Cord, receiver		Apparatus not listed:	
Cord, transmitter			

POST OR FORT Fort Heath, Mass.Date June 3, 1937AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS
None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, amperes.....		Resistor, ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT Fort Heath, Mass.Date June 3, 1937TRUNK CIRCUITS **None**

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitor.....		Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET **None**

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK **None**

	Number installed
Date installed.....	Monitor cts.....
Manufacturer and code number.....	Inc. trk. cts.....
Cct. dwg. number and date.....	Outgoing trk. cts.....
Remarks.....	Cord cts.....

TARGET RANGE SYSTEM **None**
(Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Fort Heath, Mass.Date June 3, 1937

AUTOMATIC SWITCHBOARD
(Describe attendant's cabinet on sheets 1 to 4)

None

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			
.....			
.....			
.....			

TELEGRAPH STATION **None**

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
.....	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		
.....			

POST OR FORT Fort Heath, Mass.Date June 3, 1937.

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....	<u>15</u>			Manufacturer's type			
A. H. capacity.....	<u>80</u>			hydrometer.....			
Manufacturer.....				Location.....	{ <u>Fire Control Bombproof Structure</u>		
Manufacturer's type.....	<u>E-5</u>			Furnishes power for.....			
Date installed.....	<u>About 1908</u>			Trickle, float, or			
Date new elements installed.....	<u>0</u>			cycle charged.....			
In cabinet or on rack?.....	<u>Rack</u>			How often?.....			
Which side grounded?.....	<u>Neither</u>			At what rate?.....			
Manufacturer's type thermometer.....				Remarks.....	<u>Not in commission</u>		

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
	<u>Motor -</u>	<u>Generator</u>			
Manufacturer.....	<u>Crocker - Wheeler</u>		Date installed.....	<u>About 1908</u>	
Manufacturer's type.....	<u>C.M.</u>	<u>S.E.C.D.</u>	Signal Corps type.....	<u>MG-5</u>	
Kw. output.....		<u>1 KW</u>	Order number and date.....		
Operating voltage.....	<u>110 DC</u>	<u>45 DC</u>	Location.....	{ <u>Bomb Proof F.C. Structure</u>	
Cycles or d. c.....	<u>D.C.</u>	<u>Amp. 11.1</u>	Charges what battery?.....		
Generator serial number.....	<u>954</u>	<u>955</u>			
Motor serial number.....	<u>code 43050</u>	<u>43030</u>			

RECTIFIERS FOR POST TELEPHONE SYSTEM

None

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES

None

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

None

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's type.....			
Location.....				Operating voltage.....			
				Cycles or d. c.....			

POST OR FORT Fort Heath, Mass. Date June 3, 1937DISTRIBUTING FRAME AND PROTECTING EQUIPMENT None

Wall or floor type?	Manufacturer
Number of verticals	Manufacturer's type
Capacity, protector (vertical) side	Order number and date
Protectors equipped	Date installed
Capacity, strip (horizontal) side	Date additions made
Terminal strips equipped	Drawing numbers and dates showing layout of frame
Fuse protector capacity (pairs)	Remarks
Fuse protectors equipped	
Do outside lines connect to protectors, fuses, or terminal strips?	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom		Strip, terminal, 2-point	
Block, protector, top		Strip, terminal, 3-point	
Coil, heat		Strip, terminal, 4-point	
Dielectric (Mica)		Strip, terminal, 5-point	
Fuse, _____ ampere		Test cord, _____ feet	
Protector group		Test shoe	
Ring, jumper			

RELAY RACK None

Manufacturer	Date installed
Height	Drawing number and date showing layout
Number of bays	Remarks
Relay mounting capacity per bay	

COIL AND OTHER RACKS None

Manufacturer	Mounts what equipment?
Coil capacity	
Per cent equipped	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	Other equipment
FM-5	Swbd. Room	2		26	4	0	0	1	20 condensers

POST OR FORT

Fort Heath, Mass.

Date June 3, 1937

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	FC and PTS	
Manufacturer's type			Location	Swbd. Room	
Signal Corps type	BD-17		Date installed	About 1908	
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston	51072	50-0-50 15 amp.			
Circuit breaker	Roller-Smith	63325	250 volts 3/4 H.P.			
Motor starter	Ward Leonard	S.U.E.	110 volt Ser. No. 133728			
Rheostat	Ward Leonard	FM 21.2	220 volt Ser. No. 133622			
Voltmeter	Weston	32632	0-150			
Other equipment:						
one 6 pt. Vm. sw.	3 Switches, 50 amp.		6 switches DPST 25 amp.			
Voltmeter	Weston	62532	0-3			

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	3	Controller, zone signal	0	Switch key, set	0
Bell, T. I., small	4	Hand set	5	Telephone, B. C.	1
Bell, zone sig.	0	Head set	32	Telephone, desk	0
Bell, ext. L. R.	1	Outlet, zone sig.	0	Telephone, gun	3
Box, junc., std.	0	Signal, firing, B. C.	2	Telephone, plotters	0
Box, junc., T. R.		Signal, firing, pit	0	Telephone, wall	30
Box, T. I., bell	3	Switch, hand set	3	Switchboards, BD-74	0
Box, term., 2-strip	4	Switch, push, zone sig.	0	Switchboards, BD-78	
Box, term., 4-strip	1	Switch box, base line	0	Other apparatus:	
Box, term., 8-strip	1	Switch box, cut-out	4	Coils retard	60
Box, term., strip		Switch box, transfer	0	Blocks ext.	9
				Strips, 12 pr.	40
				Strips, 21-pr.	4

POST OR FORT Fort Heath, Mass.Date June 3, 1937

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	154		9-way MCD	360		5-foot	2	
			Single CWD			6-foot		
4-way MCD	678		12-way MCS	43		4-foot	15	
			4-way fiber			3-foot	10	
2-way MCD	83		2-way fiber			22" x 40"		
3-way MCD	490		Single fiber			Other sizes:		
Single CD								
8-way MCD	170		Iron pipe					
2-way CWD								

Drawing number and date of conduit plant.....

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				25-pair	22	702	none
400-pair				25-pair			
300-pair				15-pair	19	28	
200-pair				15-pair			
150-pair				10-pair	19	1008	
100-pair				6-pair	12	167	
100-pair				10-pair			
				Other sizes:			
				1-pair	#12	857	
75-pair	19	750	none	1-pair Pow. #00		362	
				1-pair Pow. #10		259	
50-pair				Approximate number of Signal Corps poles.....			
30pair	19	926		Approximate number of joint poles.....			
50-pair							

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
2-strip F.C.		4		10-pair			
50-pair				Other sizes:			
4-strip F.C.		1					
25-pair							
8-strip F.C.		1					
20-pair							

Drawing number and date of cable plant.....

POST OR FORT Fort Heath, Mass.Date June 3, 1937

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories.....	\$.....	Outside telephone plant.....	\$ <u>75.00</u>
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....	<u>75.00</u>	TOTAL.....	<u>\$150.00</u>
FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system.....	\$ <u>7995.00</u>	Telephone and other equipment.....	\$ <u>1865.00</u>
F. C. power equipment.....	<u>640.00</u>	TOTAL.....	<u>\$10500.00</u>

TRUNKS AND TIE LINES None

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
.....	\$.....	\$.....	\$.....	\$.....
.....
.....
.....
.....
.....
.....
.....
.....

STATION EQUIPMENT

Manufacturer.....

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		<u>1</u>			
Hand set.....					
Wall.....		<u>3</u>			
TOTAL.....					

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
	<u>Caretaker</u>			<u>1</u>			<u>B</u>	
	<u>Storehouse</u>	<u>1</u>					<u>B</u>	
	<u>F.C. Swbd. Room</u>			<u>1</u>			<u>C</u>	
	<u>F.C. Sta. G-3</u>			<u>1</u>			<u>C</u>	

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HC/mm

IN REPLY
REFER TO:

SigO 333.9-Ft. Heath

Boston ARMY BASE, BOSTON, MASS

July 30, 1938.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Heath, Mass.,
for the period ending June 30, 1938.

TO: Signal Officer, First Corps Area, Boston Army Base, Boston, Mass.

Last Inspection made: June 3, 1937 by H. Caldwell, Electrical Ass't, S.S.L.

This Inspection made: July 8, 1938 by H. Caldwell, Electrical Ass't, S.S.L.

I. SWITCHBOARD, MANUAL AND ATTENDANTS CABINET. None installed.

II. AUTOMATIC EQUIPMENT. None.

III. STORAGE BATTERY

- a. The battery is "placed in reserve."
- b. The plates are not buckled, broken or cracked, but the negatives are slightly sulphated.
- c. The battery is serviceable and should be retained for use.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.

1. Motor Generator.

- a. This equipment is securely mounted and is free from vibration while running.
- b. It is of the proper size for the system and is in good condition.
- c. A practice of running the machine for short periods monthly is recommended. This could be done along with the routine running of the main power units and would benefit by keeping the machines bearing more perfectly lubricated, the commutators free of oxides and by eliminating moisture from the armature and field windings.

2. Ringing machine. None installed.

3. Rectifier. None installed.

4. Ringing Vibrator. None.

V. POWER PANEL.

- a. The panel is securely mounted and braced.
- b. The equipment installed is ample for the purpose.
- c. The motor starter, field resistance, circuit breaker, switches, voltmeter and ammeter are in satisfactory condition and operate properly.

VI. DISTRIBUTING FRAME.

- a. The frame is securely mounted, braced and suitably painted.
- b. The retardation coils on the front are in good condition and are

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1.

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nicely mounted. The enameling is in good condition.

c. In the rear the wiring is in satisfactory condition. Sufficient rings are in place for the cross connections.

d. Sufficient space is available for mounting 30 additional terminal strips. Those in use are in good condition.

VII. WIRE CHIEF'S TEST EQUIPMENT.

a. No equipment is installed or kept on hand, but can be secured when required from the harbor defense storeroom.

VIII. RELAY RACK. None installed.

IX. RECORDS

a. All records of the installation are kept at Fort Banks by the Artillery Engineer Office, and are up-to-date.

X. MISCELLANEOUS.

Information under this heading would pertain to the administration of a post telephone system. There is none at this post.

XI. STOREROOM. None.

XII. CONDUIT SYSTEM.

a. The manholes and conduit are in satisfactory condition.

b. In most cases the manholes are too small for racking cables and should not be attempted.

XIII. CABLE SYSTEM.

a. Tests made indicate that the cables are in good condition and satisfactory for all purposes assigned to them.

b. Sufficient pairs for the revised fire control system are not provided in the cables.

c. The submarine cables connecting Fort Ruckman and Deer Island Military Reservation are also in serviceable condition.

d. Cable number 307 connecting Deer Island is defective and repairs are necessary.

e. No aerial cable is installed.

XIV. POLES CROSSARMS, ETC.

None.

XV. TERMINALS.

a. These are in good condition, are properly installed and are of sufficient size.

b. The terminal wiring in the BCB'S' Station is not completed since the station wiring is not connected to the cable strips.

XVI. WIRES. No aerial wire system in use.

XVII. TARGET RANGE COMMUNICATION SYSTEM. None.

XVIII. TELEPHONE STATION EQUIPMENT.

- a. Only such telephones are installed as are required by the harbor defense headquarters for the transaction of official business.
- b. They are in satisfactory condition.

XIX. TELEGRAPH STATION. None.

XX. FIRE CONTROL SYSTEM.

1. Stations and Batteries.

- a. The metal fire control type telephones and the old composite artillery type wooden telephones are installed in about equal numbers. They are in good condition and operate with about equal efficiency.
- b. The head sets are in good condition except for the soft rubber ear pieces which have hardened in many different shapes.
- c. The hand set switches and time interval bells are in satisfactory condition.
- d. No battery commanders firing signals are installed in stations requiring that equipment.
- e. Batteries.

The equipment installed at battery emplacements is in proper working order such as the gun telephones, head sets large time interval bells and weather proof boxes.

2. Time Interval Apparatus, Panel & Circuits.

- a. The mechanism is working properly and is in good condition.
- b. There is no sparking at the governor or at line contacts when broken.
- c. The Time Interval panel is properly installed and is in good condition.
- d. The signals are properly timed and the indicators are working nicely.

3. Fort Signal Station. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS.

- a. No changes have been made in the system since the last inspection except the replacement of the wiring in two fire control stations.
- b. No telephones have been added or removed.
- c. There is a lot of work to be done on the fire control system towards converting the present layout to the revised scheme but this cannot be done until additional equipment and material can be furnished.

H. Caldwell

H. Caldwell,
Electrical Ass't, S. S. L.

HEADQUARTERS FIRST CORPS AREA
OFFICE OF THE SIGNAL OFFICER

HC/rec
Boston ARMY BASE, BOSTON, MASS.

IN REPLY

REFER TO: SigO 333.9-Ft. Revere

December 20, 1937

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Revere, Point Allerton and Strawberry Hill, Harbor Defenses of Boston, for the period ending June 30, 1937

TO: Signal Officer, First Corps Area, Boston, Mass.

Last inspection made: March 26, 1936 by L. L. Hill, Asst. Elec. Engr., S.S.L.

This inspection made: Sept. 9, 1937 by H. Caldwell, Electrical Asst., S.S.L.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET.

1. Switchboard.

- a. The administrative telephone switchboard was installed in 1920 at the protected switchboard room.
- b. The location is desirable, however the prevailing atmospheric conditions are not suitable for preservation of this type of equipment indefinitely. Heat for drying purposes is not provided.
- c. The switchboard has not been in active service for a number of years due to the absorption of moisture and consequent corrosion of contacts and springs.
- d. If the equipment is placed in service, a thorough overhauling and replacement of a number of relays, condensers and jack equipment will be necessary for satisfactory operation.

II. AUTOMATIC EQUIPMENT. None

III. STORAGE BATTERY.

The storage battery has been kept in a dry state for a number of years. The plates show considerable deterioration and it is doubted if they would be servicable if placed in commission.

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IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT.

1. Two sources of power are available for charging purposes and either the direct current or the alternating current motor generator may be employed. Both machines are in good condition.
2. Ringing Machine: None.
3. Rectifier: None.
4. Ringing Vibrator: None.

V. POWER PANEL.

- a. The power panel, meters, motor starter, field rheostat, circuit breaker and switches are in satisfactory operating condition.
- b. The panel is insufficient for the control of all charging equipment installed, however one set may be eliminated when the plant is rehabilitated by substitution of an electron tube rectifier.

VI. DISTRIBUTING FRAME.

- a. This equipment, including the wiring, cabling, terminal strips and framework, is satisfactory.
- b. The frame associated with the telephone switchboard is also in good condition.

VII. WIRE CHIEF'S TEST EQUIPMENT. None installed.VIII. RELAY RACK.

The relay rack forms part of the switchboard and is in good condition mechanically.

IX. RECORDS.

The telephone records and accounts for the post are kept at Fort Banks. The drawings of Fire Control and Post Telephone systems are not correct and do not conform to the present Signal Corps practices. The revisions of the drawings are included in the scheduled work on hand in the Signal Office, First Corps Area.

X. MISCELLANEOUS.

- a. This heading concerns the administration of the post telephone system which is not in active operation.

XI. STOREROOM.

- a. The storeroom is neat and clean and the equipment is suitably stored.
- b. No equipment is on hand except that which will be used at the post.
- c. The room is not heated in cold weather.

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XII. CONDUIT SYSTEM.

- a. The manholes are of sufficient size for the installation of the smaller sizes of cable. They are all provided with covers and are easily accessible.
- b. Power cables of 110 volts are in the same manholes but do not occupy the same ducts.
- c. The cables are fairly neatly arranged but since they were not properly racked during the initial installation, the condition cannot be greatly improved upon without extensive resplicing in the manholes and some additional cables provided, which is not warranted at this time.

XIII. CABLE SYSTEM. (Aerial)

No aerial cable system is installed.

XIV. POLES, CROSSARMS, ETC.

No aerial system installed.

XV. TERMINALS.

Terminals in underground system are included under the heading "Fire Control", Par. XX. No aerial system requiring terminals is installed.

XVI. WIRES.

No aerial wire system installed.

XVII. TARGET RANGE COMMUNICATION SYSTEM. None installed.XVIII. TELEPHONE STATION EQUIPMENT.

- a. The equipment is satisfactory and consists of five (5) telephones on three (3) lines connected to the Fort Banks switchboard. The wiring from terminals to telephone instruments is in good condition and proper.

XIX. TELEGRAPH STATION. None.XX. FIRE CONTROL SYSTEM.1. Station and Batteries.

- a. The equipment in the old stations is generally of the wood type of construction scheduled for replacement with later types when it becomes unserviceable and beyond repair. This class of equipment includes the following:
Telephones, wall, desk, plotters and all types of switch-key sets.

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- b. All station installations are neatly and properly made and in satisfactory condition including the wiring and wiring facilities.
 - c. The installations at batteries, searchlights, etc. are likewise properly made and in satisfactory condition.
 - 2. Time Interval Apparatus, Panel & Cots.
 - a. Time Interval Apparatus.
 - 1. Adjustments are properly made for all time intervals used.
 - 2. The motor, driving worm gear and discs are in good condition and the various impulse contacts operate satisfactory.
 - b. Time Interval Panel.
 - 1. In satisfactory condition and operates properly.
 - 3. Fort Signal Stations: None.
- NOTE: Other units of equipment properly belonging to the fire control system are included under Sections III, IV, V, VI, VII, XI, and XII.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

- a. Reference Par. I (c) it is recommended that the inactive telephone switchboard which was installed in 1920, and is gradually deteriorating due to atmospheric conditions and age, be placed on Inventory and Inspection Report for disposition.
- b. Reference Section III (b), (Storage Battery), it is recommended the plates of the fire control storage battery be placed on Inventory and Inspection Report also and disposed of in accordance with regulations since they are of little value for further operation of a system.



