HOROLOGICAL™ TIMES

September 2006

American Watchmakers-Clockmakers Institute

The Importance of the Wristwatch in World War I

Part 1

MAJ Eric Hollister

I am an Army Major currently serving with the 25th Infantry Division in Hawaii. My interest in horology began with the discovery that my grandfather's watch was "real"—a 1949 Hamilton Gilbert. I contacted a local watchmaker (AWCI member Mark Mongillo) to give me lessons, and have been restoring vintage watches as a hobby ever since.

The tactics used on both sides near the end of World War I were unprecedented in their level of decentralization, complexity, and necessary coordination. Operations conducted on highly precise timetables became the norm, and success of a plan depended on the synchronization of many different elements, from Division Headquarters to Artillery Batteries to Machine Gun Teams. This meant that everyone needed to be on the same sheet of music, as it were, in order to bring all these elements together. In short: Everyone needed to know what time it was. This growing military dependence on time is easily accepted, but difficult to prove. Wristwatch history, personal vignettes, and historical sources can help trace this trend, but it takes a careful look at the official Equipment Manuals, Field Manuals, General Orders, and other publications to cement the idea that the watch was a key component of successful tactics in the war. The advent and proliferation of the wristwatch, while certainly not responsible for the evolution of tactics at the end of World War I, at the very least enabled the synchronization and control of the small unit and individual maneuver that eventually brought about the war's end.

The history of the development of the wristwatch is ironically imprecise, and changes depending on the source. Generally speaking, what we now know as the wristwatch came to being in the latter half of the 19th century, and definitely began in Europe. Who did what, when, is debatable. Basically, the wristwatch began life as an altered form of the pocket watch, wherein soldered lugs were attached to the case, permitting the use of a strap. Early American wristwatches were often made by converting lady's pendant watches in a similar fashion. Another variation consisted of a leather strap with a holder, into which a pocket watch could be slipped and read like a wristwatch (Faber 7).

Considering the appearance of these early examples it comes as no surprise that the wristwatch, at least where men were concerned, was very unpopular. At a time when the pocket watch was a manly symbol of status, it was considered extremely effeminate to wear a watch (especially a converted lady's model!) on your wrist on a thin strap (Faber 9). This male aversion to the "strap watch," as it was called at the time, was so great that, were it not for two wars, the pocket watch might well have maintained its dominance far into the twentieth century.

The first of these wars was the Boer War (1899-1902). Technological and tactical advances made during this war required a new precision, and trying to dig out a pocket watch while maneuvering proved impractical in battle. British soldiers fitted their watches into the aforementioned leather strap, and found this placement to be highly useful. The first of many instances where a watch dealer used the manliness of soldiers in an attempt to sell wristwatches appeared in 1900 in the form of an "Unsolicited Testimonial" from a Boer War veteran lauding the advantages of a wristwatch (Brozek 93).

The second war was World War I, which, more than anything else, saved the wristwatch from extinction. The manliness of the fighting man, combined with advances in strap and watch movement technology, made an appeal to the male consumer that could not be resisted. American soldiers who had been exposed to wristwatches during the war fed the demand upon their

return. Watchmakers emulated the design of the basic World War I trench watch, going so far as to retain the pierced metal top cover that protected the watch's fragile crystal in the harshest of conditions (Faber 11-12). Long gone was the effeminate, converted lady's watch. In its place was a large, rugged, manly watch that had returned victoriously from combat. Advertising was in step with the times, with phrases like "A Real Man's Wrist Watch" and "Manly watches for manly men" in bold print (McGeorge 132; Faber 10).

Soldiers wearing wristwatches. Photo courtesy of: The National World War I Museum, Liberty Memorial

There is no doubt that many soldiers wore watches on their wrists during World War I. Proving this, however, is an extremely difficult thing to do. Records of actual military procurement of wristwatches have not been found, and may not exist. Many sources spout vague statements without accompanying documentation. Watch history websites contain items such as Princeton Watches' "1918: Omega supplies US Army with Wrist Watches," and the Hamilton Watch Company's "[Hamilton supplying] wristwatches for General Pershing and his troops who were fighting in the European trenches." These conflicting statements lead to some obvious questions. Who supplied the Army, Omega or Hamilton (or both)? Did they supply everyone? These claims were not only limited to the Allied soldiers. The Princeton Watch site also tells us that 93,000 wristwatches were

sold in Germany in 1902, while John Brozek informs us that "German troops at this time were largely issued the more primitive 'pocket watch' designs [referring to the leather strap arrangement described above]" (94).

