World War I and the Invention of American Intelligence, 1878 - 1918

by

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

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At the beginning of this preface I said that the writing of this dissertation did not blight my life. Sadly, I fear that it *did* blight the life of my wife, Pam. Accordingly, I dedicate this work to her. Perhaps it will be useful as fire-starting material on a cold winter evening.

Abstract

Intelligence changes as the nature of war changes. From the late 1870s, the United States military, as part of a broader reform process, began learning about intelligence in part from experience but more importantly by observing the practices of the great powers of Europe. The period of American involvement in World War I saw a rapid acceleration of this development, with the United States continuing to learn from the United Kingdom and France. The war also saw intelligence spreading into fields that it had seldom if ever entered in the American experience. During the nineteen months of American belligerency American intelligence agencies, notably the War Department's Military Intelligence Division and the Navy Department's Office of Naval Intelligence expanded greatly. In addition, the services started to adopt high technology tools such as aerial photography and signals intelligence. These new tools required the admission into the military departments and services of esoteric specialists who did not fit previous military stereotypes. The war also occasioned a vast expansion of domestic surveillance and intelligence, a result of the idea that the World War was a struggle not only of militaries but of entire societies. Espionage, too, grew in extent and sophistication and the moral stigma associated with it began to erode. Overseas, the American Expeditionary Force (AEF) in France grew its own large intelligence staff. All of these measures allowed General John J. Pershing, the AEF's commander, as well has other American leaders to be better informed than they had ever been during previous wars.

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Introduction

'To each epoch—its own wars', Lenin wrote in the margin of his copy of Clausewitz.[1] In this, if little else, he was correct. It is now axiomatic that new economic or societal structures, cultural changes, and new technologies all lead to new forms of war. Less attended to, however, is the fact that new forms of war lead to new forms of intelligence. Though World War I had some similarities to wars that had preceded it, notably the American Civil War and the Russo-Japanese War, the feeling at the time was that it was an utterly new type of war and indeed there is much justification for that feeling. Scholars have already pointed out the role of the Great War in reshaping the intelligence practices of the belligerents. One scholar-practitioner has observed that 'total war needed total intelligence; foreign military power had come to depend on factors of industrial capacity, demography and morale which fell outside the analysis of normal military and naval intelligence'.[2] By the same token, as another scholar has observed, those countries which played only marginal roles in the war lacked the motivation and the insight necessary to reform their intelligence services.[3] However, hitherto virtually all the scholarly attention given to this subject has involved assessment of the intelligence services of belligerents other than the United States.

This dissertation, then, will discuss how the United States expanded and shaped its intelligence organizations and ideas to fit the new circumstances of World War I. It will demonstrate that World War I saw America's invention of modern intelligence. Of course, 'invention'does not mean that the Americans were the first to

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[1] Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War*, (Oxford, 2001), p. 504.
[2] Michael Herman, *Intelligence Power in War and Peace*, (Cambridge, 1996), p. 25.
[3] Ken Kotani, *Japanese Intelligence in World War II*, (New York, 2009), pp. 8, 99.

invent intelligence. (The old joke, of course, is that intelligence is the second oldest profession.)[4] As newcomers to this activity, the Americans both could and did profit from the experience of others. Much of this work will therefore describe how and what the Americans learned from the Germans, the French, and the British. However, its central purpose is to demonstrate that the United States invented modern intelligence for itself, to analyse how it did so, and to show what Americans thought their invention was. The primary contention of this dissertation, then, will be that the World War I period and the years immediately preceding it have a strong and hitherto unrecognized claim to having given birth to modern American intelligence.

Merely by looking at the amount of history published about the various topics it is easy to discern the emphasis that intelligence historians have placed on World War II and the early Cold War at the expense of earlier periods. Countless volumes about American intelligence during World War II and the early Cold War fill library shelves while one has to search hard for anything written on intelligence during the Great War. The dichotomy grows even sharper when one visits an American bookstore.[5] A recent bibliographical work on World War I discusses work done on the intelligence activities of most of the major combatants but almost entirely neglects American intelligence, mentioning only a journal article about the American

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[4] More seriously, intelligence is, indeed, an ancient endeavour. Rosemary Sheldon has made her career as a historian of intelligence in the classical world. See, for instance, her *Intelligence Activities in Ancient Rome: Trust in the Gods, But Verify*, (London, 2005) and *Operation Messiah: St. Paul, Roman Intelligence, and the Birth of Christianity*, (Portland, 2008). Ralph D. Sawyer's, *The Tao of Spycraft : Intelligence Theory and Practice in Traditional China*, (Boulder, 1998), is an encyclopaedic consideration of the topic in ancient China. Primary source works from the ancient world that contain serious discussions of intelligence include Sun Tzu's *Art of War* and Kautilya's *Arthashastra*, a text on politics and statecraft in India that is often compared to Machiavelli's *The Prince*.

[5] J. Ransom Clark, a former senior CIA official turned academic, maintains a remarkably thorough and discerning bibliography of intelligence literature : http://intellit.muskingum.edu/maintoc.html. The World War II section of the bibliography is at http://intellit.muskingum.edu/wwii_folder/wwiitoc.html. The majority of the rest of the site is devoted to Cold War intelligence.

