

THE BUREAU OF NAVIGATION, 1862-1942

THE arrangement, servicing, and description of records can be successfully performed only by the archivist who familiarizes himself with the administrative history of the agency whose records he is concerned with. The writer of administrative history, on the other hand, will find the records more or less indispensable to the completion of his task. In the present instance the writer has been both the archivist and the historian, for it was in handling numerous large accessions of records from the Bureau of Navigation received in the National Archives in the past several years that he became interested in the history of that bureau to the extent of investigating and writing it. Although this article is long, it is nothing but a sketch of the eighty year history of the Bureau of Navigation. Most of the subdivisions in which it is presented could be made the subjects of separate articles by using the records of the bureau and other Navy Department records now in the National Archives. If this were to be done the records would become more useful for other types of research. This article then is an illustration of what the archivist who is trained as a historian is likely to be allured into producing when he undertakes working with a collection of records. It is replete with dates and footnotes because these will be useful to the archivist attempting to identify certain series of records and to the historian and administrative official desirous of exact information and where to find it. The writing of administrative history must to a greater or less extent be a function of the archivist.

An act of Congress approved May 13, 1942, changed the name of the Bureau of Navigation to Bureau of Naval Personnel. The old designation had been a misnomer for many years, practically since the establishment of the bureau.¹ It had been established originally as the scientific bureau of the Navy Department, but its work had come largely to deal with naval personnel. Finally when the Hydrographic Office and the U. S. Naval Observatory were transferred to the Office of the Chief of Naval Operations on April 8, 1942,² only personnel matters were left. These matters had become

¹ In 1908 the Chief of the Bureau of Navigation recommended changing the name of the Bureau to "Bureau of Personnel and the Fleet," while in 1920 the Secretary of the Navy recommended that the name be changed to "Bureau of Personnel."

² *Federal Register*, VII, No. 71, 2753, Executive Order No. 9126.

increasingly voluminous during the 1930's as a result of the expansion of the navy. From 455 vessels and an authorized enlisted personnel of 79,700 in 1933 the navy increased to 907 vessels and nearly a quarter of a million enlisted men in 1941. Upon the outbreak of the war on December 7, 1941, the building up of the two ocean navy was accelerated. The Bureau of Naval Personnel can now devote its undivided attention to the personnel work of the Navy Department.

Office of Detail

Soon after becoming Secretary of the Navy on March 7, 1861, in the cabinet formed by President Lincoln, Gideon Welles gave his attention to the organization of the Navy Department. The Confederate States of America had been formed at Montgomery, Alabama, in the preceding month, and war seemed to be close at hand. Until this time the detailing of officers had been performed by the Secretary's Office, but Welles now ordered Commodore Silas H. Stringham to report to his office to undertake this duty.³ When war came, Stringham was detached and an Office of Detail was formed under Commodore Hiram Paulding, the other members being Commanders Charles H. Davis and Maxwell Woodhull. Paulding had been in the navy for fifty years, and because of his age Davis came to do most of the work of the office.⁴ It handled also the appointment and instruction of volunteer officers, the purchasing of ships, and related matters.

Bureau of Navigation

Upon the recommendation of Secretary of the Navy Gideon Welles in reports of July 4 and December 2, 1861, a reorganization of the Navy Department was effected in 1862. Among the eight bureaus authorized by the act of July 5, 1862, was the new Bureau of Navigation. Under the authority of this act Secretary Welles by order of August 31, 1862, placed under this bureau the Naval Observatory and Hydrographical Office and the Nautical Almanac office, which had previously functioned under the Bureau of Ordnance and Hydrography, thereafter known as the Bureau of

³ Charles O. Paullin, "A Half Century of Naval Administration in America, 1861-1911," *U. S. Naval Inst. Proc.*, XXXVIII (Dec., 1912), 1319.

⁴ Charles H. Davis, *Life of Charles Henry Davis, Rear Admiral, 1807-1877* (Boston, New York, 1899), 116 ff.

Ordnance.⁵ Charles H. Davis, who had been largely responsible for the creation of the bureau, became its permanent chief on November 15, 1862. The bureau had been organized by Capt. James M. Gilliss, head of the Naval Observatory. Davis served until April 27, 1865, becoming then the superintendent of the Naval Observatory.⁶ The other chiefs of the bureau during the 1860's and 1870's were: Percival Drayton, April 28, 1865-August 4, 1865; David Dixon Porter, August 8, 1865-August 24, 1865; Thornton Alexander Jenkins, August 24, 1865-April 11, 1869; James Alden, April 12, 1869-September 30, 1871; Daniel Ammen, October 1, 1871-June 4, 1878; and William Danforth Whiting, June 11, 1878-October 12, 1881.

Naval Observatory and Hydrographical Office

The Naval Observatory and Hydrographical Office originated in the Depot of Charts and Instruments which was established by order of the Secretary of the Navy of December 6, 1830.⁷ The depot was attached to the Bureau of Ordnance and Hydrography as its hydrographic branch in 1842 upon the organization of the bureau system of administration in the Navy Department. From December, 1854, to August 1, 1866, this institution was designated as the United States Naval Observatory and Hydrographical Office. At the latter date a division of the work occurred, pursuant to an act of Congress of June 21, 1866, resulting in the formation of a Hydrographic Office and of a Naval Observatory, both of which continued as separate offices under the Bureau of Navigation.⁸

The Naval Observatory and Hydrographical Office had engaged in both hydrographical and astronomical work, but Matthew F. Maury, who headed the office from 1844 until 1861, had been prin-

⁵ Paullin, *loc. cit.*, xxxviii (Dec., 1912), 1320-1321. The other bureaus established by the act of 1862 were: Bureau of Yards and Docks, Bureau of Equipment and Recruiting, Bureau of Ordnance, Bureau of Construction and Repair, Bureau of Steam Engineering, Bureau of Provisions and Clothing, and the Bureau of Medicine and Surgery.

⁶ Davis was selected for this position because of his long experience in the scientific work of the Navy Department as head of the Nautical Almanac Office and because, being of a scholarly nature, he was better suited for this type of employment than for an active command such as he had had in charge of the Western Flotilla on the Mississippi before he was recalled to Washington. Cf. Gideon Welles, *Diary of Gideon Welles, Secretary of the Navy under Lincoln and Johnson* ((Boston, N.Y., 1911, 3 vols.), 1, 158.

⁷ Gustavus A. Weber, *The Naval Observatory; Its History, Activities and Organization* (Baltimore, 1926), 10; Lloyd M. Short, *The Development of National Administrative Organization in the United States* (Baltimore, 1923), 300.

⁸ Gustavus A. Weber, *The Hydrographic Office; Its History, Activities and Organization* (Baltimore, 1926), 26-27; Davis, *op. cit.*, 284.

cipally concerned with the hydrography. His wind and current charts of the oceans of the world, which were based upon numerous logs of naval vessels and merchant ships, were an extremely important contribution to the science of navigation. Gilliss upon succeeding Maury in 1861 restored astronomy to the primary position in the office. Davis favored the separation of the hydrographic work from the office and succeeded in accomplishing this. The divided offices were able to expand their work.

The Naval Observatory retained the astronomical functions, including the rating of chronometers and the care of navigational and surveying instruments. The sending out of time signals, which had begun in 1865, was extended by the Western Union to all cities of over twenty thousand population. In 1873 the observatory obtained the largest refractor in the world, and in 1893 the new observatory in Washington was occupied.

The Hydrographic Office was charged with the duties of providing the navy and the merchant marine with nautical charts, sailing directions, and navigator's manuals. It began publishing in 1867 the "Hydrographic Notices" and in 1869 the "Notices to Mariners," which were later consolidated under the latter title. In 1883 it began issuing pilot charts. In order to procure the information for these publication, surveys and expeditions were conducted in all parts of the world.⁹ Previously the United States had been dependent on foreign sources, chiefly the British Admiralty, for such publications. The head of the office became the Hydrographer to the Bureau of Navigation in 1871 in an order which reorganized the office into five sections.¹⁰ The practice of soliciting meteorological data from merchant ships was resumed in 1873, and new editions of charts were prepared. In 1904, however, the duty of collecting marine meteorological reports was transferred to the Weather Bureau, which thereafter supplied the Hydrographic Office with data for publication in pilot charts. The better distribution of the publications of the Hydrographic Office was provided for in 1884 by the establishment of a number of branch hydrographic offices in principal ports.

⁹ U. S. Hydrographic Office, *Surveys by the Hydrographic Office, Navy Department, from the Survey of Georges Bank and Shoal by Lieut. Charles Wilkes, U.S.N., in 1837 to July 1, 1924, with a Brief History of Several of the Earlier Surveying Expeditions* (Washington, 1924). Also published in the annual report of the Bureau of Navigation, 1924.

¹⁰ Weber, *Hydrographic Office*, 28.

Nautical Almanac Office

The Nautical Almanac Office was established in Cambridge, Massachusetts, in July, 1849, to undertake the preparation of the *American Ephemeris and Nautical Almanac* under the supervision of Lieut. Charles H. Davis, for which an appropriation was made by act of March 3, 1849. The creation of this office was the result of the efforts of Lieutenant Davis, who from his work on the Coast Survey in the preceding seven years realized the need for a national ephemeris, and the support given him by Prof. A. D. Bache, superintendent of the Coast Survey, Joseph Henry, secretary of the Smithsonian Institution, and Matthew F. Maury, superintendent of the Naval Observatory.¹¹ The Nautical Almanac Office was originally located at Cambridge because of the scientific and library advantages afforded by Harvard University. It reported directly to the Secretary of the Navy until 1859 when it was placed under the Bureau of Ordnance and Hydrography.¹² In 1866, four years after it was attached to the Bureau of Navigation, it moved to Washington. By order of the Secretary of the Navy of September 20, 1894, the office became a branch of the Naval Observatory.¹³

United States Naval Academy

The United States Naval Academy, which had been established as the Naval School at Annapolis, Maryland, in 1845 through the efforts of Secretary of the Navy George Bancroft, was placed under the jurisdiction of the Bureau of Navigation at the time of its creation. In 1850 the name of the institution had been changed to United States Naval Academy, and it was placed under the Bureau of Ordnance and Hydrography. During the War of the Rebellion it was located at Newport, R.I. On March 1, 1867, the Naval Academy was placed under the supervision of the Secretary of the Navy, but its administrative routine and financial management were conducted by the Bureau of Navigation until March 11, 1869, when all connections ceased.¹⁴ In 1889 the Naval Academy was again placed under the Bureau of Navigation, in accordance with the plan of the

¹¹ Davis, *op. cit.*, 86ff.

¹² Weber, *Naval Observatory*, 26; U. S. Superintendent of Documents, *Checklist of United States Public Documents, 1789-1909* (Washington, 1911), 764.

¹³ U. S. Navy Department, *Annual Report*, 1894, 30-31; 1895, 110; Weber, *Naval Observatory*, 28.

¹⁴ U. S. Supt. of Documents, *op. cit.*, 770; James R. Soley, *Historical Sketch of the United States Naval Academy* (Washington, 1876), 111.

Navy Department to charge that bureau with the supervision of training and education in the navy.

Naval Apprentice System

The naval apprentice system revived in 1864 by Secretary Welles under the authority of the act of March 2, 1837, according to which apprentices had been enlisted in 1837 and 1855, was the first personnel matter to be placed in charge of the Bureau of Navigation.¹⁵ The object was to supply the navy with disciplined and better instructed seamen and to free it of its dependence upon the mercantile marine. By 1867 the *Sabine*, the *Portsmouth*, and the *Saratoga*, old sailing vessels, were in commission as apprentice ships. Following the passage of the act of June 17, 1868, which limited the number of enlisted men and apprentices to 8,500, it was necessary to reduce the number of apprentices to the capacity of one ship, the *Saratoga*. Most of the apprentices were lads who hoped to pass the examinations which were to be given them for admission to the Naval Academy. The annual examination for the admission of ten boys out of about five hundred doomed most of them to disappointment, and desertions followed in large numbers.¹⁶ Failure of the system was the result.

