

▲ BRIEF HISTORY OF THE BEGINNINGS OF
FORT MONMOUTH RADIO LABORATORIES

by

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1942

HISTORY OF THE RADIO LABORATORIES OF FORT MONMOUTH

BACKGROUND--THE STORY OF FORT MONMOUTH

FOREWORD

The history of Fort Monmouth, one of the key posts of the United States Army Signal Corps, is rich in tradition, color, and events, and shows how its present prestige was achieved. It is the fascinating true story of how a Cinderella of a camp, two miles^{sq} in area, grew to be one of the most distinguished forts in the country. Through grit and action, the past of Fort Monmouth reveals what was accomplished when men of courage had the will, stamina, and initiative to wrest a rich heritage out of a wilderness, and how their legacy to posterity is being developed to even greater heights of accomplishment by the soldiers and civilians in whose trust the heritage now rests.

Prelude to Fort Monmouth- The Monmouth Park Racing Track

Where Fort Monmouth stands today, there once sprawled the famous, old, historic Monmouth Park Racing Track where racing history was made during the Reconstruction Period after the Civil War. The Track comprised all the farmland between Eatontown and the Eatontown Dock now called Oceanport. Prior to its metamorphosis into a track, that area of ground was known as the George A. Corlies Farm. ^A

The Monmouth Park Race Track opened officially on July 4, 1870 with impressive ceremonies, and from then until 1893 it became one of the most fashionable racing centers in the United States. In 1890, a new track with a steel grandstand, the largest of its kind in the world, was built there. It stood on the land which is now Fort Monmouth, and its entrance was where the present entrance to the army post is now located on the Oceanport Road. The world famous Kentucky Derby was first run in Paterson, and then brought to Monmouth Park where it became known as the Jersey Derby. It was only later that the Derby was taken to Kentucky. ^B

A brilliant assemblage, composed of political leaders, international diplomats, and theatrical and social personages, spent the racing seasons at Long Branch which had turned into the first famous resort in the nation. Amongst the colorful figures seen at the Monmouth Park races were Jim Fisk Jr., William M. Tweed, R.W. Cameron, John Morrissey, Dr. Robert Dickson, Diamond Jim Brady, Lily Langbry, Lillian Russell, George Lorillard, W.B. Babcock, John Broghan, H.P. McGrath, John Harper, Dr. Robert Underwood, John Hoey, and Tom Bowling. ^C

In 1893 laws dooming horse racing in New Jersey went into effect, and the glory of the old Monmouth Park Race Track came to an end, or shall it be said a new beginning. For part of the old race track was purchased by the United States as the site for Camp Alfred Vail which later became Fort Monmouth. ^D

A Long Branch Daily Record- Edition 7/9/42- Long Branch, N.J.

B Ibid (from article- "Horse Racing History Made After Civil War
On Site of Present Post")

C Ibid

D Ibid

Camp Alfred Vail--The Beginning of Fort Monmouth

It was Mr. John Flock Sr., then Mayor of Long Branch, who was responsible for the selection of part of the old Monmouth Race Track as the site for the present Fort Monmouth. He had heard rumors that the U.S. Army was in search of grounds for a new camp. Major General Leonard C. Wood, who had just returned from the Philippines where he had been Governor General, was the man in Washington, D.C., who had complete authority to select the site of the new camp. Mayor Flock contacted Major General Wood, and suggested the Port-au-Peck section of Oceanport. When that site was rejected because the new army camp needed available railroads and highways, he then presented the strategic assets of the old race track. After investigation, it was found acceptable. So in May 1917, Melvin Randolph Van Keuran, a prominent resident of Eatontown, leased 350 acres of the Monmouth Park Race Track to the Government, and Fort Monmouth was born first as Camp Monmouth Park, and a little later as Camp Alfred Vail. A

May 1917 - Lieut. or General Miliken was the first Adjutant General B assigned to the camp.

May 16, 1917 Authorization of Camp Monmouth Park was made by the C Adjutant General. Lieut. Colonel Hartmann was the Commander of the Camp

Fall of 1917 Camp officially named Camp Alfred Vail in honor of Alfred D Vail, one of the officials of the American Telephone and Telegraph Company. Mr. Vail's inventive genius and financial aid contributed materially towards the development of the Morse Telegraph. *Not So*

*in report
reference to
June 1917*

June 1917 First men arrived early in June 1917 from Fort Sam Houston, Texas, where they had been stationed on the Mexican Border.

October 1919- Signal Corp School was transferred from Fort Leavenworth, E Kansas, in Oct. 1919 to Camp Vail. In that year, Camp Vail was authorized to muster out of service men returning from France.

October 1919 CAMP VAIL WAS MADE A PERMANENT POST. F

August 6, 1925 Name of Camp Vail changed to FORT MONMOUTH. G
The fort was named Monmouth in honor of the men who fought and won the Battle of Monmouth, one of the most decisive and important battles of the Revolutionary War, prior to the Surrender of Cornwallis, at Yorktown. During the Battle of Monmouth, both armies marched over the territory which is encased in Fort Monmouth. It was felt that the name would be appropriate because the Fort was located in historical Monmouth county which is steeped in valor and patriotism.

A- Long Branch Record- July 9, 1942- "Senator Barbour Recalls Camp Vail

B- Ibid, and Long Branch Record- June 16, 1917

C and D- Ibid

E- and F- Ibid

G- Long Branch Record- 7/9/43 Senator Barbour Recalls Camp Vail

When the first men arrived early in June 1917 from Fort Sam Houston where they had been stationed at the Mexican border, they were appalled at the sight of what confronted them. No well-ordered camp greeted them. There were just thick tangles of briars, poison ivy, and underbrush. The only building on the site of the former Monmouth Park Race Track, which could be used for shelter, was the small brick house at the entrance of the park grounds. It was in this building that the first group of soldiers slept for three weeks before tents and other quarters could be set up for them. (A)

Mess was served in the outdoors, and patriotic citizens from neighboring communities fed the soldiers sandwiches and coffee. (B)

The soldiers grunted, complained, and pitched in to clear the underbrush and briars so that the ground could be made serviceable for the erection of tents for the new batches of men coming in. Many of them came down with ivy poisoning. However, something of the spirit of the covered wagon men seemed to enter these soldiers, and in a few weeks, according to local newspapers, the Camp looked like a tented city. (C)

At the beginning of the third week, Signal Corps construction work was started. Telephone lines were quickly built in all parts of the camp grounds, and along the neighboring roads. A complete telephone system was installed in the Camp headquarters. Then trucks and motorcycles for transportation were received. (D)

