

- p 11 - also sent secret inks
 George Washington used & or did Silas Deane in his mission to France
 John Jay's elder brother his James Jay, a Dr physician invented one of
 (code) conveyed an invisible ink the first authentic account
 which Congress received of the determination of the British
 Ministry to make the colonies to unconditional surrender
- p 12 Franklin & Deane also were informed by secret ink
 (from England) that Burgoyne was planning an expedition
 down the Hudson from Canada
- p 12 All letters in secret ink from Deane originally sent to
 Committee of correspondence his then address was covert - all wound
 up with John Jay who had the developing fluid who then
 forwarded the letters to the Committee
- p 15 James Lovell a member of Committee on Foreign Affairs was credited
 by Reckham with deciphering "nearly all, if not all, of the British
 code messages intercepted by the Americans."

Civil War

- Signal Officer of the Army Col Albert J. Myer - wrote
 first chief signal officer of the Army
 1864 - A Manual of Signals for use of Signal Officers - the first
 contained short sections on cryptography.
- 1866 Second edition same title + field and for Military and Naval
Students, Military Schools, etc Later editions 1868, 1870, 1872,
 1874, 1877, 1879.
 61 pages section on cryptography
- p 26 "Nevertheless, since the personnel of the Military Telegraph Corps
 served also as cipher clerks and on occasion even as computers
 and cryptanalysts"
- p 28 Thomas T. Eckert head of MTC 1861-1866 by General - After the war
 became president of later chairman of the board of Western Union
 & was still living at advanced age - 1907
- p 28 4 War Dept operators (MTC)
 David H. Bates, Eckert, Charles A. Tuttle, Albert B. Chandler
 (Bates, Chandler, Eckert all occupied influential
 positions in commercial companies)
 a - enciphered/deciphered encrypted dispatches & solved
 Confederate ciphers

Halden

Preparation of codes & ciphers in Navy had been done by Bureau of Navigation
 a - since at least Civil War Bureau of Naval Signal Office published signal books
 & since 1848 the Telegraphic Directories

Confidential Publications Section 1916 - centralized the Nav Dept storage, accounts,
 & distribution of confidential pubes prepared by the various Divisions,
 Offices, & Bureaus.

1917 O-IC of Code & Signal Section was made assistant to the DNC for codes & signals

Office of DNC
 July 1922 Code & Signal Section made part of OP20 given designation OP20G

Rev period - individuals

William Lee

John Jay

Robert Morris

Benjamin Franklin

James Lovell

John Adams

Robert Livingston

Thomas Jefferson

James Madison

Edmund Randolph

James Monroe

SSA 14/p 6-7

1781 Robert Livingston became secretary for foreign affairs under the Continental Congress at that time he had forms printed on one side of which were the numbers 1-1700, & on the other, the alphabetical list of words & syllables. Correspondents then prepared 2 identical copies of their code using the convenient blank forms for the purpose

p 7 a - The Virginia delegates to Congress in 1782 wrote officially to their governor in such a numerical code (numbers 1-246)

p 9 Shortly after the government of the US had been set up under the Constitution of 1787, an elaborate code, called a cypher after the terminology then current, was made for official diplomatic use. No record of person or persons who made the code, but ^{as I was} said to be based on the "Rosignol cypher", there is some probability that French experts lent their assistance.

p 10 Use of codes & ciphers fell into disuse 1815-1866. Close of Napoleonic wars, diplomatic matters lost their wartime urgency. When dispatches sent by pacific means, the ordinary diplomatic mails could carry them in comparative safety, as ships were no longer held up by the navies of warring powers with the consequent require of all dispatches.

during civil war - functions of:

- MTC - telegraphic communications between land mobile stations.
- Sig Corps - providing signals by means of lights, flags, & even electrical means for the use of units in the field.

p 35 both Sig Corps & MTC enciphered messages

p 41 E. Porter Alexander organized confederate signal service

p 75 In spring of 1862 Col J.H. Alexander (Porter's brother) was assigned the task of preparing a manual for Confederate Signal Officers which included "a table for computing cipher dispatches." Sounds like Vigenere table.

p 76 Union prepared crypt systems in 1861; Confederates 1862.

p 78 says intercepted messages were forwarded to Washington & given to cipher operators in the War Dept who worked on them.

p 79 says "Three other Confederate messages were received in the autumn of 1869 by the cipher department at New Orleans, of which Captain W.E. Phelps was then Officer in charge.

cipher department?

p 96 Dept of State had adopted a cipher shortly after the Revolution & used it right down to 1867. seldom used after war of 1812.

p 97 State Dept had cipher clerks

p 97 Story of Seward & telegraph companies gave using cable & hell for 25,000 ^{now paid}

p 97 During occupation of Mexico cipher telegrams were sent to General Bagnine, commander of Ft. forces. Some of them came into possession of US authorities (during say wars) & were deciphered by an army officer.

p 98 MTC abolished after civil war

Use of cryptography for military purposes went into decline during long period of peace broken only by Spanish American War 1898.

p 99 Enchiridion of the War Dept Telegraph code was called "Telegraphic Code to insure secrecy in the transmission of telegrams" compiled in 1885 & published by GPO in 1886. It was issued by the authority of the Secretary of War & was the work of Col. J. F. Gregory A. D. C.