During the years following the Civil War the navy sank to low depths, both in ships and personnel. The ships were largely those left over from a bygone era, and no provision was made by Congress for replacing them with modern steel ships until 1883. The service was unattractive, particularly in those days when the West was under exploitation. The crews of our naval vessels were more largely foreigners than Americans. This situation became a matter of concern to officers like Captain Stephen B. Luce, who advocated the establishment of a training system as a means of providing seamen for both the navy and the merchant marine.¹⁷

An apprentice training system was set up pursuant to a Navy Department circular of April 8, 1875, providing, according to the act of March 2, 1837, for the enlistment of boys between sixteen and eighteen years of age for service until they reached twenty-one.

¹⁵ A. W. Johnson, *A Brief History of the Organization of the Navy Department* (Washington, 1935), 38; U. S. Navy Department, *Annual Report*, 1866, 132; Aaron Ward, "Naval Apprentices," *United Service*, III (Dec., 1880), 740.

¹⁶ U. S. Navy Department, *Annual Report*, 1869, 52; 1870, 117; 1871, 117.

¹⁷ Albert Gleaves, *Life and Letters of Rear Admiral Stephen B. Luce*, U. S. Navy (New York, 1925), 134ff.; U. S. Navy Department, *Annual Report*, 1875, 18.

The training was designed merely to fit the boys to be sailors, so the mistake of giving them all hopes of becoming officers was avoided. Supervision of the apprentice system was placed under the Bureau of Equipment and Recruiting, which had had charge since its creation of the enlistment of men for the navy. The apprentices received their first instruction on training ships stationed at some of the large Atlantic coast ports: the *Minnesota* at New York, the *Constitution* at Philadelphia, the *Monongahela* at Baltimore, and the *Saratoga* at Norfolk.¹⁸ Training cruises were made on the practice ships. When the boys were transferred to cruising vessels of the navy, favorable reports were received from officers concerning them. On May 12, 1879, when there were 945 boys serving as apprentices, an act of Congress was approved authorizing the annual enlistment of 750 boys between the ages of fifteen and eighteen years, to serve until twenty-one.¹⁹ Immediate measures were taken for their recruitment.

The first naval training station for the apprentices was established on Coaster's Harbor Island, Newport, R.I., in 1883. This island had been ceded by the state of Rhode Island to the United States on March 2, 1881, for use as a training station.²⁰ It became the headquarters that year of the Apprentice Training Squadron, which had been established under the command of Commodore Stephen B. Luce.²¹ On June 4, 1883, the naval training station was permanently established there, and with the training ships it was under the supervision of the Bureau of Equipment and Recruiting.²² Upon the founding of the Naval War College on the island in 1884 the headquarters of the training system, a stone building which had formerly been the asylum for the poor of Newport, was transferred to that institution. Coaster's Harbor Island, however, continued to be the home station of the training service, which housed itself in ships and on the island in the rigging loft, in tents, and in the War College building.²³ In 1889 the Naval War College was consolidated with the

¹⁸ U. S. Navy Department, *Annual Report*, 1876, 108, 11; 1877, 123-124; 1878, 61-62; Gleaves, *op. cit.*, 146ff.; Stephen B. Luce, "United States Training Ships," *United Service*, 1 (July, 1879), 425-435.

¹⁹ The act of Feb. 23, 1881, changed the "fifteen" in the act of 1879 to "fourteen."

²⁰ U. S. Bureau of Yards and Docks, *Federal Owned Real Estate under the Control of the Navy Department* (Washington, 1937), 323.

²¹ Gleaves, *op. cit.*, 157-158. During the four preceding years Luce had had command of the *Minnesota*.

²² M. S. Thompson, *General Orders and Circulars Issued by the Navy Department from 1863 to 1887* (Washington, 1887), 223.

²³ Stephen B. Luce, "U. S. Naval War College," *U. S. Naval Inst. Proc.*, xxxvi (June, 1910), 574.

Torpedo Station on Goat Island, making the Naval Training Station the sole occupant of Coaster's Harbor Island.²⁴

As a part of the reorganization of the Navy Department effected by Navy Department General Order No. 372 of June 25, 1889, the naval apprentice system was transferred to the supervision of the Bureau of Navigation. It continued to be operated along the same lines.²⁵ Another training station for apprentices was established on the Pacific Coast on Yerba Buena Island, San Francisco, on March 25, 1899.²⁶ In conjunction with the training of landsmen instituted after the war with Spain the naval apprentice system was successful in reducing the number of foreign seamen in the navy to a small percentage.

Bureau of Navigation and Office of Detail

The administration of the personnel matters of the navy long remained in the hands of the secretary.²⁷ No provision was made even at the time of the organization of the bureau system in 1842 for handling matters pertaining to personnel. The burden which this placed upon the Secretaries of the Navy led some of them to recommend the establishment of a Bureau of Personnel.²⁸ Following the passage of the act of July 5, 1862, Secretary Welles transferred duties connected with enlisted personnel from the Secretary's Office to the Bureau of Equipment and Recruiting.²⁹ Thereafter certain matters of a personnel nature came to be assigned to the Bureau of Navigation.

The most important duties of a personnel nature assigned to the bureau were those relating to officers. The Office of Detail was placed under the Chief of the Bureau of Navigation on April 28, 1865.³⁰ This resulted in the use of the designation, Bureau of Navigation and Office of Detail, thereafter. Up until this time the important function of issuing orders to officers had been performed directly by the Secretaries of the Navy, but the chief of the Bureau of Naviga-

²⁴ Luce, *loc. cit.*, 566; *Navy Department General Order*, No. 365, January 11, 1889.

²⁵ For an account of the system towards its close see James H. Reid, "A Naval Training Policy and System," *U. S. Naval Inst. Proc.*, XXIX (March, 1903), 13-14.

²⁶ U. S. Navy Department, *Annual Report*, 1898, I, 328; 1899, 405, 458.

²⁷ R. H. Leigh, "Naval Personnel," *U. S. Naval Inst. Proc.*, LV (Oct., 1929), 855.

²⁸ U. S. Navy Department, *Annual Report*, 1851, 16 (William A. Graham); 1853, 319 ((James C. Dobbin).

²⁹ Johnson, *op. cit.*, 32.

³⁰ Paullin, *op. cit.*, *U. S. Naval Inst. Proc.*, XXXVI (Dec., 1912), 1319; XXXIX (June, 1913), 736.

tion now began to sign routine orders to naval officers.³¹ By order of the secretary of June 26, 1869, the Bureau of Navigation was given authority to issue orders to staff officers as well as to line officers.³² The power of the Bureau of Navigation was further augmented by assigning to it control over the movements of naval vessels. This function had been exercised by the secretary in connection with the issuance of orders to officers. From the Office of Detail, which had limited authority over the movements of vessels, this duty passed to the Bureau of Navigation. Secretary of the Navy William H. Hunt directed on November 28, 1881, that commandants of navy yards, commanders of squadrons, and commanding officers of ships were to send all reports, letters, and telegrams relating to the movements of vessels to the Bureau of Navigation and Office of Detail, the chief of which was to keep records of their position and destination and to prepare orders and instructions for the signature of the secretary.³³

A change in the administration of the Navy Department, however, resulted in the Bureau of Navigation's being shorn temporarily of its powers touching the detail of officers and the control of ship movements. Against some incumbents of the position of head of this bureau, the charge was made that they favored their friends in the service in making assignments. After serving for a year as the Secretary of the Navy, William E. Chandler determined to return the duty of issuing orders to officers to the Secretary's Office. When the chief of the Bureau of Navigation, then John G. Walker, refused to comply with a request to draft a modification of General Order No. 278,³⁴ Chandler issued General Order No. 309 on October 15, 1883, which directed that "All communications to the Navy Department from officers of the Navy, excepting only such as related strictly to the specific duties of the various Bureaus, as defined in General Order No. 293, dated March 30, 1882, will be addressed to the Secretary of the Navy." General Order No. 278 was stated to be rescinded. By a further order of

³¹ "The Bureau of Navigation, Office of Detail, and Office of Naval Intelligence," *United Service*, XIII (Dec., 1885), 645; Bureau of Navigation, Letters Received, Navy Department, Gideon Welles to T. A. Jenkins, August 31, 1865 (The National Archives). The orders to officers were issued "By direction of the Secretary of the Navy."

³² Bureau of Navigation, Letters Received, Navy Department, George M. Robeson to James Alden, June 26, 1869.

³³ Thompson, *op. cit.*, 203. General Order No. 278.

³⁴ "The Bureau of Navigation, Office of Detail, and Office of Naval Intelligence," *United Service*, XIII (Dec., 1885), 647.

October 1, 1884, Chandler returned the Office of Detail to the Secretary's Office.³⁵ It remained there but a short time, for on May 22, 1885, soon after entering upon the position of Secretary of the Navy, William C. Whitney restored it to the Bureau of Navigation.³⁶ He announced at the same time that the Board of Detail created by Chandler to advise the secretary concerning the detail of naval officers would be continued.

It was charged that this order placed the chief of the Bureau of Navigation in virtual command of the navy, which was a violation of our republican principles of government, according to which this authority was to be exercised by the civilian head of the Navy Department.³⁷ Whitney, nevertheless, reappointed Walker as chief of the Bureau of Navigation, a position which he held altogether from October 22, 1881, to October 31, 1889, a longer period than any other officer has ever occupied it. He has been characterized as one of the ablest administrators and executives the department has ever had.³⁸

Concerning the movements of ships, the navy *Regulations* of 1893 prescribed as follows:

All orders governing the movements of vessels, other than those issued by officers exercising command afloat or at shore stations, within the limits of their respective commands, will be signed by the Secretary and recorded in this bureau [Navigation].

Through its direction of the commissioned personnel of the navy, the movements of ships, the Naval War College, and the Office of Naval Intelligence, the Bureau of Navigation became the most powerful bureau in the Navy Department. To a large degree it had charge of the military affairs of the navy. The forceful personalities of Captain John Grimes Walker and Rear Admiral Francis Munroe Ramsay, who served from November 1, 1889, to April 5, 1897, contributed greatly to this end. An assistant chief for the bureau was authorized in 1893. By direction of the President in 1902 the chief of the Bureau of Navigation was to function as Acting Secretary of

³⁵ Thompson, *op. cit.*, 235. General Order No. 322. This order revoked the orders of the department to the Bureau of Navigation of August 31, 1865, and June 26, 1869, attaching the Office of Detail to that bureau.

³⁶ *Ibid.*, 260. General Order No. 337.

³⁷ "The Bureau of Navigation, Office of Detail, and Office of Naval Intelligence," *United Service*, XIII (Dec., 1885), 648-649.

³⁸ Albert Gleaves, *Life and Letters of Rear Admiral Stephen B. Luce* (New York, 1925), 172-173.

the Navy in the event that both the secretary and the assistant secretary became sick.³⁹

Chief Signal Office

In 1869 the Chief Signal Office was organized and attached to the Bureau of Navigation for the purpose of preparing signal books and codes and giving instruction in signalling.⁴⁰ The army method of signalling, which had proved successful during the Civil War, was introduced into the navy with the assistance of Brigadier General A. J. Myer, Chief Signal Officer of the Army, who had devised the system. Young naval officers were trained by army signal instructors and introduced instruction and practice on board ships of war. A signal book was prepared for the use of the navy, and an official American edition of the *International Signal Code*, which had been originally prepared and published in England, was brought out for the use of the navy and merchant vessels. Experiments were carried on to develop methods of signalling for both day and night. The Very pistol, an invention of Lieut. Edward W. Very, U.S.N., a method of night-signalling by means of firing colored stars from a pistol, was introduced in 1877.