Within a few weeks, the first wooden barracks arose on the site of Russell Hall, the present administrative building of Monmouth. For sleeping quarters, the barracks contained hard cots, a pot-bellied stove, and each soldier was provided with two blankets. Often a folded sweater served as a pillow. The walls had many chinks, and in the winter, the soldiers suffered from the bitter cold and the harsh snow storms. (E)

Simultaneously with the building of barracks, wooden shacks were erected to be used for radio laboratories. The section of Camp Vail bordering Oceanport Ave., where the brick barracks now stand, was called the Stockade. It was encircled then with a high wire fence and inside was the guard house and the buildings in which the secret work of the radio was carried out. (F)

Expansion continued during 1917, 18, and 1919. Camp Vail was dotted with over a hundred wooden buildings. There were barracks for the enlisted men and barracks for officers. The officers and enlisted men had separate mess halls with a kitchen attached to each one. Hangars for the Flying Field were built. The Y.M.C.A., the Red Cross, and the Knights of Columbus had recreation shacks in the Camp. A telephone exchange had been installed, and a Post Exchange. A Guard House, a Hospital, a Garage, and an Administration Building had been set up. Roads were built in the Camp and from the Camp to the neighboring towns. A sanitation system and an incineration system had been installed. Signal Corps school buildings, wooden shacks, were everywhere on the grounds, as well as the shanties of the Radio Laboratories. (G)

A-Long Branch Record-7/9/42

B-Ibid, page 9

C-Long Branch Record 6/6/17

D- "

E- Ibid

F. and G.-Long Branch Record 7/9/42

Mr. Trees of Civilian Training

"Harry C. Stille Remembers 1st Telegraph Battalion".

Camp Alfred Vail- Expansion- continued

After the War, peace loving Americans permitted Camp Vail to languish. It continued operating in its old temporary buildings which were little more than shacks. (A)

According to Senator Sutphin in his article in the Long Branch Record, 7/9/42, page 9, no action was taken to improve conditions in East Monmouth until 1931. In 1931, his first term in Congress, he worked for the rehabilitation of Fort Monmouth. Through his efforts, the first permanent buildings were constructed. A new administration building was authorized and constructed, and new and comfortable housing facilities were provided for the officers and the enlisted men at the Fort. Senator Sutphin states that in 1935 an effort was made by army authorities to move the laboratories at Fort Monmouth to Dayton, Ohio, and there consolidate the Signal Corps activities. Not only did Senator Sutphin prevent that, but through his efforts, additional laboratory buildings were constructed at Fort Monmouth. From then until the Second World War expansion continued. Since the Second World War, the military and civilian personnel of Fort Monmouth have more than tripled themselves, and the physical expansion of the Fort is continuing.

Camp Alfred Vail- Personnel

The military personnel of Vail included regular army Signal Corps men, enlisted and drafted soldiers, aero squadrons, and officers. Many officers came from regular Signal Corps army regiments. Others came from reserve units. The first reserve unit consisted of 250 reserve officers from New York City who were ordered to report for duty at Monmouth Park Camp, later Camp Vail, on July 1, 1917. From the military personnel rose the famous First Telegraph Battalion of the Signal Corps, composed largely of men from Philadelphia, Pittsburgh, and Harrisburg, and the Second Battalion made up chiefly of Bell Telephone men. Battalions saw service overseas and distinguished themselves. (B)

dog

The Camp military personnel had a mascot, "Smoke", who had been presented to them by a woman from Pittsburgh. Smoke later went to France with the First Telegraph Division and was killed there. (C)

The recruiting of men for Camp Vail publicized the Signal Corps units as a new and enriching service in the army. Lieut. Col. Carl F. Hartmann, Signal Officer of the Army's Eastern Division and in charge of the Camp, interpreted the work of the Signal Corps to the public through speeches and newspaper interviews. He stressed the importance of the knowledge of communications not only in wartimes but as a profitable vocation in times of peace. Men, not already masters of the horse, were to be taught horse back riding as that was a major requisite of the Signal Corps Units.

The Camp provided a thirteen week course. For officers, the course was more intensive. They had to become proficient in cipher work, equitation, first aid, gas engines, map reading, sketching, motor vehicles, pistol practise, signal corps lines of communication, swimming, telegraphy and forms of radio and visual signalling. (D)

A- Long Branch Record-7/9/42-Page 9-"Senator Sutphin Rehabilitates F.M."

B- " " " Harry C. Stille Remembers 1st Telegraph Battalion."

C- Ibid

D- Long Branch Record- July 18, 1917- "Chance to Join Signal Corps Now."

Camp Alfred Vail- Signal Corps Camp

From the very beginning, Camp Vail was identified with Signal Corps Activities. Therefore it inherited a background of pioneering achievements and high standards to be lived up to.

The history of the Signal Corps, at that time, was not well known to the general public. Gradually it unfolded to the men of Camp Vail. They learned that the Signal Corps had grown from an entry in "General Orders No. 17 dated July 2, 1860." That entry read, "Assistant Surgeon Albert J. Meyer to be Signal Officer, with the rank of Major, June 27, 1860 to fill an original vacancy." (A)

They became aware that behind the creation of that original vacancy was the heroic and inspiring story of Albert J. Meyer, the surgeon, who was the father of the Signal Corps. Meyer, born in Newburgh, New York, in 1827, had served an apprenticeship as a telegraph operator. After studying medicine at Buffalo Medical College, he received his degree in 1851 for his thesis entitled, "A Sign Language for Deaf Mutes". In that thesis was contained the nucleus of his system for visual signaling. Commissioned as an assistant surgeon in the Regular Army stationed in New Mexico, he continued his experimentations with flag, light, lamp, and glasses signaling which became known as his "Wig-Wag" system. An investigation by the War Department of his system proved favorable, and the act which authorized his appointment as First Signal Officer also carried an appropriation for the purchase of the equipment, and thus started the nucleus of the Signal Corps. (B)

They learned of the Signal Corps Schools, and how a large Signal Corps School had been opened at Fort Riley, Kansas in 1891, and another one had been built at Fort Leavenworth, Kansas. When the Signal Corps School from Fort Leavenworth was transferred to Camp Vail in October 1919, they knew that Camp Vail had earned its spurs as a Signal Corps training center. (C)

However, the earning of the spurs had not come easily, but had been the result of hard work and careful selection of men and training plans by the officers of Camp Vail during those testing years of 1918-1919.

