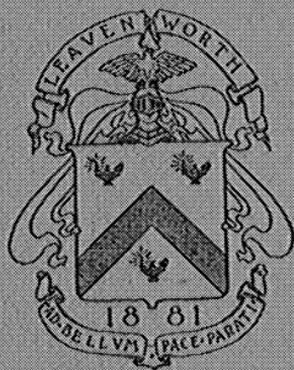


# Lines of Information As Illustrated by An Outpost Problem

By Captain Palmer E. Pierce  
13th Infantry



The Army Signal School

Reprinted from the Journal of the U. S. Infantry Association for the month of September,

1908

# LINES OF INFORMATION AS ILLUSTRATED BY AN OUTPOST PROBLEM<sup>1</sup>

BY CAPTAIN PALMER E. PIERCE, 13TH U. S. INFANTRY

No branch of the Army Service School has been of more interest to the onlooker during the past year than the Signal School. In this school a class, composed of five captains and ten lieutenants, all but two being line officers, took a course which fitted them for the duties of practical signal work in our service. To realize what this embraces one should consult their certificates, which show them to have a satisfactory knowledge of practical electricity, field signaling, installation, maintenance and practice of field lines of information; telephony, photography and military sketching, as well as some minor subjects.

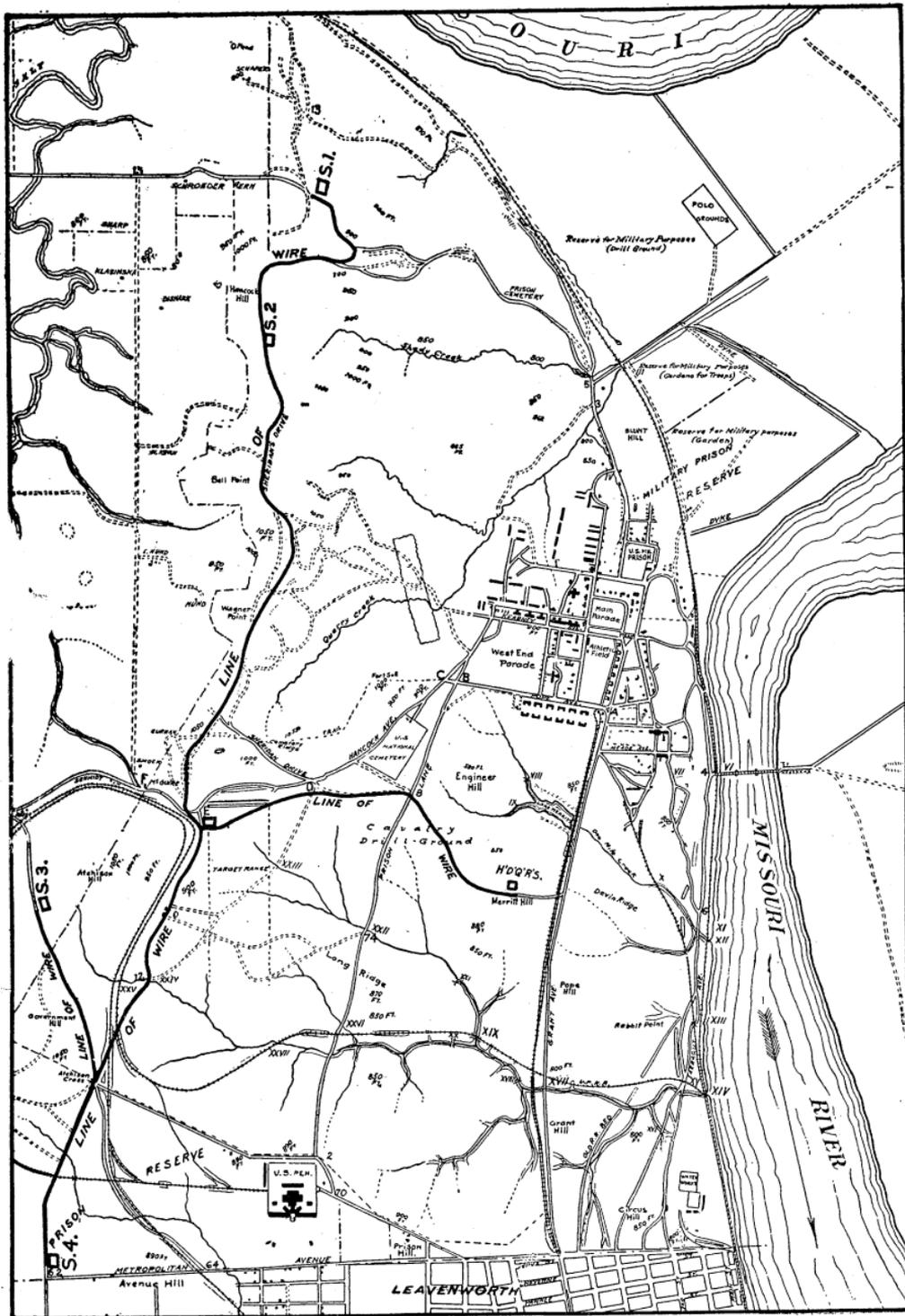
The objects striven for by the Army Signal School are announced to be:

