

Proceedings of the Board of Engineers
1887-1905

The National Archives in Washington, D.C., (Archives I), has three boxes of typewritten proceedings of the Board of Engineers, 1887-1905, in Record Group 77, Entry 462. This Board of Engineers was the continuation of the board created in 1816 to oversee the Third System of Fortifications. Until the creation of a chief of artillery in 1901, the board had virtually sole responsibility for fortification planning. In addition, for some years the board was also responsible for river and harbor improvements. However, the National Archives does not have the proceedings for all the years the board was in existence. For fortifications, the record largely stops at the end of 1905.

The CDSG now has available PDFs of the proceedings from 1887 through 1905, excepting only those that deal solely with rivers and harbors or otherwise fail to offer any useful information on fortifications. These proceedings are a curious lot. Considerable space is devoted to recording the purchase of books and periodicals. Often, reports sent and received are mentioned only in passing, with reference to entries in books of reports that have not been located. Some of these reports are found in RG 77, Entries 103 and 225, while others may be in RG 107, the records of the Office of the Secretary of War.

Generally, the board drew up and submitted several types of projects for specific harbors, for the artillery defense, submarine mine defense, and searchlight defense. It is frustratingly common to see the notation that “The project for *** was approved and transmitted to the chief of engineers,” or “The project for *** was approved by the Secretary of War,” with no mention of the contents of those projects. On the other hand, the proceedings frequently do describe in detail the board’s projects, with subsequent, almost continual, revisions. The proceedings often offer running accounts of the changes in the projects. It is possible to follow any one harbor and see the multitude of changes in the proposed defenses, often beginning well before the first batteries were built. The number of proposed locations, the amount of armament proposed, and the frequency of changes may come as a surprise.

In addition to local projects, the board exercised broad authority over fortifications in general, drawing up type plans for gun and mortar batteries, and overseeing development of submarine mines until those were transferred to the artillery. The evolution of batteries and ammunition hoists are of particular interest.

A file this large requires some sort of finding aid. A rough listing of the fortification material has been put together that can be searched for a specific location or subject. The result is somewhat uneven, but hopefully will prove helpful. In general, it shows where actual information on a specific harbor can be found, without listing every instance where a harbor was only mentioned, without details. Following the practice of the board, references to the artillery defense of a harbor are separate from those referring to the submarine mine and searchlight defenses. There are a number of general references to mines, as well as ammunition hoists, gun and mortar batteries, and fire control. The abbreviations that accompany the listing indicate the categories. Note that during this period, the term “torpedo” was used for both submarine mines and automobile torpedoes. “SM” (submarine mines) indicates fixed mines, while “Torpedoes” mean movable torpedoes.

AD: Artillery defenses
AGL: Altered gun-lift carriage

BAL: AD of Baltimore
BC: Barbette carriages

BLM: Breechloading mortar
BOS: AD of Boston
BP: Balanced Pillar
CHAR: AD of Charleston
CF: AD of Cape Fear
CR: AD of Columbia River
CS: AD of Cumberland Sound
DC: Disappearing (or depressing) carriage
DCB: Disappearing gun batteries
DEL: AD of the Delaware
FC: Fire control
GAL: AD of Galveston
GL: Gun-lift carriages & batteries
GTL: AD of the Great Lakes
Hoists: Ammunition lifts or hoists
HR: AD of Hampton Roads & Chesapeake Bay
KEN: AD of the Kennebec
KW: AD of Key West
LA: AD of Los Angeles & San Pedro
LD: Land defense
ML: Muzzleloading guns and carriages
MOB: AD of Mobile Bay

MSB: AD of Manila & Subic Bay
NAR: AD of Narragansett Bay
NB: AD of New Bedford
NO: AD of New Orleans
NYC: New York City
PAC: AD of the Pacific Coast
PEN: AD of Pensacola
PR: AD of Port Royal Sound
PST: AD of Penobscot River
POT: AD of the Potomac River
PTL: AD of Portland
PTMH: AD of Portsmouth
PS: AD of Puget Sound
RFB: Rapid-fire batteries
RFG: Rapid-fire guns
SAV: AD of Savannah
SD: AD of San Diego
SF: AD of San Francisco
SJR: St Johns River
SL: Searchlights
SM: Submarine Mines (or Torpedoes)
SNY: AD of Southern New York (including Sandy Hook)
TB: AD of Tampa Bay