Lieut. Colonel Hartmann, officer in charge then, established excellent and friendly relationships with all the telephone and telegraph firms in the territory which made up the Eastern District. With their cooperation, he was able to recruit trained men from their ranks. He also called upon the firm executives for guidance in formulating training schedules. Camp Vail was constantly recruiting for telegraph and telephone operators, electricians, engineers, and technical men. Pay was raised to attract more skilled personnel, and professional training was guaranteed. Telegraphers were given courses in elementary physics and electrical engineering. High School and College men were given courses in telegraphy in addition to their other studies. (D)

A- Radio News-II/1942- Major General Olmstead - "How It All Began"- P.26

B- Ibid

C- Long Branch Record 7/9/42

D- Long Branch Record June 18, 1917- "Organization of Telegraph Battalions."

Camp Alfred Vail- Signal Corps Camp continued

According to the Long Branch Record of January II, 1918, the first Radio School buildings were set up about then. One of them was the largest building in the camp, wooden, and could accommodate about 150 students. (A)

Before actual classes were set up, Camp Vail authorities sent letters to presidents of colleges and universities asking their cooperation in a plan of instruction for telegraphers and prospective telegraphers. Eventually, after much deliberation and experimentation, courses of studies were drawn up for Signal Corps men. Courses were given in telephone and telegraph line transmission, and the handling of radio apparatus of its own design. Where unusual conditions of war did not permit the use of electrical equipment, students were taught to send messages with heliograph mirrors (using the sun), the well-known wig-wag semaphore flag systems, lanterns, searchlights, rockets at night, and the utilization of trained pigeons whenever necessary. Students were taught the use of up-to-date field telephones, portable switchboards, and other inventions that were coming forth from the Radio Laboratories. They were trained to read maps, solve field problems, build telegraph lines, make radio outfits, and break mules and horses which were so important then to the Signal Corps for transportation. (B)

Photographic schools were set up as at that time, during the First World War, photography, during the war, was assigned to the Signal Corps as one of its duties. It was not until later that photography was distributed amongst the different military services. (C)

The successful use of pigeons during the early part of the war by Great Britain led to the Chief Signal Officer of the A.E.F. recommending the establishment of a pigeon service as a branch of the Signal Corps in July 1917. (D)

A pigeon training center was then established at Camp Vail. Wherever possible, the personnel was obtained from established groups of pigeon trainers.

After the War, in 1919, the Osman Collection of famous homing pigeons was brought and imported from England. Breeding and training lofts for those pigeons were established in Camp Vail. (E)

A short time ago, the growth of the military and civilian needs in Fort Monmouth made it necessary to suspend all pigeon training centers there and transfer them to Dayton, Ohio, instead. (F)

Today the Signal Corps Training Schools are growing at Fort Monmouth. However, instead of the outmoded Wig-Wag signalling, students are being taught the latest methods of communications and the handling of the new inventions which are making the Signal Corps the nervous system of the armed forces. The excellent working relationship established by Camp Vail with private industry continued even today, and many instructors in the schools, military and civilian, come from the very firms which cooperated with Camp Alfred Vail during the First World War.

A-Long Branch Record- Jan. II, 1918

B-~~XXXXXXXXXXXX~~ Ibid

C- Radio News- II/1942-"Signal Corps in World War I" by Lieut. Milton C. Herr

D- Ibid. page 44

E- ~~XXXXXXXXXXXX~~

Social Activities at Camp Vail

The importance of sound recreation to promote military morale was stressed in Camp Alfred Vail, especially during World War I. Harmonious and friendly relationships between the Camp and the neighboring communities were fostered through joint activities. Civilian and military workers in the Red Cross, Knights of Columbus, and Y.M.C.A. units in the Camp acted as good will ambassadors. They advised communities as to the needs and desires of the soldiers, and then guided the soldiers into utilizing and benefitting by the community resources made available to them. According to the newspaper reports of those times, the result was one of happy cooperation on both sides. (A)

Physical development was encouraged. There were basketball, baseball, boxing and football teams. The Red Bank Y.M.C.A. made its gymnasium available to soldiers, and there were many matches between military and civilian groups of players. (B)

For lighter moods, there were movies twice a week, Wednesdays and Saturdays. Then there were dances, musicales with phonograph recordings, and talent shows. (C)

Dramatics were very popular, and the boys of Camp Vail did a show very much like the one produced in "This Is The Army". The stage settings represented a camp scene at Vail, and showed a day's routine in army life which started with the bugle call. The talented members of the cast had a chance to do their specialties. The show was so successful when presented at the Camp that the boys repeated their performance in the theatres of neighboring towns. The Long Branch Record, October 17, 1917, states, "Signal Corps Boys Repeat Big Show. Camp Vail Star Entertainers Electrify Red Bank Audience."

Through the interest and activity of the women of the communities, a recreation house for the wives, relatives, and friends of the Signal Corps men was opened at Silverside Ave., Little Silver. The new centre was formerly the Schenck Conover Homestead. Under the auspices of the newly formed National League for Women Service, the house was modernized, redecorated, wired for electric light, and equipped with a reading, billiard, and dining room. Even a nursery was provided for Signal Corps wives who came with their children. (C)

In addition to the new enjoyments offered by the Recreation House in Little Silver, there were the recreational activities provided by the Y.M.C.A., the Red Cross, and the Knights of Columbus which kept open house daily. Soldiers and their guests were welcomed to pleasantly furnished wooden shacks operated by these organizations at Camp, and provided with entertainment and refreshments. The Y.M.C.A. was especially popular because of their stimulating lectures on interesting topics and the prominent people they were able to attract as speakers and entertainers. Many soldiers claimed the popularity of the Y.M.C.A. was due to the understanding and humor of the men in charge, R.L. Williams of Pittsburg, Pa., J.C. Travis of Butler, Pa., and F.C. Shinn of Philadelphia who also handled all the social work. (D)

(A) Long Branch Record- 1917-1918- L.B., N.J.

(B) " 10-19-17 "Soldier Athletes in Red Bank Gym."

(C) " 8-24-17 "Many Events Planned For Signal Corps Boys' Entertainment."

(D) Ibid

Health Activities at Camp Vail

A well equipped hospital was built at Vail in 1917 and perfected in 1918.