H. CALDWELL,

Electrical Assistant, S.S.L.

SigO 333.9-Ft. Revere

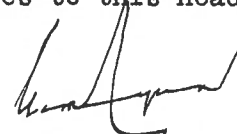
1st Ind.

/rec

Headquarters First Corps Area, Boston, Mass. December 27, 1937. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 (a), A.R. 105-20 and return of three (3) copies to this headquarters.

By command of Major General CONNER:



CLARK LYNN,

Colonel, A. G. D.,

Adjutant General


REC 120 CAL DEC 28 1937

333.14/3-EH

Ft. Revere

2d Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Dec. 28, 1937-To Commanding Officer, HD of Boston, Fort Banks, Mass.


F. L. T.

Rec'd HD of Boston DEC 28 1937



AE-333.9 (Ft. Revere)

3rd Ind.


/jms

Headquarters, Harbor Defenses of Boston, Fort Banks, Mass., January 5, 1938 -
To: Commanding General, First Corps Area, Army Base, Boston, Mass., THRU:
Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and discrepancies noted.

2. Reference Section XXI a and b, basic communication, the switchboard and storage battery will be placed on Inventory and Inspection Report and disposed of in accordance with existing regulations.

Rec'd 1st C.A.D. JAN 5 1938


J. H. GILBRETH,
Major, 9th C.A.,
Commanding.

4th Ind.

/hgc

Hq. 1st C. A. Dist., Boston Army Base, Boston, Mass., January 6, 1938.
To Commanding General, First Corps Area, Boston, Mass.


R. E. G.

REC'D O SIG O. F. C. A. JAN 6 1938

SigO 333.9

5th Ind.

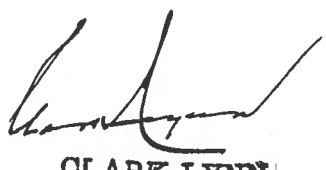
EEC/mm

Headquarters First Corps Area, Boston, Mass. January 8, 1938. To: The Adjutant General, War Department, Washington, D. C.

Approved.

For the Commanding General:

10 Received A. G. C JAN 11 1938


CLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

RECEIVED
JAN 12 8 52 AM '38
OFFICE OF THE
CHIEF SIGNAL OFFICER

333.14/3-EH

O.C.C.A. 333.14/3-EH Inc. 1.

POST OR FORT Revere, Mass.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets complete

Rendered by

H. Caldwell
H. CALDWELL,

Rank Electrical Assistant, S.S.L.

Date September 9, 1937

333.14/3-EH

Inc 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Revere, Mass.Date Sept. 9, 1937

TELEPHONE SWITCHBOARD

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed <u>1920</u>	Magneto lines equipped
Manufacturer <u>Kellogg</u>	Trunk circuits wired <u>10</u>
Manufacturer's type <u>50 line P.B.X.</u>	Trunk circuits equipped <u>10</u>
Manufacturer's Serial No.	Operating voltage <u>30</u>
Signal Corps Serial No. <u>1488</u>	Distance telephone system is outside B. R. area of telephone company
Order number and date <u>41498 - 1918</u>	Trunk loop resistance in ohms
Common battery or magneto? <u>Common battery</u>	Are line cables to switchboard under floor or on overhead rack? <u>under floor</u>
Multiple or nonmultiple? <u>Non-multiple</u>	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple	Are all positions equipped for service? <u>Yes</u>
Number of positions <u>one</u>	Is switchboard used as attendant's cabinet of an automatic system? <u>No</u>
Cord pairs per position <u>10</u>	Location of switchboard <u>F.C. Swbd. Room</u>
Common battery lines wired <u>50</u>	
Common battery lines equipped <u>50</u>	Drawing number and date of face and rear equipment layout
Magneto lines wired	

SWITCHBOARD CIRCUIT DRAWINGS

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit		Generator circuit	<u>25932</u>
Cord circuit, local	<u>20101</u>	Operator's circuit	<u>25931</u>
Cord circuit, universal		Trunk circuit	<u>25930</u>
Pilot circuit	<u>25929</u>	Other circuits	
Fuse alarm circuit	<u>25933</u>		
Night alarm circuit	<u>25929</u>		
Dial circuit			
Drawing number and date showing central office layout	<u>None.</u>		

POST OR FORT Revere, Mass.Date Sept. 9, 1937

SWITCHBOARD CABLE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables
50		WC-532	Switchboard and Cabinet	10	1
10		WC-503	" " "	10	1

CORD CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green	154V	Relay, supervisor, answering	2030 T-CC
Cap, lamp, red	154A	Relay, supervisor, calling	2030 T-CC
Cap, lamp, white	154	Relay	
Capacitator	64	Relay	
Coil, repeating		Signal	
Cord, connecting	309	Socket, lamp	
Key, ringing and listening	B1001x	Weight, cord	#9
Key, listening		Apparatus not listed:	
Key, ringing	B1031x		
Plug, cord	106		

OPERATOR'S TELEPHONE CIRCUIT

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction	7-A	Key, operator's switching	1020
Coil, repeating		Receiver	46-A
Coil, retardation	8-H	Relay	
Capacitator	64	Plug, operator's set	139
Cord, breast set		Transmitter	1076-C
Cord, receiver	CC-3	Apparatus not listed:	
Cord, transmitter			

POST OR FORT Revere, Mass.Date Sept. 9, 1937

AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....	300 ohm.	Lamp, pilot.....	30-A
Buzzer, fuse alarm.....		Lamp, resistance.....	110V. Tung. 15W
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....	9B	Relay, fuse alarm.....	
Cap, lamp, red.....	9A	Relay, night alarm.....	2051-3-EQ
Cap, lamp, white.....	9	Relay, pilot.....	2051-3-EQ
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, _____ ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, _____ ohms, test cct.....	
Fuse, _____ amperes.....		Resistor, _____ ohms, test cct.....	
Generator, hand.....	64	Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	9402
Key, generator switching.....	103	Apparatus not listed:	
Key, generator reversing.....	1038		
Key, night alarm.....			

LINE CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....	154A	Relay, line.....	26-D
Cap, lamp, green.....	154W	Signal, magneto.....	
Cap, lamp, white.....	15A	Socket, lamp.....	
Jack, line.....	34	Apparatus not listed:	
Lamp, line.....	30-A		
Relay, cut-off.....			

POST OR FORT Revere, Mass.Date Sept. 9, 1937

TRUNK CIRCUITS

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....	<u>154</u>	Relay, ring-up.....	
Capacitator.....	<u>64</u>	Relay.....	
Capacitator.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET

None

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK

None

	Number installed
Date installed.....	Monitor ccts.....
Manufacturer and code number.....	Inc. trk. ccts.....
Cct. dwg. number and date.....	Outgoing trk. ccts.....
Remarks.....	Cord ccts.....

 TARGET RANGE SYSTEM
 (Give approximate lengths of cable installed)

None

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Revere, Mass.Date Sept. 9, 1937

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....	15			Manufacturer's type.....			
A. H. capacity.....	80			hydrometer.....			
Manufacturer.....	Williard			Location.....	F.C. Swbd. Room		
Manufacturer's type.....	E-5			Furnishes power for.....	F.C. and Post Tel. Systems		
Date installed.....	1908			Trickle, float, or			
Date new elements installed.....	1920			cycle charged.....			
In cabinet or on rack?.....	Rack			How often?.....			
Which side grounded?.....	None			At what rate?.....			
Manufacturer's type thermometer.....				Remarks.....	Battery not in service.		

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Crocker-Wheeler	Burke Elec.	Date installed.....	1908	
Manufacturer's type.....	3/4 L. Ty C.M.	T.E.L.	Signal Corps type.....		
Kw. output.....	$\frac{1}{2}$	$\frac{1}{2}$	Order number and date.....		
Operating voltage.....	110-45 D C	110 AC 45 DC	Location.....	F.C. Swbd. Room	
Cycles or d. c.....	D.C.	60 cy	Charges what battery?.....	Fire Control	
Generator serial number.....	Code 43030	127375			
Motor serial number.....	937	127374			

RECTIFIERS FOR POST TELEPHONE SYSTEM

None

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES

None

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

None

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's type.....			
Location.....				Operating voltage.....			
				Cycles or d. c.....			

POST OR FORT Revere, Mass.Date Sept. 9, 1937

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT

Wall or floor type? <u>Cabinet</u>	Manufacturer <u>Cook</u>
Number of verticals <u>4</u>	Manufacturer's type <u>Protectors (#8)</u>
Capacity, protector (vertical) side <u>120 prs.</u>	Order number and date
Protectors equipped <u>55 prs.</u>	Date installed <u>1920</u>
Capacity, strip (horizontal) side <u>150 prs.</u>	Date additions made <u>none</u>
Terminal strips equipped <u>3 - 25 pr.</u>	Drawing numbers and dates showing layout of frame
Fuse protector capacity (pairs) <u>0</u>	
Fuse protectors equipped <u>0</u>	Remarks <u>Switchboard not in service</u>
Do outside lines connect to protectors, fuses, or terminal strips? <u>strips</u>	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom	<u>1</u>	Strip, terminal, 2-point	<u>3 - 25 pair</u>
Block, protector, top	<u>2</u>	Strip, terminal, 3-point	
Coil, heat		Strip, terminal, 4-point	
Dielectric (Mica)		Strip, terminal, 5-point	
None, none, or none	<u>3</u>	Test cord, _____ feet	
Protector group	<u>(#8)</u>	Test shoe	
Ring, jumper	<u>9 - 5"</u>		

RELAY RACK

Manufacturer <u>Kellogg</u>	Date installed
Height	Drawing number and date showing layout
Number of bays	
Relay mounting capacity per bay	Remarks <u>Part of switchboard</u>

COIL AND OTHER RACKS None

Manufacturer	Mounts what equipment?
Coil capacity	
Per cent equipped	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	Other equipment
<u>FM-5</u>	<u>F.C. Swbd. Room</u>	<u>2</u>	<u>50</u>	<u>37</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	

POST OR FORT Revere, Mass.Date Sept. 9, 1937

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer	Unknown		Controls what batteries?		
Manufacturer's type			Location	F.C. Swbd. Room	
Signal Corps type	BD-17		Date installed	About 1908	
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston #31662		50-0-50 Amp. 24			
Circuit breaker	Cutter Co. #C-2530		Volt 250			
Motor starter	Ward-Leonard #132735					
Rheostat	Ward-Leonard #133628			*Cutter Hammer Ser. No. 702293	11053	Amp. 4-1.54 F. 126 ohms 64
Voltmeter	Weston 32614					
Other equipment:						
				* On wall for A.C.-D.C. Mot. Gen.		

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	5	Controller, zone signal		Switch key, set	
Bell, T. I., small	12	Hand set	6	Telephone, B. C.	3
Bell, zone sig.		Head set	50	Telephone, desk	7
Bell, ext. L. R.		Outlet, zone sig.		Telephone, gun	5
Box, junc., std.		Signal, firing, B. C.	2	Telephone, plotters	6
Box, junc., T. R.		Signal, firing, pit		Telephone, wall	41
Box, T. I., bell	5	Switch, hand set	2	Switchboards, BD-74	
Box, term., 2-strip	6	Switch, push, zone sig.		Switchboards, BD-78	
Box, term., 4-strip	2	Switch box, base line	3	Other apparatus:	
Box, term., 8-strip	1	Switch box, cut-out	2	Strip 12-pr.	52
Box, term., 12 strip	2	Switch box, transfer		Strip 21-pr.	24
				Block Exten.	20

POST OR FORT Revere, Mass.Date Sept. 9, 1937.

TIME INTERVAL APPARATUS

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks
F.C. Swbd. Room	BD-15	1			
" " "	EE-56	1	Leeds-Northrop	Leeds-Northrop	

METEOROLOGICAL EQUIPMENT None

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION None

Material of mast	Year installed
Height of mast	Year last painted

Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets				

NIGHT SIGNALING EQUIPMENT

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST None

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT Revere, Mass.Date Sept. 9, 1937

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	803		8-way MCD			5		
			Single GWD	65		6 foot	1	
4-way MCD	2385		4-way fiber			4 foot	50	
			MCD			3 foot		
2-way MCD	338		2-way fiber	338		22 x 42	8	
12-way MCD			clay			Other sizes:		
Single GWD	1167		Single fiber	559		16" x 16"	4	
9-way MCD			Iron pipe					
2-way GWD	505							

Drawing number and date of conduit plant

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				25-pair			
400-pair				25-pair	22	577	
				20			
300-pair				12 -pair	19	1738	
200-pair				15-pair			
				12			
150-pair				12 -pair	16	3171	
100-pair				10-pair	19	4233	
				Other sizes:			
100-pair				6 pair	16	3881	
				3 pair	16	1602	
75-pair				1 pair	16	1589	
50-pair				Approximate number of Signal Corps poles			
40				Approximate number of joint poles			
100 -pair	19	1755					

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant

POST OR FORT Revere, Mass.

Date-----Sept. 9, 1937-----

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS

	Value		Value
Telephone switchboard and accessories.....	\$ 100.00	Outside telephone plant.....	\$ 300.00
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....	200.00	Target range system.....	
Telephone station equipment.....		TOTAL.....	600.00

FIRE-CONTROL SYSTEM

	Value		Value
Cables and conduit system.....	\$ 1580.00	Telephone and other equipment.....	\$ 2890.00
F. C. power equipment.....	1100.00	TOTAL.....	19890.00

TRUNKS AND TIE LINES

[illegible]

STATION EQUIPMENT

Manufacturer.....Western Electric Company

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		5			
Hand set.....					
Wall.....					
TOTAL.....		5			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

[illegible]

935.14 / 3-FH

HEADQUARTERS FIRST CORPS AREA
OFFICE OF THE SIGNAL OFFICER

HC/rec
Boston ARMY BASE, BOSTON, MASS.

IN REPLY
REFER TO:

SigO 333.9 (Fort Ruckman, Mass.)

October 13, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Ruckman,
Mass. for the period ending June 30, 1937.

TO: Corps Area Signal Officer, Boston Army Base, Boston, Mass.

Last inspection made: March 18, 1936 by L. L. Hill, Asst. Elec. Engr., S.S.L.

This inspection made: June 7, 1937 by H. Caldwell, Elec. Assistant, S.S.L.

- I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET. None.
- II. AUTOMATIC EQUIPMENT. None.
- III. STORAGE BATTERY. None
- IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT. None.
- V. POWER PANEL. None.
- VI. DISTRIBUTING FRAME. None.
- VII. WIRE CHIEF'S TEST EQUIPMENT. None.
- VIII. RELAY RACK. None.
- IX. RECORDS. Kept at Fort Banks.
- X. MISCELLANEOUS. No remarks.
- XI. STOREROOM. None.
- XII. CONDUIT SYSTEM.
In satisfactory condition. No new construction will be required
for the revised fire control project.

333.14/3-ED

1 O.C.C.A. 333.14/3ED

XIII. CABLE SYSTEM. Satisfactory.

XIV. POLES, CROSSARMS, ETC. No aerial system.

XV. TERMINALS.

No terminals installed for aerial wires. Terminals for the underground cable system are in satisfactory condition.

XVI. WIRES.

No wires are strung for an aerial system.

XVII. TARGET RANGE COMMUNICATION SYSTEM. None.

XVIII. TELEPHONE STATION EQUIPMENT. Satisfactory.

XIX. TELEGRAPH STATION. None.

XX. FIRE CONTROL SYSTEM.

1. Station and Batteries.

- a. The telephones, head sets, hand sets, base line and cut out switches and time interval bells in the plotting rooms have been removed for storage and preservation.
- b. The telephone terminal blocks are wired properly, are clean and one is installed for each extension headset.
- c. Telephones, head sets and T.I. bells installed in the secondary stations are all in good condition.
- d. Telephone in the B secondary station for Battery Winthrop is loose on the wall and needs tightening.
- e. Secondary Stations for Batteries Winthrop, Kellogg and Lincoln have not been wired for spotters lines as required in the present approved plan.

2. Time Interval Apparatus, Panel & Circuits.

- a. Mechanism: none.
- b. Panels: none.

3. Fort Signal Stations. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

- a. No changes have been made in the fire control system or post administrative telephones since the last inspection.
- b. A fire control switchboard room is designated for Fort Ruckman, therefore it is recommended suitable space be assigned for the purpose or a protected building be constructed.
- c. The antiaircraft battery will require four circuits in the fire control communication net. A cable could be installed for this purpose at any time connecting the battery to the cable terminal in the plotting room of Battery Gardner where through connections can now be established.

H. Caldwell

H. CALDWELL,

Electrical Assistant, S.S.L.

333.14/8-ED

SigO 333.9 - Fort Ruckman, Mass.

1st Ind.

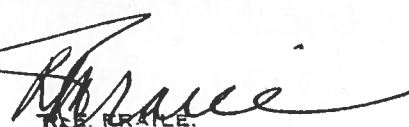
EEC/rec

Headquarters First Corps Area, Boston, Mass. October 13, 1937. Thru: Commanding General, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with provisions of paragraph 10 (a), AR 105-20 and return of three copies to this headquarters.

By command of Brigadier General Nuttman:


Rec'd 1st C.A.D. OCT 14 1937


R. E. KRAKE.
MAJOR, A. G. D.,
ASS'T. ADJUTANT GENERAL.

2d Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Oct. 14, 1937-To Commanding Officer, HD of Boston, Fort Banks, Mass.

Rec'd HD of Boston OCT 16 1937


F. L. T.

AE-333.9


3rd Ind.