Expeditionary Force's propaganda operations and another on American collection operations against Japan from 1915 to 1935.[6] The lion's share of what has been written about the World War I period deals with the domestic surveillance operations conducted by the Army and Navy and the use of the intelligence agencies to oppress out groups.[7] The standard published history of War Department intelligence to 1941 is an official history and is indispensable for its organizational information but largely devoid of interpretive content.[8] In the 1970s, Marc Powe wrote a fine master's thesis, later published, on the War Department's intelligence structures from 1885-1918.[9] Jeffrey Dorwart has written an outstanding thin volume about the ONI covering its establishment through World War I and emphasizing its reformist pedigree. His second volume covered the period 1919 to 1945 and emphasized ONI's involvement in domestic intelligence.[10] The only other general history of ONI covering the period in question that has come out in the nearly thirty years since Dorwart's books were published is a bland official history.[11]

With regard to particular collection disciplines or operations, Terrence Finnegan recently published an exemplary book comparing the aerial reconnaissance

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[6] Robin Higham with Dennis E. Showalter, eds., *Researching World War I: A Handbook*, (Westport, 2003).

[7] For examples, see Joan M. Jensen, *Army Surveillance in America, 1775-1980*, (New Haven, 1991) and Roy Talbert, Jr., *Negative Intelligence: The Army and the American Left, 1917-1941*, (Jackson, 1991). Joseph W. Bendersky, *The "Jewish Threat": Anti-Semitic Politics of the U.S. Army*, (New York, 2000), especially Chapters 1 and 2. See also Wray R. Johnson, 'Black American Radicalism and the First World War: The Secret Files of the Military Intelligence Division', *Armed Forces & Society*, 26:1, (Fall, 1999), pp. 27-54. Robert C. Cottrell, 'Roger Nash Baldwin, the National Civil Liberties Bureau, and Intelligence during World War I', *Historian*, 60:1, (Fall, 1997), pp. 87-106.

[8] Bruce W. Bidwell, *History of the Military Intelligence Division, Department of the Army General Staff: 1775-1941*, (Frederick, 1986). There is some useful material in the similarly non-interpretive John Patrick Finnegan, *Military Intelligence*, (Washington, 1998).

[9] Marc B. Powe, *The Emergence of the War Department Intelligence Agency, 1885-1918*, (Manhatten, 1975).

[10] Jeffery M. Dorwart, *The Office of Naval Intelligence: The Birth of America's First Intelligence Agency, 1865-1918*, (Annapolis, 1979) and *Conflict of Duty: The U.S. Navy's Intelligence Dilemma, 1919-1945*, (Annapolis, 1983).

[11] Wyman H. Packard, *A Century of US Naval Intelligence*, (Washington, 1996).

practices of the British, French and Americans during the war.[12] Some fifty years ago Sam Frank wrote a fine dissertation on American aerial 'observation' during the war.[13] David Kahn's massive *The Codebreakers* devotes parts of two chapters to American signals intelligence (Sigint) during the war.[14] A few other scholars, most of them officials of the National Security Agency, have written articles about tactical intelligence operations, particularly in the realm of Sigint, during World War I.[15] There has been significant coverage of the State Department's human intelligence activities, but only one book, Rhodri Jeffreys Jones' *American Espionage: From Secret Service to CIA*, takes a Washington-centric approach, and it is marred throughout by an explicit tendency to portray intelligence activities as intrinsically sinister.[16] The rest, of varying quality, concentrates on operations in Russia or those mounted by particular individuals.[17] Charles Harris and Louis Sadler have written an

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[12] Terrance J. Finnegan, *Shooting the Front: Allied Aerial Reconnaissance and Photographic Interpretation on the Western Front—World War I*, (Washington, 2006).
[13] Sam Hager Frank, 'American Air Service Observation in World War I', (unpublished doctoral dissertation, University of Florida), 1961.
[14] David Kahn, *The Codebreakers: The Story of Secret Writing*, (New York, 1996), chapters 11 and 12.
[15] All of the following articles from NSA were obtained through the Freedom of Information Act: [name redacted], 'The Origination and Evolution of Radio Traffic Analysis: The World War I Era', *Cryptologic Quarterly*, 6:1, (1987), pp. 21-40. William. F. Friedman, 'A Brief History of U.S. Cryptologic Operations 1917-1920', *Cryptologic Spectrum*, 6:2, (Spring, 1976), pp. 9-15. [redacted], 'COMINT and COMSEC: The Tactics of 1914-1918', *Cryptologic Spectrum*, Summer, 1972, pp. 5-9. [redacted] 'COMINT and COMSEC: The Tactics of 1914-1918—Part II', *Cryptologic Spectrum*, Fall, 1972, pp. 8-11. [redacted], 'The Many Lives of Herbert O. Yardley', *Cryptologic Spectrum*, 11:4 (Fall, 1981), pp. 5-29. For an article on this topic (apparently) not by an NSA veteran, see William A. Morgan, 'Invasion on the Ether: Radio Intelligence at the Battle of St. Mihiel, September 1918', *Military Affairs*, Vol. 51, No. 2 (Apr., 1987), pp. 57-61.
[16] Rhodri Jeffreys-Jones, *American Espionage: From Secret Service to CIA*, (New York, 1977).
[17] Richard B. Spence, 'The Tragic Fate of Kalamatiano: America's Man in Moscow', *International Journal of Intelligence and Counterintelligence*, 12:3, (1999), 346-374. Klaus Schwabe, 'U.S. Secret War Diplomacy, Intelligence, and the Coming of the German Revolution in 1918: The Role of Vice Consul James McNally', *Diplomatic History*, 16:2 (1992), 175-200. John F. Chalkley, *Zach Lamar Cobb: El Paso Collector of Customs and Intelligence During the Mexican Revolution, 1913-1918*, (El Paso, 1998). David A. Langbart, '"Spare No Expense": The Department of State and the Search for Information about Bolshevik Russia, November 1917-September 1918', *Intelligence and National Security*, 4:2,

illuminating book about an archaeologist commissioned into ONI and sent to find (nonexistent) German submarine bases in Central America.[18] John Votaw has penned a useful dissertation on American military attachés 1885-1919.[19] Finally, Jim Beach has written an excellent article on US-British intelligence liaison during the war.[20]