At first many of the soldiers developed ivy poisoning and severe aftereffects of the bites of the Jersey mosquito. After the poison ivy cases had subsided, the men in the camp were given inoculations against typhoid and paratyphoid, and vaccinations against smallpox. (A)

Mess At Camp Vail

It was not until fall of 1917 that the first real mess hall was constructed at Camp Vail. It had a wooden frame over which huge tarpaulins had been thrown to keep the elements out. (B)

Later a bakery was attached to the Camp, and separate mess halls were built for officers and enlisted men. Each mess hall had a kitchen attached to it. (C)

According to newspaper interview with Camp Vail soldiers, the boys found the food satisfactory and nourishing. The Long Branch Record, August 30, 1917, announces, "Signal Corps Boys Get Good Rations", A resume of a day's menu was printed. According to the article, meals were served at 6 A.M., 12 noon, and 6 P.M. Morning reveille sounded at 5:30. Breakfast included cereal, bread and butter, coffee, steak, or bacon and eggs. For dinner, roast beef was served with mashed potatoes, bread and butter, sliced tomatoes, corn on the cob, beets, and either a pudding or a pie. At night the menu included potato salad, boeuf a la mode, sliced tomatoes, corn on the cob, bread and butter, iced tea, and cake .

Insignias At Camp Vail

Even then at Camp Vail as now at Fort Monmouth, the Signal Corps motto was "Pro Patria Vigilans". The crossed signal flags were the emblem of the Vail men. However, instead of wearing the emblem on the collar as they do today, the Signal Corps Men of Camp Vail wore their emblem proudly on their jacket sleeves even as their predecessors, the earlier Signal Corps men had worn them during the Civil War. (D)

The Effect of Camp Vail on Fort Monmouth

The hardships and privations the pioneer soldiers of Camp Vail instilled a love in them for the place which was carried over to the period it became Fort Monmouth. Many of them, after their return from overseas in 1918, enlisted as military and civilian employees of the Fort. Many of them are serving today as instructors, engineers, officers, and in other capacities. When asked to explain a loyalty that time had not been able to dim, one of the Camp Vail veterans said shyly, "The place sort of gets into your blood, especially when you have seen it grow from nothing into all this. It keeps growing and growing, and you want to be part of its growing pains." knew

Many of the local communities have become very attached to Fort Monmouth because of the friendship instilled by the wise social counsellors of Vail and planted not for just a war period but for as long as the Signal Corps' key post, Fort Monmouth, will inhabit Monmouth County.

A-Long Branch Record-7/9/42- "Harry C. Stille Remembers the First Telegraph Battalion"

B- See illustrating pictures in supplementary photographic album reproduced from photographic files of old Camp Vail.

C- Ibid

D- Radio News-II/1942- "How It All Began"- Major General Olmstead

UNITED STATES SIGNAL CORPS
CHIEF SIGNAL OFFICERS*-TABLE

Brig.General Albert J.Meyer- 1860-1880
Major Gen. William Hazen- - 1880-1887
Brig.Gen. A.W. Greely -1887 -1906
Brig.Gen. James Allen -1906- 1913
Brig.Gen. G.O. Scriven -1913-1917
Maj.Gen. George Owen Squier-1917-1924
Maj.Gen. C. McK.Saltzman - 1924-1928
Major Gen.George S. Gibbs - 1928-1931
Major Gen. Irving J.Carr -1931 -1934
Major Gen. J.B. Allison - 1935-1937
Major Gen. J.O. Mauborgne - 1937-1941
Major Gen. Dawson Olmstead - 1941 -----

Biography of Major General Dawson Olmstead- Present
Chief Signal Officer

Graduated from U.S. Military Academy in 1906
Born at Corry, Pa.
Served on staff of Inspector General of the A.E.F. in France
as Signal Officer of the Fourth Corps Area, now the
Fourth Service Command
Served as Department Signal Officer for Hawaii
In Charge of the Alaska Communication System
as executive for the Chief Signal Officer, Washington, D.C.
Commandant of the Signal Corps School at Fort Monmouth, N.J.
Is Graduate of the Signal Corps School
A distinguished graduate of the Command and General Staff School
and a graduate of the U.S. Army War College

Biography of Brig. General George L. Van Deusen, Commanding Officer
of Fort Monmouth

Born in Passaic, N.J., in 1888, and graduate of West Point in 1909
Joined the Signal Corps during World War I after having served in
the Infantry and the Coast Artillery
Spent 7 years as the Assistant Commandant of the Signal Corps School
at Fort Monmouth, N.J., of which he became Commandant in 1938
Assigned to command of the Signal Corps Replacement Training Center
at Fort Monmouth in 1941
A graduate of the Command and General Staff School, the Army War
College, the Navy War College
Promoted to Brig. General in April 1941

* Tentative List of Directors of the Radio Laboratories
in Camp Vail and later of Fort Monmouth General
Development Laboratories." 1917-1938

Major Chamberlin - a few weeks in 1917
Major Nathan Levinson- 1917-18
Major Wetherholt
Captain Richard Howland Ranger-1919-7/1920
Lieut. Col. Davis R. Reeves
Colonel Paul S. Edwards (then a captain)
Brigadier General Mc Clelland
Colonel Frank D. Applin
Captain Murphy
Colonel Bender
Colonel Blair -1930-1937
General Van Deusen - After Colonel Blair became disabled, he
took over for a few months.

* These names were obtained from various individuals, Mr. Boross, Mr. Sullivan, Mr. Smith, Mr. Adams and others. However, much of the data given could not be vouched for and may not be accurate. There appears to be no documentary data that gives names and dates of the Directors of the Laboratories from 1917-1930

Radio Laboratories of Camp Vail 1917-1919Foreword

There appears to be no written documentary material of the early history of the Radio Laboratories of Camp Alfred Vail. Information was obtained from old existing photographs of the Camp Vail Radio Laboratories taken by army photographers in 1918 and 1919 and interviews with a few personnel of that history making epoch. An album of these photographs is attached as a supplement to this history. Those photographs present the past clearly and vividly.

Radio Laboratories- Beginnings

The Radio Laboratories started ^{No} ~~simultaneously~~ with the beginnings of military activities in Camp Vail in May 1917.

Their sponsor and advocate was General George Owen Squier, who was Chief Signal Officer from 1917 until part of 1924. It was through his efforts and foresight that a scientific laboratory working in conjunction with the military activities and with private industry was finally accepted as a necessary part of Camp Alfred Vail. While the Radio Laboratories were officially under the jurisdiction of the Wire Enclosure Section of Washington, D.C., and remained so until the latter part of the nineteen twenties, the Chief Signal Officer had a great deal of influence in shaping their destinies. (A)

Officers

The first Director in charge of the Radio Laboratories was Major Chamberlin who only stayed for a few weeks in 1917. Major Nathan Levinson, a brilliant executive and scientist, replaced him for the duration of World War I. Of Major Levinson, Lieut. Colonel Ranger says, "He organized the Radio Laboratories into a functioning basis and made them of great service during the War."