“To prepare each student officer for the active and technical duties required in the case of the declaration of war immediately;” and “to investigate and coördinate the whole subject of lines of information by thoroughly technical methods, with the view of realizing better and more efficient tactical and strategical methods of operating armies in campaign.”

For strictly technical work a finely equipped electrical laboratory has been installed in the base-

---

<sup>1</sup>From the *Journal of the United States Infantry Association* for the month of September, 1908. Reprinted by permission.



LINES OVER WHICH WIRES WERE LAID

Scale:  $\frac{7}{8}$ -in. = 1,000 yds.

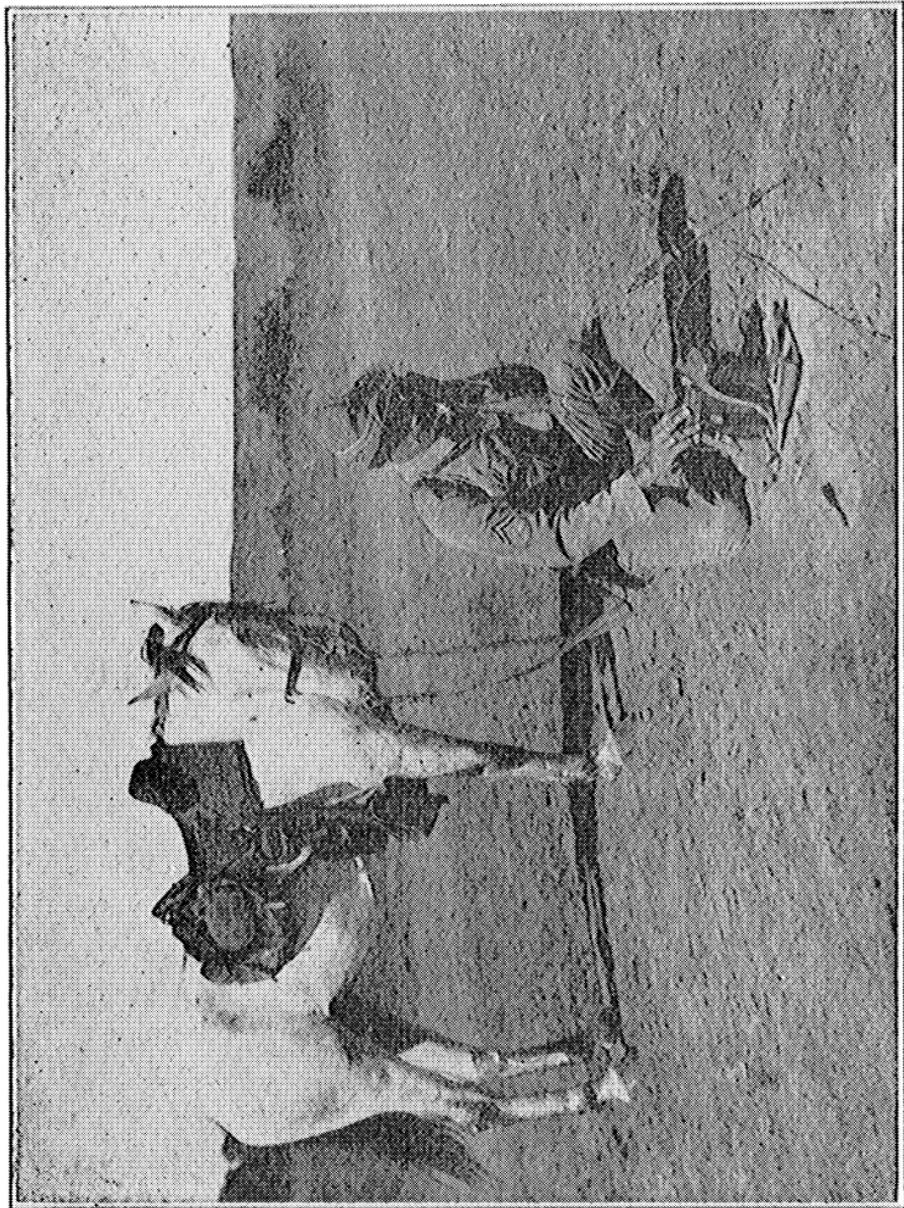
ment of the Academic building. There the student goes through a practical course in electricity, telephony and telegraphy. The work in the beginning is of necessity elementary but advances far enough to carry out the first object of the school, namely, proper technical preparation of the student for duty as a signal officer of the U. S. Army.