As sparse as that literature is, historians of intelligence have paid more attention to World War I than historians of World War I have paid to intelligence. Indeed, intelligence scarcely appears in the standards histories of the war. For instance, Marc Ferro's *The Great War 1914-1918* does not discuss the topic, though it does contain a very useful discussion of the breadth of the war from the trenches to propaganda to economics, the rich context within which modern intelligence came to operate.[21] John Keegan's *The First World War*, contains several short discussions of intelligence matters, but none refers to the United States.[22] The works of Stevenson and Strachan deal even less with intelligence.[23] Edward M. Coffman's, *The War to End All Wars: The American Military Experience in World War I*, makes only glancing reference to the topic and contains no discussions of intelligence itself.[24] The word 'intelligence' does not appear in the index of Paul G. Halpern's

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(1989), 316-334. David A. Langbart, 'Five Months in Petrograd in 1918: Robert W. Imbrie and the US Search for Information in Russia', *Studies in Intelligence*, 52:1 (March 2008), Web Supplement, https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol-52-no-1/pdf-files/(U)%20Langbart-Petrograd-Web%20Supplement.pdf, accessed 4 May 2008. David Scott Foglesong, 'America's Secret War Against Bolshevism: United States Intervention in the Russian Civil War, 1917-1920', (unpublished doctoral dissertation, University of California, Berkeley), April 1991.

[18] Charles H. Harris III and Louis R. Sadler, *The Archaeologist Was a Spy: Sylvanus G. Morley and the Office of Naval Intelligence*, (Albuquerque, 2003).

[19] John F. Votaw, *United States Military Attachés, 1885-1919: The American Army Matures in the International Arena*, (unpublished doctoral dissertation, Temple University), April, 1991.

[20] Jim Beach, 'Origins of the Special Intelligence Relationship? Anglo-American Intelligence Cooperation', *Intelligence and National Security*, 22:2, (2007), pp. 229-249.

[21] Marc Ferro, *The Great War 1914-1918*, (Boston, 1973).

[22] John Keegan, *The First World War*, (New York, 1999).

[23] David Stevenson, *1914-1918: The History of the First World War*, (New York, 2004). Hew Strachan, *The First World War*, (New York, 2006).

[24] Edward M. Coffman, *The War to End All Wars: The American Military Experience in World War I*, (Lexington, 1998).

authoritative *A Naval History of World War I*.[25] William N. Still's massive *Crisis at Sea: The United States Navy in European Waters During World War I* contains an excellent discussion of the friction between Admiral Sims' staff and ONI. It then promptly drops the subject.[26] Nor yet do 'war and society' works, such as Jennifer Keene's *Doughboys, the Great War, and the Remaking of America*, devote any appreciable attention to it.[27]

Considering the scope of American involvement in World War I and the extent of its intelligence activities, this is not a great amount of literature. This is regrettable because by the end of the World War I, while not a leader in intelligence, the United States was – as will be demonstrated - a respectable player in the field.

In discussing the growth and development of American intelligence during the war, this dissertation will not always adhere to a strictly chronological analysis of the nineteen months that the United States was a belligerent. Rather, the presentation will compare pre-war American ideas or practices with those in place on 11 November 1918. The intention here is to try to describe the ideas held by large numbers of Americans (albeit a small minority of the number of people in uniform or Federal service) on multiple continents, and also try to describe the coalescence of these people into a self-identified distinct professional community. However, ideas do not manoeuvre with the chronological crispness of military forces. We can pinpoint precisely the day, even the minute, when the American Expeditionary Forces (AEF) launched the St. Mihiel Offensive. It is altogether a different matter to pinpoint when, for example, technology became central to the American understanding of intelligence or when American intelligence personnel became believers in all-source

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[25] Paul G. Halpern's *A Naval History of World War I*, (Annapolis, 1994).
[26] William N. Still Jr., *Crisis at Sea: The United States Navy in European Waters in World*, (Gainesville, 2006).
[27] Jennifer Keene, *Doughboys, the Great War, and the Remaking of America*, (Baltimore, 2001).

analysis. Ideas usually change, even when they are in rapid flux, over comparatively long periods of time. Probing too deeply inside the chronology of a nineteen month period that saw dizzying, enthusiastic, and untidy change would require making unwarranted assumptions about causality, not to mention introducing confusing and ultimately meaningless names, dates, and details.

This work focuses on the World War I period and devotes some attention to the thirty years preceding it. However, the United States did have some experience with intelligence even before that time. In fact, over the course of American history, intelligence has undergone multiple periods of mass extinction. General George Washington was an enthusiastic and capable practitioner of intelligence during the Revolutionary period, but nothing continued of this through the subsequent decades as the US Army and Navy shrank and the country largely avoided contact with Europe.[28] Several decades later, some of the military commanders fighting for the United States and the Confederate States thought seriously about intelligence and developed capabilities in this direction during the Civil War (1861-1865). However, these concepts, and the *ad hoc* structures that instantiated them evaporated with the radical demobilization that followed the Confederate surrender at Appomattox. Two decades later, however, as a part of the reforms that eventually swept the U.S. Army and Navy, both services created intelligence offices that would endure. First came the Office of Naval Intelligence (ONI) in 1882, followed in 1885 by what eventually became known as the War Department's Military Intelligence Division (MID).[29]

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[28] For an overview, see United States Central Intelligence Agency History Staff, *Intelligence in the War of Independence*, (Washington, 2007), https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/intelligence/index.html. See also, John A. Nagy, *Invisible Ink: Spycraft of the American Revolution*, (Yardley, 2009).