Office of Superintendent of Compasses

Prof. B. F. Greene, U.S.N., reported for duty in the Bureau of Navigation as Superintendent of Compasses on March 28, 1873, by direction of the Secretary of the Navy.⁴¹ He was charged with the inspection and improvement of compasses. In that year Greene arranged for the erection of a compass observatory at Brookline, Massachusetts, on the grounds of Messrs. Ritchie, who were engaged in the manufacture of liquid compasses for the navy, in order that they could be properly adjusted and inspected before acceptance. This office also inspected compasses at storehouses in navy yards. It conducted experiments connected with the magnetic effect of iron ships upon the qualities of compasses. This office was transferred in 1889 to the Bureau of Equipment. On January 19, 1906, it was placed under the Naval Observatory, which supplied all other navi-

³⁹ Office of the Secretary of the Navy, General files, No. 12753-2. This order was issued under Section 179 of the *Revised Statutes*. It was renewed from time to time. Cf. other subnumbers under file 12753.

⁴⁰ U. S. Navy Department, *Annual Report*, 1869, 52.

⁴¹ *Ibid.*, 1873, 80.

gational instruments to ships, and which had ample accommodations and facilities.⁴²

Office of Naval Intelligence

In 1869 the secretary directed the Bureau of Navigation to collect information about foreign navies and other matters of interest to the navy.⁴³ This led eventually to the establishment in 1882 of the Office of Naval Intelligence under the Bureau of Navigation.⁴⁴ Its first head was Lieut. T. B. M. Mason, who was largely responsible for its creation.⁴⁵ By the same order the department library was placed under this office in order to facilitate its work. From the year of its establishment the Office of Naval Intelligence has maintained naval attachés in foreign capitals. In 1890 the office was transferred to the re-established office of the Assistant Secretary of the Navy. It was returned by an order of the secretary of April 26, 1898, to the Bureau of Navigation in which it remained until detached by order of November 18, 1909, when it was assigned to the Aid for Operations. The Office of Naval Intelligence was first provided for by law in the appropriation act of February 24, 1899.

Library and Naval War Records Office

The librarian appointed in 1882 undertook in addition to the maintenance of the library of the department the arrangement of the manuscript records of the Union and Confederate navies in the War of the Rebellion. After Congress made an appropriation for this work on July 7, 1884, the librarian, Prof. J. R. Soley, was made superintendent of the Naval War Records Office. Thereafter a single chief presided over this office and the library. In the reorganization of the department effected in 1889 these organizations were transferred to the office of the Secretary of the Navy.

Naval War College

After securing the establishment of the training system Captain Luce turned his attention to promoting the creation of a school where officers of the navy could be taught the art of war. Through

⁴² U. S. Navy Department, *Annual Report*, 1904, 384-385; 1906, 387.

⁴³ Johnson, *op. cit.*, 39-40.

⁴⁴ By Navy Department General Order No. 292 of March 23, 1882.

⁴⁵ Albert P. Niblack, *The History and Aims of the Office of Naval Intelligence* (Washington, 1920).

the powerful support of Admiral David D. Porter and Capt. John G. Walker, chief of the Bureau of Navigation, who were both strong friends, Captain Luce was ordered to Washington on special duty in 1884, and after a conference with Secretary of the Navy Chandler he was made president of a board to consider the question of the establishment of a war college.⁴⁶ Impressed by Luce's arguments, Secretary Chandler adopted the recommendation of the board, and on October 6, 1884, established the Naval War College on Coaster's Harbor Island under the general supervision of the Bureau of Navigation.⁴⁷ Commodore Luce was detached from command of the North Atlantic Fleet in September, 1884, to become the first president of the institution. In the late poorhouse of the city of Newport the college was opened in the fall of 1884, but it was not until September, 1885, that the first brief session was held. Luce was succeeded in August, 1886, by Capt. Alfred T. Mahan, who since his detachment from the command of the *Wachusett* in the preceding year had been working in New York on the lectures he was to deliver at the college.⁴⁸ These lectures and others that followed resulted in his famous books on the influence of sea power on history which began to appear in 1890.

The early years of the Naval War College were precarious ones owing to the strong opposition evinced by some officers. The Bureau of Navigation continued to support it, but when relations between Captain Walker and the Secretary of the Navy became strained over the question of the detailing of officers, this was no longer effective. Walker's successor, Commodore Francis M. Ramsay, had been superintendent of the Naval Academy at the time of the establishment of the college and had opposed it on the ground that it was unnecessary and that it should have been a post graduate school at the academy. The Bureau of Equipment, which had been deprived of the headquarters for its Training System on Coaster's Harbor Island by its transfer to the Naval War College, also sought to secure its abolition.⁴⁹ The opponents of the college were so far successful

⁴⁶ Gleaves, *op. cit.*, 174; John Stapler, "The Naval War College, a Brief History," *U. S. Naval Inst. Proc.*, LVIII (Aug., 1932), 1157; Stephen B. Luce, "U. S. Naval War College," *U. S. Naval Inst. Proc.*, XXXVI (June, 1910), 562; Leon B. Richardson, *William E. Chandler, Republican* (New York, 1940), 307.

⁴⁷ By Navy Department General Order No. 325.

⁴⁸ W. D. Puleston, *Mahan, the Life and Work of Captain Alfred Thayer Mahan* (New Haven, 1939), 74-80.

⁴⁹ Luce, *loc. cit.*, 567.

as to effect in 1889 the consolidation of the college and the Naval Torpedo Station on Goat Island, where the station had been located since 1869.⁵⁰ The Naval Torpedo Station and War College, as the consolidated institution was designated, came under the jurisdiction of the Bureau of Ordnance.

A new administration soon came into power, however, and the friends of the college were able to persuade Secretary of the Navy Tracy to recommend the construction of the new building for the college on Coaster's Harbor Island, where there was ample room and certainty of occupation since the Navy Department owned it. The appropriation act approved June 30, 1890, provided that the building for which an appropriation had been made should be erected on that island. This appropriation was assigned to the Bureau of Navigation, but Secretary Tracy removed the Naval War College from the jurisdiction of Ramsay, who had succeeded Walker on November 1, 1889, to the newly re-established office of the Assistant Secretary of the Navy to which was appointed James R. Soley, one of the earliest lecturers at the college and its staunch friend.⁵¹

After an interval in which no sessions were held the college re-opened in September, 1892, in its new building under the presidency of Captain Mahan. The advent of the Cleveland administration brought into the position of Secretary of the Navy, Hilary Herbert, who as chairman of the naval appropriations committee had opposed the foundation of the college. He held the same views as Commodore Ramsay, who was able to secure his support for an order detaching Mahan for sea duty. Later Herbert read one of Mahan's books and became convinced of the value of the college. He detailed Capt. H. C. Taylor as president with directions to place the institution upon a firm basis. Taylor, who was later to be chief of the Bureau of Navigation, had been an early lecturer at the college. On December 16, 1901, the Naval War College was again placed under the Bureau of Navigation.⁵² In 1909 it was transferred to the Aid for Operations.⁵³ After being in the Office of the Chief of Naval Operations from 1915 to 1934, the Naval War College was returned to the Bureau of Navigation in 1934. By this time the college had

⁵⁰ Navy Department General Order No. 365, January 11, 1889.

⁵¹ Luce, *loc cit.*, 570; Puleston, *op. cit.*, 92.

⁵² Navy Department General Order No. 74, Dec. 13, 1901; U. S. Navy Department, *Annual Report*, 1902, 409.

⁵³ Effected by changes in Navy Regulations, No. 6, Nov. 18, 1909.

become more of an educational institution than a planning organization.

Naval Inspector of Electric Lighting

As early as 1882 the Navy Department became interested in the installation of electric lighting on board ships of the navy. Whale oil and more recently lard oil had been used for lighting purposes. The chief of the Bureau of Navigation in that year recommended an appropriation, and as a result electric lights were installed in the *Trenton*.⁵⁴ This was the first ship of war in the world to be lighted by electricity. Capt. R. B. Bradford had charge of this work and of the training of young officers in it. He became on January 6, 1887, the Naval Inspector of Electric Lighting.⁵⁵ His duties were to prepare specifications for installing electric lights on ships and at naval stations and to inspect electrical materials and machinery. In 1889 all duties connected with electrical engineering were transferred from the Bureau of Navigation and the Bureau of Ordnance to the Bureau of Equipment.

Reorganization of 1889

In the years following the reorganization of 1862 the Navy Department developed without plan or system. New duties were assigned to the bureaus regardless of relationship to the duties being performed by those bureaus. The work of the bureaus was not properly co-ordinated, sometimes with ludicrous results as in the case of the *Omaha*, which, when delivered from the hands of the several bureaus working upon her, had her space so fully appropriated that she had room for coal for only four days' steaming. All of the bureaus had charge of the supply of materials, a function which should have been concentrated in a single bureau. No bureau had charge of the detailed administration of the navy; these duties were also scattered. This duplication and overlapping resulted in increased expense of administration and decreased efficiency.

The defects in the organization of the Navy Department were pointed out by the Secretaries of the Navy, and measures were taken by them to correct the incongruities. Secretary Whitney thought there was something radically wrong with the department and proposed a division of its work into its three natural branches: Di-

⁵⁴ U. S. Navy Department, *Annual Report*, 1889, 296; 1890, 85.

⁵⁵ *Ibid.*, 1887, 157; Paullin, *U. S. Naval Inst. Proc.*, xxxix (Sept., 1913), 1254.

vision of Personnel and the Fleet, which would be the military branch; the Division of Material and Construction, which would furnish the ships and their equipment and supplies; and the Division of Finance and Accounts.⁵⁶ His successor, Benjamin F. Tracy, was also dissatisfied with the condition of the Navy Department and, under the secretary's authority to distribute the duties of the department among the bureaus established by Congress, he decided to effect a reorganization which would charge the Bureau of Navigation with the supervision of the entire fleet, including vessels, officers, and seamen as to training, assignment, inspection, and practice.⁵⁷ The "new navy" provided for by the act of August 5, 1882, was already in existence and there was need for an organization to direct its operations.

This reorganization was effected by Navy Department General Order No. 372 of June 25, 1889, which entrusted the Bureau of Navigation with duties relating to personnel and the fleet. The handling of enlisted personnel and recruiting and the apprentice system were transferred from the Bureau of Equipment and Recruiting to the Bureau of Navigation. The Office of Detail was absorbed by the Bureau of Navigation. Under the Bureau of Equipment, as the former Bureau of Equipment and Recruiting was thereafter called, were placed the Naval Observatory, the Nautical Almanac Office, the Naval Inspector of Electric Lighting, and the Compass Office. In his annual report Secretary Tracy recommended that the Hydrographic Office also be placed by statute under the Bureau of Equipment, a transfer which was also favored by the Bureau of Navigation. He could not effect this transfer himself because of the statute already in existence, but it was finally done by act of May 4, 1898.

The duties of the Bureau of Navigation were prescribed as follows in General Order No. 372:

The duties of the Bureau of Navigation shall comprise all that relates to the promulgation and enforcement of the Secretary's orders to the fleet and to the officers of the Navy; all that relates to the education of officers and men, including the Naval Academy and technical schools for officers (except the Torpedo School), the apprentice establishment and schools for the technical education of enlisted men; to the enlistment and discharge of all enlisted persons, including appointed petty officers

⁵⁶ U. S. Navy Department, *Annual Report*, 1885, xxviii, xl.