But the most absorbing task of this department was the effort made to carry out the second object, namely, the proper coördination of lines of information with a view of realizing better and more efficient tactical and strategical methods of operating armies in campaign. Here is a broad subject, a most important one to the whole service, and, moreover, one that has not been as yet properly provided for. The late conflict between Russia and Japan accentuated the necessity of coördination between all the parts of a great modern army in order to gain the maximum of results. This coördination can only be obtained by lines of information properly laid, maintained and operated. But such lines cannot be laid, much less maintained and operated, without a properly equipped and organized personnel and without practice, for practice makes perfect in this branch even more than in any other of our service.

The working method of securing the second object of the school was most practical. Company A of the Signal Corps is on duty at the school. It is divided into four Wire Line Platoons each of these being provided with an instrument wagon, wire cart, operators and messengers.

The work was in charge of Captain A. C. Knowles, a graduate of the Line as well as the Signal School. A series of Field Problems was originated and worked out in detail under conditions simulating, as near as may be, those of actual campaigning.

As the problem of 20 June is one of peculiar in-



A MOUNTED MAN, EQUIPPED FOR LAYING FIELD LINES AND ABLE TO KEEP IN TOUCH WITH THE MAIN BODY TWO MILES DISTANT.

terest to the Infantry, it is given in detail with a map showing the location of the outposts, reserves and headquarters, and the lines over which the wires were laid.

ARMY SIGNAL SCHOOL

*Fort Leavenworth, Kansas, June 20, 1908.*

Special Field Problem—Lines of Information

General Situation:—

A Blue army is advancing by Platte City on Fort Leavenworth, Kansas.

A Red division is concentrating at Valley Falls, Kansas.