/jms

HQ. HD OF BOSTON, FORT BANKS, MASS., November 4, 1937 - To: Commanding General, First Corps Area, Army Base, Boston, Mass. THRU: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and recommended changes and discrepancies noted.
2. The discrepancy noted in paragraph XX 1 d has been remedied.
3. The installation of additional telephone lines and cable as recommended in paragraphs XX 1 e and XXI c will be accomplished as soon as practicable.

Rec'd 1st C.A.D. NOV 8 1937


J. H. GILBRETH,
Major, 9th C.A.,
Commanding.

4th Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Nov. 8, 1937-To Commanding General, First Corps Area, Boston, Mass.

REC'D O SIG O. F. C. A. NOV 8 1937


R. E. G.

333.14/3-ED

1. OCCA 333.14/3ED Inc. 1.

POST OR FORT Fort Ruckman, Mass.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Complete

Rendered by H. Caldwell
H. CALDWELL

Rank Electrical Assistant, S.S.I.

Date June 7, 1937.

333.14/3-ED- Inc 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Ruckman, Mass.

Date June 7, 1937

TELEPHONE SWITCHBOARD None

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout.....
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS

None

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			
Drawing number and date showing central office layout.....			

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937

SWITCHBOARD CABLE

None

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS

None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green		Relay, supervisory, answering	
Cap, lamp, red		Relay, supervisory, calling	
Cap, lamp, white		Relay	
Capacitor		Relay	
Coil, repeating		Signal	
Cord, connecting		Socket, lamp	
Key, ringing and listening		Weight, cord	
Key, listening		Apparatus not listed:	
Key, ringing			
Plug, cord			

OPERATOR'S TELEPHONE CIRCUIT

None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction		Key, operator's switching	
Coil, repeating		Receiver	
Coil, retardation		Relay	
Capacitor		Plug, operator's set	
Cord, breast set		Transmitter	
Cord, receiver		Apparatus not listed:	
Cord, transmitter			

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS
None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, _____ ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, _____ ohms, test cct.....	
Fuse, _____ amperes.....		Resistor, _____ ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS
None

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937TRUNK CIRCUITS **None**

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitor.....		Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET **None**

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK **None**

	Number installed
Date installed.....	Monitor ccts.....
Manufacturer and code number.....	Inc. trk. ccts.....
Cct. dwg. number and date.....	Outgoing trk. ccts.....
Remarks.....	Cord ccts.....

TARGET RANGE SYSTEM **None**
(Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937

AUTOMATIC SWITCHBOARD
(Describe attendant's cabinet on sheets 1 to 4) **None**

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION **None**

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937STORAGE BATTERIES **None**

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....				Manufacturer's type			
A. H. capacity.....				hydrometer.....			
Manufacturer.....				Location.....			
Manufacturer's type.....				Furnishes power for.....			
Date installed.....				Trickle, float, or			
Date new elements				cycle charged.....			
installed.....				How often?.....			
In cabinet or on rack?.....				At what rate?.....			
Which side grounded?.....				Remarks.....			
Manufacturer's type							
thermometer.....							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS **None**

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Signal Corps type.....		
Kw. output.....			Order number and		
Operating voltage.....			date.....		
Cycles or d. c.....			Location.....		
Generator serial number.....			Charges what battery?.....		
Motor serial number.....					

RECTIFIERS FOR POST TELEPHONE SYSTEM **None**

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES **None**

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT **None**

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's			
Location.....				type.....			
				Operating voltage.....			
				Cycles or d. c.....			

POST OR FORT

Fort Ruckman, Mass.

Date

June 7, 1937

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT

None

Wall or floor type?	Manufacturer
Number of verticals	Manufacturer's type
Capacity, protector (vertical) side	Order number and date
Protectors equipped	Date installed
Capacity, strip (horizontal) side	Date additions made
Terminal strips equipped	Drawing numbers and dates showing layout of frame
Fuse protector capacity (pairs)	Remarks
Fuse protectors equipped	
Do outside lines connect to protectors, fuses, or terminal strips?	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom		Strip, terminal, 2-point	
Block, protector, top		Strip, terminal, 3-point	
Coil, heat		Strip, terminal, 4-point	
Dielectric (Mica)		Strip, terminal, 5-point	
Fuse, _____ ampere		Test cord, _____ feet	
Protector group		Test shoe	
Ring, jumper			

RELAY RACK

None

Manufacturer	Date installed
Height	Drawing number and date showing layout
Number of bays	Remarks
Relay mounting capacity per bay	

COIL AND OTHER RACKS

None

Manufacturer	Mounts what equipment?
Coil capacity	
Per cent equipped	

FIRE CONTROL DISTRIBUTING FRAMES

None

Type	Location	Number installed	QUANTITIES OF EQUIPMENT					
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD None

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Controls what batteries?.....		
Manufacturer's type.....			Location.....		
Signal Corps type.....			Date installed.....		
Order number and date.....					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter.....						
Circuit breaker.....						
Motor starter.....						
Rheostat.....						
Voltmeter.....						
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large.....	2	Controller, zone signal.....	0	Switch key, set.....	0
Bell, T. I., small.....	5	Hand set.....	3	Telephone, B. C.....	4
Bell, zone sig.....	0	Head set.....	20	Telephone, desk.....	0
Bell, ext. L. R.....	2	Outlet, zone sig.....	0	Telephone, gun.....	0
Box, junc., std.....	0	Signal, firing, B. C.....	0	Telephone, plotters.....	0
Box, junc., T. R.....	0	Signal, firing, pit.....	0	Telephone, wall.....	17
Box, T. I., bell.....	2	Switch, hand set.....		Switchboards, BD-74.....	
Box, term., 2-strip.....	1	Switch, push, zone sig.....	0	Switchboards, BD-78.....	
Box, term., 4-strip.....	1	Switch box, base line.....	2	Other apparatus:	
Box, term., 8-strip.....	1	Switch box, cut-out.....	5	Blocks Exten.	12
Box, term., 3 strip.....	2	Switch box, transfer.....	3	Strips Term.	12

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937TIME INTERVAL APPARATUS **None**

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks

METEOROLOGICAL EQUIPMENT **None**

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION **None**

Material of mast	Year installed
Height of mast	Year last painted

Apparatus	Signal Corps type	Number installed	Books	Edition (year)

NIGHT SIGNALING EQUIPMENT **None**

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST **None**

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT Fort Ruckman, Mass.Date June 7, 1937

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	410	0	Single CWD			6-foot	3	0
4-way MCD			4-way fiber			4-foot	3	0
2-way MCD			2-way fiber			22" x 40"		
Single CD			Single fiber			Other sizes:		
2-way CWD			Iron pipe			Cable Hut		
						8 foot	1	0

Drawing number and date of conduit plant

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				25-pair			
400-pair				25-pair			
300-pair				15-pair	19	680	0
200-pair				15-pair			
150-pair				10-pair	19	460	0
100-pair				10-pair			
100-pair				Other sizes:			
75-pair				20-pr.	19	426	0
50-pair				Submarine to			
50-pair				Ft. Heath	19	16,565	1065
				Approximate number of Signal Corps poles			None
				Approximate number of joint poles			None

TERMINALS (state number of each)

None

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant Eng. Office A-100, May 7, 1930

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HC/mm

Boston ARMY BASE, BOSTON, MASS.

IN REPLY SigO 333.9 Ft. Standish
REFER TO:

December 2, 1937.

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Standish, Boston Harbor, for the period ending June 30, 1937.

TO: Signal Officer, First Corps Area.

Last Inspection made March 24, 1936 by L. L. Hill, Ass't Elec. Engr., S.S.L.

This Inspection made September 13, 1937 by H. Caldwell, Elec. Ass't, S.S.L.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET.
None.

II. AUTOMATIC EQUIPMENT.
None

III. STORAGE BATTERY

- a. This unit of the equipment is made up of used cells maintained in an inactive condition for preservation of the plates.
- b. The condition is as follows:
 - 4 jars are cracked.
 - 4 jars are of a large size.
 - 1 positive element of a cell is broken.The battery should be entirely replaced when again required for training purposes.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT

- a. The motor generator is in good condition and operates properly.
No ringing machines rectifiers or ringing vibrators are installed.

V. POWER PANEL.

The condition of the equipment is good; operates satisfactorily, and is of sufficient capacity for all purposes.

VI. DISTRIBUTING FRAME
Satisfactory.

VII. WIRE CHIEF'S TEST EQUIPMENT
None.

333.14/3-EI

1. OCCA 333.14/3-EI

12/2/37

VIII. RELAY RACK

None.

IX. RECORDS

Cable maps and other records should be revised and redrawn to conform with the present Signal Corps standard for drawings of this type.

X. MISCELLANEOUS

This section refers to the operation and traffic of the administrative telephone system. Nothing is to be reported.

XI. STOREROOM

Satisfactory.

XII. CONDUIT SYSTEM

The system is in satisfactory condition.

XIII. CABLE SYSTEM

The underground cable system is also in satisfactory condition. However, it is not adequate for the revised fire control system which is planned for the post. More cable conductors will have to be provided to a number of stations and batteries and to the submarine cable terminal.

XIV. POLES, CROSSARMS, ETC.

None.

XV. TERMINALS

Satisfactory.

XVI. WIRES

No aerial system.

XVII. TARGET RANGE COMMUNICATION SYSTEM

None.

XVIII. TELEPHONE STATION EQUIPMENT

Satisfactory.

XIX. TELEGRAPH STATION

None.

XX. FIRE CONTROL SYSTEMa. Stations:

Equipment listed herewith is in satisfactory condition:

Base line and transfer switch boxes.

Handset switches; Switch Key sets, and Cutout switch boxes.

Wall telephones C.A.T. type

Plotters telephones C.A.T. type

Handsets and Headsets

Time interval bells and terminal strips.

12/2/37

b. Batteries:

The equipment listed herewith is also satisfactory:

Battery commanders telephones

Gun telephones

Head telephones

Time interval bells and boxes.

c. Time Interval Apparatus, Panel and Circuits.

Panel type BD-15 and

Mechanism EE-56 satisfactory.

d. Fort Signal Station.

None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

Reference Section III b, it is recommended that the storage battery be disposed of in accordance with existing regulations as its further serviceability is quite questionable.



H. Caldwell

Electrical Ass't, S.S.L.

SigO 333.9-Ft. Standish

1st Ind.

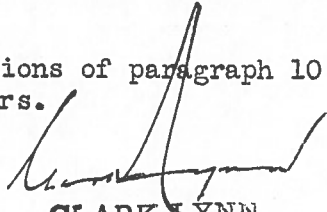
/mm

Headquarters First Corps Area, Boston, Mass. December 6, 1937. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

For action in accordance with the provisions of paragraph 10 (a), AR 105-20, and return of three copies to this headquarters.

By command of Major General Conner:

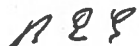
Rec'd 1st C.A.D. DEC 7 - 1937


CLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

2d Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Dec. 7, 1937-To Commanding Officer, HD of Boston, Fort Banks, Mass.

Rec'd HD of Boston DEC 8 - 1937


R. E. G.

333.14/3-EI

AE-333.9 (Ft. Standish)

3rd Ind.


/jms

Hq. Harbor Defenses of Boston, Fort Banks, Mass., January 5, 1938.

To: Commanding General, First Corps Area, Army Base, Boston, Mass., THRU:
Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined and discrepancies noted.
2. Reference recommendations in paragraph XXI, the storage battery will be placed on I & Report in accordance with existing regulations.

Rcd 1st C.A.D. JAN 6 1938



J. H. GILBRETH,
Major, 9th C.A.,
Commanding.

4th Ind.

/hgc

Hq. 1st C. A. Dist., Boston Army Base, Boston, Mass., January 6, 1938.
To Commanding General, First Corps Area, Boston, Mass.

REC'D 1st C.F.C.A. JAN 6 1938


R. E. G.

SigO 333.9-Ft. Standish

5th Ind.

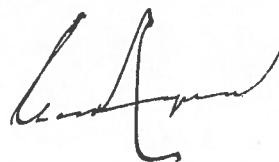
EEC/mm

Headquarters First Corps Area, Boston, Mass. January 8, 1938. To: The Adjutant General, War Department, Washington, D. C.

Approved.

For the Commanding General:

10 Received A. G. C. JAN 11 1938



CLARK LYNN,
Colonel, A. G. D.,
Adjutant General:

333.14/3-EI

1 OCCA 333.14/3 EI Sheet 1

POST OR FORT Standish, Mass.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets complete

Rendered by

H. Caldwell
H. Caldwell

Rank

Electrical Assistant, S.S.L.

Date

Sept. 13, 1937.

333.14/3-EI

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Fort Standish, Mass. Date September 13, 1937.

TELEPHONE SWITCHBOARD NONE

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout.....
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS NONE

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			

Drawing number and date showing central office layout.....

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937

SWITCHBOARD CABLE NONE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green.....		Relay, supervisory, answering.....	
Cap, lamp, red.....		Relay, supervisory, calling.....	
Cap, lamp, white.....		Relay.....	
Capacitor.....		Relay.....	
Coil, repeating.....		Signal.....	
Cord, connecting.....		Socket, lamp.....	
Key, ringing and listening.....		Weight, cord.....	
Key, listening.....		Apparatus not listed:	
Key, ringing.....			
Plug, cord.....			

OPERATOR'S TELEPHONE CIRCUIT NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction.....		Key, operator's switching.....	
Coil, repeating.....		Receiver.....	
Coil, retardation.....		Relay.....	
Capacitator.....		Plug, operator's set.....	
Cord, breast set.....		Transmitter.....	
Cord, receiver.....		Apparatus not listed:	
Cord, transmitter.....			

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS

NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, amperes.....		Resistor, ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937

TRUNK CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitator.....		Relay.....	
Capacitator.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET NONE

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK NONE

		Number installed
Date installed.....	Monitor ccts.....	
Manufacturer and code number.....	Inc. trk. ccts.....	
Cct. dwg. number and date.....	Outgoing trk. ccts.....	
Remarks.....	Cord ccts.....	

 TARGET RANGE SYSTEM NONE
 (Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Fort Standish, Mass.Date Sept. 13, 1937.

AUTOMATIC SWITCHBOARD NONE
(Describe attendant's cabinet on sheets 1 to 4)

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION NONE

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT Fort Stanuish, Mass.

Date Sept. 13, 1937.

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....	15			Manufacturer's type			
A. H. capacity.....	80			hydrometer.....			
Manufacturer.....	Willard			Location.....	F.C. Swbd. Room		
Manufacturer's type.....	E-5			Furnishes power for.....	F.C. System		
Date installed.....	1920			Trickle, float, or			
Date new elements				cycle charged.....			
installed.....	None			How often?.....			
In cabinet or on rack?.....	rack			Remarks.....	Battery not in use.		
Which side grounded?.....	None						
Manufacturer's type							
thermometer.....							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Cr-Wheeler		Date installed.....	1920	
Manufacturer's type.....	3/4 L Ty. S.E.C.D.		Signal Corps type.....		
Kw. output.....	1/2 K.W.		Order number and		
Operating voltage.....	110 - 45		date.....		
Cycles or d. c.....	D.C. Sp. 1600 RPM		Location.....	F.C. Swbd. Room	
General serial number.....	951 Code 43030		Charges what battery?.....	Fire Control	
Motor serial number.....	950 3/4 L. Ty C.M.				

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's			
Location.....				type.....			
				Operating voltage.....			
				Cycles or d. c.....			

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT NONE

Wall or floor type.....	Manufacturer.....
Number of verticals.....	Manufacturer's type.....
Capacity, protector (vertical) side.....	Order number and date.....
Protectors equipped.....	Date installed.....
Capacity, strip (horizontal) side.....	Date additions made.....
Terminal strips equipped.....	Drawing numbers and dates showing layout of frame.....
Fuse protector capacity (pairs).....	Remarks.....
Fuse protectors equipped.....	
Do outside lines connect to protectors, fuses, or terminal strips?.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom.....		Strip, terminal, 2-point.....	
Block, protector, top.....		Strip, terminal, 3-point.....	
Coil, heat.....		Strip, terminal, 4-point.....	
Dielectric (Mica).....		Strip, terminal, 5-point.....	
Fuse, ampere.....		Test cord, feet.....	
Protector group.....		Test shoe.....	
Ring, jumper.....			

RELAY RACK NONE

Manufacturer.....	Date installed.....
Height.....	Drawing number and date showing layout.....
Number of bays.....	Remarks.....
Relay mounting capacity per bay.....	