[29] Though it had various names at various times, I shall refer to it as the MID throughout this work.

Of course, the services had long had the concept of intelligence support for commanders in the field or at sea and there were well-established literatures about and procedures for scouting, searching, and screening. ONI and the MID, however, were novel. Indeed, they were both symptoms of and active proponents of modernization. Their *raison d'être* was, in large part, the realization that in order to develop appropriate plans for mobilization and war and to ensure the procurement of modern weaponry, it was necessary to study foreign militaries and the terrain on which American forces might fight. These services gained the requisite information—about the mobilization capacities of the various nations, the latest European naval technology, etc.—mostly through overt measures: the legal work of military attachés, the scouring of professional journals, and the like. (The use of clandestine measures was a loathsome aberration confined almost exclusively to wartime.) Back in Washington, a tiny cadre of intelligence officers consigned this information to file cards, the most advanced information technology of the time, against the day when it might prove useful.

It was the fate of ONI and the MID that they should be created not long before the perceived nature of war radically changed. This change manifested itself in World War I, which the United States joined in 1917. An intelligence system optimized for wars similar to the U.S. Civil War or the Franco-Prussian War in which relatively small earthbound armies roamed relatively large theatres (or the naval equivalent of these) seeking each other out, would not do in the Great War. Now enormous armies spent every minute in contact along a generally static front while aircraft flew the skies above. Furthermore, the war was conducted not merely by destroying the enemy's military forces, but also by attacking the enemy's economy and industry, his

morale, and the political bonds that held ally to ally and held multiethnic empires together. Intelligence had to change to stay relevant.

American intelligence had to evolve very quickly because it was in the war such a short period of time and in serious combat even a much shorter time. The country declared war in April, 1917 and General John J. Pershing and the nucleus of his staff, including its intelligence component, arrived in Europe in June, 1917. The first American division, however, did not enter the front line trenches until January, 1918. This gave the AEF's intelligence personnel, almost all of them new to the discipline, several months to learn and prepare. Naval intelligence personnel had to spring into action rather sooner, doing counterintelligence work in and around the French ports which were receiving an ever-increasing number of troopships carrying doughboys. Even by January, however, AEF intelligence was scarcely ready for the 'Big Show'. Fortunately, for most of the next several months, the AEF experienced static warfare as it continued to grow and mature. Not until May 1918 when it became involved in repelling the spring German offensive did it face a more fluid situation. The AEF took a major part in stopping and then reversing these German gains, but by the second half of July, the situation was again largely static. Though Pershing's General Headquarters (GHQ) had existed from the time he came to France, the US First Army with its own staff and intelligence component was only established on 10 August and only assumed command of a sector on 30 August 1918. On 12 September, it mounted the first American offensive, the St. Mihiel Offensive, which crushed a long-standing German salient. On 26 September, shortly after the successful conclusion of the first offensive, the AEF launched its second and last, the Meuse-Argonne offensive. This effort, which in its waning days saw the establishment of the U.S. Second Army, lasted until the 11 November armistice.

This dissertation will examine the evolution of American military intelligence from the late nineteenth century until the end of the First World War. Chapter 1 will discuss the development of American thinking about intelligence between the 1880s, when it was reborn, and the outbreak of World War I. It will be shown that once the military services decided, as part of their reform efforts, that intelligence services were necessary, they tended to mirror the ideas and practices of France, Prussia and Britain, sometimes by imitation, sometimes through parallel development. These ideas were the topic of substantial debate in the military journals of the time. Chapter 2 describes the reinvention of intelligence by technology that took place with the invention of the aeroplane and continued with the flourishing of signals intelligence. An emphasis on technology is in the very genes of American thinking about intelligence. The development of overhead reconnaissance (primarily imagery intelligence) and signals intelligence forced the militaries to bring into their ranks specialists and intellectuals who would never previously have been found in uniform. Aerial photography and signals intelligence also brought in staggering amounts of data and immediately put the opposing forces into an offence-defence relationship analogous to that armour/anti-armour or airpower/air defence dialectics. Both information overload and this dialectic contributed to the bloating of military staffs.

Chapter 3 looks toward home and assesses attitudes toward and ideas about counterintelligence there. World War I was a total war of entire national systems in a way that no war before it had been and this placed unprecedented demands on intelligence systems. Belligerents thought that their adversaries could affect every aspect of the all-encompassing military system by means of spies, saboteurs, and propagandists. This threat demanded a response. Soon the military services, in cooperation with civilian organs of government, found themselves monitoring not

only the actions but the ideas of alien and citizen alike throughout the length and breadth of the country. Of course, individual opinions varied, but broadly speaking the officer corps flung itself enthusiastically into this work during the war, but immediately tried to distance itself from such matters once the war was over. In this latter endeavour it was to have only modest success.