⁵⁷ *Ibid.*, 1889, 37-40, 295.

for general and special service, and to the preparation of estimates for the pay of all officers and enlisted men.

It shall have under its sole control all rendezvous and receiving ships, and it shall provide transportation for all enlisted persons and appointed petty officers.

It shall establish the complement of the crews of all vessels in commission.

It shall keep the records of service of all squadrons, ships, officers, and men, and prepare the annual Naval Register for publication.

It shall have under its direction the Office of Naval Intelligence and Naval Attachés abroad, the Department Library, libraries for ships, and the War Records Office.

It shall be charged with the enforcement of the laws and authorized regulations, tactics, signal codes, and manuals of the service and the keeping of the same correct to date.

All questions with regard to discipline, changes of regulations, tactics, and manuals shall be submitted to this Bureau for its action or recommendation.

It shall prescribe the dress of all officers and men and see that the regulations in this respect are strictly enforced.

It shall receive and bring to the attention of the Secretary of the Navy all applications from officers for service or change of service.

It shall receive all reports of service performed by vessels, officers, or men; of all inspections of the same not of a special nature, and of all drills and exercises.

In order to prevent the issuing of conflicting instructions all official communications to vessels in commission shall be first submitted to the Secretary of the Navy and forwarded through this Bureau.

Naval Home

The Naval Asylum at Philadelphia was established as a result of an act of Congress approved February 26, 1811, which created a Board of Commissioners of Navy Hospitals and directed it to provide at one of the locations obtained for hospital purposes a permanent asylum for disabled navy officers, seamen, and marines. Not until 1827 was the building begun on a site near the Schuylkill River. Although it was not completed, it was occupied towards the close of 1833 when patients moved in from the old Pemberton mansion on the grounds, which had been occupied as a naval hospital since 1826.⁵⁸ A superintendent who had been in charge after 1834 was

⁵⁸ Edward Shippen, "Some Account of the Origin of the Naval Asylum at Philadelphia," *Pennsylvania Magazine of History and Biography*, VII (July, 1883), 130; Charles H. Stockton, *Origin, History, Laws and Regulations of the United States Naval Asylum, Philadelphia, Pennsylvania* (Washington, 1886), 15.

replaced by a governor in 1838. Until this time the institution had been under the general supervision of the commandant of the navy yard at Philadelphia, but it now became an independent command under the jurisdiction after 1842 of the Bureau of Medicine and Surgery.⁵⁹ On July 1, 1849, it was transferred to the Bureau of Yards and Docks. Forty years later its name was changed to Naval Home, which had a better connotation than Naval Asylum. By order of the Secretary of the Navy of March 19, 1898, the personnel and administration of the Naval Home were transferred to the Bureau of Navigation, which by that time was essentially the personnel bureau of the Navy Department.⁶⁰ The Bureau of Yards and Docks, however, remained in charge of the buildings and grounds.

Spanish War

Upon the outbreak of the Spanish War the Bureau of Navigation undertook the procurement of officers and men for the new ships of the navy. More applications were received for appointments than were needed. Examining boards were established to ascertain the qualifications of applicants. Temporary appointments were given to 813 officers, of which 456 were line officers. Over five hundred other officers were obtained from the naval militia and the retired list of the navy. The enlisted force of the navy, which had an authorized strength of 12,500 before the war, reached a maximum of 24,123 on August 15, 1898. The additional men were secured through enlistments, applicants being many more than were required. Immediately after the war the volunteer officers were discharged and the enlisted personnel was reduced.

Coast Signal Service

The naval defense of the coasts of the United States had been a matter of concern to naval officers, but prior to the outbreak of the Spanish War no measures were taken by the Navy Department.⁶¹ The Coast Signal Service was organized upon the recommendation of a board convened by order of the Navy Department of October

⁵⁹ Richmond C. Holcomb, *A Century with the Norfolk Naval Hospital, 1830-1930* (Portsmouth, Va., 1930), 129.

⁶⁰ U. S. Navy Department, *Annual Report*, 1898, 213.

⁶¹ Richard Wainwright, "Naval Coast Signals," *U. S. Naval Inst. Proc.*, xv (1888), 61-74; W. T. Sampson, "Outline of a Scheme for the Naval Defense of the Coast," *U. S. Naval Inst. Proc.*, xv (1889), 169-232; U. S. Navy Department, *Annual Report*, 1884, 237-244. Frequent lectures were given at the Naval War College on coast defenses.

18, 1897. Pursuant to orders of the Secretary of the Navy of March 15, 1898, Capt. Caspar F. Goodrich, president of the Naval War College, reported a plan for the establishment of coast signal stations on the Atlantic and Gulf coasts, based upon that of the board.⁶² Orders were issued on April 9, 1898, to Captain Goodrich to establish these stations. He located his headquarters in New York and on April 22 telegraphed the commanding officers of the naval militias of the seaboard states to establish and man the coast signal stations already decided upon. On the following day Captain Goodrich was relieved by Capt. Theodore F. Kane. The latter was relieved on May 9 by Capt. John R. Bartlett, chief intelligence officer, who removed the headquarters to Washington, where it operated under the supervision of the Bureau of Navigation. Eight districts were created in which thirty-six signal stations were maintained by the state naval militias. The Life Saving Service, the Lighthouse Service, and the Weather Bureau co-operated with the Coast Signal Service in maintaining a lookout for the approach of enemy vessels and the movements of American vessels. The service was discontinued after the conclusion of the war.

Naval Auxiliary Service

The collier service established by the Navy Department during the Spanish War became a permanent organization operating under the direction of the Bureau of Navigation. Towards the end of March, 1898, a few weeks after the sinking of the *Maine* in the harbor of Havana, the chief of the Bureau of Equipment recommended to the Secretary of the Navy the purchasing of steam colliers in view of the great deficiency of coaling stations for the navy.⁶³ Upon the authorization of Theodore Roosevelt, Assistant Secretary of the Navy, the Bureau of Equipment obtained a number of colliers, which were used during the war to supply the vessels of the navy operating against the Spanish and the naval base at Key West.⁶⁴ One of the colliers purchased, the *Merrimac*, was sunk in the harbor

⁶² F. B. Anderson, "The Coast Signal System," *U. S. Naval Inst. Proc.*, xxv (Dec., 1899), 727-745; Paullin, *loc. cit.*, XL (March-April, 1914), 428; U. S. Navy Department, *Annual Report*, 1898, 386ff.

⁶³ Office of the Secretary of the Navy, General Files, No. 6203-34½, R. B. Bradford to the Secretary of the Navy, March 25, 1898.

⁶⁴ *Ibid.*, 6203-34½, T. Roosevelt to the Chief of the Bureau of Equipment, April 8, 1898; Albert P. Niblack, "Colliers and Coaling Stations," *U. S. Naval Inst. Proc.*, xxx (Sept., 1904), 568; U. S. Navy Department, *Annual Report*, 1898, I, 26-27; Paullin, *loc. cit.* XL (March-April, 1914), 422.

of Santiago on the night of June 3, 1898, by a valiant crew led by Lieut. Richmond P. Hobson in a partially successful effort to bottle up the Spanish fleet in that harbor.⁶⁵ Other supply ships were bought by Admiral George Dewey for use in his voyage from Hongkong to Manila.⁶⁶

For several years there was contention between the Bureau of Equipment and the Bureau of Navigation over the control of the movements of the vessels composing the collier service. Secretary of the Navy John D. Long finally decided the controversy in favor of the Bureau of Navigation.⁶⁷ During the fiscal year 1900-1901, because of the difficulty of securing naval personnel, the Bureau of Navigation successfully put into operation the practice of contracting with merchant captains to supply crews for the colliers. This was not intended to be a permanent policy, but it was continued because of the dislike of the regular naval personnel for such non-combatant service. On January 8, 1904, Capt. Albert Ross was designated Inspector of Colliers with an office at Baltimore, where the coal contract was then let.⁶⁸

In 1905 the collier service was changed to the Naval Auxiliary Service.⁶⁹ At this time the office was moved to New York, to which place the contract for coal had been transferred. The naval officer in charge of the service was designated the Supervisor of Naval Auxiliaries. The service included transports, supply vessels, colliers, and other vessels assigned to it by the department. A subsequent transfer of the headquarters was made to Norfolk. Soon after the outbreak of war with Germany in 1917 the ships of the Naval Auxiliary Service were placed in commission and their personnel were enrolled in the Naval Reserve Force.⁷⁰ In October of that year

⁶⁵ Fred J. Buenzle, "The Collier Merrimac," *U. S. Naval Inst. Proc.*, LXVI (Oct., 1940), 1447-1453.

⁶⁶ W. S. Whitted, "The Old Auxiliary Service," *U. S. Naval Inst. Proc.*, LIV (July, 1928), 594.

⁶⁷ Office of the Secretary of the Navy, General Files, No. 6203-34½, John D. Long's third endorsement to letter of the Bureau of Equipment to the Secretary of the Navy, Sept. 25, 1900, Oct. 3, 1900; Long to the Chief of the Bureau of Navigation, March 27, 1901; U. S. Bureau of Navigation, *Regulations for Navy Colliers*, 1902 (Washington, 1902); U. S. Navy Department, *Annual Report*, 1901, 510.

⁶⁸ Whitted, *loc. cit.*, 594; Office of the Judge Advocate General, Naval Examining Board Record of Albert Ross.

⁶⁹ Whitted, *loc. cit.*, 594; Office of the Secretary of the Navy, General Files, No. 6203-49.

⁷⁰ Office of the Secretary of the Navy, General Files, No. 6203-144, Chief of the Bureau of Navigation to Supervisor of Naval Auxiliaries, April 27, 1917. The personnel of hospital ships were excepted from the call to active service because of the Geneva Convention.

the Supervisor of Naval Auxiliaries was ordered to transfer his headquarters from Norfolk to the Navy Department, Washington, D.C., and to report to the chief of the Bureau of Navigation.⁷¹ After the World War the auxiliary vessels remained in commission in the navy, becoming part of the Naval Transportation Service, which was established on July 3, 1920.⁷² On June 30, 1922, the Navy Department was compelled to place on inactive status the officers of the former auxiliary service, some of whom had served the navy since 1898, because of lack of funds.⁷³

Naval War Board

Since the Navy Department had no general staff for the conduct of the military operations of the navy, it was obliged at the outbreak of the Spanish War in 1898 to create a special strategy board. An outgrowth of an informal advisory board which had existed for some time, the Naval War Board was formed by Secretary of the Navy John D. Long and met daily throughout the war.⁷⁴ Its members were Rear Admiral Montgomery Sicard, Capt. A. S. Crowninshield, chief of the Bureau of Navigation, and Capt. Alfred T. Mahan, the well-known naval historian. The board collected military information, prepared strategical plans of war, and advised the Secretary of the Navy. This board played an important part in the conduct of the war.⁷⁵ It was dissolved upon the conclusion of the war.

General Board

The experience of the Spanish War having indicated the necessity for a permanent war plans body in the Navy Department, Secretary John D. Long established the General Board on March 13, 1900.⁷⁶

⁷¹ *Ibid.*, 6203-157, Acting Secretary F. D. Roosevelt to Rear Admiral Hugo Osterhaus, Supervisor of Naval Auxiliaries, Oct. 3, 1917.