1887

12-13: Mortar battery
12-20: Mortar battery, water battery,

1888

1-3: Senate Bill 62
1-17: SF-SM
1-20: Adams DC
5-29: Gasparilla Is, FL,
6-15: Armor, Adams DC, HR
7-20: Brown's SM, Frost armor, Spinola, SNY
9-28: HR
10-27: HR, Tortugas, SNY
11-13: Deer Is, MA,
11-23: Dynamite guns

12-24: PS, WT, Pneumatic Gun-Carriage and Power Co. DC

1889

1-5: SM

2-21: SNY

2-22: SNY

2-23: SNY

3-5: SNY, DCB

3-6: SNY

3-8: SNY, BOS

6-15: SNY, SM,

6-17: Dynamite guns, ENY, BOS, SNY

6-21: SNY

6-27: SF-SM, Bowles Torpedoes and torpedo boats, Pt Roberts, WT,

7-3: Pt Roberts, WT, Ruckman's FC

7-6: Dynamite guns, BOS

7-8: BOS

7-9: BOS, SF

7-10: SF

7-17: SF, ENY, LIS, NYC

7-29: BOS

8-1: BOS

8-15: Ellicott's SM

10-15: BOS, CS, SF, ENY-SM

10-21: ENY-SM, SF-SM

12-5: LIS, ENY-SM, SF-SM, SF, PS

12-7: Rwy guns, CS, SNY

12-20: POT, SF-SM, Danish turrets, SF, Torpedoes

12-21: PS

1890

1-23: POT, Pacific

1-25: POT

1-27: KW
2-4: SF
2-5: SF, SM
2-17: SNY, POT
2-21: POT
2-27: Torpedoes
3-4: SNY, ENY, BOS, SM, RFG
3-8: SF, ENY, POT
3-28: POT, POT-SM, Torpedoes
3-31: Torpedoes
4-5: SNY, BOS, SF
4-7: POT, HR, ENY, BOS, SF, POT
4-16: PS
4-28: SM, Armor plate
5-8: SM, SF
6-2: Torpedoes
6-9: Torpedoes
6-10: Ft Hale
7-7: SF, Torpedoes, Armor
7-16: SF-SM, SF, Defense of both coasts
7-17: Defense of both coasts
7-19: Defense of both coasts
7-21: Defense of both coasts
7-28: GL, SNY, Armor plate, SM
8-11: PAC, Torpedoes
8-18: PAC
8-28: SM, SNY, GL
8-29: SM
8-30: SM
9-1: SM
9-8: SNY, GL

9-22: SF, SM, HR, PTL

9-26: SM

9-30: ENY

10-13: SM, PTL-SM

10-14: SM

10-30: ENY, LIS

11-24: HR-SM, RFG, SM

12-1: RFG

12-15: SF

12-17: SF

12-22: SNY-GL

1891

1-20: PTL-SM, SF, Torpedoes

1-24: Torpedoes, CS, SJR

3-2: Fortification bill – 15 guns, SF, SF-SM, ENY, PTL-SM, CS, BOS

3-10: SM, BLM batteries, CS

3-16: SM, SM-DEL, NAR-SM, SNY-SM, PTL-SM, BOS, ENY

3-17: PTL

3-20: SM, BLM carriage, SF-SM

3-30: ENY, SNY

4-3: Storage of ammunition in magazines, ENY, BOS, PTL

4-4: PTL, NY

4-7: BOS

4-8: PTL-SM

4-9: ENY, SM

4-22: CHAR-SM

4-23: PTL

5-4: ENY

5-11: PTL, SF, BLM batteries

5-16: Armor plate, Belgian turrets, BLM carriages and batteries, SM

6-5: PTL, DEL SM

6-6: HR, SM, PTL
6-12: NAR-SM
6-22: PTL, SM
7-9: POT
8-28: LIS
9-1: Turrets
9-29: SNY, SM
10-8: SM, LIS
10-16: SM, ENY-SM, DEL-SM
10-17: LIS, ENY
10-26: ENY
11-7: LIS, ENY
12-9: Doherty's revolving fort, BOS
12-18: Test of sand as protection
12-24: Storage of ammuniton in seacoast batteries, ammunition supply, SNY, LIS
12-29: ENY, NAR