Chapter 4 will look at clandestine operations, spying itself. Before World War I, the U.S. government most often used spies for their ability to observe military forces or infrastructure. Indeed, during the Civil War, 'spy' and 'scout' were interchangeable terms.[30] In short, spies were usually thought of as reconnaissance assets. The term 'secret service' was similarly muddled in its meaning, applying to espionage and even counterespionage but also to investigative work, especially criminal investigation.[31] The armed services seldom recruited spies as penetration agents to steal secrets from inside a government bureaucracy. This changed during the total war which was World War I as the services, even the State Department, started deploying more and more spies, often to collect information that would have seemed of scant interest to commanders and statesmen in previous wars. The State Department also began to deploy clandestine agents to gather military information in such places as revolutionary Russia, Switzerland, and the Mexican border. It also joined forces with the War Department to deploy a network of Czechoslovak agents in Central and Eastern Europe. Moreover, before World War I, spying, it was generally agreed, was an odious endeavour, tolerable only during wartime and under carefully circumscribed circumstances. World War I saw the beginning of the erosion of that idea.

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[30] William B. Feis, *Grant's Secret Service*, (Lincoln, 2002), p. 3.
[31] Edwin C. Fishel, *The Secret War for the Union: The Untold Story of Military Intelligence in the Civil War*, (Boston, 1996), p. 8.

Furthermore, the war saw the development of a new concept of geography in the mind of intelligence officers, at least those responsible for espionage. Instead of being built around the notion of physical geography, rivers, coasts, mountains, defiles, trench lines, etc., it was built around the question of *access*. How could the intelligence organizations insert a collector, a spy, into an area of interest and maintain two-way communication with him? The important factors were likely to be the existence or non-existence of diplomatic relations among countries, the sympathies of civilian populations on either side of the border, the degree of cross-border business or labour flows, the nature of the censorship regimes on the post and telegraphs and other such factors which were only tenuously related to physical geography.

Chapter 5 will look, then, at how intelligence supported the military commanders, with an emphasis on senior ground commanders. The American Expeditionary Forces (AEF) that deployed to Europe in 1917 modelled its intelligence staff on the British organization, but many of the field manuals and pamphlets on intelligence topics that the AEF disseminated to the troops were translations of French publications. Speaking with regard to counter-espionage and security functions in France, the US Naval Attaché found that it was best to study the 'French System' and then 'reinforce' it.[32] British and French instructors taught American intelligence personnel in many places. In short, Britain and France were the midwives to this conceptual birth a full generation before the British purportedly nursed the OSS. The intelligence staffs provided two particular types of support to their senior commanders. The first was providing the information needed to make decisions. The second involved securing the rear area of enemy forces, much as the United States

[32] R. H. Jackson to Director of Naval Intelligence, n.d., NARA, RG 38, Entry 98, E-9-a, 10670-C.

itself had to be kept secure from spies, saboteurs, and propagandists. The war also saw the first stirrings of a capability for the United States to conduct what are today called 'covert action' or 'covert influence' operations.

The work will close with a short final chapter describing how wartime developments launched the United States intelligence efforts into the immediate post-war years.

A few other remarks are in order. First, with the exception of short section in the final chapter this work does not attempt to assess the extent to which intelligence actually affected national policy or decisions by military commanders. There are two interlocking reasons for this. The focus here is on what intelligence was and how it was done. Given the paucity of studies of American intelligence during World War I, this seemed a logical place to start. The influence or utility of intelligence is a separate and only tenuously related question. Furthermore, attempting seriously to assess the influence of intelligence on decision-making would be a work in itself, probably much lengthier than this one. The reason for this is simple: decision-making is an opaque psychological process. The mere fact that an intelligence report was produced does not mean that it had influence. As a result, historians approaching this problem must go through the voluminous files of the commander in search of needles in a haystack which usually will only show that an intelligence report got near the commander, not that it influenced him. Furthermore, the same historian will also have to go through the intelligence files looking for tasking memos or marginal notations by the senior commander scrawled on returned reports.

The influence of secrecy makes judgments about effectiveness even more problematic. Richard Aldrich has famously cautioned against viewing intelligence

archives as 'analogues of reality'.[33] It is far from clear that commanders' files should be any more analogous to reality when intelligence matters are concerned. Further complicating the situation is the fact that because of secrecy, intelligence matters often (perhaps usually) do not appear in commander's memoirs even when they actually were important for decision-making. For an example, one need only note the fact that the Ultra secret was not revealed until 1973 by which time most of the senior commanders of World War II were dead.

Secondly, a word about sources might also be helpful. This dissertation uses a broad range of archival sources, contemporaneous journal articles, more recent secondary sources and, of course, memoirs. However, the use of memoirs has been carefully circumscribed. Relatively free use has been made of the memoirs of non-intelligence personnel and of intelligence personnel involved in relatively unglamorous endeavors, but memoirs written by 'spies' have generally been avoided. Civil War espionage literature and World War II espionage literature are filled with exaggerations and fabrications.[34] It seemed likely that World War I espionage literature would suffer from the same defects; the few such works that I dipped into did not fill me with confidence. The one such work that is used, the autobiography of Emmanuel Victor Voska, is backed up by archival sources and the writings of others including his contemporaries.[35] That said, I have been unable to avoid depending upon Voska's account for certain details.

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[33] Richard Aldrich, *The Hidden Hand: Britain, America and Cold War Secret Intelligence*, (New York, 2001), p. 6.

[34] On the Civil War, see Fishel, *The Secret War for the Union*, pp. 2-3. On World War II, see Nigel West, *Counterfeit Spies: Genuine or Bogus? An Astonishing Investigation into Secret Agents of the Second World War*, (London, 1998).

[35] Emanuel Victor Voska and Will Irwin, *Spy and Counterspy*, (London, 1941). There is one biography of Emanuel Voska, unfortunately, it is written in Czech: Ivan Brož, *Masarykův Vyzvědač*, (Prague, 2004).