COIL AND OTHER RACKS NONE

Manufacturer.....	Mounts what equipment?.....
Coil capacity.....	
Per cent equipped.....	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	Other equipment
FM-5	F.C. Swbd. Room	1	30	24	0	0	0	1	- -

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	30 V FC	
Manufacturer's type			Location	F.C. Swbd. Room	
Signal Corps type	BD-17		Date installed		
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer's code	Manufacturer's code	Range
Ammeter	Weston		50-0-50	#51060		Flush type
Circuit breaker	Cutter Co.	C 2600	250 V-24 Amp.			
Motor starter	Cutler Hammer		HP 1 - 115 V, 8 Amp.	No. 1110	901B9	
Rheostat	Ward Leonard	(No code available)				
Voltmeter	Weston		0-250	#32572	flush type	
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	7	Controller, zone signal	0	Switch key, set	1
Bell, T. I., small	5	Hand set	4	Telephone, B. C.	4
Bell, zone sig	0	Head set	26	Telephone, desk	11
Bell, ext. L. R.	0	Outlet, zone sig	0	Telephone, gun	8
Box, junc., std	0	Signal, firing, B. C.	0	Telephone, plotters	3
Box, junc., T. R.	0	Signal, firing, pit	0	Telephone, wall	17
Box, T. I., bell	7	Switch, hand set	1	Switchboards, BD-74	0
Box, term., 2-strip	6	Switch, push, zone sig	0	Switchboards, BD-78	0
Box, term., 4-strip	4	Switch box, base line	1	Other apparatus:	
Box, term., 8-strip	2	Switch box, cut-out	1	Strips 12-pr.	45
Box, term., 16 strip	1	Switch box, transfer	1	Blocks, Exter.	20
				Capacitor 8 mf	1

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

TIME INTERVAL APPARATUS

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks
Swbd. Room	BD-15	1	- -		
Swbd. Room	EE-56	1	Leeds Northrup	L&N #18778, Mot. No. 487916	

METEOROLOGICAL EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION NONE

Material of mast _____			Year installed _____	
Height of mast _____			Year last painted _____	
Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets _____				

NIGHT SIGNALING EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST NONE

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

CONDUIT SYSTEM

(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	1394		Single CWD			5 ft. 6-foot	2	
4-way MCD	1562		4-way fiber			4-foot	19	
2-way MCD	170		2-way fiber			20" x 24"	1	
8 MCD	591		Single fiber			22" x 40"		
Single CWD						Other sizes:		
12 MCD	563		Iron pipe			3 foot	2	
2-way CWD								

Drawing number and date of conduit plant

CABLE SYSTEM

(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
1-pr. 652 100-pair	00	730		30 pr. 405 100-pair	19	1140	
3-pr. 214 100-pair	18	3805		25-pair 414	22	2945	
6-pr. 215 100-pair	16	3200		20-pr. 403	19	739	
6-pr. 217 100-pair	18	297		15-pair			
12-pr. 218 100-pair	18	398		12-pr. 216	18	1553	
1-pr. 213 100-pair	18	1255		15-pair			
100-pair				10-pair 321	19	225	
75-pair				10-pair 401	19	3963	
50-pair				Other sizes:			
50-pair							
				Approximate number of Signal Corps poles. <u>None.</u>			
				Approximate number of joint poles.			

TERMINALS (state number of each) NONE

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant

POST OR FORT Fort Standish, Mass.

Date Sept. 13, 1937.

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories.....	\$.....	Outside telephone plant.....	\$200.00
Telephone power plant.....		Other plant.....	
Other telephone C. O. equipment.....		Target range system.....	
Telephone station equipment.....	100.00	TOTAL.....	300.00
FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system.....	\$18,403.00	Telephone and other equipment.....	\$2,700.00
F. C. power equipment.....	1,000.00	TOTAL.....	22,103.00

TRUNKS AND TIE LINES NONE

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
.....	\$.....	\$.....	\$.....	\$.....
.....
.....
.....
.....
.....
.....
.....
.....

STATION EQUIPMENT

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....		4			
Hand set.....					
Wall.....		1			
TOTAL.....		5			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
Ft. Banks #3	Chief Caretaker	1					B	
" #13	3 Caretakers	3					B	
" #73	Dock			1			C	
.....
.....
.....
.....
.....

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HHW/mm

IN REPLY SigO 333.9-Ft. Standish, Mass.
REFER TO:

Boston ARMY BASE, BOSTON, MASS.

December 7, 1939

SUBJECT: Inspection of Signal Corps ~~Radio~~ Plant in Place at Fort Standish, Mass., for the calendar year 1939.

TO: Signal Officer, First Corps Area.

Last inspection made September 13, 1937 by H.Caldwell, Electrical Ass't, S.S.L.

This inspection made November 28, 1939 by Herman H. Wagner, Assistant Electrical Engineer, S.S.L., in accordance with travel orders dated November 25, 1939.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET
None.

II. AUTOMATIC EQUIPMENT
None.

III. STORAGE BATTERY
a. Fire Control. None.
b. Telautograph.

This battery is in very bad condition, having been left without charge for months in a wet condition. It is recommended this battery be placed on I & I.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT
1. Motor generator.
Satisfactory.
2. Ringing machine.
None.
3. Rectifier.
None.
4. Ringing vibrator.
None.

V. POWER PANEL
Satisfactory.

VI. DISTRIBUTING FRAME
The cables to the distributing frame are potheaded and the frame itself is the old fire control type mounting porcelain or composition terminal strips. It is recommended the fire control distributing frame be replaced with more modern equipment.

333.14/3-EN

1. OCCA 333.14/3-EN
333.1 1st Standish Mass

VII. WIRE CHIEF'S TEST EQUIPMENT
None.VIII. RELAY RACK
None.IX. RECORDS

The cable maps and drawings pertaining to this post are those turned over to the Signal Corps by the Engineer Corps and are not up-to-date. These drawings are in the process of revision in the office of the Corps Area Signal Officer.

X. MISCELLANEOUS

No information under this heading applies to this post.

XI. STOREROOM
Satisfactory.XII. CONDUIT SYSTEM

Satisfactory, except that in event cables larger than 100 pair are installed it may be necessary to enlarge some of the manholes.

XIII. CABLE SYSTEM

The cables are all old (some of them over thirty years) and are all terminated in potheads. It is recommended the Corps Area Signal Officer prepare a project for the complete rehabilitation of the cable system for this post.

XIV. POLES, CROSSARMS, ETC.
None.XV. TERMINALS

It is recommended that in connection with the recommendation contained in paragraph XIII provision be made for the termination of all cables in sealed chamber type terminals similar to JB-10.

XVI. WIRES
None.XVII. TARGET RANGE COMMUNICATION SYSTEM
None.XVIII. TELEPHONE STATION EQUIPMENT
Satisfactory.XIX. TELEGRAPH STATION
None.XX. FIRE CONTROL SYSTEM1. Station and batteries.

Satisfactory, except that a great majority of telephone equipment is the old C.A.T. type equipment which, while appearing to be satisfactory, is not as efficient as that of later design.

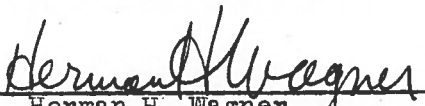
SigO 333.9-Ft. Standish, Mass.

12/7/39

2. Time interval apparatus.
Satisfactory.
3. Fort signal stations.
None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE

It is recommended the 5 Kw. gas-engine-driven generator and the power panel associated with the telautograph system battery be declared excess and reported to the Corps Area Signal Officer.


Herman H. Wagner
Assistant Electrical Engineer, S.S.L.

SigO 333.9-Ft. Standish

1st Ind.

HHW/mm

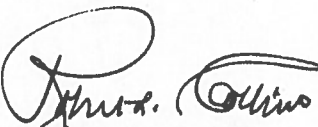
Headquarters First Corps Area, Boston, Mass. December 7, 1939. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

1. For action in accordance with the provisions of paragraph 13 a, AR 105-20, September 29, 1938, and return of three copies to this headquarters.

2. The Corps Area Signal Officer will initiate action in accordance with the recommendations contained in paragraphs VI, XII, XIII and XV.

By order of Colonel Freeman:

Recd 1st C. A. Dist. DEC 11 1939


ROBERT L. COLLINS
Colonel, A. G. D.
Adjutant General

2nd Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

DEC 11 1939

To C. O., HD of Boston.

RAZ

Rec'd HD of Boston DEC 11 1939



333.14/3-EN

AE-333.9 Ft. Standish

3rd Ind.

/jms

HEADQUARTERS, HARBOR DEFENSES OF BOSTON, FORT BANKS, MASS., January 11, 1940 -
To: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined.
2. The storage battery mentioned in paragraph III b was placed on I & I report several years ago and was turned into salvage. Authority was obtained to reclaim it from salvage and use it for post lighting purposes as long as practicable and required. It has now been destroyed since it is no longer required.
3. The 5 kw gas-engine-driven generator mentioned in paragraph XXI has been reported as excess to the Corps Area Signal Officer for disposition.

Recd 1st C. A. Dist. JAN 1 1940

Monte J. Hickok
MONTE J. HICKOK,
Colonel, 9th C.A.,
Commanding.

~~4th~~ Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

~~JAN 1 1940~~ To C. G., 1st Corps Area, *WZ*

Rec'd Hq. 1st C. A. JAN 16 1940
REC'D C SIG O. F. C. A. JAN 16 1940

SigO 333.9-Ft. Standish

5th Ind.

HHW/rec

Headquarters First Corps Area, Army Base, Boston, Mass. January 17, 1940.
To: The Adjutant General, War Department, Washington, D. C.

1. Approved.
2. The Corps Area Signal Officer has initiated or will initiate action in accordance with recommendations contained in paragraphs VI, XIX, XIII and XV.

For the Commanding General:

12 A 40
JAN 19 1940
Received *gma*

RECEIVED
JAN 20 10 00 AM '40
OFFICE OF THE
CHIEF SIGNAL OFFICER
Robert L. Collins
ROBERT L. COLLINS
Colonel, A. G. D.
Adjutant General

333.14/3-EN

1 OCCA 333.14/3-EN Enc. 1.

POST OR FORT FORT STANDISH, MASS.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Title and sheets 6, 6 A, 8, 11 and 13

Rendered by Herman H. Wagner
Rank Assistant Electrical Engineer
Date November 28, 1939

S-10152

TITLE SHEET

333.14/3-EN Enc. 1

Enc 1

POST OR FORT FORT STANDISH, MASS.

Date November 28, 1939

STORAGE BATTERIES NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....				Manufacturer's type			
A. H. capacity.....				hydrometer.....			
Manufacturer.....				Location.....			
Manufacturer's type.....				Furnishes power for.....			
Date installed.....				Trickle, float, or			
Date new elements				cycle charged.....			
installed.....				How often?.....			
In cabinet or on rack?.....				At what rate?.....			
Which side grounded?.....				Remarks.....			
Manufacturer's type							
thermometer.....							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Cr-Wheeler		Date installed.....	1920	
Manufacturer's type.....	3/4 L. Ty. S. E. C. D.		Signal Corps type.....		
Kw. output.....	1/2 K.W.		Order number and		
Operating voltage.....	110 - 45		date.....		
Cycles or d. c.....	D. C. Sp. 1600 RPM		Location.....	F. C. Swbd. Room	
Generator serial number.....	951 Code 43030		Charges what battery?.....	Fire Control	
Motor serial number.....	950 3/4 L. Ty. C. M.				

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT NONE

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....				Manufacturer.....			
Date installed.....				Manufacturer's			
Location.....				type.....			
				Operating voltage.....			
				Cycles or d. c.....			

FORT STANDISH, MASS.

Date: November 28, 1939

Gas Engine Generator (Telautograph)

Type GN-20A 5 KW.
Order #131536, 6-22-22
Engine, GE-4
Panel, BD-42

Power Panel (Telautograph)

Type: Rack mounted, slate, similar to BD-17
Ammeter: 0-100 amps. w/shunt, Weston 50142
Voltmeter: 0-150 V
Weston 6071

POST OR FORT FORT STANDISH, MASS.

Date November 28, 1939

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	30 V FC	
Manufacturer's type			Location	F.C. Swbd. Room	
Signal Corps type	BD-17		Date installed		
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston		50-0-50	#51060	Flush type	
Circuit breaker	Cutter Co.	C 2600	250 V-24	Amp.		
Motor starter	Cutler Hammer		HP 1-115	V, 8 Amp. No. 1110	901B9	
Rheostat	Ward Leonard	(No code available)				
Voltmeter	Weston		0-250	#32572	Flush type	
Other equipment:						

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	7	Controller, zone signal		Switch key, set	xxx
Bell, T. I., small	4	Hand set	xxx	Telephone, B. C.	5
Bell, zone sig		Head set	26	Telephone, desk	xxx
Bell, ext. L. R.		Outlet, zone sig		Telephone, gun	4
Box, junc., std		Signal, firing, B. C.		Telephone, plotters	3
Box, junc., T. R.		Signal, firing, pit		Telephone, wall	15
Box, T. I., bell	7	Switch, hand set	1	Switchboards, BD-74	
Box, term., 2-strip	6	Switch, push, zone sig		Switchboards, BD-78	
Box, term., 4-strip	4	Switch box, base line	1	Other apparatus:	
Box, term., 8-strip	2	Switch box, cut-out		Strips 12-pr.	45
Box, term., 16 strip	1	Switch box, transfer	1	Blocks, Exter.	20
				Capacitor 8 mf	1

POST OR FORT FORT STANDISH, MASS.

Date November 28, 1939

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories	\$	Outside telephone plant	\$200.00
Telephone power plant		Other plant	
Other telephone C. O. equipment		Target range system	
Telephone station equipment	100.00	TOTAL	300.00

FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system	\$18,403.00	Telephone and other equipment	\$2,700.00
F. C. power equipment	1,000.00	TOTAL	22,103.00

TRUNKS AND TIE LINES NONE

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
			\$	\$	\$	\$

STATION EQUIPMENT

Manufacturer

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk		4			
Hand set					
Wall		1			
TOTAL		5			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
Ft. Banks #3	Chief Caretaker	1					B	
" #13	3 Caretakers	3					B	
" #73	Dock			1			C	

O.C.C.R.

HEADQUARTERS
NORTH ATLANTIC COAST ARTILLERY DISTRICT
TEXTILE BUILDING, 99 CHAUNCY ST.

319.1

BOSTON, MASS., July 18, 1919.

From: Captain Frederick P. Schlamdt, C. A., Asst. Materiel Officer, N.A.C.A.D. *W.P.*
To: The Adjutant General, U. S. Army, (Through Military Channels).
Subject: Fiscal year 1919 Inspection of Signal Corps equipment, Fort Strong, Mass.

1. Inspection made July 3, 1919, per G. O. #146, W. D., 1911, and in compliance with Paragraph 1, S. O. #107, Headquarters N. A. C. A. District, June 26, 1919. Last annual inspection made July 27, 1917. Number of companies at post: 4. Fire-control system is standard.

2. STATIONS AND BATTERIES:

2nd Battle Command Station, Deer Island;

- (a) No labels on telephones Nos. 1225 and 1118.
- (b) Hook spring of telephone No. 1225 is weak.
- (c) No headset on telephone No. 1118.
- (d) Hinges of handset switch No. 151 broken.
- (e) Wing nuts loose on telephones Nos. 2023 and 2009.
- (f) Retaining cord not tied on telephone No. 1225.
- (g) All telephones need a thorough cleaning.

Bⁿ Terrill - Deer Island.

- (a) T. I. Bell rusty

Searchlight No. 13.

- (a) No mat in tray of telephone.

Bⁿ Burbeck - Deer Island

- (a) T. I. Bell rusty.

Mⁿ A - Deer Island.

- (a) Hook spring of telephone No. 1124 is weak.

Mⁿ 2B - Deer Island;

- (a) Door of telephone No. 2010 broken off of hinges.
- (b) No condenser in telephone No. 2010.
- (c) No battery switch in telephone No. 714.

G5 Station.

- (a) T. I. Bell rusty and dirty.
- (b) Wing nut loose on telephone No. 212.
- (c) Cannot receive a ring over telephone No. 1111.
- (d) All telephones need cleaning.

Bⁿ 11 Hitchcock.

- (a) A piece of improvised wiring outside of moulding in plotting room.
- (b) No megaphone in station.
- (c) Strap key does not ring T. I. Bell.
- (d) Wing nut broken on telephone No. 145.

Reed. Strong 7-22/19

(Ft. Strong, cont.)

B'Ward.

- (a) T. I. Bell needs cleaning.
- (b) No megaphone in station.
- (c) Hook spring of telephone No. 1108 is weak.

M'2 B

- (a) Nut missing from T. I. Bell.
- (b) No megaphone in station.
- (c) Telephone No. 1037 fastened to wall with only three screws.
- (d) Telephone No. 1198 fastened to wall with only two screws.

Meteorological Station;

- (a) No table of temperature corrections for barometer.
- (b) T. I. Bell rusty.
- (c) Wind vane is not securely fastened to shaft.

M'2 Drill Station;

- (a) Hook switch contact of telephone corroded.

Battery Hitchcock.

- (a) One plug missing from emplacement outlet box at No. 1 Gun.
- (b) Thumb screw broken on telephone No. 1103.
- (c) One cross connection is in front of slate panel of cutout cabinet and not labeled.
- (d) Improvised wiring from telephones in booths to telephone terminal blocks at range boards. This wiring is very unsightly and has very poor insulation resistance. It is recommended that the telephones be attached to the emplacement wall near the range boards and connected to the emplacement outlet boxes with type 251 cable.

Battery Ward;

- (a) One wooden wall telephone in booth on searchlight line. If this telephone is authorized, it should be replaced by a B. C. telephone in an iron case.
- (b) Improvised wiring to range boards. This wiring should be replaced by cables as recommended in Paragraph "d", Battery Hitchcock.

M" Drill Station;

- (a) Terminal box is rusty.

Battery Taylor;

- (a) No label on telephone.

3. DISTRIBUTING AND POWER SWITCHBOARDS:

- (a) Voltmeter switch reading positive to ground; 0.
" " " negative " " 26.
- (b) Terminal for B. C. telephone or distributing board not soldered.

4. STORAGE BATTERIES AND CHARGING EQUIPMENT:

- (a) The normal charge rate of the telephone battery is 15 amperes.
- (b) There is a large amount of sediment in some of the cells. The local authorities stated that all cells would be cleaned as soon as the new sand trays, which have been requisitioned for, are received.
- (c) The specific gravity of each cell is as follows;

Ft. Strong, Mass., cont.

Cell No. 1 - 1185	Cell No. 6 - 1186	Cell No. 11 - 1187
2 - 1185	7 - 1187	12 - 1186
3 - 1187	8 - 1188	13 - 1185
4 - 1184	9 - 1185	14 - 1186
5 - 1187	10 - 1186	15 - 1187

(d) The voltage of a few cells is as follows;

Cell No. 1	- 1.9
4	- 1.9
7	- 1.9
9	- 1.9
15	- 1.9

(e) Voltage of battery at normal rate of discharge: 28.