⁷² *Navy Regulations*, 1920, article 1458; Office of the Secretary of the Navy, General Files, No. 3980-1570, Memorandum for Bureaus, April 11, 1920; 28963-836:1, Chief of Naval Operations to Bureaus, July 3, 1920; 28963-836:3 Capt. Charles S. Freeman memorandum for Chief of Naval Operations, July 1, 1920; 5087-219, Office of Ship Movements, Memorandum for the Chief of Naval Operations, June 30, 1921; 3980-1607, Chief of Naval Operations, Memorandum for all Chiefs of Bureaus, Oct. 30, 1920.

⁷³ U. S. Navy Department, *Annual Report*, 1922, 16.

⁷⁴ U. S. Navy Department, *Annual Report*, 1898, II, 33; Jarvis Butler, "The General Board of the Navy," *U. S. Naval Inst. Proc.*, LVI (Aug., 1930), 701.

⁷⁵ Paullin, *loc. cit.*, XL (Jan., 1914), 116-117; W. D. Puleston, *Mahan; the Life and Work of Captain Alfred Thayer Mahan* (New Haven, 1939), 187-201; John D. Long, *The New American Navy* (New York, 1903, 2 vols.), I, 162.

⁷⁶ Navy Department General Order No. 544; Paullin, *loc. cit.*, 118-119; U. S. Navy Department, *Annual Report*, 1903, 5; Richard Wainwright, "The General Board, a Sketch," *U. S. Naval Inst. Proc.*, XLVIII (Feb., 1922), 190; Butler, *loc. cit.*, 701.

Its membership included Admiral George Dewey, as president, Rear Admiral A. S. Crowninshield, chief of the Bureau of Navigation, the Chief Intelligence Officer, the president of the Naval War College, and several line officers. The chief of the Bureau of Navigation functioned as chairman of its executive committee, and in the absence of the president he was to preside. The Bureau of Navigation was to be custodian of the records of the General Board and was to handle its correspondence. Captain Henry Clay Taylor, who later served as chief of the Bureau of Navigation (April 29, 1902, to July 26, 1904), was largely responsible for the creation of the General Board.⁷⁷ The creation of the Joint Army and Navy Board on July 17, 1903, was also due to his efforts. He became one of the first members of this board, which was designed to co-ordinate and promote joint interests of the army and the navy. His death in the summer of 1904 removed one of the foremost advocates of the creation of a general staff in the Navy Department. Ever since its establishment, this board has played an important part in the formulation of American naval policy. With the Naval War College and the Office of Naval Intelligence it performed after a fashion the planning function of a general staff. Upon the establishment of the Aid System in 1909 the chief of the Bureau of Navigation lost his position on the board, but the bureau executed plans of the board when approved by the secretary.⁷⁸

Inspector of Target Practice

Gunnery training like other phases of training was placed under the Bureau of Navigation in 1889, being transferred from the Bureau of Ordnance. Manuals on gunnery prepared under the direction of the Bureau of Navigation were issued in 1893 and 1900, but little improvement was made in marksmanship.

Although two Spanish fleets were destroyed during the Spanish War, our gunnery record was not at all creditable. Examining boards found after the war that the percentage of hits on the Spanish wrecks at Santiago was less than five per cent. Following the war particular attention was given to gunnery training. The Bureau of Ordnance had had charge of gunnery practice, but its duties in connection with

⁷⁷ Wainwright, *loc. cit.*, 191; Henry C. Taylor, "Memorandum on General Staff for the U. S. Navy," *U. S. Naval Inst. Proc.*, XXVI (Sept., 1900), 441-448.

⁷⁸ Office of the Secretary of the Navy, General Files, No. 27325-2:1, p. 34, Swift Board Report.

supplying the navy with modern armament so engrossed its attention that it could not adequately supervise training on vessels at sea.

In 1901 an Inspector of Target Practice was assigned to the Bureau of Navigation to handle all matters pertaining to gunnery practice.⁷⁹ Gunnery schools were established at Washington and Norfolk, and training was given on board ships. Under the direction of Lieut. Commander William S. Sims from 1902 to 1909 our naval gunnery was vastly improved.⁸⁰

Naval Training Stations

The recruiting of men for the navy and the supervision of their training was transferred from the Bureau of Equipment and Recruiting to the Bureau of Navigation in 1889. Men enlisted at naval rendezvous located at the principal seaports were taken on board receiving ships and then transferred to cruising ships for training. Prior to the Spanish War enlisted men were given special training at only the torpedo school at Newport, Rhode Island, and the gun foundry at the Washington navy yard. The training given at the latter place embraced a number of crafts. The technical improvements which had been introduced into naval vessels following the Civil War made it necessary to develop men with special skills.

During the administration of John D. Long as Secretary of the Navy (1897-1902) an electrical school and a school for yeomen were established at the New York navy yard, and an artificers school at the Norfolk navy yard.⁸¹ Another electrical school was established at San Francisco. A school for hospital apprentices was located at the Norfolk Naval Hospital. Since those days the training facilities afforded to enlisted personnel have steadily improved and have constituted an important attraction in obtaining enlistments of youths in the navy.

To meet the increasing demands of the navy for seamen, the Bureau of Navigation undertook the enlistment and training of

⁷⁹ William D. Leahy, Director of Gunnery Exercises and Engineering Performances to Bureau of Navigation, Feb. 4, 1920 (a report in the Office of Naval Records and Library); Office of the Judge Advocate General, Naval Examining Board Record of Albert P. Niblack, Lieut. Commander Niblack was assigned on October 24, and reported on October 26, 1901. U. S. Navy Department, *Annual Report*, 1902, 402.

⁸⁰ Elting V. Morison, *Admiral Sims and the Modern American Navy* (Boston, 1942), 131-147, 235-262.

⁸¹ Long, *op. cit.*, I, 93. A. C. Dillingham, "U. S. Naval Training Service," *U. S. Naval Inst. Proc.*, xxxvi (June, 1910), 360ff. Also U. S. Naval Department, *Annual Reports*.

landsmen in 1900.⁸² Recruiting was extended to the interior of the country, and successful use was made of recruiting parties. These young men aged from eighteen to twenty-five were transferred from recruiting stations to receiving ships and then placed upon training ships. After cruises of six to eight months they were sent into the regular service as ordinary seamen.⁸³

The development of training stations like those in use for training apprentices was soon under way. Both the Bureau of Equipment and Recruiting and the Bureau of Navigation had made recommendations for the establishment of permanent barracks on shore for use in training enlisted men.⁸⁴ It was pointed out that the receiving ships or roofed-over hulks were expensive to maintain; that training stations were preferable for reasons of health, sanitation, and hygiene; and that they would provide better facilities for drill and recreation. In 1901 the Bureau of Navigation began to develop the abandoned naval station at Port Royal, South Carolina, as a training station, but Congress failed to make an appropriation and it had to be given up.⁸⁵ The *Franklin* and the *Richmond* were stationed at the Norfolk navy yard, marking the beginning of that shore establishment as a training station.⁸⁶ At the League Island navy yard in Philadelphia other landsmen were quartered on board the *Minneapolis* and the *Puritan*, and use was made of the facilities which had already been established at San Francisco for the apprentices.⁸⁷ Temporary barracks were constructed at Norfolk and Philadelphia for the use of the landsmen.⁸⁸

After several years of operating the apprentice and the landsmen training systems the Navy Department consolidated the two methods of training. A recommendation to this effect was made by the commander-in-chief of the Atlantic Training Squadron, who urged changing the ratings of apprentices and landsmen to apprentice seamen.⁸⁹ An officer writing in the *United States Naval Institute*

⁸² U. S. Navy Department, *Annual Report*, 1900, 451; 1901, 511; J. K. Taussig, "The Enlisted Personnel of the Navy," *U. S. Naval Inst. Proc.*, XLI (Nov.-Dec., 1915), 1782.

⁸³ James H. Reid, "A Naval Training Policy and System," *U. S. Naval Inst. Proc.*, XXIX (March, 1903), 14.

⁸⁴ U. S. Navy Department, *Annual Report*, 1876, 105; 1899, 405.

⁸⁵ *Ibid.*, 1901, 511-12; 1902, 401.

⁸⁶ *Ibid.*, 1902, 401.

⁸⁷ *Ibid.*, 1903, 482.

⁸⁸ *Ibid.*, 1904, 495, 1162.

⁸⁹ Office of the Secretary of the Navy, General Files, No. 17064, Dec. 16, 1903. Secretary of the Navy Moody directed the Bureau of Navigation at this time to prepare and submit to the department a draft of an appropriate executive order.

Proceedings came out strongly for the establishment of a uniform training policy.⁹⁰ On the ground that experience had shown that younger boys could not do the heavy work required of them on board naval vessels, the Bureau of Navigation changed the minimum age for apprentices to sixteen on January 1, 1904.⁹¹ The merging of the apprentice and landsmen training systems was effected at the end of November, 1904.⁹² This order changed the designation of all enlisted men under training for the seaman branch to apprentice seamen and fixed the minimum age for enlistment at seventeen years. Minors enlisted under the age of eighteen were to serve until they reached twenty-one years of age, while those enlisted at eighteen and over were to serve for four years. The order became effective on December 1, 1904.

The training of the apprentice seamen was conducted at the naval training stations at Newport, Norfolk, and San Francisco. In 1905 there were at these places in the order named twelve hundred, six hundred, and sixty apprentice seamen. At Norfolk the station was located on the St. Helena reservation on the Elizabeth River opposite the navy yard. In 1911 the Great Lakes Naval Training Station was opened on the west shore of Lake Michigan thirty-five miles north of Chicago. Originally provided for by an act of Congress approved April 27, 1904, this station had been under construction for several years.

Supervision of the training stations was placed under an officer in the Bureau of Navigation in 1906, thus promoting uniformity in the training and handling of recruits.⁹³ Finger-printing as a means of identification was inaugurated on January 1, 1907.⁹⁴

Naval Districts

Naval defense districts were established in 1902 on the suggestion of Rear Admiral H. C. Taylor, chief of the Bureau of Navigation,

⁹⁰ Reid, *loc. cit.*, 1, 15.

⁹¹ U. S. Navy Department, *Annual Report*, 1905, 376; 1903, 482; 1904, 495; A. C. Dillingham, "Methods Employed at Training Stations for Training Apprentice Seamen for the Fleet," *U. S. Naval Inst. Proc.*, xxxiii (March, 1907), 137.

⁹² By Navy Department General Order No. 178, which communicated an executive order to the naval service; Office of the Secretary of the Navy, General Files No. 17064-2, Secretary of the Navy to the President, Nov. 29, 1904; U. S. Navy Department, *Annual Report*, 1905, 376.

⁹³ U. S. Navy Department, *Annual Report*, 1906, 433. This was probably the beginning of the Enlisted Personnel Division.

⁹⁴ *Ibid.*, 1911, 200.

for the naval defense of the coast. The Bureau of Navigation, which had recommended the division of the coast as a step towards more efficient defense in time of war, was given cognizance and general supervision of matters pertaining to these districts.⁹⁵ The districts created in 1902 were replaced by thirteen naval districts in 1903.⁹⁶ Portions of the sea coast and of the shores of the Great Lakes were assigned at this time to the districts, but definite assignments of states were not made until 1917. An Office of Naval Militia Affairs and Naval Districts was established in the Bureau of Navigation in 1912.⁹⁷

Inspector of Engineering Competitions

The improvement attained in naval marksmanship through the introduction of competitive target practice suggested the employment of a similar system in connection with engineering efficiency. Instructions for the inauguration of yearly competitive steaming tests were issued on June 4, 1909.⁹⁸ The Office of Inspector of Engineering Competitions was established in the Bureau of Navigation in the following month.⁹⁹ Awards of prizes, trophies, and badges were made through this office to the warships displaying the greatest proficiency in the tests. It also prepared compilations showing the results of the competitions. On February 2, 1911, this office was combined with the Office of the Inspector of Target Practice,¹ which had been transferred to the Division of Operations of the Fleet in 1909. The adoption of engineering competitions resulted in more efficient operation of the machinery of naval vessels, an increased steaming radius for the fleet, and economies in the use of coal, oil, and other supplies.