1892

1-5: ENY
1-7: ENY
1-12: SM, NAR, LIS
1-25: SNY, LD, BLM batteries
1-29: SF, BLM batteries, FC, PS
2-1: Test of sand as protection, NAR
2-8: Steel forts, SM, BLM batteries
3-3: Torpedoes, SM
3-16: NAR, ENY, SAV
4-7: ENY
4-12: SAV
4-13: SAV
4-14: CHAR, CHAR-SM
4-28: SAV, CHAR, ENY, LIS

5-10: SAV
5-26: ENY,
6-29: SAV
7-16: SAV, NAR
7-22: NAR
7-25: Casemate batteries
7-27: NAR, SAV
9-3: NAR
9-13: CHAR, SNY, BLM batteries
9-24: NAR, NAR-SM
9-26: CHAR, BLM batteries
9-27: BLM batteries
10-13: CHAR, SM, SNY, BLM batteries, SAV-SM, SF-SM, BAL-SM,NO
10-24: BLM batteries, BOS, NO
11-26: PS, BLM batteries, CHAR
11-28: BLM batteries
12-2: PAC, NO
12-15: CHAR, PAC, DC, Florida islands, NO
12-23: CHAR

1893

2-27: MOB, PEN, ML, PTL, SM, PTL-SM, BOS-SM, POT-SM, MOB-SM, PEN-SM, CHAR
2-28: CHAR, MOB
3-1: PEN, BAL, DEL
3-7: BAL
3-8: CHAR
3-9: CHAR, PTL, PEN, MOB
4-5: PEN
4-6: MOB
4-29: MOB, PEN, CHAR, KW
5-17: NAR, MOB, PEN
6-2: NAR, PEN, 8-inch barbette batteries, HR, SAV

6-13: BAL

6-21: BAL, PTL

6-22: PTL, PEN, 8-inch barbette batteries, SNY

7-26: BAL

8-5: 12-inch barbette batteries,

8-23: PEN, HR,

9-12: 10 & 12-inch barbette batteries, 12-inch casemate batteries, SNY, BAL, PS

11-20: BLM batteries, DEL

1894

1-13: PEN, MOB, BAL, KW, DEL

1-22: DEL, DEL-SM

1-26: DEL, GL

2-9: KW

3-3: PTL, CHAR, BLM batteries, CF-SM, PAC

3-6: PTL, CF, CF-SM, KW,

3-13: PTL, KW, BLM batteries, SF

3-21: KW, PAC

4-3: SM, BLM, PS, KW, KW-SM

4-5: PS, DEL

6-11: PAC, SD, PS, KW, DEL

6-23: PTL, 6-pdr, PS, SD, KW, Concrete, DEL

7-9: PTL, PS, DEL, BLM batteries

7-30: SD, PS, PTL, BLM batteries

9-22: 8-inch barbette carriage, SD

9-24: SD

10-30: CF, SD

11-17: SNY, SD, 4.7-inch batteries, CR-SM, PS-SM

12-1: CR, PS, PS-SM

1895

2-5: SM, CR, PS, PS-SM, DCB

2-6: CR

2-16: DC, SF, CR, CHAR
2-18: CR, PS
3-4: BLM batteries, DC carriages
3-9: 8-inch DCB
3-11: Power rammer, MOB SM, 8-inch DCB
3-23: 8 & 10-inch DCB, CR
3-31: GAL
4-20: CR, DCB, PS, Ft Wayne
4-25: GAL, PS
4-27: 10-inch DCB
5-11: 10-inch DCB, PS, SF, GAL
5-25: SNY, 8-inch DCB, PS
6-7: DCB, PS, Gordon BLM
6-18: SNY
7-3: 10-inch DCB, PS
7-12: PS, GAL, SNY
7-29: 10-inch DCB, Ammunition cranes, ENY, CHAR
8-5: BLM battery, DCB, Ammunition cranes, BOS
8-7: GL, SNY
8-12: PS, Ammunition cranes, BLM batteries, DEL, MGs in seacoast fortifications, PEN
8-19: Retirement of Col Abbot, DCB, PEN
8-20: DCB
9-8: Ammunition cranes, PTL
9-20: Retirement of Col Abbot
9-27: Batteries
10-15: Gordon DC, SD, 10-inch DCB
10-22: SD, 10-inch DCB, Ammunition cranes
10-25: 10-inch DCB, Ammunition cranes
10-31: SF, Ammunition carrier,
12-2: 10-inch DCB, Mansfield's DC, SF
12-16: 10-inch DCB, BOS, RFG