5. MONTHLY MAINTENANCE TEST:

(a) The monthly tests of all cables of the fire-control system have not been recorded.

(b) In the partial test made by the inspector the following lines were found with poor insulation:

Strip 16		Strip 24	
	Ohms		
Pr. 1	50000 1 meg.	Pr. 7	- 500000 50000
2	500000 400000	8	- 500000 5 meg.
3	500000 600000		
4	400000 400000		
6	300000 400000		

6. UNDERGROUND SYSTEM:

(a) The records of the underground system are now being corrected.

7. OVERHEAD SYSTEM:

(a) Lightning arrester in stable not grounded.

(b) Several carbons missing from pole box at headquarters.

(c) Two pair of carbons missing in pole box C 4.

(d) No entrance tubes on telephone lines in buildings Nos. 36 A and 37. Line passes through window casing in building No. 37; this line should be properly installed.

(e) It is recommended that the present system of overhead distributing lines be replaced by underground cable.

8. POST TELEPHONE SYSTEM:

(a) Switchboard is not protected from hostile fire.

(b) The following unauthorized telephones are installed. These telephones are not

Ft. Strong, cont.

listed on Form 211, dated February 12, 1919.

Drop No. 63 - Sergeant Brown

" 64 - Engineer Jorgeson

(a) Switchboard cords Nos. 1 and 6 do not test perfect.

(b) In the partial maintenance test made by the inspector the following lines were found with low insulation:

Drop. No. 8 - 30000

11 0

17 500000

39 900000

29 2000

24 300000

21 600000

20 300000

61 0

7 400000

10 300000

70 10000

Trunk Lines:

Warren 0

0

City Hospital 300000

300000

11. TELEGRAPH EQUIPMENT:

None at post.

12. TARGET RANGE:

None at post.

13. GENERAL:

Recommendations:

The following work should be done.

(a) ~~ALL telephone handsets should be overhauled, the transmission over the lines at Ft. Strong was generally poor.~~ Thoroughly clean all exterior metal parts of telephones, handset switches, base line switches, etc., and then cover these parts with a thin coating of oil. Clean and adjust the switch contacts of all telephones and handset switches. Clean the metal parts of handsets and headsets. Varnish wooden telephones where necessary and paint the interior and exterior of iron B. C. telephone boxes.

14. This report is submitted in quadruplicate, one to be filed in each of the following named offices: Post Commander, District Commander, Chief of Coast Artillery, and Chief Signal Officer of the Army. The post commander will, under existing regulations, retain one copy of the report and forward, through military channels, the remaining three copies, indorsing all three copies. He will include in his indorsement remarks of the action taken to remedy any defects and deficiencies reported, his approval or disapproval of any recommendations of the inspector, and any additional comments or recommendations he deems advisable in connection with the equipment.

FPS/dbf.

Frederick P. Schlant
Frederick P. Schlant.

1st Ind.

Commanding Officer, Ft. Strong, Mass. July 31, 1919. - To Commanding Officer,
C. D. of Boston, Ft. Warren, Mass.

1. With the exceptions noted in ensuing paragraphs all defects and deficiencies noted in attached report have already been remedied, or the work will be completed by August 1st, 1919.

2. Recommendation in par. 2, Battery Hitchcock, and Ward, subpar (d) is concurred ~~with~~ and authorization for use of type 251 cable for replacing this wiring is requested.

3. Recommendation in par. 7 (e) is also approved as the overhead installation is extremely unsightly on the post, and has absolutely no protection against the weather or hostile fire.

Cyril L. D. Wells

CYRIL L. D. WELLS,
Major, C. A.
Commanding.

REQ'D BACA C. D. OF BOSTON

333.1

2 d. Ind.

HQ. C.D.OF BOSTON, FORT WARREN, MASS., AUGUST 12, 1919:---To COMMANDING
GENERAL, N.A.C.A.DISTRICT, BOSTON, MASS.

1. Forwarded. Approved.

rgn

S.M. Foote

S.M. FOOTE,
Colonel, C.A.C.

Rel.

REC'D. HQ. NACAD.

AUG 13 1919

333.1

3rd Ind.

FPS/dbf

HQ. N. A. C. A. DISTRICT, Boston, Mass., September 8, 1919.---To Chief
of Coast Artillery, Washington, D. C.

1. Attention is invited to the foregoing report on the ac-
tion taken to remedy the defects noted, which is approved

2. The Commanding Officer, Coast Defenses of Boston, has been
directed to submit a requisition for the necessary material to install the
post telephone system underground and to rewire Batteries "Ward" and "Hitch-
cock".

✓ *e*
RECEIVED SEP 10 1919 N.A.C.A.

File

REV 10 11

Law

John W. Ruckman
JOHN W. RUCKMAN,
Brigadier General, U.S.A.,
Commanding.

695

OFFICE CHIEF OF COAST ARTILLERY

RECORD CARD

DATE RECEIVED

12/22/19

CV

Ft. Strong, Mass.
Sept. 25/19

C.O. FORT STRONG, MASS.
Lt. Col. E. H. Metzger,

Submits requisition for material required to install the Post Telephone system at this post underground, and for material to rewire Battys Ward and Hitchcock with type 251 cable. A sketch showing the proposed new construction is attached. This work requires the construction of seven new man-holes, the laying of approximately 1700 feet of 4-duct conduit, the tributary single duct conduit lines from man-holes to buildings, and the trenching of type 251 cable from can terminals to buildings.

4 Incls.

1. Reqn. Serial No. 3440, 9/17/19, by S.O. (A.E.), Ft. Strong, Mass., for material required to install Post Telephone system underground, including 6900 ft. Cable, type 251, 275 ft. Cable, type 306, etc.
2. Reqn. dated 12/1/19, by S.O. Ft. Strong, for material required to rewire Battys Hitchcock & Ward, Ft. Strong, Mass.
3. Copy Attached.
4. B/F- Ft. Strong, Mass. U.S. Signal Corps Cable System.

1st Ind. Hq. C.D. Boston, 9/29/19 - To C.O., Ft. Strong, Mass. 1. Returned, with request that par. 775, A.R., be complied with. The subject referred to in par. 3 of this communication should be the subject of a separate letter. 2. Further attention is invited to the sketch of the proposed underground telephone lines, which should be indicated on Signal Corps print, No. 335-A-7, C.S.O.E.D., of which there should be one or more on file.

2nd Ind. Hq. Ft. Strong, Mass. 10/3/19 - To C.O. C.D. Boston, 1. Returned- Instructions as directed in 1st Ind. complied with. Two letters are forwarded herewith. One contains the data called for in letter 333.1. The Adjutant N.A.C.A.D. 9/8/19 - The other requests authority to install the Post Lighting System underground at the same time the telephone system is placed underground

665/3B-1

3rd Ind. Hq. C.D. Boston, 10/7/19 - To C.O., Ft. Strong, Mass. 1. Returned. It is noted on the requisition that the distance between manholes is as follows: M.H. A-9 to M.H. A-13 200 feet. While the proposed manholes are shown on the attached blueprint; A-13 is not so marked, also no cables are shown to enter this manhole, while manholes Nos. A-14, A-15, A-16, A-17, A-18, A-19 and A-20 show proposed cables entering and leaving them. 2. It is presumed that M.H. A-13 is the proposed one shown west of the Post Hospital. 3. It is suggested that you eliminate the M.H. A-13 from the Signal Corps print. An Engineer print is enclosed herewith, that you may place all the manholes thereon and marking the seven shown on Signal Corps print for Signal Corps cables; also Engr. cables, and on the Engineer print manhole A-13 for Engineer lighting cables only.

4th Ind. Hq. Ft. Strong, Mass. 10/16/19 - To C.O. C.D. Boston. 1. Returned-instructions, in 3rd Ind. complied with, in that construction of manholes on Signal Corps print shows the seven manholes needed for the telephone system only, while the Engr. print shows M.H. A-13 as the only manhole not provided for by the telephone installation, which is needed to complete the underground installation of the lighting system.

Forwarded, recommending approval.

6th Ind. Hq. N.A.C.A.D. 10/27/19 - To C.O., C.D. Boston, 1. Due to the fact that the underground post telephone system is a proposed installation, the material required should be entered on a separate reqn. All items necessary for the proposed change, such as manhole cable hangers, splicing material, pipe straps, terminal blocks, etc., should be included in the estimate. Only standard items issued by the Signal Corps should be called for. 2. The type 251, cable should enter each building as shown in Fig. 7-45, S.C. Manual No. 8, and terminate on a W.E. 7 A, 1 pair terminal block. 3. It is also noted that there are no pipe straps or cable supports on the requisition for the installations at Battys Ward and Hitchcock.

Attention is invited to the preceding Ind.

665/3 B-1

333.1

10th Ind.

S:d

HQ. N.A.C.A.DISTRICT, Boston, Mass., December 19, 1919 - To the Chief of Coast Artillery, Washington, D.C.

1. The present overhead post telephone system at Fort Strong was installed in 1908 and is now in a very poor and unsightly condition. It is recommended that the aerial lines be replaced by underground cable as suggested in the foregoing letter.

2. Some of the type 251 cable will be used to replace the unserviceable wiring between the booths and range boards at Batteries Ward and Hitchcock.

3. The proposed installation of the post lighting system, referred to in the 4th indorsement hereon, is not included in this estimate.

4. A copy of letter No. 333.1, from the Adjutant, North Atlantic Coast Artillery District, dated September 8, 1919, referred to in paragraph 1 of the basic letter, is inclosed herewith.

H.B.GRAFF
Colonel, C.A., Adjutant
For and in the absence of the
District Commander.

4 incls.
1 blueprint
2 reqn (tripl.)
1 letter

(6)

665/3B-1

12th Ind. O.C.S.O. (400.312 Ft. Strong, Mass.) 1/3/20 - To C. of E. 1. Forwarded.
2. The approximate cost of the items enumerated on the attached reqn. #3440
is \$877.00, allowing for cable on hand to be used. Cost of the material listed
in the attached reqn, no number, is approximately \$90.00.

665

3B-1

Office, C. of E., February 25, 1920. - To the Chief of Coast Artillery.

1. Returned, with the information that the papers having been referred to the District Engineer, Boston, Mass., he estimates the cost of construction of the underground duct system, including installing the cables therein, to be \$8,775, and submits a revised requisition, copy of which is inclosed herewith.
2. In view of the amount of construction work involved, it would appear that under Paragraph 1505-1/2, Army Regulations, this work should be undertaken by the Engineers, and if the Chief of Coast Artillery desires that the work be done, it is recommended that it be handled in that way. Funds are available from assignments heretofore made to this office.
3. The District Engineer has gone on the assumption that the re-wiring of Batteries Ward and Hitchcock was to be done by the Coast Artillery troops, as authorized under Paragraph 1505-1/2, Army Regulations, and, therefore, has submitted no estimate of cost for that work. If, however, this work is so extensive as to be undertaken by the Engineers also, he will be instructed to submit an additional estimate therefor.

LANSDING H. BEACH
Major General, Chief of Engineers.
By:

C. O. SHEPHERD
Colonel of Engineers.

Sub Nos. 1-4 and
F2/1 accomp.

(6)
665

3B-1

665/3B1

14th Ind.

Cox/HVP

War Department, O.C.C.A., March 3, 1920. To The Adjutant General.

1. These papers pertain to Fort Strong, Boston. It is proposed to replace the overhead telephone system, which is reported in a very poor condition, by an underground duct system, and to re-wire Battery Ward (two 10-inch) and Battery Hitchcock (two 10-inch).

2. It is recommended that the project as outlined above be approved and the the Chief of Engineers be instructed to proceed with the work.

5 incls.

F.W. COE,
Major General,
Chief of Coast Artillery.

MAILED MAR 4 1920

2:56 PM

[Handwritten signature]
[Handwritten signature]

00005

665-

3-B-1

H

Forwarded.

676.1 Ft. Strong (Misc.)

16th Ind.

CHAMC 158

War Department, A. G. O., March 19, 1920 - Through the Chief of Coast Artillery, the Chief Signal Officer, the Commanding General, Northeastern Department, Boston, Mass., and the Commanding General, North Atlantic Coast Artillery District, Boston, Massachusetts, to the Commanding Officer, Ft. Strong, Mass.

Returned, disapproving the request made in the foregoing papers to change the overhead telephone system to an underground duct system at Fort Strong, Massachusetts, there being no justification for the expenditure of the necessary funds to effect the change at this time.

By order of the Secretary of War:

Snodgrass

5 Incls.

Adjutant General.

(6)

665

3-B-1

COPY

333.1

September 8, 1919.

From: The Adjutant, N.A.C.A. District.

To: Commanding Officer, Coast Defenses of Boston, Fort Warren, Mass.

Subject: Requisition.

1. Reference 1st indorsement, Fort Strong, Mass., dated July 31, 1919, on report of annual Signal Corps inspection, the District Commander directs that a requisition be submitted for the material required to install the post telephone system underground, and to rewire Batteries "Ward and "Hitchcock" with type #251 cable.

2. The information required by paragraph 90, General Orders, Headquarters, Northeastern Department, 1917, will accompany the requisition.

FPS:dbf

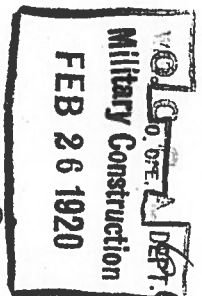
W.W. ROSE
Lt. Colonel, Coast Artillery

665/3B-1

Inc 3.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF COAST ARTILLERY
WASHINGTON

February 19, 1920
RECEIVED



From: Chief of Coast Artillery.

To: Chief Signal Officer.

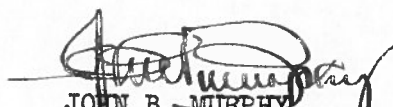
Subject: Post Telephone System, Fort Strong, Mass.

1920 FEB 21 PM 4 25
CHIEF SIGNAL OFFICER

There was transmitted, through your office to the Chief of Engineers, by 11th indorsement of this office, dated December 26, 1919, (File No. O.C.C.A. 665/3B1; O.C.S.O. No. unknown), a communication requesting that this office be informed of the approximate cost of the project therewith, for placing the existing overhead post telephone system at Fort Strong, Mass., underground, as follows:

- (a) By the Chief Signal Officer-- the cost of Signal Corps material called for on the requisitions therewith.
- (b) By the Chief of Engineers-- the cost of the construction of man-holes, conduits, and trenching, etc.

No reply to the foregoing communication has been received in this office and information is requested as to the present status of same.


JOHN B. MURPHY,
Colonel Coast Artillery,
Assistant to Chief of Coast Artillery,
In the absence of the Chief of Coast Artillery.

1920 FEB 21 PM 1 14
RECEIVED
CHIEF SIGNAL OFFICER

665
3-B-3

1st Ind.

400.312 (Ft.Strong)


✓C.W.-E.Ka.

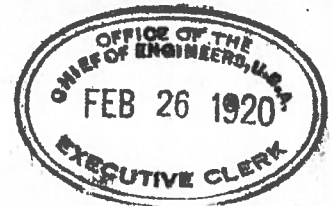
O.C.S.O., February 25, 1920 - To: Chief of Engineers.

1. Returned, advising that the communication referred to in the foregoing letter was forwarded to the Chief of Engineers under 12th Indorsement from this office on January 3, 1920 with the following information:

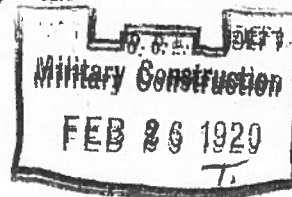
"The approximate cost of the items enumerated on the attached requisition #3440 is \$877.00, allowing for cable on hand to be used. Cost of the material listed in the attached requisition, no number, is approximately \$90.00".

By authority of the Chief Signal Officer.


F. R. Curtis,
Colonel, Signal Corps.



To C. C. A.-
Informal indorsement a few days ago gives the status of above correspondence as far as this office is concerned.



File: Law

6 FEB 28 1920 O.C.S.O.

X

OFFICE CHIEF OF COAST ARTILLERY

RECORD CARD

DATE RECEIVED

CV
3/12/20

Feb. 20/20

C.O. FT. STRONG, MASS.
To CO, C.D. Boston, Mass.

Requesting Engr. Dept. rewire Battys Ward and Hitchcock, Ft. Strong, Mass.
This work required to make present F.C. wiring permanent.

Forwarded recommending approval.

4th Ind. Office, Div. Engr, N.E. Div. N.Y. City, 3/6/20 - To C. of E.
1. Forwarded, attention being invited to request of Coast Arty Comdr. of
Feb. 25/20, with 2nd and 3rd Inds. thereon. In this connection attention is
invited to par. 3 of 6th Ind. of this office, dated 2/19/20, on wrapper on
C. of E. 676.1 (Bos-Strong) Fl, dated Jan. 17/20.

665
3 B-4

C.of E.676.1(Bos-Strong)F4 - Subject: Rewiring of Batteries Ward
and Hitchcock.

5th Ind.

Office, C. of E., March 11, 1920. - To the Chief of Coast Artillery.

1. Forwarded, inviting attention to paragraph 3 of the 13th
indorsement, dated February 25, 1920 (C.of E.676.1(Bos-Strong)F1;
O.C.C.A.665/3B-1). The District Engineer estimates the cost of the
work required to be \$1,021. Fire control funds are available to this
office from assignments heretofore made.

2. Approval is recommended.

LANDING H. BEACH
Major General, Chief of Engineers.
By:

C. O. Sherrill
Colonel of Engineers.

(6)

665

3 B-4

C. of E. 576.1 (Bee-Strong) F4 - Subject: Rewiring of Batteries
Ward and Hitchcock.

7th Ind.