Division of Personnel

The reorganization of the Navy Department effected in 1909 by order of Secretary of the Navy George von L. Meyer divided it into four divisions, as follows: Division of Operations of the Fleet, Division of Personnel, Division of Material, and Division of Inspec-

⁹⁵ U. S. Navy Department, *Annual Report*, 1902, 397; 1903, 494; 1904, 504.

⁹⁶ Navy Department General Order No. 128, May 7, 1903.

⁹⁷ By Navy Department General Order No. 251, Dec. 30, 1912.

⁹⁸ Navy Department General Order No. 26; U. S. Navy Department, *Annual Report*, 1909, 33, 306.

⁹⁹ Office of the Secretary of the Navy, General File, No. 28067, President's Commission on Economy and Efficiency, Form 3a.

¹ *Ibid.*; Office of the Judge Advocate General, Naval Examining Board Record of Leigh C. Palmer, who was the first director.

tions.² Effective on December 1, 1909, this reorganization was a further step towards the creation of a general staff in the Navy Department. For the Bureau of Navigation it meant a marked decline in influence and prestige. Henceforth the Aid for Operations (after 1915 Chief of Naval Operations) was to be the outstanding officer in the Navy Department.

The function of the aids who were in charge of the divisions was to assist and advise the secretary, but they were without supervisory or executive authority. The existing bureaus of the department were distributed among these divisions, the Bureau of Navigation being assigned to the Division of Personnel. At this time the Naval War College, the Office of Naval Intelligence, the Inspector of Target Practice, and control of the movements of ships were transferred to the Division of Operations of the Fleet. In 1914 the Naval Radio Service was also transferred.

As prescribed by Changes in Navy Regulations No. 6, the duties of the Bureau of Navigation were revised as follows:

8A. (1) The duties of the Bureau of Navigation shall comprise the issue, record, and enforcement of the orders of the Secretary to the individual officers of the Navy; the training and education of line officers and enlisted men (except of the hospital corps) at schools and stations and in vessels maintained for that purpose; the supervision and control of the Naval Academy, technical schools for line officers, the apprentice seaman establishments, schools for the technical education of enlisted men, and the Naval Home at Philadelphia, Pa.; the maintenance and repair of the Naval War College; the enlistment, assignment to duty, and discharge of all enlisted persons, and the preparation of estimates for the pay of all officers and enlisted men.

(2) It shall have under its direction all rendezvous and receiving ships, and shall provide transportation for all enlisted persons under its cognizance.

(3) It shall establish the complements of all ships in commission.

(4) It shall keep the records of service of all officers and men, and shall prepare an annual navy register for publication, embodying therein data as to fleets, squadrons, and ships which shall be furnished by the Aid for Operations.

(5) It shall be charged with all matters pertaining to applications for appointments and commissions in the Navy and with the preparation of such appointments and commissions for signature.

(6) It shall be charged with the preparation, revision, and enforce-

² By Changes in Navy Regulations No. 6, Nov. 18, 1909; U. S. Navy Department, *Annual Report*, 1909, 7; M. A. DeWolfe Howe, *George von Lengerke Meyer* (New York, 1920), 467.

ment of all regulations governing uniform, and with the distribution of all orders and regulations of a general or circular character.

(7) Questions of naval discipline, rewards, and punishments will be submitted by this bureau for the action of the Secretary of the Navy. The records of all general courts-martial and courts of inquiry involving the personnel of the Navy shall, before final action, be referred to this bureau for comment as to disciplinary features.

(8) It shall receive and bring to the attention of the Secretary of the Navy all applications from officers for duty or leave.

(9) It shall receive all reports of services performed by individual officers or men.

As a part of Secretary Meyer's reforms, the duties of the Bureau of Equipment were distributed among the other bureaus of the Navy Department in 1910.³ The Hydrographic Office, the Naval Observatory, the Nautical Almanac Office, and the Compass Office were transferred back to the Bureau of Navigation.⁴ The first two offices were placed under the Chief of Naval Operations on April 8, 1942.⁵

Naval Aviation

Although Assistant Secretary of the Navy Theodore Roosevelt had urged the adoption of measures for the promotion of naval aviation as early as 1898, it was not until years later that the navy began turning its attention to the possibilities of the use of airplanes. The Wright brothers of Dayton, Ohio, had been flying power-driven machines of their own invention and construction since 1903, but they had been unable to interest the United States government. In July, 1909, when Orville Wright made a successful trial flight at Fort Myer, Virginia, to meet U. S. Army specifications, two naval

³ The Secretary pointed out that the duties of the bureaus had been extended by an illogical growth so that they were overlapping. He recommended that the Bureau of Equipment be abolished and its duties be distributed among the other bureaus. Cf. *Annual Report*, 1909, 7. Authorization for such a distribution was provided for in an act of Congress of June 24, 1910.

⁴ Effected by Changes in Navy Regulations No. 11, June 27, 1910 (Office of the Secretary of the Navy, General Files, No. 3980-556:4), and Departmental Order No. 70, June 30, 1910 (Office of the Secretary of the Navy, General Files, No. 27256-88). Article 8 A (10) of the Changes in Navy Regulations reads as follows concerning the Bureau of Navigation: "It shall have charge of the Hydrographic Office, the Naval Observatory, the Nautical Almanac Office, and Compass Office; all that relates to the supply of ships with Navigational outfits, including instruments, and with the maintenance and repair of the same; the collection of foreign surveys; publication and supply of charts, sailing directions, and nautical works, and the dissemination of nautical, hydrographic, and meteorological information to the Navy and mercantile marine. It shall also have charge of all ocean and lake surveys and ships and libraries; it shall defray the expense of pilotage of all ships in commission." The changes became effective on July 1, 1910.

⁵ Executive Order No. 9126, *Federal Register*, VII, 2753.

officers were present as observers. They made an enthusiastic report, but the navy did not immediately follow the army's lead in purchasing an airplane. A naval officer, Captain Washington I. Chambers, was ordered to the Navy Department in 1910 with instructions to give part of his time to observing progress in aeronautics.⁶ On April 14, 1911, he was assigned to the Bureau of Navigation to devote his entire time to co-ordinating the aeronautical work of the bureaus of the Navy Department.⁷

Captain Chambers succeeded in the next two years in carrying through some significant experiments designed to adapt the airplane to naval purposes. On November 14, 1910, Eugene Ely, a free lance aviator formerly connected with Glenn H. Curtiss, flew a Curtiss machine from a special wooden platform on the *Birmingham* in Chesapeake Bay. A Curtiss airplane was landed by Ely on the *Pennsylvania* on January 18, 1911, off San Francisco. A hydroplane was developed by Curtiss at North Island near San Diego, and in February such a craft was landed by Curtiss alongside the *Pennsylvania* and hoisted aboard by means of a crane. The navy acquired its first airplanes in October, 1911, when two Curtiss planes and one Wright plane were delivered at the naval reservation on the Severn River across from Annapolis, Maryland. Three pilots, Lieutenants Ellyson, Rodgers, and Towers, who had been trained by the manufacturers, took charge of the machines. The following winter was spent at North Island engaging in experiments with a flying boat with Curtiss. On October 12, 1912, Ellyson made a successful catapult launching at the Washington navy yard. Early the next year aircraft participated in the fleet maneuvers off Guantanamo, showing their value for reconnaissance, the detection of submarines and mine fields, and in bombing.

By 1913 naval aviation had demonstrated its usefulness, and it was given a more important position in the Navy Department. In December, 1913, Capt. Mark L. Bristol took charge of an aeronautics office in the Division of Operations.⁸ Captain Chambers remained with him in an advisory capacity.

⁶ Harold B. Miller, *Navy Wings* (New York, 1937), 24.

⁷ *Ibid.*, 85; W. H. Sitz, *A History of U. S. Naval Aviation* (Washington, 1930), 5. Chambers reported for special duty in the Navy Department on December 7, 1909, continuing in that status until April 3, 1911, when he was placed on duty with the General Board until April 14. Cf. Office of the Judge Advocate General, Naval Examining Board Record of Washington I. Chambers.

⁸ Office of the Judge Advocate General, Naval Examining Board Record of Mark L.

Naval Radio Service

Not until some years after the Navy Department had been interested in radio was the administration of naval radio activities placed under the Bureau of Navigation. As early as 1899 some naval officers were assigned under the direction of the Bureau of Equipment to observe and report upon the working of Marconi's system.⁹ The installation of radio sets on ships and at shore stations was begun in 1903. In 1904 the President approved the recommendation of an interdepartmental board that the Navy Department maintain a complete system of radio stations upon the coasts of the United States and its possessions. Within a few years these radio stations were established. Besides being used for sending government messages, they sent weather reports, reports of dangers to navigation, and time signals to ships at sea. In April, 1911, a number of stations were directed to handle commercial messages under certain conditions.

Cognizance of wireless telegraphy was transferred from the Bureau of Equipment to the Bureau of Steam Engineering in 1910, when the duties of the former bureau were distributed among the other bureaus of the Navy Department.

The passage of the act of Congress of August 13, 1912, greatly increased the work of the federal government in connection with radio. This act provided for the opening of shore stations to commercial business, the examination and licensing of all private and commercial apparatus and operators, and brought under federal control the operation of all radio apparatus. Accordingly it was decided to establish an office to administer the naval radio service and the provisions of the foregoing act.¹⁰ The Naval Radio Service was established by Navy Department General Order No. 240 of November 9, 1912, and the Office of Superintendent of Naval Radio Service was located at the radio station in Arlington, Virginia, across the Potomac River from Washington, D.C.¹¹ The superintendent was under the

Bristol, Report on Fitness of Officers, Nov. 11, 1913-March 31, 1914, signed B. A. Fiske, Aid for Operations; Secretary's Files 5087-129, Mark L. Bristol, Annual Report on Aeronautics, Jan. 19, 1916; Bradley A. Fiske, *From Midshipman to Rear-Admiral* (New York, 1919), 539. Admiral Fiske felt that Chambers had been more interested in certain inventions connected with aviation than in developing an aeronautical service, so he secured the appointment of Bristol and gave him half of his desk.

⁹ William H. G. Bullard, "United States Naval Radio Service," *U. S. Naval Inst. Proc.* XL (March-April, 1914), 431.

¹⁰ U. S. Navy Department, *Annual Report*, 1912, 143.

¹¹ *Ibid.*, 450; Naval Radio Service, *Annual Report*, 1912-1913, 3; 1914-1915, 3; U. S. Navy Department, *Annual Report*, 1913, 124.

direction of the Bureau of Navigation. The Bureau of Steam Engineering was relieved of administrative functions in connection with naval radio, but continued to handle technical matters. In the following year forty-nine radio stations were being operated by the navy and several others were under construction. In addition two hundred naval vessels were equipped with radio. During 1914-1915 the government work performed in the Office of Superintendent of Naval Radio Service was under the direct supervision of the assistant superintendent who was also the Atlantic Coast Superintendent of Radio. This position was occupied by a naval officer. The commercial work was in charge of a civilian.

The work of the Naval Radio Service was more logically related to that of the Division of Operations of the Fleet than to the personnel functions performed by the Bureau of Navigation. As a result, the actual operation and supervision of the radio service were gradually transferred to the Division of Operations of the Fleet.¹² This transfer appears to have taken place during 1914-1915.