12-20: RFG, 10-inch DCB

12-27: ML, 10-inch DCB, PEN

1896

1-3: SAV, SAV-SM, ML, DC, Ammunition cranes

1-17: SAV-SM, BOS, Pneumatic dynamite gun, SF, PS

2-4: Ammunition cranes, PS, Machine guns, 8-inch DCB, shot trays

2-7: Great Lakes, 8-inch DCB, Ammunition cranes, NO

2-10: PTMH, KEN

2-12: SAV-SM, CS, PEN

2-16: 8-inch DCB

2-28: 10-inch DCB, NO

3-5: Shot trays, NB, SAV-SM, Pneumatic guns, ML, NAR, ENY, SNY

3-11: RFB, 10-inch DC carriages, NO, SAV-SM, Pneumatic guns

3-26: SNY, DC, 12-inch DCB, CS, TB, PEN, CS, CS-SM, Pneumatic guns

4-1: 12-inch DC & batteries

4-10: PTMH, KEN-SM, PST, PST-SM, Batteries

4-30: 10 & 12-inch DCB, ML, PEN, Great Lakes, 6-pdr, PTMH, DEL

5-5: NB, NB SM, PTL, 10-inch DCB, DEL

5-20: NB, machine guns, Counterpoise carriages, BLM batteries, 10-inch DCB

6-1: SM, NO, 6-pdr, DC & batteries, ARF batteries, Ft Wayne, SNY, Ammunition cranes, SF
BLM batteries

6-4: SF, Ammunition service, BLM batteries, 10-inch DCB

6-19: BLM batteries, Great Lakes, BAL, DCB

6-26: Great Lakes, BLM batteries, PTL, NO, SF, Ammunition service, 10-inch DCB,
Gordon BLM & batteries

6-29: Ammunition supply, 10-inch DCB

7-9: DEL, BAL, NO, HR, 10-inch DC & carriage, SF, Ammunition supply

7-16: FC, 6-inch RFG, DEL

7-24: BLM batteries, loading devices for 8, 10, & 12-inch guns, Hoists, SF,
Machine guns, DCB, PR

8-5: SM, NO

8-7: 12-inch DC, NO, 12-inch DCB, 6-inch RFG

8-14: 10 & 12-inch DCB, BLM & batteries, Ammunition supply
9-10: DCB, 6-inch RFG, CHAR-SM, MOB, GAL
10-1: 10 & 12-inch DCB, Hoists, CHAR-SM, 6-inch RFG,
10-6: BAL, 6-inch RFG, HR
10-8: Great Lakes, NB, DCB
10-9: BAL, HR, PR
10-28: NB, ML, CHAR, NO
11-11: NO
11-15: NO
11-27: NO, NB-SM, Armor plate, DCB, NB, NO, Ft Wayne, 12-inch BC
12-10: DCB, NB, 6-inch RFG, ML. Ft Wayne, CF, LIS, Electric lighting, SNY,
hoists, SM
12-19: 5-inch RFB, LIS, 8-inch DC M1896, Powder cases, Electric lighting
12-23: Electric lighting, 6-inch RFG, SNY, ENY
12-31: 8-inch DCB, DEL, Ammunition cranes, 6-inch RFG, SNY, ENY

1897

1-12: SM, ML, 5-inch RFG, SF, St Andrews Bay, FL, SNY, ENY, 6 & 12-pdr RFG,
Ammunition cranes, FC
1-18: 6-inch RFG, Hotchkiss RFG, BLM batteries, Ammunition storage, 12-inch AGL batteries,
SNY, FC
1-26: FC, Florida keys, CS, SNY, Ammunition cranes, 12-inch AGL batteries
2-2: PEN, 37 mm machine guns, Southeast Florida, CS, CS-SM, BAL
2-4: Hoists, 5-inch RFB, 37 mm machine guns
3-9: RFG, BOS, DEL,
3-19: 12-inch AGL batteries, FC, BAL, SM, CS-SM, POT, Hoists, BLM-FC, 10-
inch DCB, Naval turrets, CR, BOS, 5-inch RFB
3-26: BAL-SM, BLM batteries, DEL, FC, DEL,
4-14: DEL, DCB, NO, BOS, BLM batteries, BAL-SM, BAL, Dry Tortugas, 12-inch DC
4-21: BAL-SM, BLM Batteries, KEN, PST, BAL, 12-inch DCB
4-23: Gun batteries, NO, CR
4-28: NB, BLM Batteries, 5-inch RFB, GL, SNY, ENY, DEL, BAL, NAR, 10-inch DCB
5-5: NAR, BLM-FC, CR, BAL, NB, ENY, NB, BAL-SM, PTL-SM, Pneumatic dynamite guns,
DEL, KEN, PST, 12-inch DCB, BLM batteries, Gruson turrets