Office, C. of E., April 23, 1920. - To the Chief of Coast Artillery.

1. Returned.

2. In view of disapproval of the proposal to replace the overhead telephone system at Fort Strong, Boston Harbor, by an underground chat system, carried in 16th indorsement, March 19, 1920 (A.G.O. 676.1-Ft. Strong-Misc.; O.C.C.A. 685/381), information is requested as to whether it is the opinion of the Chief of Coast Artillery that the work of rewiring Batteries Ward and Hitchcock, requested herein, is warranted. The work was apparently concerned only with the fire control wiring and it was intended to make it permanent in connection with the change of the outside system which was disapproved as noted.

LANSING H. BEACH
Major General, Chief of Engineers.
By:

C. O. Sherrill
Colonel of Engineers.

Sub No. 1 accompanying.

(6)

Cox/HVP

665/3B4

8th Ind.

War Department, O.C.C.A., April 27, 1920. To Chief of Engineers.

It is recommended that the work of rewiring Batteries
Ward and Hitchcock, Fort Strong, be accomplished.

John B. Murphy, Maj. C.A.C.
In the absence of

F.W. COE,
Major General,
Chief of Coast Artillery.

✓
1 incl.

Saw

MAILED APR 27 1920 12:00 BATH

665

3B4

11

OFFICE OF THE SIGNAL OFFICER.

HC/mm

IN REPLY SigO 333.9-Ft. Strong
REFER TO:

November 3, 1937.

TO: Signal Officer, First Corps Area.

This inspection made: September 2, 1937 by H. Caldwell, Electrical Ass't S.S.L.

- 333.9-74. Strong (11-3-57)
- I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET
None installed at the present time.
- II. AUTOMATIC EQUIPMENT.
None.
- III. STORAGE BATTERY
This is made up of used cells maintained in an inactive condition for preservation.
- IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT
In good condition and operates satisfactorily. It is of sufficient size for the operation of the fire control and post administrative telephone systems.
- V. POWER PANEL
Satisfactory.
- VI. DISTRIBUTING FRAME
The fire control type frame involved in this installation is sufficient for all purposes at the present time and the equipment including terminal strips, retardation coils and time interval panel is in good condition.
- VII. WIRE CHIEF'S TEST EQUIPMENT
None is permanently installed for determining the condition of circuits and associated apparatus. Suitable instruments are obtainable however from the harbor defense general storeroom where they are kept for preservation when not being used.
- VIII. RELAY RACK
None.

1 O.C.C.A.
33.14/3-E
333.1
333.9-
S.S.L.
S.S.L.
ent
ve
ficient
terminal
dition.

11/3/37

IX. RECORDS

- a. Record of the equipment kept at the post is correct.
- b. No recent record of the condition of the communication cables was obtainable at the post.
- c. Maps of the cable and conduit system are on hand; these are to be corrected and revised in accordance with the present Signal Corps standard for such drawings.

X. MISCELLANEOUS

This paragraph relates to the operation of a post administrative telephone switchboard, therefore, there is nothing to report.

XI. STOREROOM

- a. The storeroom is suitably located, is neat and clean and equipment is satisfactorily stored.
- b. No equipment other than that needed is stored.

XII. CONDUIT SYSTEM

- a. The manholes are of adequate size for the cables in use; all are provided with cast iron covers in good condition.
- b. Power cables of 110 volts pressure occupy space in the same manholes, but separate conduit runs.
- c. Cables employed for circuits in the communication system are in satisfactory working condition.
 - (1) Cable number B-6 connecting the "old switchboard" building (not occupied) and a terminal in the officers quarters area, is not in use and probably never will be as now installed. It is proposed to alter this and provide underground circuits to quarters 34, 43A, 43B and the officers area. The cable passes building No. 30 and through connections to the main distributing switchboard can be established at that point if the cable is cut and terminated there. The section of the cable from opposite building 30 to the old switchboard room when recovered will provide the cable necessary for extensions from the remaining section to all the buildings indicated above. Three terminals of the JB-10 type will be required. The work will reduce the maintenance of the aerial system now in use.
- d. Antiaircraft battery number 3 has not been provided with facilities for telephone communication. A ten pair armored cable which is now in place running from building No. 30 to the vicinity of the battery will serve for all lines required, when equipped with a terminal installed in connection with it on a substantial post at the battery. The cable if used for this purpose should be discontinued to building No. 30 and transferred at manhole No. A5 to an underground cable leading to the switchboard room which is now available.

XIII. CABLE SYSTEM

No aerial cable system.

XIV. POLES, CROSSARMS, ETC.

In fair condition.

XV. TERMINALS

In fair condition.

XVI. WIRES

In fair condition.

XVII. TARGET RANGE COMMUNICATION SYSTEM

None.

XVIII. TELEPHONE STATION EQUIPMENT

Satisfactory.

XIX. TELEGRAPH STATION

None.

XX. FIRE CONTROL SYSTEM

1. Station and Batteries.

The equipment in the stations and at the batteries as listed below, although of old types, is in good condition:

Telephones - desk and wall types

Headsets and handsets

Time interval bells, extension blocks

Telephones - Battery Commanders and gun types

Terminal boxes, terminal strips and wiring

2. Time Interval Apparatus, Panel and Circuits.

(1) The time interval mechanism type EE-56 is in good condition and operating satisfactorily.

(2) The time interval switchboard panel is also in good condition.

3. Fort Signal Station. None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE

a. No changes have been made in the installation since the last inspection.

b. The change proposed in Section XII c (1), affecting the cable system in the quarters area is submitted for approval since very little expense would be involved. The cable required is on hand and can be made available for the purpose as explained. Terminals only need to be supplied.

c. Lines to the Antiaircraft battery are required in the approved fire control plan and the alterations to cables proposed in Section XII d will provide immediate establishment of these.

H. Caldwell

H. Caldwell, Electrical Ass't, S.S.L.

333.14/3-EE

7th Ind.

War Department, Office, Chief of Coast Artillery, November 30, 1937. - To:
The Adjutant General.

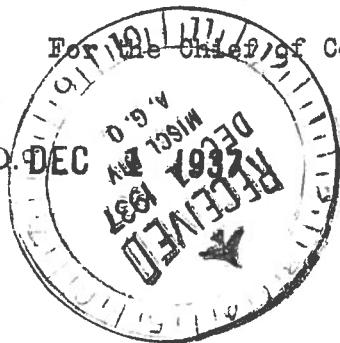
1. Reference is made to paragraph XII d, basic letter, in which it is stated that Antiaircraft Battery No. 3 has not been provided with facilities for telephone communication.

2. No funds are available to the Chief of Coast Artillery for the alteration of existing facilities which will provide the required communication. If sufficient funds are available to the Commanding General, First Corps Area for the purpose, it is recommended that the existing 10-pair armored cable be transferred at Manhole No. A5 to an existing underground cable leading to the switchboard room and that a terminal at battery be installed.

For the Chief of Coast Artillery:

Received A. G. O. DEC 4 1937

1 Incl.



J. A. Green
J. A. GREEN,
Colonel, C.A.C.,
Executive.

AG 333.9 Ft. Strong
(11-3-37) Misc.

8th Ind.

MMS/ss

War Department, AGO, December 2, 1937. To: the Commanding General, First Corps Area.

Attention is invited to the 7th indorsement.

By order of the Secretary of War:

Rec'd Hq. 1st C. A.

DEC 4 1937

By [Signature]
Adjutant General.

1 incl. n/c

REC'D O SIG O. F. C. A. DEC 4 1937

SigO 333.9-Ft. Strong

9th Ind.

CPB/mm

Headquarters First Corps Area, Boston, Mass. December 9, 1937. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

1. Attention is invited to 7th and 8th indorsements.

2. A project will be submitted to the Corps Area Signal Officer, in accordance with paragraph 4 b (2) AR 105-20, outlining the work recommended in paragraph XXI b and c. It is assumed that the work can be accomplished by military personnel at your disposition.

By command of Major General Conner:


R. E. FRAILE,
MAJOR, A. G. D.,
ASS'T. ADJUTANT GENERAL

Incl. w/d (Form #72)

10th Ind.

HQ. FIRST COAST ARTILLERY DISTRICT, Boston Army Base, Boston, Mass., Dec. 10, 1937-To Commanding Officer, HD of Boston, Fort Banks, Mass.

Incl - n/c


F. L. T.

Rec'd HD of Boston DEC 11 1937


AE-333.9(Ft. Strong)

11th Ind.

CAG/JMS

Headquarters, H.D. of Boston, Fort Banks, Mass., April 7, 1938 - To: Commanding General, First Corps Area, Army Base, Boston, Mass., THRU: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. In compliance with instructions contained in preceding 9th Indorsement, the following data are furnished in accordance with paragraph 4 b (2), A. R. 105-20, reference the proposed changes to be made in cable routings at Fort Strong.

a. Cable B6 to be removed from ducts between MBC₂ Station and M.H. A5, and between M.H. A6 and M.H. A9. At M.H. A5 cable T-17 is to be spliced to Cable T-15B to furnish pairs between Anti-Aircraft Battery No. 3 and switchboard room. At M.H. A9 cable T-1 (10-pairs) is to be extended and continued to quarters No. 2, Officers' Area. Cable required to extend cable T-1 to be portion of Cable B6, recovered. Cable T-14 is to be removed from ducts between M.H. A8 and M.H. A9 and will be trenched to officers' quarters 43 A and 43 B, thence to Hospital. There will be several short 2-pair and 1-pair cables trenched from 10-pair terminals to quarters and between quarters. These are indicated on blueprint A-100-2-a, attached hereto.

b. The changes outlined above are indicated on attached blueprint and are necessary in order to eliminate existing aerial lines and to furnish necessary fire-control communication lines to Anti-Aircraft Battery, No. 3.

AE-333.9 (Ft. Strong) 11th Ind. (4-7-38) Cont'd.

c. All labor required incident to changes can be performed by available troop personnel.

d. Total cost of materials which are not available and which will be requisitioned will be (approximately) 350 feet, cable, type WC-251, 1-pr. - \$38.50; 1300 feet cable, type WC-253, 2-pr. - \$80.60; 4 Junction boxes, type JB-10 - \$23.20. No funds will be required for the hire of civilian personnel.

e. See d, above, for list of materials required.

f. No funds will be required, other than those set forth in d, above.

3 Incls - 2 added

Blueprint A-100-1-a

" A-100-2-a

C. A. Gillette
C. A. GILLETTE,
Capt., 9th C.A.,
Commanding.

HQ. FIRST COAST ARTILLERY DISTRICT, ^{12th Ind.} Boston Army Base, Boston, Mass., April 8, 1938-To Commanding General, First Corps Area, Boston, Mass.

REC
R.E.G.

REC'D SIG O. F. C. A. APR 8 1938

SigO 333.9 (Ft. Strong)

13th Ind.

EEC/rec

Headquarters First Corps Area, Boston, Mass. April 12, 1938. To: The Adjutant General, War Department, Washington, D. C.

1. The construction work outlined in 11th indorsement is approved.
2. Instructions have been issued, under separate correspondence, to the Commanding Officer, Harbor Defenses of Boston, to submit a requisition to this headquarters to cover the material listed in paragraph 1 d of 11th indorsement.

For the Commanding General:

12 Rec'd Back A. G. O. APR 14 1938

Incl. 1

2 withdrawn - Blueprints A-100-1-a
and A-100-2-a



Clark Lynn
CLARK LYNN,
Colonel, A. G. D.,
Adjutant General.

1. OCCA 333.14/3-EE Inc. 1.

POST OR FORT Fort Strong, Mass.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Pages 1 - 13, incl.

Rendered by

H. Caldwell
H. Caldwell

Rank Electrical Assistant, S.S.L.

Date September 2, 1937.

Incl 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT Fort Strong, Mass.

Date September 2, 1937.

TELEPHONE SWITCHBOARD

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	<u>None</u>	Magneto lines equipped.....
Manufacturer.....		Trunk circuits wired.....
Manufacturer's type.....		Trunk circuits equipped.....
Manufacturer's Serial No.		Operating voltage.....
Signal Corps Serial No.	<u>(1636</u>	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	<u>42883 - 1918</u>	Trunk loop resistance in ohms.....
Common battery or magneto? ..	<u>Removed 1933)</u>	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?		If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?.....
Number of panels to a multiple.....		Are all positions equipped for service?
Number of positions.....		Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....		Location of switchboard.....
Common battery lines wired.....		
Common battery lines equipped.....		Drawing number and date of face and rear equipment layout...
Magneto lines wired.....		

SWITCHBOARD CIRCUIT DRAWINGS

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			
Drawing number and date showing central office layout.....			

POST OR FORT Fort Strong, Mass.Date September 2, 1937

SWITCHBOARD CABLE NONE

Pairs	Manufacturer's code	Signal Corps type	Connects what apparatus	Average length per run	Number of cables

CORD CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, green.....		Relay, supervisory, answering.....	
Cap, lamp, red.....		Relay, supervisory, calling.....	
Cap, lamp, white.....		Relay.....	
Capacitor.....		Relay.....	
Coil, repeating.....		Signal.....	
Cord, connecting.....		Socket, lamp.....	
Key, ringing and listening.....		Weight, cord.....	
Key, listening.....		Apparatus not listed:	
Key, ringing.....			
Plug, cord.....			

OPERATOR'S TELEPHONE CIRCUIT NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Coil, induction.....		Key, operator's switching.....	
Coil, repeating.....		Receiver.....	
Coil, retardation.....		Relay.....	
Capacitor.....		Plug, operator's set.....	
Cord, breast set.....		Transmitter.....	
Cord, receiver.....		Apparatus not listed:	
Cord, transmitter.....			

POST OR FORT Fort Strong, Mass.Date September 2, 1937.AUXILIARY SIGNAL, FUSE ALARM, NIGHT ALARM, TEST, DIAL, GENERATOR, AND MISCELLANEOUS CIRCUITS
NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Bell, night alarm.....		Lamp, pilot.....	
Buzzer, fuse alarm.....		Lamp, resistance.....	
Buzzer, night alarm.....		Receptacle.....	
Cap, lamp, green.....		Relay, fuse alarm.....	
Cap, lamp, red.....		Relay, night alarm.....	
Cap, lamp, white.....		Relay, pilot.....	
Coil, retard, dial cct.....		Relay.....	
Capacitor, signal cct.....		Resistor, generator.....	
Capacitor, dial cct.....		Resistor, ohms, test cct.....	
Fuse, 1½ amperes.....		Resistor, ohms, test cct.....	
Fuse, amperes.....		Resistor, ohms, test cct.....	
Generator, hand.....		Ringer (buzzer), gen. cct.....	
Key, dial switching cct.....		Socket, lamp.....	
Key, generator switching.....		Apparatus not listed:	
Key, generator reversing.....			
Key, night alarm.....			

LINE CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, red.....		Relay, line.....	
Cap, lamp, green.....		Signal, magneto.....	
Cap, lamp, white.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Lamp, line.....			
Relay, cut-off.....			

POST OR FORT Fort Strong, Mass.

Date September 2, 1937.

TRUNK CIRCUITS NONE

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Cap, lamp, busy.....		Relay, cut-off.....	
Cap, lamp, trunk.....		Relay, ring-up.....	
Capacitor.....		Relay.....	
Capacitor.....		Relay.....	
Coil, impedance (retard).....		Relay.....	
Coil, repeating.....		Signal.....	
Coil, resistance.....		Socket, lamp.....	
Jack, line.....		Apparatus not listed:	
Jack, night.....			
Key, dial.....			
Key.....			

WIRE CHIEF'S TESTING SET NONE

Date installed.....	Manufacturer's type of voltmeter.....
Manufacturer and code number.....	Range of voltmeter.....
Location.....	Circuit dwg. number and date.....
	Remarks.....

CHIEF OPERATOR'S DESK NONE

		Number installed
Date installed.....	Monitor cts.....	
Manufacturer and code number.....	Inc. trk. cts.....	
Cct. dwg. number and date.....	Outgoing trk. cts.....	
Remarks.....	Cord cts.....	

 TARGET RANGE SYSTEM NONE
 (Give approximate lengths of cable installed)

Cable	Gage	Armored	In duct	Cable	Gage	Armored	In duct
100-pair.....				15-pair.....			
75-pair.....				10-pair.....			
50-pair.....				Other sizes.....			
25-pair.....							

Drawing number and date of target range system.....

POST OR FORT Fort Strong, Mass.Date September 2, 1937.

AUTOMATIC SWITCHBOARD NONE
(Describe attendant's cabinet on sheets 1 to 4)

Manufacturer.....	Line switch capacity.....
Order number and date.....	Line switches equipped.....
Date installed.....	Selector framework capacity.....
Date additions made.....	Selectors equipped.....
Plunger, rotary, line finder, or relay.....	Connector framework capacity.....
Per cent trunking L. S. to selector.....	Connectors equipped.....
Per cent trunking first selector to second selector.....	Location of switchboard.....
Per cent trunking selector to connector.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Line finder.....			
Line switch.....			
Master switch.....			
First selector.....			
Second selector.....			
Connector.....			
Apparatus not listed:			

TELEGRAPH STATION NONE

		Manufacturer	Code number
Location.....	Sounder.....		
Connects to what companies?.....	Relay.....		
	Key.....		
Number of circuits.....	Protector.....		
Remarks.....	Switchboard.....		

POST OR FORT Fort Strong, Mass.

Date September 2, 1937

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells.....	15			Manufacturer's type			
A. H. capacity.....	80			hydrometer.....			
Manufacturer.....	Willard			Location.....	F.C. Swbd Room		
Manufacturer's type.....	E-7				F.C. and Post Tel. System		
Date installed.....	1921			Furnishes power for.....			
Date new elements installed.....	None			Trickle, float, or cycle charged.....	Cycle		
In cabinet or on rack?.....	rack			How often?.....	Not	in service.	
Which side grounded?.....	None			At what rate?.....			
Manufacturer's type thermometer.....				Remarks.....			