Personal vignettes can somewhat help to prove wristwatches were worn by soldiers in World War I. In his letter to the *Military Collector & Historian* journal, Haig Sergenian describes how his father and fellow soldiers used to poke fun at wristwatch wearers in their unit by mocking the action of checking the time. In a letter to the same journal, J. H. MacKendrick describes the town of Galt, Ontario giving a wristwatch to all soldiers enlisting for wartime service. A song called "The Wrist Watch Man" about the soldiers of the American Expeditionary Force (AEF) was penned in 1918, as was a column in *The Stars and Stripes* entitled "The Wrist Watch Speaks," describing the war from a watch's point of view (McGeorge 132-3).

The Army Corps of Engineers website provides more detailed information, stating that roughly 1,000 Hamilton pocket watches were purchased for use by the Engineer Corps during railroad operations in France. Whether these are the watches the Hamilton Company refers to on their website is unknown. Even more compelling evidence of the presence of wristwatches in the Great War is in the photos taken during the war itself. Jonathan Gawne's book *Over There* shows numerous individuals wearing watches, from Privates to Lieutenant Colonels.

Similarly, Charles Woolley's *Uniform's and Equipment of the Imperial German Army 1900-1918* also shows various soldiers of different ranks and specialties sporting watches. In a photo from 1917, he goes so far as to imply that the pictured German Engineer's wristwatch was an issued item (140). This, and previous claims that the Germans were issued watches, can be somewhat supported by the success of German infiltration tactics and their development of the rolling barrage. Certainly such complicated maneuvers could not have succeeded without the ability to synchronize the actions of many different groups. Further support is found in a biography of Field Marshal Erwin Rommel. In August 1917, as a company commander during the battle for Mount Cosna on the Rumanian front, Rommel personally positioned ten separate machine gun teams, giving each "exact targets and timings" (Fraser 56). It would appear watches were prevalent in the German Army.

Another source of information is the online auction site eBay. At any given time there are between 15 and 20 World War I trench watches being auctioned. The fact that so many of these 80-year-old watches are still around says something about the quantity that must have existed during the war years. How many actually saw service in the war is obviously unknown, but many are engraved in such a manner as to dispel any doubts of their wartime history.

The official documents of the United States Army shed some light on the issue of wristwatch proliferation among the troops during the war. *The Field Service Manual* of 1908 shows that an Infantry Battalion of 1,024 personnel was authorized a total of 37 watches, at least 29 of which being the wristwatch variety. Of these 37, 29 were for the officers, and 8 were for the soldiers performing signaling duties (13). The 1914 version of the same manual is basically unchanged regarding watch issue (15).

General Order Number 12 of January 1918 authorizes each observation station of the Regimental Intelligence Service a watch. This authorization was expanded two months later to give each Infantry Regiment twelve luminous dial watches (wrist or pocket not specified). (Historical Div. 174, 268)

In May of 1918, the *Equipment Service Manuals for Service in Europe: Series A-No. 1* appears to have authorized 271 watches to an Infantry Regiment of 3,741 soldiers. Wrist-type watches were generally specified, with all requiring luminous dials. The placement of these watches is very specific, with watches being issued to soldiers in the Headquarters Company, Observation Stations, Signal Platoons, the Sappers and Bombers Platoon, the One-Pounder Cannon Platoon, and the Machine Gun Company. Three months later, the August version of the same publication had lowered this number to 158. Oddly, *No. 15* of the same series (also published in August 1918) authorized 761 watches for an Infantry Division of 28,059 soldiers, with the Infantry Regiment designated only 53. All of these watches were designated as wrist-type, luminous dial. The reason for the disparity in the number of watches for the Regiment is unclear; however, these documents clearly show the proliferation of watches in the AEF.