Type of Work and Personnel

During that period the only work done by the Radio Laboratories was with radio. There was a great deal of experimentation with radio for airplane, as it was called then, use. Aviation, then, was only a section of the Signal Corps. (B)

Personnel, consisting of about 200 people, was mostly composed of trained military men who had had radio experience in private industry. The civilian employees, which included about twenty women, did mostly clerical and stenographic work. The grit and fortitude they showed under the most trying conditions, in order to relieve men for overseas duty, made these women forerunners of the WAACS without even the glory of a uniform.

(C)

Physical Makeup part

During the early of 1917-1918, the Radio Laboratories consisted of four or five long, narrow, one-story, unheated, wooden, roughly built shacks.

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- A- Mr. Trees, Mr. Sullivan, Mr. Boross, Lieut. Col. Ranger
 - B- Mr. Trees, Mr. Sullivan, Mr. Boross
 - C- Mr. Sullivan

HISTORY OF RADIO LABORATORIES OF FORT Monmouth

Camp Alfred Vail - 1917-1919

Physical Makeup- continued

Gradually a garage, a guardhouse, and an incinerator were acquired. The Radio Laboratories included the four hangars and attached repair shop of the 122nd Aero Squadron which was one of the military units of Camp Vail. (A)

Composition of Radio Laboratories

According to the old photographs of the Radio Laboratories, they then consisted of The Apparatus Design and Drafting Section, Headquarters, Technical Department, Flying Department, Specifications and Records Section, Supply Department, Administrative Department, and a Service Department.

The APPARATUS, DESIGN, AND DRAFTING SECTION was composed of the Design Engineering Group, Model Shop, Drafting Room, Blueprint and Photostat Room.

Attached to the Blueprint and Photostat Room was a trimming room where there was only one old-fashioned hand cutter for trimming work done. The Model Shop, consisting of about three or four men, did all the metal and wood work, and also repaired instruments. It owned a small power plant. Attached to the shop was a cubby hole stock room.

THE FLYING DEPARTMENT was made up of a clerical department, Office of the O.I.C., 122nd Aero Squadron, and the Flying Field Activities. Its jurisdiction included supervision of smaller section, Aerplane Repair Shop, Aero Machine Shop, Aero Wood Shop, Motor Repair Shop, Dope Shop where aerplane wings were tested, Company Supply Aero Squadron, and an Aero Stock Room.

THE SPECIFICATIONS AND RECORDS SECTION included Records and Reports Group Specifications, and Parts Lists Group. It contained a clerical office and a Specifications Testing Room. Photographs of that Specifications Testing Room show a test of a communication instrument being made by a soldier. The bottom of the small speaker is resting on his chest, and part of it is attached to wires connected with the ear-phones which are part of a leather helmet he wears on his head. Then new wires coming from the ear-phones are fastened under his chin. The contraption appears complicated and clumsy in comparison to the stream-line makeup of the modern Walky-Talky and Handy Talky.

THE HEADQUARTERS SECTION was composed of Headquarters and the Personnel Division. It also included the Office of the Camp Adjutant, a clerical office, a Western Union Office, and the Camp Telephone Exchange. (B)

THE TECHNICAL DEPARTMENT consisted of the Office of the O.I.C. Research Section, the Office of the O.I.C. Circuit Investigations, a tiny scientific library, A Circuit Laboratory, a Vacuum Tube Testing Laboratory, Office of the O.I.C. Developments, a Measurements Laboratory, Office of Job Officers, a clerical office, a Direction Finder and Amplifier Laboratory,

A- From old photographs of Radio Laboratories of Camp Vail

B- Ibid

Radio Laboratories of Camp Vail -1917-1919

Composition of Radio Laboratories

TECHNICAL DEPARTMENT - continued

Airplane Direction Finder Laboratory, and a Loop Laboratory with a Long Wave Loop Receiver on the top of the Loop Laboratory.

THE SUPPLY DEPARTMENT consisted of a Supply Section, a Property Records Section, a Disbursing Section, and Purchasing and Storeroom Sections. It included the Office of the Supply Officer, Office of the Disbursing Officer, a Clerical and Receiving Room, a Storage and Crating Room, and Stock Rooms.

SERVICE SECTIONS was composed of the Flying Relations Group, Field Trials, Photographic Group and Utilities group. It included a clerical department, Office of O.I.C. Service Section, Office of O.I.C. Photographic and their smaller subsidiaries.

The Photographic Group consisted of an operating room with a few old-fashioned cameras, a developing room which had a tiny dark room, and a small room for washing photographs.

Field Trials included Intercept Stations, Test Engineers Office, a Display Room for American and Foreign Radio Apparatus, Field Service Stock Room, Storage Battery Charging Plant, and a Sketching Room.

O.I.C. Flying Relations Group was composed of a Flying Relations Office, an Aerplane Radio Installation Shop, and a sub-section called "Preliminary Ground Tests."

Despite the impressive titles, many of the departments consisted of three or two small rooms and their personnel, at most, included about fifteen people, and in some instances about one or two employees.

Working Conditions At Camp Vail Radio Laboratories

The employees, military and civilians, worked under very trying conditions. In the winter, they suffered from the harsh, intense cold. At first the wooden shacks were heated by pot-bellied stoves with pipes extending through the ceiling and leading into chimneys. Warmth only came to those near those stoves. Later an inadequate heating system was installed, and the radiators attached to the middle of the walls were not very satisfactory. In the summer, the heat was unmerciful. There was no cross ventilation, the wall fans were temperamental, and the wooden shacks were hot, stuffy, and uncomfortable.

The only lighting came from a large shaded bulb suspended from the ceiling. Only the draftmen had hooded bulbs near their drawing boards. The furniture consisted mostly of long, wooden tables with drawers, and wooden chairs, and there were a few typewriters antique for even then.

(A)

Accomplishments at Radio Laboratories During 1917-1919

The importance of communications and the heroic showing of the Signal Corps during the War were incentives to the trained men at the laboratories to continue their experiments. Reports from the Fronts of Europe showed the inadequacies of certain equipment and the need for new inventions.