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....	Crocker-Wheeler	Burke Elec. Co.	Date installed.....	1921	1921
Manufacturer's type.....	SECD	TEL.	Signal Corps type.....	L Ty. CM	T.E.L.
Kw. output.....	.9	1	Order number and date.....	110V 12 1/2 A	110V 22A.
Operating voltage.....	110 DC	110 AC	Location.....	FC Swbd Room	
Cycles or d. c.....	45 V, 20A	60	Charges what battery?.....	E-7	
Generator serial number.....	471	126699			
Motor serial number.....	470	126698			

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Date installed.....		
Manufacturer's type.....			Location.....		
Amperes.....			Charges what battery?.....		
Voltage output.....			Bulb code number.....		
Operating voltage.....					
Cycles.....					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment.....	Mot. Gen.			Manufacturer.....	Electric Specialty Co.		
Date installed.....	unknown			Manufacturer's type.....	Mot. K 142 Gen.	H-142	
Location.....	Swbd Room			Operating voltage.....	110 V	60 cycles	
Motor No.....	158873			Cycles or d. c.....	80 V	20 "	
Gen. ".....	158874						

POST OR FORT Fort Strong, Mass.Date September 2, 1937DISTRIBUTING FRAME AND PROTECTING EQUIPMENT NONE

Wall or floor type?.....	Manufacturer.....
Number of verticals.....	Manufacturer's type.....
Capacity, protector (vertical) side.....	Order number and date.....
Protectors equipped.....	Date installed.....
Capacity, strip (horizontal) side.....	Date additions made.....
Terminal strips equipped.....	Drawing numbers and dates showing layout of frame.....
Fuse protector capacity (pairs).....	Remarks.....
Fuse protectors equipped.....	
Do outside lines connect to protectors, fuses, or terminal strips?.....	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom.....		Strip, terminal, 2-point.....	
Block, protector, top.....		Strip, terminal, 3-point.....	
Coil, heat.....		Strip, terminal, 4-point.....	
Dielectric (Mica).....		Strip, terminal, 5-point.....	
Fuse, ampere.....		Test cord, feet.....	
Protector group.....		Test shoe.....	
Ring, jumper.....			

RELAY RACK NONE

Manufacturer.....	Date installed.....
Height.....	Drawing number and date showing layout.....
Number of bays.....	Remarks.....
Relay mounting capacity per bay.....	

COIL AND OTHER RACKS NONE

Manufacturer.....	Mounts what equipment?.....
Coil capacity.....	
Per cent equipped.....	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						Other equipment
			Coils	12 pr. strips	21 pr. strips	TM-88 terms.	Jack panels	T. I. panels	
FM-5	F.C. Swbd.	2	40	42	0	0	0	1	Capacitor/mfd. 10

POST OR FORT Fort Strong, Mass.

Date September 2, 1937

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Controls what batteries?.....	E-7	30 volt
Manufacturer's type.....			Location.....	Swbd Room	
Signal Corps type.....	BD-17		Date installed.....	About 1908	
Order number and date.....					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter.....	Weston	51061	50-0-50			
Circuit breaker.....	Roller-Smith	SP	15 A #63326			
Motor starter.....	Ward Leonard	133730	110 V 3/4 HP			
Rheostat Field.....	" "					
Voltmeter.....	Weston	28883	0-250			
Other equipment:	8 Switches 50 Amp. capacity					
Rheostat Field	Cutter-Hammer	11153	Max. Amp 4, ohms 64, #11111 H 153.			

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large.....	0	Controller, zone signal.....		Switch key, set.....	1
Bell, T. I., small.....	2	Hand set.....	4	Telephone, B. C.....	8
Bell, zone sig.....		Head set.....	11	Telephone, desk.....	8
Bell, ext. L. R.....		Outlet, zone sig.....		Telephone, gun.....	2
Box, junc., std.....		Signal, firing, B. C.....		Telephone, plotters.....	0
Box, junc., T. R.....		Signal, firing, pit.....		Telephone, wall.....	15
Box, T. I., bell.....		Switch, hand set.....		Switchboards, BD-74.....	0
Box, term., 2-strip.....	4	Switch, push, zone sig.....		Switchboards, BD-78.....	0
Box, term., 4-strip.....		Switch box, base line.....		Other apparatus: Strips 12-pr.....	23
Box, term., 8-strip.....	1	Switch box, cut-out.....		Blocks Ext.....	22
Box, term., 16 strip.....	1	Switch box, transfer.....			
" " 24 ".....	1				

POST OR FORT Fort Strong, Mass.

Date September 2, 1937

TIME INTERVAL APPARATUS

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks
F.C. Swbd. Room	EE-56	1	Leeds-Nor.	L & N	#18789
" " "	BD-15	1			

METEOROLOGICAL EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

FORT SIGNAL STATION NONE

Material of mast	Year installed
Height of mast	Year last painted

Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets				

NIGHT SIGNALING EQUIPMENT NONE

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST NONE

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

POST OR FORT Fort Strong, Mass.Date September 2, 1937.

CONDUIT SYSTEM
(Give approximate total lengths (lineal feet) installed)

Conduit	Feet	Added since last report	Conduit	Feet	Added since last report	Manholes	Number	Added since last report
6-way MCD	1463		3 D-clay Single CWD	191		6-foot	67	
4-way MCD	3700		16 D-MC	88		4-foot		
2-way MCD	837		4-way fiber			22" x 40"		
Single CD	135		9 D-MC	235		Other sizes:		
8 MCD	1120		2-way fiber					
2-way CWD			Single fiber					
			Iron pipe					

Drawing number and date of conduit plant.....

CABLE SYSTEM
(Give approximate total lengths installed)

	Gage	Feet	Added since last report		Gage	Feet	Added since last report
600-pair				30 25 -pair	19	623	Ty. 405
400-pair				25-pair	22	2784	414
300-pair				20 15 -pair	19	125	403
200-pair				15-pair			
150-pair				10-pair	19	9444	401
100-pair				1-pr Pow. } 100 -pair	00 10	476 368	652 644
100-pair				Other sizes: 6 pr.	12	984	215
75-pair				1 pr.	12	8630	Ty. 213
50-pair				3 pr.	12	3450	" 214
40 30 -pair	19	1100	Ty. 406	3 pr.	12	253	" 53
				Approximate number of Signal Corps poles. None.			
				Approximate number of joint poles. 4			

TERMINALS (state number of each)

	Protected	Unprotected	House		Protected	Unprotected	House
50-pair FX				15-pair			
50-pair				10-pair			
25-pair				Other sizes:			
20-pair							

Drawing number and date of cable plant.....

POST OR FORT Fort Strong, Mass.

Date September 2, 1937.

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS			
	Value		Value
Telephone switchboard and accessories	\$ 0	Outside telephone plant	\$ 1065.00
Telephone power plant	0	Other plant	0
Other telephone C. O. equipment	0	Target range system	0
Telephone station equipment	0	TOTAL	1065.00

FIRE-CONTROL SYSTEM			
	Value		Value
Cables and conduit system	\$36,534.00	Telephone and other equipment	\$ 1,464.00
F. C. power equipment	1,540.00	TOTAL	39,538.00

TRUNKS AND TIE LINES NONE

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
			\$	\$	\$	\$

STATION EQUIPMENT

Manufacturer					
Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk		5			
Hand set					
Wall					
TOTAL		5			

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
4	Caretakers	2					B	
14	"	2					B	
74	Storehouse	1					B	

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HHW/mm

IN REPLY
REFER TO: SigO 333.9-Ft. Strong, Mass.

Boston ARMY BASE, BOSTON, MASS.

December 6, 1939

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Strong, Mass.,
for the calendar year 1939.

TO: Signal Officer, First Corps Area

Last inspection made September 2, 1937 by H. Caldwell, Elec. Ass't, S.S.L.

This inspection made November 28, 1939 by Herman H. Wagner, Ass't Electrical
Engineer, S.S.L., in accordance with travel orders dated November 25, 1939.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET

1. Switchboard.

The potheaded cables to the old switchboard position are still in
place on the distributing frame and under the floor. It is recommended these
cables be removed.

II. AUTOMATIC EQUIPMENT

None.

III. STORAGE BATTERY

The storage battery has been preserved in a dry state for approximately
15 years. It is recommended it be placed on I & I, since it would probably
be of little use if an attempt was made to restore it to service.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT

1. Motor generator.

Satisfactory.

2. Ringing machine.

Satisfactory.

3. Rectifier.

None.

4. Ringing vibrator.

None.

V. POWER PANEL

Satisfactory, except that the front surface of the panel has been
painted with black paint. It is recommended this paint be removed and the
surface properly oiled to preserve its natural slate finish.

VI. DISTRIBUTING FRAME

The cables to the distributing frame are potheaded and the frame
itself is the old fire control type mounting porcelain or composition terminal
strips. It is recommended the fire control distributing frame be replaced with
more modern equipment.

VII. WIRE CHIEF'S TEST EQUIPMENT
None.VIII. RELAY RACK
None.IX. RECORDS
The cable maps and drawings pertaining to this post are those turned over to the Signal Corps by the Engineer Corps and are not up-to-date. These drawings are in the process of revision in the office of the Corps Area Signal Officer.X. MISCELLANEOUS
No information under this heading applies to this post.XI. STOREROOM
Satisfactory..XII. CONDUIT SYSTEM
Satisfactory, except that in event cables larger than 100 pair are installed it may be necessary to enlarge some of the manholes.XIII. CABLE SYSTEM
The cables are all old (some of them over thirty years), and are all terminated in potheads. It is recommended the Corps Area Signal Officer prepare a project for the complete rehabilitation of the cable system for this post.XIV. POLES, CROSSARMS, ETC.
None.XV. TERMINALS
It is recommended that in connection with the recommendation contained in paragraph XIII provision be made for the termination of all cables in sealed chamber type terminals similar to JB-10.XVI. WIRES
None.XVII. TARGET RANGE COMMUNICATION SYSTEM
None.XVIII. TELEPHONE STATION EQUIPMENT
Satisfactory.XIX. TELEGRAPH STATION
None.XX. FIRE CONTROL SYSTEM
1. Station and batteries.

Satisfactory, except that a great majority of telephone equipment is the old C.A.T. type equipment which, while appearing to be satisfactory, is not as efficient as that of later design.


SigO 333.9-Ft. Strong

12/6/39

2. Time interval apparatus, panel and circuits.
Satisfactory.
3. Fort Signal Stations.
None.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE

This post is on a caretaking status, all administrative lines being connected to the Fort Banks switchboard.


Herman H. Wagner
Assistant Electrical Engineer

SigO 333.9-Ft. Strong

1st Ind.

HHW/mm

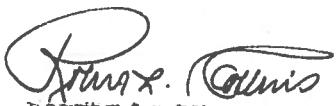
Headquarters First Corps Area, Boston, Mass. December 7, 1939. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

1. For action in accordance with the provisions of paragraph 13 a, AR 105-20, September 29, 1938, and return of three copies to this headquarters.

2. The Corps Area Signal Officer will initiate action in accordance with the recommendations contained in paragraphs VI, XII, XIII and XV.

By order of Colonel Freeman:

Recd 1st C. A. Dist. DEC 11 1939


ROBERT L. COLLINS
Colonel, A. G. D.
Adjutant General

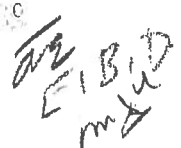
2nd Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

DEC 11 1939

To C. O., HD of Boston.

VTC


FIBID
md

333.14/3-EQ

AE-333.9 (Ft. Strong)

3rd Ind.

/jms

HEADQUARTERS, HARBOR DEFENSES OF BOSTON, FORT BANKS, MASS., February 6, 1940.
To: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined.
2. The recommendations and changes noted in report under paragraphs, indicated below, have been corrected as follows:

I 1. The potheaded cables to the old switchboard position and under the floor have been removed.

III. The storage battery has been disassembled and will be placed on I & I report as soon as weather conditions permit its shipment to Fort Banks.

V. Power panel has been cleaned of paint and has been oiled and is now in natural finish.

3. Action on other changes recommended is to be initiated by the Corps Area Signal Officer in accordance with paragraph 2, preceeding 1st Indorsement.

Recd 1st C. A. Dist. FEB 7 1940

Monte J. Hickok
MONTE J. HICKOK,
Colonel, 9th C. A.,
Commanding.

~~4th~~ Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

FEB - 7 1940 To C. G., 1st Corps Area *WZ*

REC'D O SIG O. F. C. A. FEB. 7 1940

SigO 333.9-Ft. Strong

5th Ind.

EEC/mm

Headquarters First Corps Area, Boston, Mass. February 13, 1940. To: The Adjutant General, War Department, Washington, D. C.

1. Approved.
2. The Corps Area Signal Officer has already initiated, or will initiate action in accordance with recommendations contained in paragraphs VI, XII, XIII, and XV.

For the Commanding General.

3 AGO
FEB 14 1940

Received

1 Inc

333.14/3-EQ

Robert L. Collins
ROBERT L. COLLINS
Colonel, A. G. D.
Adjutant General

OFFICE OF THE
CHIEF SIGNAL OFFICER
FEB 15 9 02 AM '40

OCSigO 333.1-Ft. Strong
(12-6-39)

6th Ind.

6

War Dept., OCSigO, Washington, February 17, 1940 - To: Chief of Coast
Artillery.

1 Incl.
Dup. w/d

[Signature]
J.C.G.

7-6 RECD FEB 19 1940 O.C.A. 19mc.
NR

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m
K
18

333.14/3-EQ

1 OCCA 333.14/3-EQ Inc. 1.

POST OR FORT FORT STRONG, MASS.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Title and sheets 1, 6, 8, 11 and 13

Rendered by Herman H. Wagner
Rank Assistant Electrical Engineer, S.S.L.
Date November 28, 1939

333.14/3-EQ
Incc 1

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT FORT STRONG, MASS. Date November 28, 1939

TELEPHONE SWITCHBOARD NONE

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed.....	Magneto lines equipped.....
Manufacturer.....	Trunk circuits wired.....
Manufacturer's type.....	Trunk circuits equipped.....
Manufacturer's Serial No.	Operating voltage.....
Signal Corps Serial No.	Distance telephone system is outside B. R. area of telephone company.....
Order number and date.....	Trunk loop resistance in ohms.....
Common battery or magneto?	Are line cables to switchboard under floor or on overhead rack?.....
Multiple or nonmultiple?	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple.....	Are all positions equipped for service?
Number of positions.....	Is switchboard used as attendant's cabinet of an automatic system?
Cord pairs per position.....	Location of switchboard.....
Common battery lines wired.....	
Common battery lines equipped.....	Drawing number and date of face and rear equipment layout...
Magneto lines wired.....	

SWITCHBOARD CIRCUIT DRAWINGS NONE

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit.....		Generator circuit.....	
Cord circuit, local.....		Operator's circuit.....	
Cord circuit, universal.....		Trunk circuit.....	
Pilot circuit.....		Other circuits.....	
Fuse alarm circuit.....			
Night alarm circuit.....			
Dial circuit.....			
Drawing number and date showing central office layout.....			

POST OR FORT FORT STRONG, MASS.

Date November 28, 1939

STORAGE BATTERIES

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Number of cells	15			Manufacturer's type			
A. H. capacity	80			hydrometer			
Manufacturer	Willard			Location	{ F.C. Swbd. Room F.C. and Post Tel. System		
Manufacturer's type	E-7			Furnishes power for			
Date installed	1921			Trickle, float, or			
Date new elements installed	None			cycle charged	Cycle		
In cabinet or on rack?	rack			How often?	Not in service.		
Which side grounded?	None			Remarks			
Manufacturer's type thermometer							

CHARGING EQUIPMENT OTHER THAN RECTIFIERS

	No. 1	No. 2		No. 1	No. 2
Manufacturer	Crocker-Wheeler	Burke Elec. Co.	Date installed	1921	1921
Manufacturer's type	SECD	TEL.	Signal Corps type		
Kw. output	.9	1	Motor Size 1	L Ty. CM	T.E.L.
Operating voltage	110 DC	110 AC	Order number and date	110V 12 1/2 A	110V 22A
Cycles or d. c.	DC	60	Location	{ FC Swbd Room	
General serial number	471	126699	Charges what battery?	F.C.	F.C.
Motor serial number	470	126698			

RECTIFIERS FOR POST TELEPHONE SYSTEM NONE

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Date installed		
Manufacturer's type			Location		
Amperes			Charges what battery?		
Voltage output			Bulb code number		
Operating voltage					
Cycles					

RECTIFIERS FOR CHARGING PORTABLE BATTERIES NONE

Ampere rating	Number in use	Location	Charges what batteries	Approximate number charged per month

RINGING EQUIPMENT

	No. 1	No. 2	No. 3		No. 1	No. 2	No. 3
Type equipment	Mot. Gen.			Manufacturer	Electric Specialty Co.		
Date installed	unknown			Manufacturer's type	Mot. K 142 Gen.		H-142
Location	Swbd Room			Operating voltage	110 V	60 cycles	
Motor No.	158873			Cycles or d. c.	80 V	20 "	
Gen. "	158874						

POST OR FORT FORT STRONG, MASS.