Special Situation—Blue:

On June 20, 1908, the advance guard of the Blue division, consisting of:

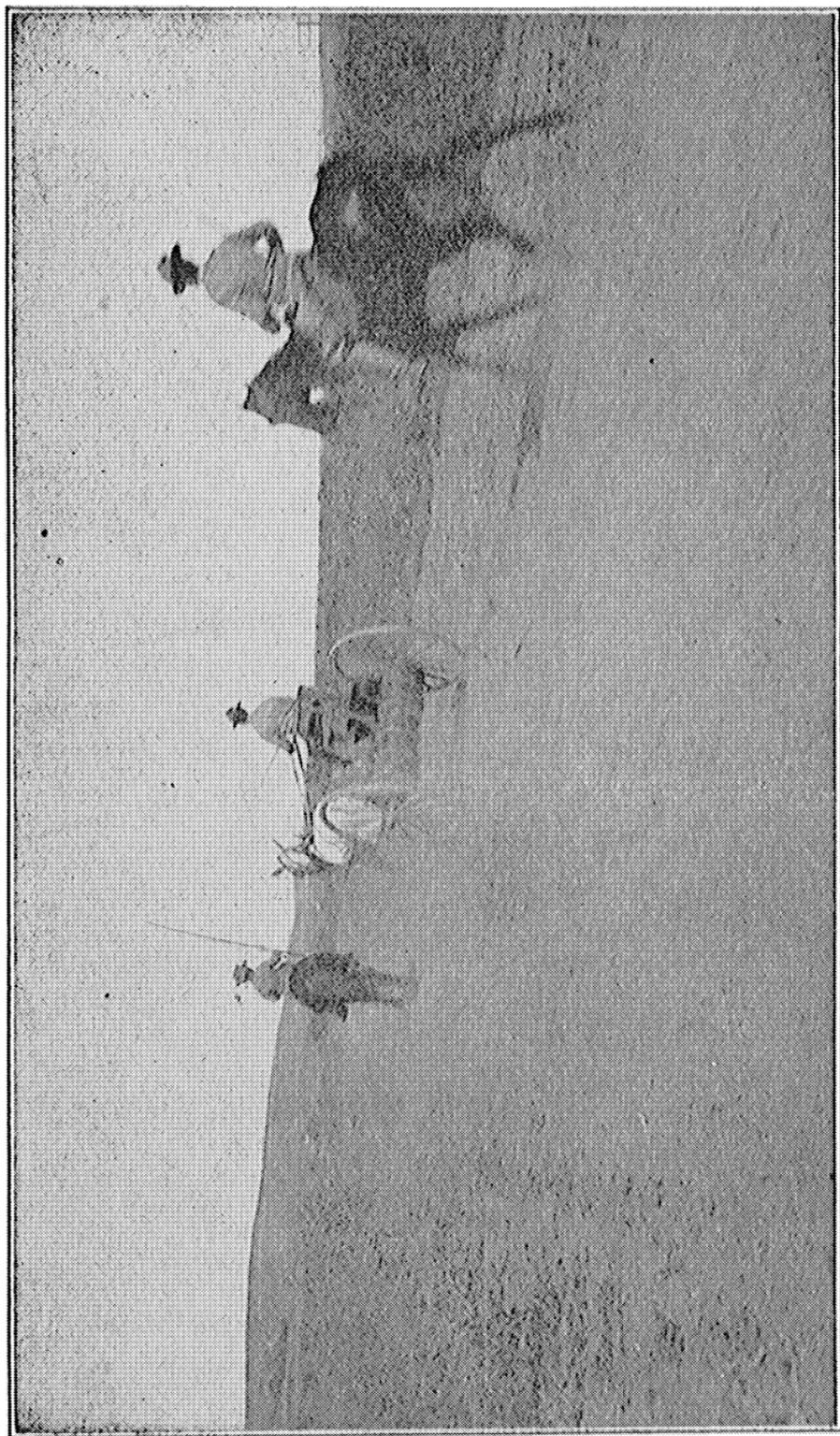
1st Infantry  
2d Infantry  
1st Squadron, 1st Cavalry  
Battery A, 1st Field Artillery  
 $\frac{1}{2}$  Field Company, Signal Corps  
Ambulance Section, 1st Field Hospital

has been directed to cross the Missouri River and occupy Fort Leavenworth.