"The Importance of the Wristwatch in World War I" will continue next month.

Works Cited

AEF. *Equipment Manuals for Service in Europe: Series A-No. 1: Infantry Regiment*. General HQ, AEF: General Staff, 1918 (May and August versions cited).

AEF. *Equipment Manuals for Service in Europe: Series A-No. 15: Infantry Division*. General HQ, AEF: General Staff, 1918.

Brozek, John E. "The History and Evolution of the Wristwatch." *International Watch*, January 2004: 92-6.

Faber, Edward, and Stewart Unger. *American Wristwatches: Five Decades of Style and Design*. Pennsylvania: Schiffer Publishing Ltd., 1988.

Fangboner, Donald. "The Wristwatch Comes of Age." *Military Collector & Historian* 26 (1984): 31-2.

Fraser, David. *Knight's Cross*. Great Britain: HarperCollins, 1993.

Gawne, Jonathan. *Over There! The American Soldier in World War I*. London: Greenhill Books, 1997 (Pages 2, 32, 37, 62, 63, 69).

Hamilton Watch Company. "Hamilton Watch Tells the Story of an American Original." *Hamilton Watch Company*. 12 Nov. 2004 <http://www.hamiltonwatch.com/index-flash.php>.

Historical Division, Dept. of the Army. *United States Army in the World War 1917-1919: General Orders, G.H.Q., A.E.F.* Washington: GPO, 1948.

History Office, U.S. Army Corps of Engineers. "Did You Know—Vignette No. 63." U.S. Army Corps of Engineers. 11 Nov. 2004 <http://www.hq.usace.army.mil/history/vignettes/Vignette_63.htm>.

MacKendrick, J. H. Letter. *Military Collector & Historian* 28 (1986): 44.

McGeorge, Stephen C. "Collectors Field Book: The Last Word on the Wristwatch?" *Military Collector & Historian* 40 (1988): 131-3.

Princeton Watches. "Watch History: Watch Development Through the Ages." *Which Watches*. 11 Nov. 2004 <http://www.which-watches.com/history.html>.

Sergenian, Haig. Letter. *Military Collector & Historian* 27 (1985): 96.

U.S Army. *Field Service Manual: 1908: Infantry Battalion*. London: Harrison & Sons, 1908.

U.S. Army. *Field Service Manual: 1914: Infantry Battalion*. London: Harrison & Sons, 1914.

Woolley, Charles. *Uniforms and Equipment of the Imperial German Army 1900-1918*. Pennsylvania: Schiffer Publishing, 1999 (Pages 140, 146, 233).

HOROLOGICAL TIMES

October 2006

Antoine Simonin
Fellow - AWCI

American Watchmakers-Clockmakers Institute

The Importance of the Wristwatch in World War I

Part 2

MAJ Eric Hollister

The presence of wristwatches in World War I having been established, the question becomes how they supported the doctrinal advances that ended the war. An interesting place to start is in the field orders that were used to plan and execute missions. In a 1903 lecture at the General Services and Staff College on the subject, all times utilized in the very short and general field order examples are limited to on the hour or half-hour. Yet, in a bit of a dichotomy, the students are warned that:

> In each order particulars of time and place must be given so exactly that error is impossible. It is important that an excellent timepiece be kept at Headquarters and that commanders or staff officers of subordinate units set their watches by it. (Dickman 10)

Eben Swift's *Field Orders, Messages, and Reports* of 1906 and Roger Fitch's *Estimating Tactical Situations and Composing Field Orders* of 1909 are no more precise. Neither, apparently, was the German Army, whose reputation for precision, not to mention their possession of all those previously mentioned watches, did not translate into temporal exactness in Hans von Kielsing's *Battle Orders* of 1910.