Date November 28, 1939

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer			Controls what batteries?	E-7	30 volt
Manufacturer's type			Location	Swbd. Room	
Signal Corps type	BD-17		Date installed	About 1908	
Order number and date					

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter	Weston	51061	50-0-50			
Circuit breaker	Roller-Smith	SP	15 A #63326			
Motor starter	Ward Leonard	133730	110 V 3/4 HP			
Rheostat Field	" "					
Voltmeter	Weston	28883	0-250			
Other equipment:	8 Switches 50 Amp. capacity					
Rheostat Field	Cutter-Hammer	11153	Max. Amp 4, ohms 64, #11111 H 153,			

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large	0	Controller, zone signal		Switch key, set	1
Bell, T. I., small	2	Hand set	4	Telephone, B. C.	2
Bell, zone sig.		Head set	9	Telephone, desk	8
Bell, ext. L. R.		Outlet, zone sig.		Telephone, gun	2
Box, junc., std.		Signal, firing, B. C.		Telephone, plotters	
Box, junc., T. R.		Signal, firing, pit.		Telephone, wall	13
Box, T. I., bell		Switch, hand set		Switchboards, BD-74	
Box, term., 2-strip	4	Switch, push, zone sig.		Switchboards, BD-78	
Box, term., 4-strip		Switch box, base line		Other apparatus: Strips 12-pr	23
Box, term., 8-strip	1	Switch box, cut-out		Blocks Ext.	22
Box, term., 16 strip	1	Switch box, transfer			
" " 24 "	1				

POST OR FORT FORT STRONG, MASS.

Date November 28, 1939

PRESENT ESTIMATED VALUE OF TELEPHONE AND FIRE-CONTROL PLANT IN PLACE
(Installation cost, less depreciation)

ADMINISTRATIVE TELEPHONE AND TARGET RANGE SYSTEMS

	Value		Value
Telephone switchboard and accessories.....	\$ 0	Outside telephone plant.....	\$ 1065.00
Telephone power plant.....	0	Other plant.....	0
Other telephone C. O. equipment.....	0	Target range system.....	0
Telephone station equipment.....	0	TOTAL.....	\$1065.00

FIRE-CONTROL SYSTEM

	Value		Value
Cables and conduit system.....	\$ 36,534.00	Telephone and other equipment.....	\$ 1,464.00
F. C. power equipment.....	1,540.00	TOTAL.....	39,538.00

TRUNKS AND TIE LINES NONE

Connects to what city	Company	Number	Rate per annum	Mileage cost	Additional message cost	Total cost per annum
.....	\$.....	\$.....	\$.....	\$.....
.....
.....
.....
.....
.....
.....
.....
.....

STATION EQUIPMENT

Manufacturer.....

Telephones	GOVERNMENT OWNED				Privately owned
	Dial type	Nondial	Extension bell	L. R. bell	
Desk.....	5	.....	.....	.....
Hand set.....
Wall.....
TOTAL.....	5	.....	.....	.....

LIST OF TELEPHONES

Class A telephones are for official use only and have access to city trunks.

Class B telephones are authorized trunk connections for personal use.

Class C telephones are not permitted city trunk connections.

Class D telephones are for special services, such as fire reporting, watchman, etc., and are not permitted city trunk connections.

Telephone number	Listing	NUMBER INSTALLED					Class of service	Authority for installation
		Desk	Hand set	Wall	Extension bell	L. R. bell		
.....	Caretakers and office	6	.....	.....	.....	.....	.....	.....
.....
.....
.....
.....
.....
.....

HEADQUARTERS FIRST CORPS AREA

OFFICE OF THE SIGNAL OFFICER

HHW/HHW

IN REPLY SigO 333.9-Ft. Warren, Mass.
REFER TO:

Boston ARMY BASE, BOSTON, MASS.

December 5, 1939

SUBJECT: Inspection of Signal Corps Plant in Place at Fort Warren, Mass.
for the calendar year 1939.

TO: Signal Officer, First Corps Area

Last inspection made September 7, 1936 by H. Caldwell, Electrical Ass't, S.S.L.

This inspection made November 29, 1939 by Herman H. Wagner, Ass't Electrical Engineer, S.S.L., in accordance with Travel Orders dated November 25, 1939.

I. SWITCHBOARD, MANUAL AND ATTENDANT'S CABINET

1. Switchboard.

The switchboard is considered to be in doubtful condition. It has been installed in the present location since 1920 with no protection against dampness. Inasmuch as commercial power is now available at the switchboard room, it is recommended the heating units for the switchboard be installed and used continuously in an effort to remove as much moisture as possible.

II. AUTOMATIC EQUIPMENT

None.

III. STORAGE BATTERY

The storage battery has been preserved in a dry state for approximately 15 years. It is recommended it be placed on I & I, since it would probably be of little use if an attempt was made to restore it to service.

IV. CHARGING EQUIPMENT AND RINGING EQUIPMENT

1. Motor Generator.

Satisfactory.

2. Ringing Machine.

None.

3. Rectifier

None.

4. Ringing vibrator

None.

V. POWER PANEL

Satisfactory, except that the front surface of the panel has been painted with black paint. It is recommended this paint be removed and the surface properly oiled to preserve its natural slate finish.

333.14/3-EP

333.1 1st Major Mads
1 OCCA 333.14/3-EP

VI. DISTRIBUTING FRAME

a. The distributing frame associated with the post telephone switch-board is exposed to dampness with the result the jumpers and other equipment feel wet when touched. It is recommended a suitable cabinet be constructed to inclose this frame, and heating units be installed.

b. The cables to the distributing frame are potheaded and the frame itself is the old fire control type mounting porcelain or composition strips. It is recommended the fire control distributing frame be replaced with more modern equipment.

VII. WIRE CHIEF'S TEST EQUIPMENT

None.

VIII. RELAY RACK

None.

IX. RECORDS

The cable maps and drawings pertaining to this post are those turned over to the Signal Corps by the Engineer Corps and are not up-to-date. These drawings are in the process of revision in the office of the Corps Area Signal Officer.

X. MISCELLANEOUS

No information under this heading applies to this post.

XI. STOREROOM

Satisfactory.

XII. CONDUIT SYSTEM

Satisfactory, except that in event cables larger than 100 pair are installed it may be necessary to enlarge some of the manholes.

XIII. CABLE SYSTEM

The cables are all old (some of them over 30 years) and are all terminated in potheads. It is recommended the Corps Area Signal Officer prepare a project for the complete rehabilitation of the cable system for this post.

XIV. POLES, CROSSARMS, ETC.

None.

XV. TERMINALS

It is recommended that in connection with recommendation contained in paragraph XIII provision be made for termination of all cables in sealed chamber type terminals similar to JB-10.

XVI. WIRES

None.

XVII. TARGET RANGE COMMUNICATION SYSTEM

None.

XVIII. TELEPHONE STATION EQUIPMENT

Satisfactory.

XIX. TELEGRAPH STATION

None.

12/5/39

XX. FIRE CONTROL SYSTEM1. Station and batteries.

Satisfactory, except that a great majority of telephone equipment is the old C.A.T. type equipment which, while appearing to be satisfactory is not as efficient as that of later design.

2. Time interval apparatus.

Satisfactory.


3. Fort signal stations.

a. Satisfactory.

b. It is recommended the mast be painted during calendar year 1940.

XXI. GENERAL INFORMATION AND RECOMMENDATIONS NOT INCLUDED IN ABOVE.

None.


Herman H. Wagner
Assistant Electrical Engineer

SigO 333.9-Ft. Warren

1st Ind.

HHW/mm

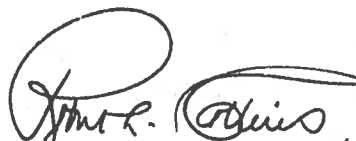
Headquarters First Corps Area, Boston, Mass. December 8, 1939. Thru: Commanding Officer, First Coast Artillery District. To: Commanding Officer, Harbor Defenses of Boston, Fort Banks, Mass.

1. For action in accordance with the provisions of paragraph 13 a, AR 105-20, September 29, 1938, and return of three copies to this headquarters.

2. Action will be initiated by the Corps Area Signal Officer with respect to recommendations made in paragraphs VI b, XII, XIII and XV.


By order of Colonel Freeman:

Recd 1st C. A. Dist. DEC 11 1939

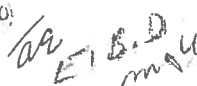

ROBERT L. COLLINS
Colonel, A. G. D.
Adjutant General

2nd Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

DEC 11 1939 To C. O., HD of Boston. 

DEC 12 1939



HEADQUARTERS, HARBOR DEFENSES OF BOSTON, FORT BANKS, MASS., January 30, 1940.
To: Commanding General, First Coast Artillery District, Army Base, Boston, Mass.

1. The foregoing report has been carefully examined.
2. The recommendations and changes noted in the report under paragraphs, indicated below, have been corrected as follows:

I. Heating units (2 - 50 watt lamps) have been installed and are used continuously.

III. The storage battery has been disassembled and will be placed on I&I report as soon as weather conditions permit its shipment to Fort Banks.

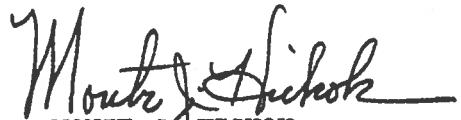
V. Power panel has been cleaned of paint and has been oiled and is now in natural finish.

VI. The distributing frame associated with the post telephone switchboard has been enclosed in a suitable cabinet and four heating units (4 - 50 watt lamps) have been installed and are used continuously.

XX, 3. The signal station mast will be painted as soon as weather conditions permit.

3. Action on other changes recommended will be initiated by the Corps Area Signal Officer, in accordance with paragraph 2, preceeding 1st Indorsement.

RECEIVED 1st C. A. DIST. FEB 2 1940


MONTE J. HICKOK,
Colonel, 9th C.A.,
Commanding.

4th Ind.

Hq. 1st C. A. Dist., Army Base, Boston, Mass.

FEB 2 1940 To C. G., 1st Corps Area. *WZ*

REC'D O SIG O. F. C. A. FEB 2 1940

1 OCCA 333.14/3-EP Inc. 1.

POST OR FORT FORT WARREN, MASS.

DESCRIPTIVE DATA RECORD
OF
SIGNAL CORPS PLANT IN PLACE

This report consists of sheets Title and pages 1, 7, 8, 9 and 13.

Rendered by Herman H. Wagner
Rank Assistant Electrical Engineer, S.S.L.
Date November 29, 1939

333.14/3-EP Inc. 1.

REPORT OF SIGNAL CORPS PLANT IN PLACE

1. This form is to be completed by the inspector and used for reporting the Signal Corps equipment installed at Government-owned telephone and telegraph systems, fire-alarm and fire-control systems at the time the annual inspection of the system is made by the inspector designated by the department or corps area commander for that duty. The officer in charge of the system will assist the inspector in making out this form by giving him facts and data he may have on record that relate to the equipment to be reported.

2. No sheet of this form, except the title sheet and sheet 11, which should be prepared each time an inspection is made, need be made out when a similar sheet submitted within the preceding three years contains the required data and there have been no changes in the data previously submitted. Where a new sheet is made out, it should be complete for all headings, even though no changes have been made under some of the headings since the last inspection.

POST OR FORT FORT WARREN, MASS.

Date November 29, 1939

TELEPHONE SWITCHBOARD

(Use another sheet for fire-alarm or separate fire-control switchboards)

Date installed 1920	Magneto lines equipped
Manufacturer Stromberg-Carlson	Trunk circuits wired 10
Manufacturer's type 100 line P.B.X.	Trunk circuits equipped 10
Manufacturer's Serial No. C 9669	Operating voltage 30 volts
Signal Corps Serial No. 2014	Distance telephone system is outside B. R. area of telephone company Outside B.R. Area
Order number and date 140905 Feb. 1920	Trunk loop resistance in ohms
Common battery or magneto? Com. Battery	Are line cables to switchboard under floor or on overhead rack? overhead
Multiple or nonmultiple? Non-multiple	If multiple switchboard, do cables from switchboard double at R. R. or distributing frame?
Number of panels to a multiple	Are all positions equipped for service? Equipped.
Number of positions One	Is switchboard used as attendant's cabinet of an automatic system? No
Cord pairs per position 15	Location of switchboard F.C. Swbd. Room
Common battery lines wired 100	
Common battery lines equipped 100	Drawing number and date of face and rear equipment layout..
Magneto lines wired	B-2593, 4/5/20

SWITCHBOARD CIRCUIT DRAWINGS

Name of circuit	Number and figure	Name of circuit	Number and figure
Line circuit	B-3140	Generator circuit	B-3170
Cord circuit, local	B-3470	Operator's circuit	B-3160
Cord circuit, universal	B-3470	Trunk circuit	B-5720
Pilot circuit	B-3170	Other circuits	
Fuse alarm circuit			
Night alarm circuit	B-3170		
Dial circuit			
Drawing number and date showing central office layout. 107.8 - 42 - 301			

POST OR FORT FORT WARREN, MASS.

Date November 29, 1939

DISTRIBUTING FRAME AND PROTECTING EQUIPMENT

Wall or floor type? <u>Wall type</u>	Manufacturer <u>Weston Electric</u>
Number of verticals <u>2 W.E. type 1430 F</u>	Manufacturer's type <u>1430-F</u>
Capacity, protector (vertical) side <u>110</u>	Order number and date
Protectors equipped <u>110</u>	Date installed <u>1920</u>
Capacity, strip (horizontal) side <u>200</u>	Date additions made <u>none</u>
Terminal strips equipped <u>60-pr.</u>	Drawing numbers and dates showing layout of frame
Fuse protector capacity (pairs) <u>none</u>	Remarks
Fuse protectors equipped <u>none</u>	
Do outside lines connect to protectors, fuses, or terminal strips? <u>Protectors</u>	

Apparatus	Manufacturer's code	Apparatus	Manufacturer's code
Block, protector, bottom	1	Strip, terminal, 2-point	1435-W
Block, protector, top	2	Strip, terminal, 3-point	
Coil, heat	76A	Strip, terminal, 4-point	
Dielectric (Mica)	3	Strip, terminal, 5-point	
Fuse, _____ ampere	0	Test cord, _____ feet	
Protector group	1168A	Test shoe	8
Ring, jumper	8		

RELAY RACK

Manufacturer	Date installed
Height <u>In switchboard</u>	Drawing number and date showing layout
Number of bays	Remarks
Relay mounting capacity per bay	

COIL AND OTHER RACKS NONE

Manufacturer	Mounts what equipment?
Coil capacity	
Per cent equipped	

FIRE CONTROL DISTRIBUTING FRAMES

Type	Location	Number installed	QUANTITIES OF EQUIPMENT						
			Coils	12 pr. strips	21 pr. strips	TM-38 terms.	Jack panels	T. I. panels	Other equipment
FM-5	F.C. Swbd.	2	50	42	0	0	0	1	

POST OR FORT FORT WARREN, MASS.

Date November 29, 1939

POWER PANELS, INCLUDING FIRE-CONTROL SWITCHBOARD

	No. 1	No. 2		No. 1	No. 2
Manufacturer.....			Controls what batteries?	Fire Controls	
Manufacturer's type.....			Location.....	F.C. Swbd. Room	
Signal Corps type.....	BD-17		Date installed.....	Original installation about	
Order number and date.....			1910 - Reinstalled	1920	

Apparatus	No. 1 Panel			No. 2 Panel		
	Manufacturer	Manufacturer's code	Range	Manufacturer	Manufacturer's code	Range
Ammeter.....	Weston	Flush	0-50-0	No. 51059		
Circuit breaker.....	Cutler Co.	ITE	250 V	24 Amp. No. 2525		
Motor starter.....	Ward Leonard	SUE		116		
Rheostat.....	Ward Leonard					
Voltmeter.....	Weston	Flush	0-150	#32619		
Other equipment:	Voltmeter Sw.		6-point			

FIRE-CONTROL EQUIPMENT

Apparatus	Number installed	Apparatus	Number installed	Apparatus	Number installed
Bell, T. I., large.....	6	Controller, zone signal.....		Switch key, set.....	
Bell, T. I., small.....	5	Hand set.....	9	Telephone, B. C.....	19
Bell, zone sig.....		Head set.....	24	Telephone, desk.....	6
Bell, ext. L. R.....	XX	Outlet, zone sig.....		Telephone, gun.....	12
Box, junc., std.....		Signal, firing, B. C.....		Telephone, plotters.....	4
Box, junc., T. R.....		Signal, firing, pit.....		Telephone, wall.....	28
Box, T. I., bell.....	2	Switch, hand set.....	1	Switchboards, BD-74.....	
Box, term., 2-strip.....	5	Switch, push, zone sig.....		Switchboards, BD-78.....	
Box, term., 4-strip.....	4	Switch box, base line.....	2	Other apparatus:	
Box, term., 8-strip.....		Switch box, cut-out.....		Blocks, Ext.....	29
Box, term., strip.....	1	Switch box, transfer.....		Strips 12-pr.....	28
Coil Sets C-28.....	10			" 21-pr.....	10

POST OR FORT FORT WARREN, MASS.

Date November 29, 1939

TIME INTERVAL APPARATUS

Location	Signal Corps type	Number installed	Manufacturer	Manufacturer of motor	Remarks
F.C. Swbd. Room	EE-56	1	Leeds-Northrop		#18779
" " "	BD-15	1			

METEOROLOGICAL EQUIPMENT

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed
1 Barometer	ML-2)	In storeroom			
1 "	ML-9)				
1 Psychrometer	ML-24)				

FORT SIGNAL STATION

Material of mast Wood			Year installed	
Height of mast 75 feet			Year last painted	
Apparatus	Signal Corps type	Number installed	Books	Edition (year)
Flag sets International		1		

NIGHT SIGNALING EQUIPMENT None

Apparatus	Signal Corps type	Number installed	Apparatus	Signal Corps type	Number installed

TELEPHONE PAY STATION AND PRIVATE TELEPHONE LINES ON POST None

Location	Authority and date	Are Government cables used	Location	Authority and date	Are Government cables used