At 3 P.M. the head of the reserve of the advance guard has reached the west end of the Fort Leavenworth bridge over the Missouri River. The advance guard commander has joined the commander of the support on South Merritt Hill, and gives him the following verbal order:

Advance Guard, 1st Division, 1st Army Corps,  
Fort Leavenworth, Kansas,  
Field Orders 20 June, 08, 3-30 P.M.  
No. 5.

1. Hostile cavalry patrols are reported in the vicinity of Easton. Our main body has halted for the night at Platte City. Our cavalry has reached E.



**AUTOMATIC WIRE CART FROM THE U. S. SIGNAL SCHOOL LAYING WIRE AT A TROT.**  
An improved cart is now being furnished. The driver is at all times under control of the main station.

2. The advance guard will camp for the night at Fort Leavenworth.

3. (a) Colonel Y with the 1st and 2d Battalions, 1st Infantry, and seven mounted orderlies, and Troop A, 1st Cavalry, will form the outpost, holding Sheridan Drive ridge and patrolling in direction of Easton.

(b) The Signal troops will establish and maintain lines of information connecting the supports of the outpost with outpost commander and the latter with advance guard commander.

In case of attack the outpost line will be held.

4. The wagons of the outpost troops will join them.

5. Messages will reach me on South Merritt Hill.

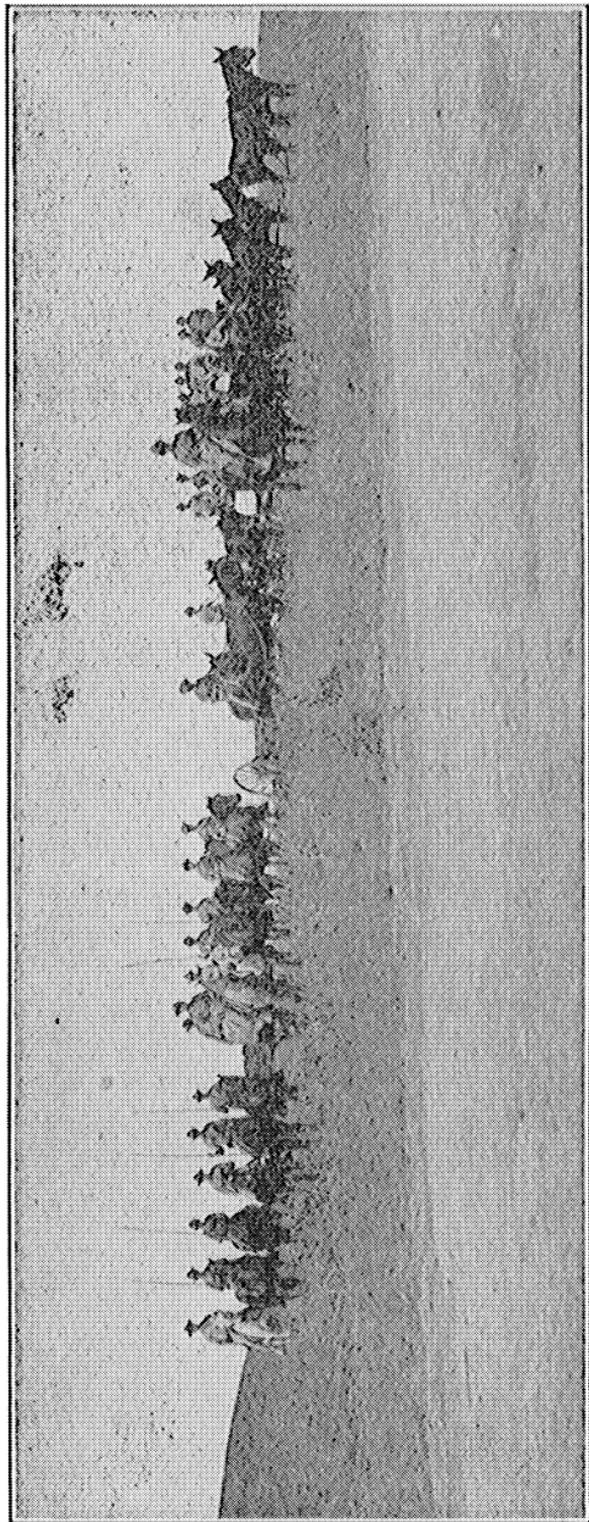
X  
Brigadier General

Verbally to mounted officers; by wire to division commanders.

At the same time he sends a brief message by mounted orderly to the cavalry commander directing him to hold at E and await further orders.

The infantry detailed for the outpost has formed the support during the day's march.

Colonel Y issues the following order:



PLATOON OF COMPANY A, SIGNAL CORPS, EQUIPPED FOR FIELD SERVICE.

This company is on duty at the U. S. Signal School and is divided into four platoons similar to the above.

Outpost, 1st Division, 1st Army Corps,  
Field Orders South Merritt Hill,  
No. 1. 20 June, 1908, 4 P.M.

Troops	
Support:	1. Red Cavalry patrols seen near EASTON at noon today. Our main body has halted at PLATTE CITY. The advance guard will camp for the night at FORT LEAVENWORTH. Our cavalry is at E.
No. 1, Capt. A. Co. A, 1st Inf. 1 plat. Tr. A, 1st Cav.	2. This outpost will hold line NORTH hill—SHERIDAN drive ridge—ATCHISON hill—SOUTHWEST hill.