5-21: BLM batteries, DCB, 5-inch RFB, FC, Great Lakes, KEN
5-26: NO, NAR-SM, Pneumatic dynamite guns, PTL-SM, PTL
6-1: PTL, FC, GL, SNY, SF, NO
6-4: ML, DCB, 5-inch RFB, PST-SM, GL, BLM-FC
6-16: 12-inch DC, NO, BLM batteries, PST-SM, GL, BLM-FC
6-29: PEN, PEN-SM, NO, DCB, CS, HR
7-13: PEN, PEN-SM, CS, CS-SM, 10-inch DCB, Ashaltic concrete, NAR, NAR-SM, PEN, CS, CS-SM
8-12: POT, Batteries
8-17: Asphaltic concrete, SM, 12-inch DC, 10-inch ARF DCB, KEN, KEN-SM, PST, PST-SM, GTL, GTL-SM, NO, NO-SM, 5 & 6-inch RFG, Hoists, 3-inch RFG
8-24: PS, 37 mm machine guns, Asphaltic concrete, POT, Batteries
8-26: 12-inch DC
9-14: BLM batteries, CHAR, DCB, PTL-SM, Targets
10-19: POT, Batteries, PTL-SM, BLM batteries, CHAR, HR, CS, SM, Shot tongs, PEN-SM, CHAR-SM, Oil engines, BLM-FC, 10-inch DCB, Hoists
11-3: BLM-FC, BLM batteries, PS, Oil engines, SM
11-12: CHAR, CF, HR, SM, batteries, Pneumatic dynamite gun, BLM batteries, BLM
11-19: CHAR, CF, Oil engines, SD, 12-inch DC, Hoists, ENY, BLM batteries, PR
12-1: CHAR, PR, HR, Hoists, SD, Oil engines, 10-inch DCB
12-3: Batteries, 12-inch carriages, GL, Gun casemates
12-10: PR
12-16: PR, SD, Rammer staves, CF, Boom defense, NAR, 12-inch carriages, CHAR, PEN, POT, PTL, BOS, DEL, BAL, SNY
12-21: NAR, GTL, SNY, PTL, BOS, POT, CHAR, PEN, DEL, BAL, MOB, KW, SF
12-29: PR, DCB, CHAR, GTL, SAV, NAR
12-31: 10-inch DC batteries, NAR, SM

1898

1-11: Humbolt, CA, PS, 10 & 12-inch DCB, CHAR, SM, CR, MOB
1-27: NAR, MOB, 8 & 12-inch DCB, 12-inch DC, Ammunition trucks, NO, Oil engines, PEN, Hoists
1-29: Miller's armor & turrets
2-8: KW, Tortugas

2-12: SJR

2-23: Hoists, 12-inch DCB, SM, 10-inch ARF DCB, PS-SM, PEN, NO-SM, SM, BOS, PTL,
NO-SM, PEN

3-8: LIS, SAV, POT, SJR, PR

3-14: SJR, PR, PR-SM, PEN, Pneumatic Dynamite Gun, POT, SNY, ENY

3-16: NO-SM, SNY, ENY, PR, BLM batteries, SJR, SAV, KW, GAL, POT

3-22: PR, PEN, GAL, 4.7-inch RFG, CF, SJR, SAV, SNY, ENY, PEN, Tortugas, PS-SM, PS,
KW

3-23: Gruson turret

3-25: PS, GAL, KW, POT, TB, TB-SM, BOS, Pneumatic dynamite gun, Sabine Pass

3-26: SM

3-29: SNY, HR

4-1: NO-SM, St Augustine, FL, SNY-SM, BOS, 8-inch DCB, KW-SM, Hoists, BLM batteries