Division of Naval Militia Affairs

To the Bureau of Navigation, which for years had been interested in the development of a reserve force for the navy,¹³ was transferred in 1912 the administration of the naval militia. Federal interest in the naval militia of the states, which were then being organized and developed, took tangible form in 1891 when an act of Congress appropriated \$25,000 for the extension of federal support.¹⁴ A further act of August 3, 1894, authorized the Navy Department to loan old naval vessels to naval militia for training purposes. During the Spanish War, 4,316 men of the naval militia served with the regular navy, the Auxiliary Naval Force, and the Coast Signal Service.

Administrative matters connected with the naval militia were handled by the Assistant Secretary of the Navy until December 1, 1909, when they were transferred to the Division of Personnel of

¹² Office of the Secretary of the Navy, General File, No. 12479-794:5, Report of Board on Organization U. S. Naval Radio Service, Feb. 20, 1915, p. 62; Naval Examining Board Record of W.H.G. Bullard, contains fitness reports for April 1 to Sept. 30, 1914, and Oct. 1, 1914-March 31, 1915, which are signed by Bradley A. Fiske, the Aid for Operations.

¹³ U. S. Navy Department, *Annual Report*, 1887, 148-149, recommended by the Chief of the Bureau of Navigation, J. G. Walker.

¹⁴ Paullin, *U. S. Naval Inst. Proc.*, xxxix (Dec., 1913), 1507; Albert P. Niblack, "The Naval Militia Movement," *ibid.*, xxi (1895), 779-787.

the Office of the Secretary of the Navy.¹⁵ The Naval Appropriation Act of March 4, 1911, having provided the funds, an Office of Naval Militia came into existence in that division in the same year.¹⁶ Naval militia affairs were placed under the Bureau of Navigation in 1912 in conjunction with naval district matters.¹⁷ Pursuant to an act of Congress of February 16, 1914, which brought the naval militia under federal control, Navy Department General Order No. 93 of April 12, 1914, established the Division of Naval Militia Affairs under the Bureau of Navigation.¹⁸ In May, 1915, the officer in charge of the division was transferred to the Office of the Chief of Naval Operations.¹⁹ Besides naval militia affairs, and naval districts, this officer also had charge of an Office of Naval Reserve, which had been created during 1912-1913.²⁰

Naval Reserve

The efforts of the Bureau of Navigation to secure the establishment of a Naval Reserve resulted in the authorization for the Naval Reserve Force by the act of Congress of August 29, 1916. The Bureau of Navigation was directed by order of the Secretary of the Navy of September 22, 1916, to organize a section of reserves and to incorporate therein the Division of Naval Militia Affairs.²¹ The act of August 29, 1916, also provided for the enrollment of the naval militia in time of war into a force to be known as the National Naval Volunteers.

Upon the mobilization of the naval militia on April 6, 1917, the day that war was declared against Germany, nearly all the militia volunteered for enrollment in the National Naval Volunteers.²²

The federal government then found itself with two organizations, the United States Naval Reserve Force, which was recruited from

¹⁵ Effected by Changes in Navy Regulations No. 6, Nov. 18, 1909.

¹⁶ U. S. Superintendent of Documents, *op. cit.*, 698.

¹⁷ By Navy Department General Order No. 251, Dec. 30, 1912.

¹⁸ U. S. Navy Department, *Annual Report*, 1914, 195-196; 1918, 67; Short, *op. cit.*, 322.

¹⁹ Office of the Judge Advocate General, Naval Examining Board Record of F. B. Bassett, Jr.; Navy Department, *Annual Report*, 1916, 778.

²⁰ U. S. Navy Department, *Annual Report*, 1913, 127-128.

²¹ Office of the Secretary of the Navy, General Files, No. 3973-164, L. C. Palmer, chief of the Bureau of Navigation to the Chief of Naval Operations, August 25, 1916; No. 3973-168, W. S. Benson, chief of Naval Operations to the Chief of the Bureau of Navigation, Sept. 16, 1916; No. 3973-164, Josephus Daniels to the Chief of the Bureau of Navigation, Sept. 22, 1916.

²² U. S. Navy Department, *Annual Report*, 1917, 25.

ex-service men and the merchant marine, and the National Naval Volunteers, which was composed of the former naval militia of the states, both maintained for the purpose of reinforcing the navy in time of war. To prevent the duplication of effort and the double overhead of cost and personnel for training, it was determined to work out a plan of amalgamation. This was done in co-operation with the officers of the former naval militia, and an act of Congress was approved on July 1, 1918, repealing all laws relating to the naval militia and the National Naval Volunteers and transferring the personnel of the latter to the United States Naval Reserve Force.²³ Thus 17,000 men and 785 officers were added to the Naval Reserve Force. By the same act the Division of Naval Militia Affairs was discontinued; its clerical force and the office expense provided for it were transferred to the Bureau of Navigation. In this bureau the Naval Reserve Force Division was organized in September, 1919.²⁴ The designation of Naval Reserve Force was changed to the Naval Reserve by the act of February 28, 1925, and the division in the Bureau of Navigation became the Naval Reserve Personnel Division, the title of which was shortened about 1934 to Naval Reserve Division. This act provided for the appointment of communication officers and resulted in the formation of the Naval Communication Reserve.²⁵ In 1932 Naval Reserve Educational Centers were established at New York, Washington, New Orleans, and San Francisco to promote the instruction of Naval Reserve officers.²⁶ In June, 1941, the Naval Reserves were placed on active duty soon after the President had declared an unlimited national emergency.

Naval Reserve Officers' Training Corps

An additional reserve for the navy was established pursuant to the act of March 4, 1925, which provided for a Naval Reserve Officers' Training Corps similar to the Army R.O.T.C. authorized by the National Defense Act of June 3, 1916.²⁷ The object was to

²³ *Ibid.*, 1918, 71; 1920, 565; 40 *U. S. Statutes at Large*, 708, 712.

²⁴ Short, *op. cit.*, 325; U. S. Navy Department, *Annual Report*, 1920, 561; *U. S. Navy Directory*, Oct. 1, 1919, 247.

²⁵ Dean Brooks, "The Naval Communication Reserve," *U. S. Naval Inst. Proc.*, LXIV (March, 1938), 350-354.

²⁶ Edward B. Arroyo, "Naval Reserve Educational Centers," *U. S. Naval Inst. Proc.*, LXII (June, 1936), 832.

²⁷ C. W. Nimitz, "The Naval Reserve Officers' Training Corps," *U. S. Naval Inst. Proc.*, LIV (June, 1928), 441.

provide instruction at civil educational institutions to qualify selected students for appointments in the Naval Reserve. Funds having become available, four year courses in naval science and tactics were inaugurated at the following universities in the fall of 1926: California, Washington, Harvard, Yale, Northwestern, and Georgia School of Technology. The administration of these units was placed under the Training Division of the Bureau of Navigation. Legislation enacted February 27, 1936, provided for the appointment of a limited number of Naval R.O.T.C. students to the Naval Academy. This program has been considerably expanded within the past several years by the establishment of Naval R.O.T.C. units at numerous other universities.

Office of the Chief of Naval Operations

Under Secretary of the Navy Josephus Daniels, who succeeded Meyer in 1913, the divisions established by the latter disappeared because of Daniels' dislike of being dominated by the military element in the department. A new chief of the Bureau of Navigation was appointed by Secretary Daniels soon after he entered office.²⁸ He got rid of the Aid for Personnel by ordering him to sea without relief. Personnel matters were thus again placed entirely under the Bureau of Navigation. The Aid for Operations was retained because Admiral George Dewey, president of the General Board, prevailed upon Daniels to retain him.

The movement for a general staff in the Navy Department, which continued after the department failed to secure the legalization of the aid system culminated in the creation of the Office of the Chief of Naval Operations by act of Congress of March 3, 1915. The offices which had been transferred from the Bureau of Navigation to the Division of Operations of the Fleet in 1909 and the Naval Radio Service, were placed under the Chief of Naval Operations, who took office on May 11, 1915. The Division of Naval Militia Affairs was transferred in May from the Bureau of Navigation to the Office of the Chief of Naval Operations and with it the administration of Naval district matters.

The Navy Regulations (1917) issued by the Secretary of the Navy after the passage of the act prescribed as follows:

131. (1) The duties of the Bureau of Navigation shall comprise the

²⁸ This was Rear Admiral Victor Blue who served from March 26, 1913, to August 10, 1916.

issue, record, and enforcement of the orders of the Secretary to the individual officers of the Navy; the training and education of line officers and of enlisted men (except of the Hospital Corps) at schools and stations and in vessels maintained for that purpose; the upkeep and operation of the Naval Academy, of technical schools for line officers, of the apprentice-seaman establishments, of schools for the technical education of enlisted men, and of the Naval Home at Philadelphia, Pa.; the upkeep and the payment of the operating expenses of the Naval War College; the enlistment, assignment to duty, and discharge of all enlisted persons; it shall have under its direction the Division of Naval Militia Affairs, the National Naval Volunteers, and the Naval Reserve Forces, and shall provide for the mobilization of all these reserves.

(2) It shall have under its direction all rendezvous and receiving ships, and shall provide transportation for all enlisted persons under its cognizance.

(3) It shall establish the complements of all ships in commission.

(4) It shall keep the records of service of all officers and men, and shall prepare an annual Navy register for publication, embodying therein data as to fleets, squadrons, and ships which shall be furnished by the Chief of Naval Operations. To the end that it may be able to carry out the provisions of this paragraph, all communications to or from ships in commission relating to the personnel of such ships shall be forwarded through this bureau, whatever their origin.

(5) It shall be charged with all matters pertaining to application for appointments and commissions in the Navy and with the preparation of such appointments and commissions for signature.

(6) It shall be charged with the preparation, revision, and enforcement of all regulations governing uniform, and with the distribution of all orders and regulations of a general or circular character.

(7) Questions of naval discipline, rewards, and punishments shall be submitted by this bureau for the action of the Secretary of the Navy. The records of all general courts-martial and courts of inquiry involving the personnel of the Navy shall, before final action, be referred to this bureau for comment as to disciplinary features.

(8) It shall receive and bring to the attention of the Secretary of the Navy all applications from officers for duty or leave.

(9) It shall receive all reports of services performed by individual officers or men.

(10) It shall be charged with the enforcement of regulations and instructions regarding naval ceremonies and naval etiquette.

(11) It shall be charged with the upkeep and operation of the Hydrographic Office, the Naval Observatory, Nautical Almanac, and Compass Offices; with all that relates to the supply of ships with navigational outfits, including instruments, and with the maintenance and repair of same; with the collection of foreign surveys; and with the publication and supply of charts, sailing directions, and nautical works, and the dissemination of nautical, hydrographic, and meteorological information to the

Navy and mercantile marine. It shall also have charge of all ocean and lake surveys and ships' and crews' libraries; it shall defray the expenses of pilotage of all ships in commission.