Thirdly, this work contains more than the usual number of quotations from the participants. This has been a conscious choice. Ultimately, this work tries to describe the thoughts and beliefs of a group of people. It seemed not merely presumptuous but, in fact, actually counterproductive to gag these people assuming that I could speak for them better than they could for themselves. Of course, I would like to think that my words—the inferences I drew about what was going on in the heads of intelligence personnel of the time—are sound and persuasive. However, I wished to provide another, perhaps more osmotic, way of getting my points across: by letting the protagonists speak for themselves.

Note on Agencies and Organizations

Though this history does not focus on the development of bureaucracies most of the action it recounts took place within bureaucracies. Thus, a brief overview of organizational issues may be a useful aid to what follows. During World War I, the United States had several sizeable intelligence organizations. The War Department (and its Army), the Department of the Navy, and the Department of State were the three most important players on the intelligence stage, though a wide variety of other agencies, most notably the Bureau of Investigation, played supporting roles. Though the State Department played an important, if largely informal, central role in coordinating much of the intelligence effort, by far the lion's share of intelligence personnel were attached to the War Department or Army, be it in the Military Intelligence Division stateside or in the AEF.

War Department

In the months before America's entry into the war, Major Ralph Van Deman in the War College Division had been agitating for the creation of a War Department intelligence organization, the previous one having been effectively abolished a few years earlier as an unintended consequence of the Root Reforms. In early May 1917, a month into America's war, when the War Department finally established the 'Military Intelligence Section' in the War College Division, it placed Van Deman in charge. He held this position for approximately a year, earning the moniker 'Father of American Military Intelligence'.[36] The organization went through various names in the course of the war, eventually becoming the Military Intelligence Division of the

[36] After the war, Van Deman oversaw security for the American delegation at the Versailles peace talks. He then returned briefly to the MID in a largely advisory capacity. He later commanded a regiment, a brigade and, finally, as a Major General, the 3rd Infantry Division. After retirement, he ran an investigative service, seeking out subversives. During World War II he briefly did some consultative work for the War Department.

General Staff, boasting 1159 civilians and 282 military personnel shortly after the war ended.[37]

By the end of the war, the MID was divided into two branches: 'Positive Branch' and 'Negative Branch'.[38] (See Figure 1.) The primary business of the former was to gather and assess information concerning the enemy and the outside world. The primary business of the latter was counterintelligence: finding out and thwarting the plans and operations of the enemy's spies, saboteurs, and propagandists and, indeed, anyone whose actions were comparable in effect to those of enemy agents.

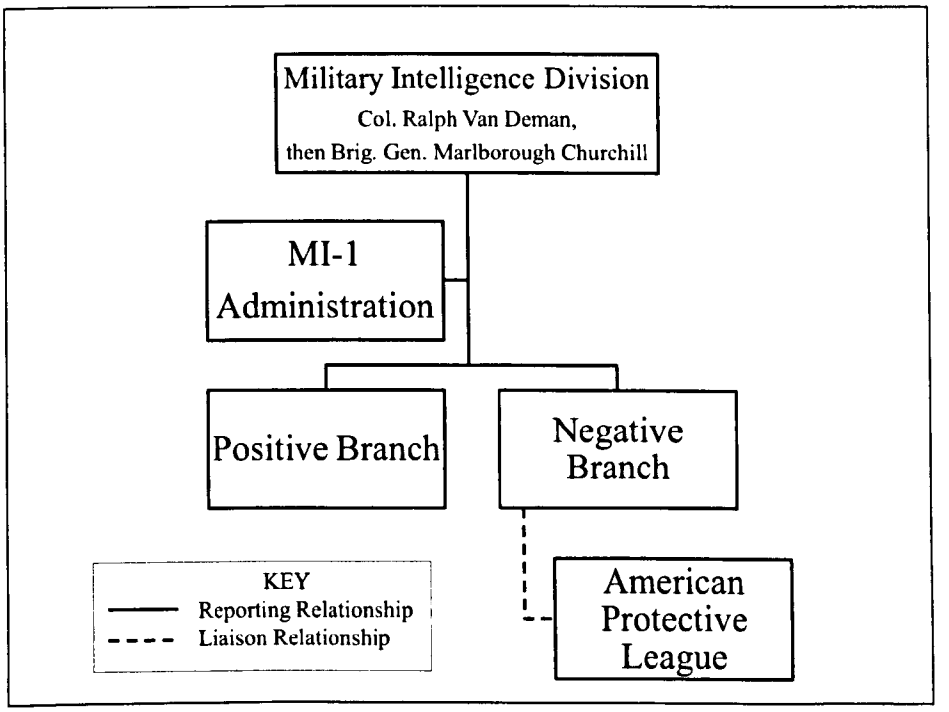

Figure 1 MID Organization

Within the Positive Branch (See Figure 2.), MI-2, the 'Foreign Intelligence' section, with its Combat, Economic, Political, Psychological and Monograph subsections, did most of the analysis and assessment. (John Foster Dulles headed the Economic Subsection for a time.) The Combat Subsection also came to be

[37] Bidwell, *History of the Military Intelligence Division*, pp. 110-111.
[38] For outlines of the functions of the Positive and Negative Branches, see Bidwell, *History of the Military Intelligence Division*, Chapters IV and V, respectively.

responsible for maintaining situation maps and also an order of battle of the American Expeditionary Force, not to mention other similar tasks that might, more properly, have gone to the Adjutant General. The Psychological Subsection, in fact, did both analysis and some actual propaganda and counter-propaganda work.