(A) Information obtained from old photographs of Camp Vail
Radio Laboratories

Radio Laboratories of Camp Vail- 1917-1919

Accomplishments of Radio Laboratories During 1917-1919

Also, the airplane, which at first had only been able to stay up in the air for two hours at a stretch, had proven some possibilities during the War. They were aware of what to seek for in research projects. According to men who were there then at Camp Vail as soldiers and civilians, some of the Radio Laboratories' engineers were dreaming ahead of things that later came to life as the radio beam, Radar, Range Finding, Radiosonde, and secret electric eyes and ears. However, while they tinkered with the spectacular, those Radio Laboratories' engineers and technicians built radio sets that were improvements on those already used, and tested and perfected sample sets sent them by private industry firms which had government contracts. Always the relationship between the Radio Laboratories of Camp Vail and the radio firms of the nation was a friendly and harmonious one. Many officials from those firms visited the laboratories and accepted suggestions and criticisms, and in turn were allowed to offer suggestions and criticism to officials and engineers of the Laboratories. That friendly, working relationship between the Signal Corps and private industries continued even after World War I ended and exists today with World War II going on. (1)

Radio Laboratories of Camp Vail and Later Fort Monmouth- 1919-1930

After the end of World War I, Camp Vail declined. The public's interest in its activities ceased. However, there were soldiers, who had been trained in the Camp Vail Signal Schools or who had worked for a brief time in the Radio Laboratories before they had left for France. After their return to the United States, some of them obtained work as engineers and technicians in the Radio Laboratories which still continued to operate. Seasoned by actual warfare and the use of equipment under all sorts of battle conditions, they were a valuable addition to the personnel. At all times during his office as Chief Signal Officer, General Squier visited the wooden shacks of the Radio Laboratories and had faith in their future. Mr. Boross of Shop told of one such visit. General Squier, then renowned as an international figure of great prominence, looked wistfully at the work going on in the Machine Shop, and the ingenious machines rigged up in the small wooden shack. He said, "If I had had a shop like this to work in when I was a boy, I would have amounted to something."

During this period, the Radio Laboratories still maintained their friendly relationship with private industry. During this period, quietly and unpublicized, was laid the groundwork and scientific foundation for many of the later glorious inventions that were to come forth from the Signal Corps General Development Laboratories of Fort Monmouth.

Physical Makeup of Camp Vail Laboratories- 1919-1920

When Mr. Boross of Shop entered the service of the Camp Vail Radio Laboratories in 1919, he found the Radio Laboratories consisted of four wooden shacks. One contained Model Shop, and another housed the Administration and Drafting Section and included the Blueprint Room.

A- Mr. Trees, Mr. Sullivan, Mr. Adams, Mr. Boross

History of RADIO LABORATORIES

Physical Makeup of Camp Vail Laboratories- 1919-1920 (continued)

The third was the Research Section, and the fourth was Supply which included the Photographic Section. Two of these wooden shacks are still standing today to the west of the Squier Laboratory within the barbed wire fence.

The Research Section in Radio contained radio apparatus, measuring and testing instruments. There ~~were~~ one model set was worked on at a time. It was built, and then sent to the Field Test Service for testing. When the set was finally approved, it was sent to manufacturers for reproduction. Sometimes the manufacturers sent completed sets which were gone over and tested and which had to have final approval from the engineers of the Radio Laboratories before they could be produced in numbers. Some of the firms which sent in radios for approval included Westinghouse, Western Electric, and others.

The Chief Signal Officer was in Washington, D.C. He sent army specifications for aircraft there. Wright Field had an air corps, but the original radio sets were built in the Radio Laboratories of Camp Vail.

Physical Makeup of Fort Monmouth Radio Laboratories in 1929

When Mr. Bob Weiss of Welding came to the Radio Laboratories in 1929, they still consisted of four wooden shacks. The Executive Offices were in one. Another building housed the Radio, Meteorological and Direction Finding Sections. The Drafting Room, Supply and Wire Section and the Reproduction Room were in the third. The Reproduction Room only contained an enlarging camera and a blue-print machine. The fourth was the Carpenter's Shop and was near the parade grounds.

The Shop, laid out and perfected by Harry Trees, worked in conjunction with the engineers who were always open to suggestions from the skilled workmen in the shop.

Working Conditions- 1919-1930

The working conditions were very much alike to the conditions that prevailed in 1917-1919. During the early part of that period there were about twenty women working in clerical capacities there. Mrs. Sutphen of Post Engineering tells of the snow storm in the winter of 1920. The snow covered the tops of the Radio Laboratories' buildings and they had to be dug out. Paths had to be carved out. The prevailing means of transportation was out of commission. Many of the women walked to work through miles of snow. Mr. Trees tells of how the laboratories' workers refused to be intimidated by the freezing weather and how they worked in heavy overcoats and pounded their feet and hands to keep the circulation going while they continued with their experiments. Occasionally, when it was humanly impossible to stay and survive the cold in those wooden shacks, they were forced to go home.

Accomplishments -1919-1930

While the working conditions were miserable, they were compensated by the friendly camaraderie of the workers and the stimulation of brilliant minds assembled there. Many of the men who were directors of the Radio Laboratories of that period became renowned later on as scientists and

Accomplishments 1919-1930 (continued)

and inventors. Amongst them was Captain Richard Howland Ranger (1919-7/1920), later Lieut. Colonel Ranger, ^{and} Captain Murphy, who perfected the radio beam. Associated with that period were clever and ingenious engineers who made their mark later on in the industrial world. Their ranks included famous names like Max Batsel, Captain Bladderman, Harold M. Lewis, Duke Silva, and Captain Ralph Bown. (A)

The beginnings of Radar experiments started in the wooden shack of the machine shpp. (B)

Personnel Relationships

The small number of personnel, about 200, made of the workers in the Radio Laboratories one happy family. They were constantly going out together on picnics, outings, and dances. There were baseball teams and friendly rivalries. Friendships were formed which exist today. Amongst the employees of that period still working in the Laboratories today are Mr. Trees of Civilian Training, Mr. Sullivan of Administration, Major Seibert of the Squier Laboratory, Mr. Milton Smith of Camp Coles, Mr Millar, Mr. Henry Harris, Mr. Boross, Mr. John Adams of Supply in Bradley Beach and many others. (C)

-
- A- Mr. Trees, Mr. Sullivan, Mr. Adams, Mr. Boross
 - B- Mr. Boross
 - C- Mr. Trees, Mr. Sullivan, Mr. Boross, Mr. Adams, Mr. Milton Smith