Navy Mobilization Service

An enormous expansion of naval personnel took place during the first World War. The Naval Appropriations Act of August 29, 1916, authorized the expenditure of over \$313,000,000 for naval construction, more than twice any previous appropriation, and the increase of the enlisted personnel from 50,500 to 74,700. At the outbreak of war on April 6, 1917, the naval personnel included: officers—4366 regular Navy, 877 Naval Reserve Force, 633 Coast Guard, and 813 National Naval Volunteers; enlisted personnel—Regular Navy 64,680, Naval Reserve Force 1109, Coast Guard 3478, and Naval Militia 12,000.²⁹ In January, 1917, there were 176 naval vessels in commission.³⁰

Most of the additional personnel needed for the war-time navy were obtained through recruiting. The country was divided into four recruiting divisions as follows: Eastern Division with headquarters at New York; Central Division with headquarters at Kansas City; Western Division with headquarters at San Francisco, and the Southern Division with headquarters at New Orleans.³¹ These headquarters opened 78, 50, 34, and 31 recruiting stations, respectively. Recruiting ceased on August 8, 1918, when enlistments and enrollments were suspended. An act of Congress approved August 31, 1918, extended selective service to the navy, and arrangements were made with the War Department to obtain men through the draft.³² To handle the induction of these men, a Navy Mobilization Service was organized. Fifteen of the former main recruiting stations were designated as main mobilization stations, and the remaining thirty-five as sub-mobilization stations, while 240 sub-recruiting stations were closed. There was so much congestion at training stations and camps, and so many reservists waiting for call to active duty, that the calling of men under the new system was deferred, and as a result only 12,493 men were obtained under the selective service law. In early December, 1918, voluntary enlistments again

²⁹ U. S. Navy Department, *Annual Report*, 1916, 1-2; 1919, 363.

³⁰ *Ibid.*, 1918, 433.

³¹ U. S. Naval Inst. Proc., XLIII (March, 1917), 589.

³² U. S. Navy Department, *Annual Report*, 1919, 381.

became the practice, and the Navy Mobilization Service was abolished. The recruiting service was thereupon re-established. It has been administered since by the Recruiting Division, which has been at times a separate division (about 1920-1929) and at other times a section in the Enlisted Personnel Division.

Training Division

The administration of the training during the World War of the enlisted personnel was placed in charge of the Training Division in the Bureau of Navigation. The first officer at the head of this division was Capt. Ernest L. Bennett, who reported for duty on April 19, 1917.³³ Throughout the war he superintended the huge task of providing training facilities and running them. At the opening of the war there were four permanent training stations at Newport, Norfolk, Great Lakes, and San Francisco with a total capacity of 6,000 enlisted men.³⁴ These stations were expanded eight-fold; temporary stations or barracks were constructed at Mare Island, Puget Sound, New Orleans, Charleston, Philadelphia, Brooklyn, Boston, Portsmouth and Gulfport, Mississippi; and others for the Naval Reserve Force at Boston, Bumkin Island, Newport, Pelham Bay, Cape May, Key West, San Pedro, and Seattle. Facilities at San Francisco and Pensacola were also utilized. A vast naval operating base was established at Hampton Roads, Virginia, which was to become the principal rendezvous for the fleet on the Atlantic coast. The facilities at the base included a large training station. The Training Division also had responsibility for training and instructing enlisted men for examination for commissions. It had charge of training on district vessels, at special schools, at naval rifle ranges, and of the naval units of the Students' Army Training Corps.

The Training Division continued to form a part of the Bureau of Navigation after the war. From 1919 to about 1923 it was a section in the Enlisted Personnel Division. In later years it was separate and again it was under the Enlisted Personnel Division.

Chaplains Division

Chaplains had been provided for the navy since its beginning.

³³ U. S. Navy Department, Historical Section, *History of the Training Division, Bureau of Navigation*, by Ernest L. Bennett and Lewis P. Clephane (Washington, 1920. MS in office of Naval Records and Library); Office of the Judge Advocate General, Naval Examining Board Record of Ernest L. Bennett.

³⁴ U. S. Navy Department, *Annual Report*, 1917, 22, 433.

Besides conducting divine services, they served as schoolmasters. The number in the service was small prior to the World War; the total of twenty-four provided for in 1842 was not increased until 1914. At the outbreak of the war there were fifty-nine and at its close 199. During 1917 when the Chaplains Corps was undergoing a rapid expansion, the need for central administration was met by assigning a chaplain of many years' experience, Capt. John Brown Frazier, as the first chief of the Chaplains Division in the Bureau of Navigation.³⁵ He had charge of the selection of candidates proposed by the Federal Council of Churches in America representing the Protestant denominations and the Chaplains Bureau of the Catholic Church and general supervision of the Chaplains Corps. Immediately upon the conclusion of the war more than half of the chaplains resigned, leaving an insufficient number in the service. In 1934 the Navy Department Board on Reorganization recommended a strength of seventy-six for the corps, and as a result the eighty which were then in service were gradually reduced.

Demobilization

Upon the conclusion of the World War the Bureau of Navigation undertook the considerable task of demobilizing the personnel of the navy, which then comprised over half a million enlisted men and over ten thousand officers. Not until January 1, 1918, did the navy offer the choice of enlistment for the duration of the war, and only forty-five thousand men were so enlisted. The laws were such that honorable discharges, which were necessary in order to be eligible for the benefits which Congress intended to enact for service men, could be given only to men who completed their terms of enlistment.³⁶ The country clamored for the release of the men, however, and the Bureau of Navigation was compelled to allow them to go as rapidly as possible. Beginning in November, 1918, successive orders were issued for the release of men and by the end of July, 1919, 57,000 regular Navy men and 230,000 reserves had been let go.

At first the discharged and released men were given their papers at a few ports chiefly on the Atlantic coast, but it became necessary

³⁵ U. S. Navy Department, *Annual Report*, 1918, 131, 388; 1919, 388; 1920, 120; Edward A. Duff, *The Chaplain Corps, U. S. Navy* (n.p., 1936), 13. Frazier began serving in this post on November 3, 1917, Cf. Office of the Judge Advocate General, Naval Examining Board Record of John B. Frazier.

³⁶ U. S. Navy Department, *Annual Report*, 1918, 375-376.

to establish demobilization stations in the interior of the country. Prior to the passage of the act of February 28, 1919, the Bureau of Navigation had no money with which to supply men with travel funds for transportation to their homes. At New York, where many men had become stranded, a transportation office was established to furnish them with funds. Experience showed that the cash travel allowance was frequently spent for something else. On April 1, 1919, the plan was adopted of transferring men to demobilization stations close to their homes. These stations were opened at Pittsburgh, Atlanta, Minneapolis, St. Louis, Dallas, Denver, and Salt Lake City, operating under the jurisdiction of the recruiting officer in those cities. This plan of demobilization worked very successfully.

Sixth Division

The accomplishments of the Commission on Training Camp Activities and other organizations during the World War and the period of demobilization brought about the creation of the Sixth Division (Morale Division) in the Bureau of Navigation in 1919.³⁷ Prior to that time there had been no central agency in the Navy Department for handling matters pertaining to the comfort, entertainment, and recreation of men in the naval service, and as a result the navy was not up to the practices being followed in business. The Moral Division, as it came to be called in 1921, was composed of sections on the following activities: organization of communities, service, religious, recreation, education, dramatic entertainments, motion pictures, athletics, travel, lectures, and social hygiene. Aids for morale were assigned to shore stations and ships to carry on this work. It was transferred in 1923 to the Training Division, and the Sixth Division was discontinued.³⁸

Aviation Division

To supply our naval aviation forces with meteorological information, a naval aerological service was established early in 1918.³⁹ The

³⁷ U. S. Navy Department, *Annual Report*, 1919, 386, 94; 1920, 556-557; Information from the Navy Department.

³⁸ *U. S. Navy Directory*, March 1, 1923, 162; May 1, 1923, 164. Capt. C. R. Train, who had been chief of the Morale Division, became chief of the Training Division in which a Morale Section was established.

³⁹ Frederick J. Nelson, "The History of Aerology in the Navy," *U. S. Naval Inst. Proc.*, LX (April, 1934), 523; F. J. O'Brien, "The Navy's Part in Modern Aerological Developments," *U. S. Naval Inst. Proc.*, LXI (March, 1935), 386.

function of purchasing aeronautical instruments was assigned to the Naval Observatory because of its experience with scientific instruments, its trained personnel, and its facilities. This work expanded so rapidly during the World War that a Department of Aeronautical Instruments was established in the Naval Observatory to have charge of it.

As a result of the adoption of the policy of merging aviation activities with other naval activities, the Aviation Division of Naval Operations was abolished on August 7, 1919, and its duties distributed. To the Bureau of Navigation were assigned the training and detail of personnel, photography, training of pigeons, aerography, and navigation instruments for aircraft.⁴⁰ To assure the proper development of the pigeon work, photography, and aerology, the Bureau of Navigation placed Lieut. Commander R. M. Griffin in charge of the Aviation—Navigation and Photographic Division on October 7, 1919.⁴¹ This division, the name of which was soon shortened to Aviation Division, provided merely for the supply and upkeep of pigeons; their operations at air stations were handled by the Naval Communications Service of the Office of the Chief of Naval Operations to which a pigeon officer and the pigeon records were attached.

Upon the establishment of the Bureau of Aeronautics on September 1, 1921, to administer all naval aviation activities, cognizance of aerial photography and aerology were transferred to the bureau.⁴² Lieut. Commander Griffin was also transferred. The Naval Observatory continued to furnish navigation and aerological instruments to the Bureau of Aeronautics until 1927, when the bureau took over this activity.

Navy Motion Picture Exchange

Efforts to procure satisfactory motion picture service by contracts having proved unsuccessful, the Navy Motion Picture Exchange was organized at New York under the Bureau of Navigation in April, 1920.⁴³ Sub-exchanges were established in a number of naval districts and at outlying stations.

⁴⁰ Bureau of Aeronautics, General Files, 602-4, Inter-office memorandum No. 11, Chief of Naval Operations, Aug. 1, 1919; Memorandum, W. S. Benson, Aug. 7, 1919.

⁴¹ *Ibid.*, 3084-2:1, Chief of the Bureau of Navigation to the Chief of Naval Operations, Oct. 23, 1919; Nelson, *loc. cit.*, 525.

⁴² *Ibid.*, Circular letter No. 1, W. A. Moffett, Aug. 16, 1921; 602-4, Memorandum for Director of Naval Communications, Sept. 1, 1921; Memorandum from Flight Division to the Chief of Bureau of Aeronautics, Oct. 18, 1921.

⁴³ U. S. Navy Department, *Annual Report*, 1920, 560; 1921, 32.

Mail and File Division

In April, 1920, the Mail and File Division was established in charge of Lieut. Commander W. D. Chandler, Jr., who had previously had charge of the mail room.⁴⁴ The function of this division was to handle the bureau's mail and to file its records.

Naval Training Stations

Important developments in relation to naval training stations took place after the World War. The temporary stations constructed during the war were demobilized, and operations at the permanent stations were reduced. The training station at the Norfolk Naval Base, Hampton Roads, Virginia, displaced the old station at the Norfolk Navy Yard on Elizabeth River.

The division of the American fleet in the summer of 1919 into the Atlantic Fleet and the Pacific Fleet necessitated the development of bases on the Pacific Coast. An act of Congress approved July 11, 1919, authorized the Secretary of the Navy to accept donations of land on San Diego Bay four and one-half miles north of the city of San Diego, California, for naval purposes. The appropriation act for the fiscal year 1921 provided a million dollars for the erection of a permanent training station at San Diego.⁴⁵ The development of this site as a naval base corresponding to that at Hampton Roads on the Atlantic Coast was undertaken, and by 1920 a number of facilities were in operation. When the training station was completed in 1923, it displaced the old station at San Francisco. Together with the Newport and Great Lakes Naval Training Stations the stations at Hampton Roads and San Diego have continued in operation to the present day.⁴⁶

The National Archives

HENRY P. BEERS

⁴⁴ *U. S. Navy Directory*, April 1, 1920, 196; May 1, 1920, 192.

⁴⁵ U. S. Navy Department, *Annual Report*, 1920, 549.

⁴⁶ The writer wishes to acknowledge his indebtedness to Rear Admiral Adolphus Staton, U.S.N. (ret.), and to Captain Dudley W. Knox, U.S.N. (ret.), for reading the manuscript of this article. The writer alone is responsible for all statements.