No. 2, Capt. B. Cos. B, C, D, 1st Inf. 1 plat. Tr. A, 1st Cav.	3. Support No. 1, posted on the MILLWOOD road at 11, will hold line MISSOURI river—HANCOCK hill inclusive.
No. 3, Capt. C. Cos. E, F, 1st Inf. 1 plat. Tr. A, 1st Cav.	Support No. 2, posted on SHERIDAN drive between BELL point and WAGNER point, will hold the line HANCOCK hill, exclusive (RAILROAD cut inclusive).
7 mtd. orderlies.	
No. 4, Capt. D. Cos. G, H, 1st Inf. 1 plat. Tr. A, 1st Cav.	

Support No. 3, posted on ATCHISON hill, will hold the line RAILROAD cut exclusive, GOVERNMENT hill inclusive.

Support No. 4, posted on SOUTHWEST hill, will hold line GOVERNMENT hill exclusive, BARNES' road inclusive.

The supports will intrench their position. In case of attack we are to be reinforced.

4. The wagons of the supports will join them.

5. Messages will reach me at E.

Y,  
Colonel.

By buzzer to advance guard commander; verbally to company commanders and staff; by mounted orderly to Troop A, 1st Cavalry.

The problem being understood, two platoons with their outfits trotted out from south of Merritt Hill. One of these laid a line to the outpost commander at E, and from there to the supports at Atchison Hill and 62. The other wagon laid wire from E to the supports on Hancock Hill and II. In all over five miles of wire was put down. As the stations were established, word was telegraphed back to South Merritt Hill. At the end of one hour, messages were being received at headquarters from all the supports.

One of the most remarkable things about this remarkable performance was the fact that the parties laying the wire were at all times under control of headquarters. At any moment during the operations, moving or standing, the party could be telegraphed to from headquarters. The importance of this ingenious arrangement is perfectly apparent to the military man.

During the morning's work the remainder of the Signal Company gave demonstration of visual and wireless Signaling and of scouting by an operator on horseback. This man carried on a reel two miles of wire, which was run out as he galloped to the flanking ridge, dismounted, and crawled to the top and made a report to the group at the starting point of what he saw.

The day's demonstration was an impressive one and opened the eyes of the spectators to the important work being accomplished by the Army Signal School.