4-5: HR, BLM batteries, 8-inch DCB, Hoists, HR,

4-12: SNY, Mengis' armored forts

4-14: 8-inch DCB

4-19: SM, KW-SM, Sabine Pass, SNY, SNY-SM

4-27: Hoists

4-30-98: Height of batteries, HR

5-6: Hoists, SNY, SNY-SM, BLM rammers, 10-inch ARF DCB, 6-inch RFG, ML carriages,
Armstrong RFG, 4-inch RFG, DEL, FC

5-9: CHAR

5-26: BLM batteries, SNY, Dampness, FC

6-8: SL

6-18: FC

6-20: DEL, Dampness

6-30: HR

7-12: Ammunition trucks, DCB, Ammunition service, GAL, Sabine Pass, NO-SM, 12-inch DC

7-16: PS

8-3: BOS, FC

8-9: CF

8-10: Ammunition storage

8-24: PS, 6-inch DCB, 15-pdr casemate mount, FC, Brown wire-wound gun batteries

8-27: NB, 6-pdr RFG

9-28: Hoists

10-11: Hoists, ENY

11-1: 6-inch batteries, Pedestal vs. BP mounts, SF

11-4: BOS, 6-inch DC, SF

11-23: PS

12-9: 6-inch DCB

12-29: RFG pedestal mounts

1899

1-3: Pedestal vs. BP mounts, SNY

1-4: Pedestal vs. BP mounts, SNY

1-20: Hoists

2-11: HR

2-17: Hoists, ENY

4-1: ENY

4-6: SAV

4-12: ENY, SAV, CR, BAL

4-15: HR, HR-SM

4-21: Hoist, ENY

5-4: 5 & 6-inch Brown batteries, HR

5-17: SNY, BOS, HR, HR-SM

5-18: HR

6-9: SNY

6-22: Waterproofing, SL, Tortugas, Tortugas-SM

6-28: PS

7-5: HR

7-10: SF

7-28: HR, Batteries, FC, NAR, POT

8-15: BOS, HR, BAL, POT, SJT-SM, SJR, ML carriages, 5 & 6-inch Brown batteries

9-12: Hoists

9-28: BOS, Tortugas, SJR, GTL, HR, SF

10-4: BOS, HR, Hoists

10-7: GTL, Hoists, SAV

10-26: 5-inch BP carriages, HR, 6-inc Brown RFG, Hoists, SJR, ENY-SM, Tortugas, ML

12-12: HR, Ammunition trucks, Brown guns, 10-inch DCB

12-27: 6-inch DCB, BOS, Armor plate, Tortugas

12-28: 10-inch DCB, Hoists

1900

1-17: Hoists, Tortgas

1-18: BOS, Tortugas

1-20: Tortugas

1-31: BOS, SF, BAL, SJR

2-1: SJR, Hoists, PS

2-6: PTMH

2-13: PTMH

2-20: Hoists, PTMH

2-23: SJR, 6-inch RFG

3-8: SF, Tortugas, BOS

3-9: BOS

3-23: Tortugas

3-27: PTL

3-29: Hoists, PTMH, Tortugas, 5 & 6-inch RFG, 8-inch RFG

4-5: Tortugas, HR

4-6: Hoists

4-24: HR

4-26: BOS, 6-inch DC, Hoists, SJR, Tortugas

5-9: SAV, PS, Tortugas, Armor plate

5-16: HR, BAL, POT

6-6: Barbette vs DC

6-14: 10-inch batteries

6-15: 10-inch batteries

6-20: 10-inch DCB, Hoists

7-3: HR, BAL, Gruson turrets, PTL, Magazines, Barbette vs DC, SF, Hoists, 10-inch batteries