Early doctrine proves similarly frustrating. The tactical doctrine used by all parties at the start of the war had led to the trench stalemate, and was inadequate to solve the tactical problem that faced both armies well into the conflict. It was into this environment that the AEF was thrust, armed with equally poor field manuals. In fact, in looking at pre-war Army doctrinal sources, the subject of offensive operations is woefully underrepresented; a fact not lost on the AEF senior officers. LTG Hunter Ligget, commander of the U.S. First Army, resorted to publishing his own thoughts on open warfare, having determined that nothing in print at the time "teaches this, to me, essential question." (Finlayson 41) What was becoming readily apparent to everyone on both sides of the trench was that success increasingly depended on smaller units operating independently in a highly coordinated manner.

This trend first appears in AEF doctrine in the *Instructions on the Offensive Conduct of Small Units*, a translation of a 1916 French manual, which appeared in 1917. This manual addresses the breakdown of larger units into platoons and half-platoons, that carried on the fight independently. (11) This doctrine was updated with the *Supplement to Instructions (Provisional) Issued January 8, 1916 on the Offensive of Small Units*, published in 1918. This version goes into much greater detail regarding the planning and execution of operations at the Company level and below. Of particular interest is the construct and independent nature of the fighting half-platoon, which was led, out of necessity, by a sergeant. (9) Also interesting is the new emphasis placed on timing the operation. Among the operational details listed are the time the operation will start, the method by which artillery fire will be timed to stay in front of the advancing infantry, and the method to mark out the front line trace "either at some particular time...or as required." (17) Clearly, precise timing had become important, and those in leadership positions, be they officers or enlisted, needed to know those exacting details, as well as the exact time.

Between these two manuals appeared one of the most remarkable and revealing publications of the period. *Notes on Infantry Attacks and Raids* was published in July 1917, and contains many examples of what appear to be actual operations orders from the war with names of personnel and units omitted. Who wrote or utilized these orders is a mystery, however, as some of them predate the arrival of the AEF in Europe. Regardless, these orders outline in amazing detail how decentralized these operations had become, and how important precise timing was to operational success.

The first order, dated March 26, 1917, gives separate instructions to four trench clearing parties containing

Capt. E.G. Stahl, operating a field radio set. Co. A, 110th F.S.Bn. Varennes, d'Argonne-Meuse, France. Aug. 26, 1918. The National World War I Museum, Liberty Memorial

a total of ten independently operating sections. The details regarding time are impressive. The operation was to begin at 3:00 a.m., all parties would be in position at their start points thirty minutes prior, and the length of stay in the enemy trenches was 20 minutes. (12-13) Later in the order appears an item that is commonplace in every order in this manual: "All watches will be synchronized at 12 noon, 8:00 p.m., 12 midnight, and again at 2:00 a.m. at advanced Headquarters." (14)

Another order in the manual, dated February 27, 1917, states even more specifically: "The limit allowed in enemy trenches is 16 minutes after zero." (22) Why 16 minutes was chosen, and not 15 or 20 is anyone's guess. It is clear that the level of precision in timing operations had taken a significant leap. This kind of precision could only be possible if watches were worn by a majority of the participants involved. Further guidance in this order reinforces this point:

> The right company commander will pay particular attention to the making of a special disposition in the vicinity of the raid and will detail a reliable N.C.O. to take up a position inside our trench at our northernmost tape. The N.C.O. will be provided with a watch, which will be synchronized at Advance Headquarters, Dugout F.33, at 1:45 a.m. At 2:15 a.m. this N.C.O. will fire a succession of Very Lights toward our support line in a northwesterly direction. (24)

Later in the year, the timing became almost ridiculously precise, as an order dated October 2, 1917, indicates. Its plan specifies that troops were to be ready to enter the lines at zero + 4 minutes, follow the barrage, enter the second objective at zero + 11 minutes, and needed to be clear of a certain line on a map by zero + 41 minutes. (34) These precise timings were obviously intended to aid the artillery in adjusting fires, but it seems a bit extreme to have expected troops to track such precise timings in the heat of battle, watches or no watches. As with the rest, this order ends with the seemingly obligatory watch synchronization information. Interestingly, none of this impressive detail, especially the requirement of the watch synchronization instructions, made it into 1918's *Tactical Order for Small Units in Trench Warfare* document, or the *Infantry Drill Regulations (Provisional)* of 1919.