PERSONALITIES WHO HAVE HELPED OR ARE HELPING TO MAKE THE
LABORATORIES OF FORT MONMOUTH FAMOUS

Dr. Samuel Herbert Anderson

Technical adviser over research in the Eatontown Laboratory
for many years

Physics

Born Berrien Springs, Michigan, August 21, 1880

A.B. Park College -02

A.M. Park College -03

Ph.D. Illinois-1912

Prof. Physics and Chemistry-Albany College

From Instructor to Assoc. Professor-Washington College (Seattle) 12-28

Physicist Daniel Guggenheim Fund Promotion Aeronautics 28-30

Signal Corps Lab. -'30

Physical Society

Work

Effect of frequency on capacity

photoelectric cells

photoelectric properties of vapors on alkali metals

catenary loaded at one point

overtones of tuning forks

design and calibration of phonodeik

tungsten arc characteristics

end corrections of organ pipes

Xray radiography of light metal alloys (3)

transmission of radiation through fog

In addition to his brilliant work in the Sound and Light Section, Dr. Anderson is well respected and liked by the colleagues who labor with him on secret research projects whose results will do much to further the war effort. The nature of the inventions conceived and executed under his guidance can not be disclosed until the present war has ended. However, our fighting men on the battlefronts of the world save endless lives through the use of new electric eyes and ears made available to them. (B)

(A) American Men of Science-New York-The Science Press-1938

Edited by J. McKeen Cattell and Jacques Cattell

(B) Mr. Trees of Civilian Training, Long Branch

Mr. Max Batsel

Worked in the Radio Laboratories of Camp Alfred Vail from 1917 to about 1920

Did pioneer work in developing amplifiers for aeroplanes. Established frame to ground contact, ground to plane contact, plane to ground contact, and then plane to plane contact. Is considered one of the best experts on amplifiers in the country

Gave many talks before the Institute of Radio Engineers
Is believed to be now employed by the R.C.A. Labs. in Princeton (A)

Captain Bladderman

After war came back to Camp Vail where he had been temporarily stationed as a soldier, and was employed as an engineer in the Radio Laboratories as they were known then.

One of the outstanding radio and electrical engineers in the country today

Perfected Alternating Current Tube (B)
while employed there

Colonel Blair

In charge of Signal Corps Laboratories at Fort Monmouth from 6/1930 until 8/1937 when he left because of physical disability and retired.

One of the country's outstanding experts on meteorology
Developed the use of sound balloons in meteorological ranging
Professor of Chicago University prior to service with laboratories
Author of scientific articles in "Proceedings to History of Radio Engineering" (Published 1930 or 1931)

(C)

Captain Ralph Bown

Radio engineer during 1918 and 1919 in Radio Laboratories of Camp Alfred Vail. Worked under commanding officer, Major Levinsohn.

Executive and outstanding engineer while employed in Camp Vail
A president of the Institute of Radio Engineers
At present in Research and Development at the American Telephone and Telegraph Company at 195 Broadway, N.Y.C.
Is also one of the vice-presidents of the A.T.T.

(D)

(A) Information supplied by Mr. Sullivan of Administration, Squier Laboratory, Mr. Boross of Shop, and Mr. Trees of Civilian Training

(B) Ibid

(C) Mr. Rauh of Shop, Mr. Sullivan of Administration, Mr. Weiss of Welding supplied information

(D) Lieut. Colonel Ranger, and Mr. Sullivan supplied data

Major General Colton

•
Colonel R.V.D. Corput

Dr. Marcel Jules Golay

Physica

Neuchatel, Switzerland, May 3, '02

B.Sc., Neuchatel, '20

E.E., Zurich, '24

Ph.D., Chicago, '31

Bell Tel. Labs. -24-28

Associate physicist and later physicist, Signal Corps Labs '31

WORK

Spectroscopy

hydraulicoustics

sound ranging

telephone cables (A)

At present Dr. Golay, a mathematical genius, is employed on secret research projects at the Eatontown Laboratory. These projects, if successful, will revolutionize submarine warfare.

Major Nathan Levinson or Levinsohn

In charge of Radio Labs. of Camp Vail during part of 1917 and 1918

Signal Corps trained man

Now on western coast in charge of talking picture equipment for major movie company, and an executive.

According to Lieut. Colonel Ranger, Major Levinson "organized the radio laboratories into a functioning basis and made them of great service during the last world war. (B)

Harold M. Lewis

Worked for several years in Radio Laboratories of Camp Vail up to about 1923 or 1924.

Helped develop, and experimented with meteorological balloon carrying small transmitter of about one pound in 1923.

Did telephone research, and in 1926, developed theoretically the Duplex Telephony System as a successful means of multiple communication. (two way radio)

Now consulting engineer for the Hazelton Corp. in L.I.C.

Holds patent on every radio set in the market

Expert engineer on transmitters

(C)

(A) American Men of Science - N.Y. - Science Press - 1938

(B) Lieut. Colonel Ranger, Mr. Sullivan, and Mr. Boross supplied data

(C) Ibid plus Mr. Trees of Civilian Training

Lieut. Colonel Oscar C. Maier

Born in Poland-Sept. 4, 1901

Graduated as a Second Lieut., Signal Corps, June 12, 1925 from the U.S. Military Academy

Graduate of the Signal Corps School in 1926

Stationed in California for meteorology study where he became one of the outstanding army-"weathermen" previous to the organization of the present weather bureau system

Promoted to First Lieut.-Oct. 1, 1930, and to Captain August 1, 1935

Became a Major in Signal Corps in 1941

In Charge of Camp Coles Signal Laboratory of the old Signal Corps Ground Signal Service, and also Executive Officer of the S.C.G.S.S.

Under the newly formed Signal Corps Ground Signal Agency, he heads the engineering division of all the five laboratories. Lt. Colonel Uhrhane has succeeded him as the Director of the Camp Coles Signal Laboratory. (A)

Captain Murphy (Colonel Murphy at time of his death)

In charge of Radio Laboratories

While at Fort Monmouth, perfected the radio beam for aeroplanes Around 1930 or 32, the beam was used in the first successful flight to Honolulu. Boltchen, flight commander, sent his autograph to Captain Murphy and wrote him, "Without your beam, I never could have made it."

Spent three years in the F.M. Signal Corps School

Expert on tank radios

Killed in Phillipines at the beginning of this war. While in a parachute jump, he was believed to have been shot down by Japanese attackers.

Camp Murphy in Florida is named after him for his distinguished contribution to science and the war effort. (B)

Jackson Pressley

Worked in Radio Laboratories around 1925. Helped then to perfect Superheterodyne 8 tube set with loud speaker

At present chief engineer with major Television Corp. on Western Coast (C)

Colonel (Lieut.) Richard Howland Ranger

In Charge of Radio Labs. from 1919-7/1920

Radio Engineering. Born Indianapolis, Indiana, June 13, 1889

B.S. Mass. Instit. Tech.-'11

Ranger Printing Co.-Boston-II-16, A.E.F.--1917-1919

Design Sect. Radio Corp. of America - -20-30

Pres.-Rangertone, Inc., 1930---

Radio Eng., Elec. Engineers, Physical Society

Work

Radio and Electric Music

Electric transmission of pictures

Radio reception

At present in charge of Signal Corps Bureau of Standards at Red Bank, N.J.