7-6: 10-inch batteries

8-6: Storage magazines, Ammunition storage

8-17: PTL

9-4: SNY, 10-inch DCB, Electrical power, PTL

9-5: SNY, SF

9-10: SF,

9-14: RFG, PR, CR

10-5: SNY

11-27: GAL, GAL-SM

12-3: Puerto Rico-SM

12-14: SNY, 6-inch batteries

12-28: Hoists, SNY

1901

1-2: Peace magazines, Ammunition storage

1-8: SNY, Hoists

1-11: Emery DC, SNY

1-18: Puerto Rico-SM, Hoists

1-21: SNY, 6-inch Armstrong

1-23: HR

1-24: FC

1-29: PTMH, SNY, 6-inch pedestal battery

2-2: 6-inch pedestal battery, SF, PTMH

2-5: PR, PR-SM

2-26: 6-inch pedestal battery

3-1: Peace magazines

3-12: ENY, ENY-SM

3-13: PTMH, PR, NO-SM

3-18: LIS

3-26: LIS, GAL

3-29: PS
4-2: SNY
4-23: LIS
4-25: PTL
4-27: SNY
4-30: HR-SM
5-29: CHAR, PEN, St Augustine, FL, CR
6-20: KW, BOS, PS, CR
6-28: PEN, LIS, Electric lighting, KEN, NAR
7-2: FC, SNY, NAR,
7-8: PR, CHAR, KW, TB, PEN
7-26: Hoists
8-2: PEN
8-8: SM, SF
8-28: HR, 15-pdr RFB, POT
9-4: Hoists, POT, SL, MOB
9-5: PTL, KEN, PST
9-13: PS, CHAR, DEL, 5-inch RFB
9-26: HR
10-3: Hoists
10-24: SF
11-7: KW, HR, Hoists, PST
11-13: GAL, SF, SNY
11-21: SNY
12-6: Oahu, SNY, FC
12-10: SNY, Hoists, SD, 12-inch DCB
12-19: KW, SNY

1902

1-9: Hoists,
1-11: Hoists, FC
1-17: 12-inch DCB, PS, CHAR

1-18: PS
1-21: Ammunition supply
1-22: Puerto Rico
1-25: HR, Puerto Rico, Hoists
2-3: 12-inch DCB, Armament chests, FC
2-13: Hosts, HR, SAV, FC, 6-inch RFB
2-21: Hoists, Peace magazines, LIS
3-13: LIS, Hoists
3-21: LIS
3-31: LIS
4-1: LIS
4-10: MSB
4-11: LIS
4-18: MSB
4-24: Electric lighting, Hoists, MSB
4-30: PS, PS-SM
5-6: PS
5-13: Hoists
5-27: Hoists, LIS
5-31: BOS
6-19: BAL
6-26: 6-inch RFB
7-10: Puerto Rico
7-16: 6-inch ammunition supply, SNY
7-18: Concrete, Oil lamps
7-28: PS, SNY
7-30: 12-inch DCB
7-15: BOS, Hoists
8-9: FC, Hoists
8-25: Memorandum LIS army & navy maneuvers, Record LIS army & navy maneuvers
10-3: Ammunition trucks

10-14: Hoists, PS, BAL, 15-pdr RFB
10-17: PS
10-21: Barbette vs DC 6-inch RFB, PS
10-24: SL, NAR
10-25: Hoists, NAR-SL
10-28: BOS-SL
10-30: LIS-SL, PTL-LIS, SF-SL
11-1: PS-SL
11-5: HR-SL, NAR-SL
11-6: BOS-SL, PTL-SL
11-11: 6-inch RFB
11-12: PTL-SL, BOS-SL, Hoists
11-18: NAR-SL, LIS-SL
11-24: LIS-SL
11-25: LIS-SL, PTL-SL, BOS-SL, NAR-SL
11-28: Hoists
12-3: MOB, LIS, Hoists
12-8: NAR, 12-inch DCB
12-9: HR-SL
12-17: PTL-SL, BOS-SL, NAR-SL, LIS-SL, HR-SL, SF-SL, PS-SL
12-24: KEN, PTL, SNY-SL

1903

1-2: Ammunition storage, Hoists, SNY-SL
1-5: 10-inch DCB, Coaling stations
1-12: NO, LD, ENY-SL, SNY-SL, 10-inch DCB
1-16: PS, Puerto Rico, 10-inch BLM
1-30: PS, NO, SL, 6-inch RFB, Ammunition supply
2-3: SD-SL, POT-SL, BAL-SL
2-6: Frenchman's Bay, ME
2-13: Puerto Rico, LD
2-20: KW