MI-5 was the 'Military Attaché' section, the office in charge of administering the work of attachés, the MID's primary intelligence collectors abroad. MI-8, under the famous Major Herbert O. Yardley, was publicly described as the 'Cable and Telegraph' section, but in fact, was the 'Code and Cipher' section, responsible for protecting War Department communications and breaking into adversary communications, both written and electronic. Though these were the key sections of the Positive Branch, only MI-2 was firmly and unambiguously focused on 'positive intelligence'.

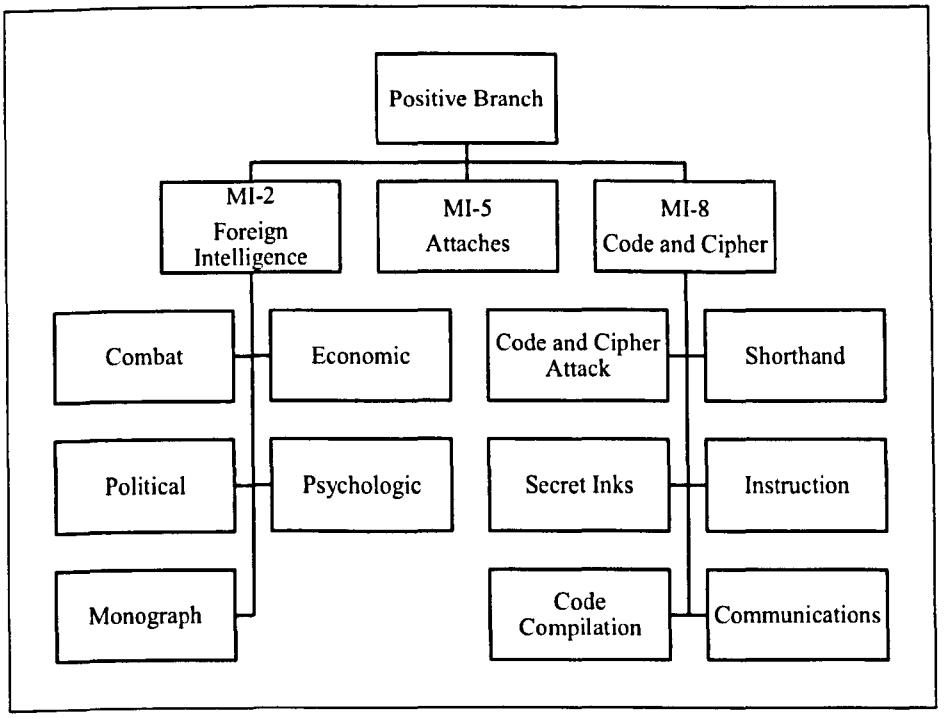

Figure 2 Selected organizations of MID's Positive Branch.

To grapple more directly with counterintelligence, the MID gathered several sections into a new 'Negative Branch' in late August 1918. (See Figure 3.) Its most important sections were MI-3, 'Counter-Espionage in the Military Service'; MI-4 'Counter-Espionage Among the Civilian Population'; and MI-10, 'Censorship'. (Despite its name, MI-10 also collected signals intelligence, as we shall see.) The Plant Protection Service, while not formally a part of the MID, was co-located with MI-3. Also working closely with MI-3 was the 250,000-strong American Protective League (APL), the largest of several voluntary association of patriotic Americans that busily looked for spies.[39] The MID also had offices devoted almost exclusively to negative intelligence in each of the military 'departments' into which the country was divided not to mention offices in several major cities.[40]

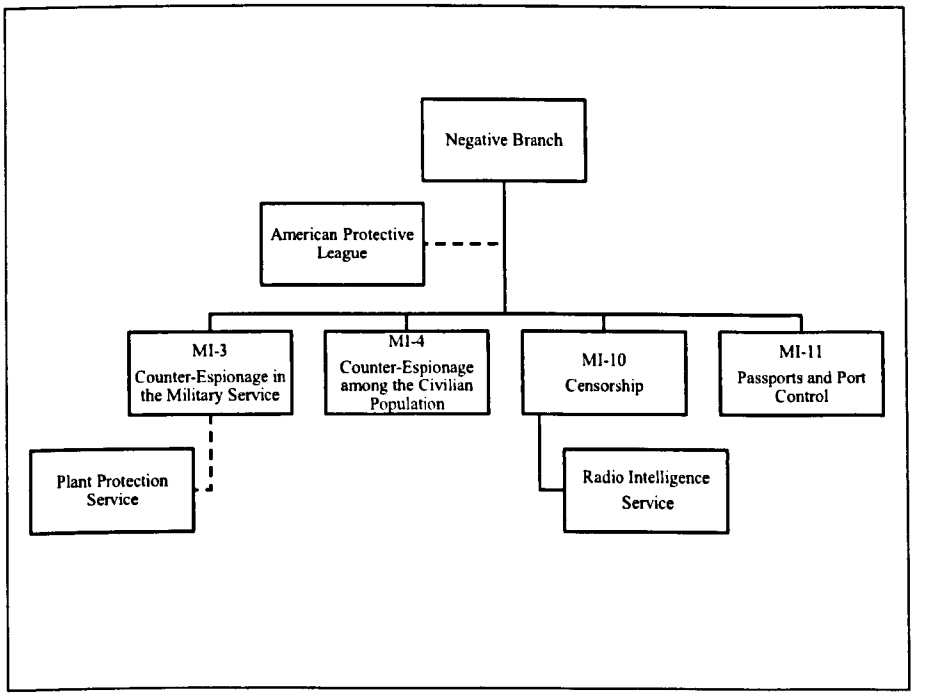

Figure 3 Selected organizations of MID's Negative Branch.