A- Radio News- II/1942, and Signal Corps Message 8-27-43

B- Mr. Boross, Mr. Trees, Mr. Sullivan, and Lieut. Col. Ranger

C- Ibid

D- Men of Science. Dates as director of Labs. supplied by Lieut. Col. Ranger

Major Seibert

With Radio Laboratories of Fort Monmouth since 1917
Executive officer in charge of all records (A)

Duke Silva

Brilliant engineer who worked in radio laboratories of Camp
Vail

Father was a member of Kaiser Maximillian's Court
One of the best engineers with the Atwater Kent Corp. until
its dissolution
Now in engineering business out west (B)

GeneralGEORGE OWEN SQUIER

Squier Laboratory is named in his honor. As Chief Signal Officer
at the time Camp Vail was established, he encouraged the
establishment and continuance of the work of the Radio Laboratories.

b.-3/21/65

died - 3/24/34

unmarried

fellow John Hopkins-1902-03, 1903-04 Ph.D.

Non.D.Sc. from Dartmouth College-1922

Appt. 2nd Lieut.-3rd artillery-6/12/87

1st Lieut.-6/30/93

Captain Signal Officer-vols-5-20-98

Lieut.Colonel Signal Officer-vols.-7/18/98

1st Lt.Signal Corps.-U.S.A.-2-23-99

Capt. Signal Officer-U.S.A.-2-2-01

Major- 3/2/03-Cond. U.S. ~~XXXXXXXXXX~~ Cableship-Burnside
1900-1902- Laying of Phila. Cable and Telegraph System

U.S.Military Attache at London, England, 1912

Lt.Colonel Signal Corps.-3/17/13

Brig. General-Chief Signal Officer-U.S.A.-2-14-17

Major General-10-6-17 in charge of army air service

(5/20/16-5/20/18)

Member National Council- Boy Scouts of America

D.S.M. (U.S.)

Knight Comdr. -St. Michael and St. George (Gt. Britain)

Commander Order of the Crown- (Italy)

Commander Legion of Honor - (France)

Elliott Cresson gold medal

Franklin Medal

Researches

Electrochemical effects due to magnetisation

The polarising of photochronograph

The sine wave systems of telegraphy and ocean cabling

The absorption of electro-magnetic waves of living vegetable organisms

multiplex telephony and telegraphy

tree telephony and telegraphy over open circuit bare wires laid
in earth or sea (C)

(A) Mr. Trees, Mr. Boross, Mr. Sullivan supplied data

(B) Ibid.

(C) Who's Who in America 1897-1942 -under George Owen Squire

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Base Command- Felagsprintsamidjan-Dec.1942-Reykjavik,Iceland

Davis,Harry Meyer and Fassett,F.G.- "What You Should Know About the
Signal Corps"- Wm.Norton and Co. Inc.- New York

Long Branch Daily Record-offices Long Branch N.J.

Long Branch Fort Monmouth Anniversary Edition -Long Branch Daily Record
as of July 9,1942

Long Branch Daily Record- Read entire files for year 1917 and Jan. 1918

Long Branch Daily Record- 6-6-17- "Monmouth Park,Site of Camp"
" - 6/18/17 "Organization of Telegraph Battalions"
" - 6-18-17 "Recruiting Signal Corps for Training
at new Monmouth Park Cantonment"
" - 7-16-17-"Chance to Join Signal Corps Now"
" - 8-3-17 "Signal Corps Men Have Portable Switch-
boards Now"
" - 8-9-17 "Signal Corps Reserves at Monmouth Park
sent "Somewhere in France" "
" -8-24-17 "Many Events Planned for Signal Corps
Boys Entertainment"
" -8/25/17 "Hostess House for Monmouth Camp"
" -8-30-17 "Signal Corps Boys Get Good Rations"
" -8-31-17 "Signal Corps House is Popular"
" -9-5-17 "Seventh Battalion Expected Tomorrow"
" -9-6-17 "400 New Signal Corps Men Arrive-
Battalions from Chicago and Northwest"
" - 9-8-17 "Mitchell,Colonel of Signal Corps"
" - 9-24-17 "Big Phone Men Visit Camp Vail"
" - 10-17-17 "Signal Corps Boys Repeat Big Show"
" - 10-19-17 "Soldier Athletes in Red Bank Gym"
" - 10-23-17 "1200 Camp Vail Soldiers to Parade in
Liberty Loan Rally Tomorrow Night"
" - I-II-18 "Signal Corps School Starting"
" - I-12-18 "Camp Vail Lieuts. Enjoy Cotillion"

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" " "Horse Racing History Made After Civil
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" " "Senator Sutphin Rehabilitates Fort
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" " "Signal Corps Includes Manifold Activities
with Specialists in Many Occupations"

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Fort Monmouth for Many Years

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- # Anderson,Dr. Samuel Herbert - Eatontown Laboratory
- * Boross,Alexander -- Shop-Squier Laboratory-Fort Monmouth
- Bouse,Mr. - Long Branch Trust Co.,LongBranch,N.J.
- * Bowater,Leslie -Reproduction Section,Squier Lab.,F.M.
- Brown,Houston --Editor-in Chief,Long Branch Daily Record,
Long Branch,N.J.
- # Finnix,Bill --Guard Section,Squier Lab.- F.M.
- # Kelly,Miss -Records,Squier Lab.-Fort Monmouth
- # Parmer,Major -Eatontown Laboratory
- # Ranger,Lieut.Col. --Bureau of Standards,Red Bank,N.J.
(With Radio Labs. at Camp Vail. Left,and returned recently)
- # Rauh,Mr. -Section Chief,Shop,Squier Lab.- F.M.
- * Smith,Milton --Camp Coles
- *Sullivan,Mr. ---Administration,Squier Lab.- F.M.
- * Sutphen,Mrs. --- Engineering Office,Fort Monmouth
- * Trees,narry ---Civilian Training at Long Branch
- * Weiss,Mr. --- Welding Shop,Squier Lab.,F.M.

*(Major Seibert-not contacted as yet,but available for information)

* -----Individuals with F.M. for more than 20 years

#----- Individuals with F.M. ten years or over