2-24: Hoists, SD
3-4: HR, BAL
3-5: SD
3-11: LIS
3-14: PS
3-19: LIS, Puerto Rico
3-24: LIS
3-27: KW, PS
4-1: 6-inch DCB, LIS, GAL-SL, NO-SL, MOB-SL, PEN-SL, TB-SL, KW-SL
4-3: SD
4-6: GAL-SL, NO, NO-SL, MOB, MOB-SL, TB, TB-SL, KW, KW-SL, FC, PEN, PEN-SL
5-6: LIS, Hoists
5-7: BOS, NO, movable BLM, LIS-SL
5-13: SAV-SL, CHAR-SL, CF-SL, CR-SL
5-14: Puerto Rico, FC
5-18: SAV, SAV-SL, PR, CHAR, CHAR-SL, CF-SL, POT, BAL
5-27: BOS
5-28: CF, SNY
6-2: PEN, Puerto Rico, FC
6-11: PEN
6-12: NO, MOB
6-16: BAL
6-17: SAV, SM
6-24: FC
7-9: MOB
7-10: PEN, CHAR, KW
7-17: LIS, HR, HR-LD, PEN-LD, NO-LD, CF-LD
7-23: MOB, HR-LD, CF-LD, PEN-LD
7-24: BAL-LD, SF
8-3: HR-LD, CF-LD, PEN-LD, BAL-LD, NO-LD, 10-inch DCB
8-12: TB-SL, 10-inch DCB

8-13: DEL, FC, 12-inch DCB
9-11: NO, Puerto Rico, SM
9-17: NO, CHAR, MOB, 10-inch DCB
9-24: HR, NO
10-7: HR, HR-SL
10-22: Hoists, Lamps, HR, BOS, 10 & 12-inch DCB
10-23: PTMH
10-28: Hoists
11-5: Hoists, HB, BAL
11-6: PMH, PTMH-SL, 10 & 12-inch DCB
11-11: PTMH, PTMH-SM, PTMH-SL
11-13: Whitehead torpedoes, NAR-LD
11-16: PTL, NAR-LD
11-17: PTMH
11-24: PTMH
12-2: SNY
12-4: PTMH, PTMH-SM
12-10: Hoists, PTL
12-16: SF, SNY
12-18: GAL-LD, Puerto Rico
12-24: KW, BLM batteries, ENY, GAL-SM
12-29: Torpedoes

1904

1-6: 6-pdr RFB, FC, Portable electric lamps, 10-inch DCB, LIS-SM
1-14: BLM rammers, ENY
1-18: SF, BLM batteries, ENY, 10-inch DCB
2-8: ENY, ENY-SM, PTL
2-15: ENY-SL, PTL
2-24: SD-SL, PTL-SM, PTL-SL
2-26: BOS, SL, SNY, FC
3-4: SAV-LD

3-6: SAV-LD, PTL
3-16: CHAR-LD
3-18: CHAR-LD, SNY-SM
3-22: CHAR-LD, MOB-LD
3-25: MOB-LD, DEL-LD
3-30: DEL-SL, DEL-LD, DEL-SM, LIS-LD
4-4: DEL-SL, DEL-LD, LIS-LD
4-8: DEL-SM, LIS-LD
4-12: CHAR, Blast, BLM
4-19: LA, Iloilo
4-22: Iloilo, Cebu
4-27: ENY, BLM, MSB
5-2: MSB
5-9: LIS-LD
5-20: Santa Barbara, CA, MSB, SL, BLM batteries
6-17: MSB
6-18: MSB, Cebu, Iloilo,
6-29: Cebu-SL, Iloilo-SL, MSB-SL
7-28: MSB, MSB-SL
9-1: SL, Guam, Oahu
9-22: Guam, Oahu
11-14: Guantanamo, Guantanamo-SM, FC
12-5: Guantanamo, FC
12-22: MSB-SM, Guantanamo, Guantanamo-SL, Oahu-SL, Guam-SL
12-30: Oahu-SL, HR

1905

1-6: SM, HR-SM, CR
5-5: PTL, BOS-SM, BOS
5-6: ENY, SNY, DEL
5-10: PTMH, NAR, DEL, BAL
5-11: POT, HR, LIS

5-16: NB, CF, PR, SAV, KW, TB
5-20: SM, PST, KEN, SD, SF, CR, PS
5-24: PEN, NO, GAL, MSB, Oahu, Puerto Rico
5-26: Iloilo, Cebu, Guantanamo
7-14: SM, HR-SM, LA, LA-SL
7-19: Puerto Rico, Culebra
8-8: Powder hoists, DEL, LA, Kiska, Sorsogon Bay
9-15: HR, Sorsogon Bay
12-5: Kiska, HR, BLM batteries
12-8: DEL, Sorsogon Bay, Puerto Rico, NO, HR, Tortugas
12-13: Calibers of guns, 16-inch DC
12-20: HR, DEL, Kiska, Sorsogon Bay
12-27: Puerto Rico, Tortugas