was not ^{completely} original but a revision & adaptation of widely used public code prepared by Robert Stater Secretary of the French Atlantic Telegraph Company.

p 100 Only American code known to have been used between Civil War & Spanish American War. 33415.

p 100 During Spanish American war a telegraph & cipher bureau was maintained at the Executive Office of the President for communications between the Commander-in-Chief of the Army & many of his subordinates

- a - Report of Chief Signal Officer for 1900, p 50
- " " " " " " 1901, p 23
- " " " " " " 1902, p 42
- " " " " " " 1903, p 33

This Office performed telegraphic service & also responsible for encoding & decoding all traffic & was under [p 101] the direction of Capt. Benjamin F. Montgomery of Signal Corps Volunteers

- a - Montgomery's report is Appendix 12 of Report of CSO for 1901
- however it does not give any info re cipher work of bureau

p 102 Solved a number of cipher messages sent by the Filipino insurrectionist Emilio Aguinaldo to various chieftains under him in 1901

- a - Frederic Timston, Memoirs of Two Wars (NY: Scribner's 1911) Chapter VII "The Capture of Emilio Aguinaldo"
- messages were captured

p 103. Report of Chief Signal Officer for 1899

" Under the provisions of General Order, No. 9, Adjutant General's Office, January 16, 1899, the Chief Signal Officer of the Army has undertaken the preparation of a suitable telegraphic code for the official use of the Army.

Notes the expense & how the CSO had to do the job personally because [p 104] "... a satisfactory performance of this work required a practical knowledge of telegraphy, a thorough familiarity with the necessities of the special vocabularies to be used, also a ~~working~~ knowledge of working methods in vogue and regulations in force on the various cable links of the world."

Goes on to say something had to be done to reduce ~~cable~~ cable expense & to adapt a commercial code temporarily which would best serve the Army. - proved to be the Western Union Telegraphic Code.

Also developed the Preliminary War Department Telegraphic Code - 1899 This code with editing (to reduce expenses) as supplementing the main body of the Western Union Telegraphic Code.

p 105 The permanent War Dept Tel Code came out with a ^(date on title page) late 1899 or Jan 16, 1900 as indicated by stamp on leather binding.

- a - but still used first 471 pages of WUTC. It even contained a copy of WUTC bound in the same volume

p 106 Report for 1906 cites p 1741 of Army Regulation for authority granted to Chief SO to prepare the War Dept Tel Code - so do Reports 1902 & 1903.

SSA 161
p 107

Some dissatisfaction felt w/ old WDTIC 1819 for in 1902 Maj Gen H.C. Corbin, Adjutant General of the Army decided that another be issued. Was inaccurately called "The Code of the War Department" in spite of fact it was a code. Prepared in AG's Office & printed by GPO 1902. Only one ever put by AG Office. (p. 108)

p. 109 1904 CSO (General A.N. Greeley) 1903 War Dept "For Code Telegraph Code."

p 110 No new code appeared for 9 years (1906-1915)

p 112 The War Dept Telegraph Code 1915 prepared by CSO & published by authority of Secretary of War. (bears GPO on title page but actually printed by a commercial establishment in Cleveland, Ohio)

p 115 By eve of WWI Army possessed no cryptanalytic unit altho there were some who had studied into a degree. From 1913 to outbreak of WWI cryptography had been part of the curriculum of the Army Signal School at Ft. Leavenworth Kansas.

letter 10 Jul 1916 Chief of War College Division Brig Gen M.M. Macomb to Army Service Schools at Ft. Leavenworth

" 2. The War College Division is frequently called upon to decipher various messages and, as it has no one who is an expert in work of this description, we would like to have the names of such officers as have shown special aptitude in such work in order to utilize their services."

This letter finally reached Acting Dir, Army Signal School, Ft. Leavenworth who replied on 13 Jul 1916 and supplied the following names:

1. Captain Parker Hill - "undoubtedly the best cipher man in our service"
LT. Joseph O. Mauborgne - "has done some excellent work in this line and should be of value to the War College"

LT. Charles A. Lewis

p 116

LT. Edmund R. Andrews

LT. Charles E. Swartz

LT. Clyde L. Eastman

LT. Karl Truesdell

LT. Frank Moorman Act Dir, Army Sig School

p 117 Mexican Expeditionary Forces March 1916 - Feb 1917
arrests along the border produced info on Mex cryptography espionage also

p 118 "During the Mexican expedition a number of Mexican ciphers were intercepted and solved by various intelligence officers on duty in the Southern Department." This is MI 8 crap say that it's much more progressed than this

Vol I ends

Kahn

1809 Navy Dept message to Commodore David Porter of New Orleans

Responsibility for naval cryptography as it had since navy
was founded with senior members of the Navy Board.

1842 Bureau of Construction, Equipment, & Repair

1853 Bureau of Ordnance and Hydrography

1862 Bureau of Navigation until 1917

Kahn -

Nathaniel Aram American comrade in Faith

was captured as messenger to Congress - found

their way to Lovell who solved them. (Aram to be by

Thomas McKean
President of the Congress?)

McKean sent someone to

Washington & Adm de Grasse