In 1918, doctrine appeared to have caught up with the current tactics. All of these sources stress the importance of time, referring to intelligence collection, coordination of the attack, and other battlefield systems. *Scouting and Patrolling*, a reprint of an official British document, discusses training of scouts. In particular, it directs them to note the time they depart and to track distances by time. (10-11) Obviously the scouts were expected to have watches. Under the section on night patrolling, the manual insists "All concerned must be notified of the place and time of the departure and return of the patrol." (20) It could not be expected that

an officer would always be with either the patrol or at the point of exit and return, indicating that watches were prevalent enough to assume that parties at both locations would have access to one. The manual also addresses the luminous dials often associated (and ordered) with military wristwatches. In a section entitled "Seeing Without Being Seen," the manual warns:

> Many a casualty has occurred from want of thought. A luminous wristwatch, striking a match, a lantern torch, or cigarette exposed are often causes of fatal results. Men must be trained to think. (23)

Questions For a Platoon Commander, which appeared in April 1918, was a four-page "cheat sheet" to help platoon commanders ensure they were addressing everything within their area of responsibility. Notable among these items were "Do I understand the barrage lines and timing of lifts in the Artillery Program?" and "Is my watch synchronized?" Again, it is puzzling why this second question was not reflected in the orders section of the 1919 *Infantry Drill Regulations (Provisional)*. What the new drill manual did recognize, however, was the decentralized nature of open warfare. The manual advocated advances by infiltration or rushes of small units, not necessarily led by officers. These skirmishers were to advance by individuals or squads, only to rejoin with their Platoon Leader after a predetermined terrain feature had been achieved. (Hamburger 24) There can be no doubt that these types of tactics would not have worked if the officers were the only ones carrying a watch.

The historical evidence subtly confirms that the wristwatch was present on both sides of the conflict in large numbers, and that it was a new technology that enabled the groundbreaking tactical developments in the latter stages of World War I. There is, however, a lack of quantifiable data that proves the significance of this major horological achievement. General statements by watch company websites, wristwatch history books, or military journals can only be verified by looking at official World War I documents through a specific filter. Unlike weaponry, aircraft, or vehicle advances, the role the wristwatch played in the war has been largely ignored or discounted. Much like today, the availability of the correct time on the wrist was taken for granted during the Great War, as if it had always been there.

Works Cited

Army War College. *Supplement to Instructions (Provisional) Issued January 8, 1916 on the Offensive of Small Units.* Washington: GPO, 1918.

Army War College. *Scouting and Patrolling.* Washington: GPO, 1918 (Reprint from an official British Document).

Army War College. *Instructions on the Offensive Conduct of Small Units (translated from the French Edition of 1916).* Washington: GPO, 1917.

Dickman, J.C. "Field Orders, Messages, Reports, etc." *General Services and Staff College Lectures.* Ft. Leavenworth, 1903. Reprinted as *Infantry and Cav School Lectures.* Wisconsin: Brookhaven Press, 2000. 1-25.

Fangboner, Donald. "The Wristwatch Comes of Age." *Military Collector & Historian 26* (1984): 31-2.

Finlayson, Kenneth. *An Uncertain Trumpet.* Connecticut: Greenwood Press, 2001.

Fitch, Roger S. *Estimating Tactical Situations and Composing Field Orders.* Kansas: Ft. Leavenworth, 1909.

Hamburger, Kenneth. "Learning Lessons in the American Expeditionary Forces." *Center for Military History.* 11 Nov. 2004 < http://www.army.mil/cmh/brochures/aef/aef.htm>.

Swift, Eben. *Field Orders, Messages, and Reports.* Washington: GPO, 1906.

U.S. Army. *Notes on Infantry Attacks and Raids.* Washington: GPO, 1917.

U.S. Army. *Infantry Drill Regulations (Provisional) 1919.* Washington: GPO, 1919.

Von Kielsing, Hans. *Battle Orders.* Missouri: Franklin Hudson P., 1911.

War Department. *Tactical Order for Small Units in Trench Warfare.* Washington: Office of the Adjutant General, 1918.

War Department. *Questions for a Platoon Commander.* Washington: War Plans Department, 1918.