[39] The standard history of the APL is Joan M. Jensen, *The Price of Vigilance*, (Chicago, 1968).

[40] For discussions of the departmental and local offices respectively, see 'History of the Military Intelligence Division', 21 July 1919, pp. 1485-1559 and pp. 1560-1638, NARA, RG 319, Entry 'Historical Studies of G-2 Components, 1918-159', boxes 21, 21A, 22. Hereafter, *MID History*.

While the MID's organization was not firmly set until the last few months of the war, Pershing's AEF approached the problem in a more organized fashion. His inner core of staff hashed out their general organizational system on the ship that took them to Europe in the spring of 1917. They based their system on the Napoleonic staff system, under which the intelligence section would be known as G-2. The leadership of G-2 fell to Brigadier General (as he eventually became) Dennis Nolan.

Most closely corresponding to the MID's Positive Intelligence Branch was G-2-A, under Colonel Arthur Conger. The core of the section was G-2-A-1, the 'Battle Order' subsection. Using every scrap of information available, including the reports from the observation of trains by agents behind enemy lines, it assessed German strength. G-2-A-3, 'Enemy Works' received all aerial photographs and was responsible for assessing enemy intentions based on their trenching activities and other similar phenomena. G-2-A-6, the section with which Nolan was most impressed did 'radio intelligence' collection. G-2-A-7 was responsible for tracking enemy air deployments and technical developments. It also administered the 'Branch Intelligence Officers' deployed down to lower-echelon aviation units.

G-2-B was the repository for both the espionage and counterespionage sections and its officers were largely drawn from Reserve officers who had lived or studied abroad. Nevertheless, Nolan found that 'plots and counterplots' were but a 'minor part' of the overall work of the G-2.[41] G-2-C and G-2-D were responsible for topography and censorship, respectively.

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[41] Dennis Nolan typescript, pp. 178, 185-186, Dennis Nolan Papers, Box 2, Folder 'Second Draft of His Proposed History of World War I', United States Army Military History Institute, Carlisle, PA. . Hereafter Nolan, 'History', and USAMHI.

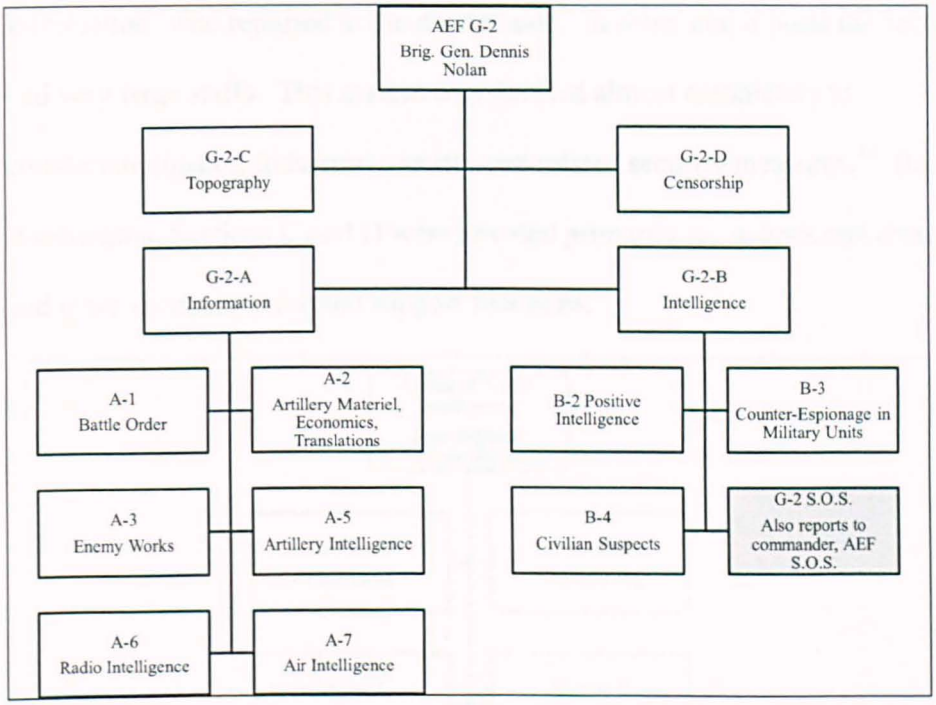

Figure 4 Selected AEF G-2 organizations as of November 1918.

The Navy

Though the Office of Naval Intelligence (ONI) existed when the US entered the war, it never grew as large as the MID. Indeed, as of July 1918, ONI's central office consisted of only some 92 officers plus others in support under Captain Roger Welles. ONI was divided into eight sections as of May 1918. (See Figure 5.) (A reorganization later in 1918 expanded the number of sections, but kept ONI's structure broadly similar.) Section A was the heart of ONI. It provided guidance to the Naval attachés abroad and managed clandestine foreign collection. Most importantly, it also conducted a variety of domestic counterintelligence functions, notably overseeing the work of naval intelligence offices around the country. Much like the War Department with its 'departments', the Navy, during this period, divided the United States into 15 naval 'districts' each subdivided into sections. Each district

had an 'aide for information' who reported to ONI. Each section had an 'aide for information' who reported to the district aide. In some major ports the section aides had very large staffs. This system was devoted almost completely to counterintelligence, industrial security and related security measures.[42] Back in Washington, Sections C and D were devoted primarily to analysis and dissemination and other sections performed support functions.

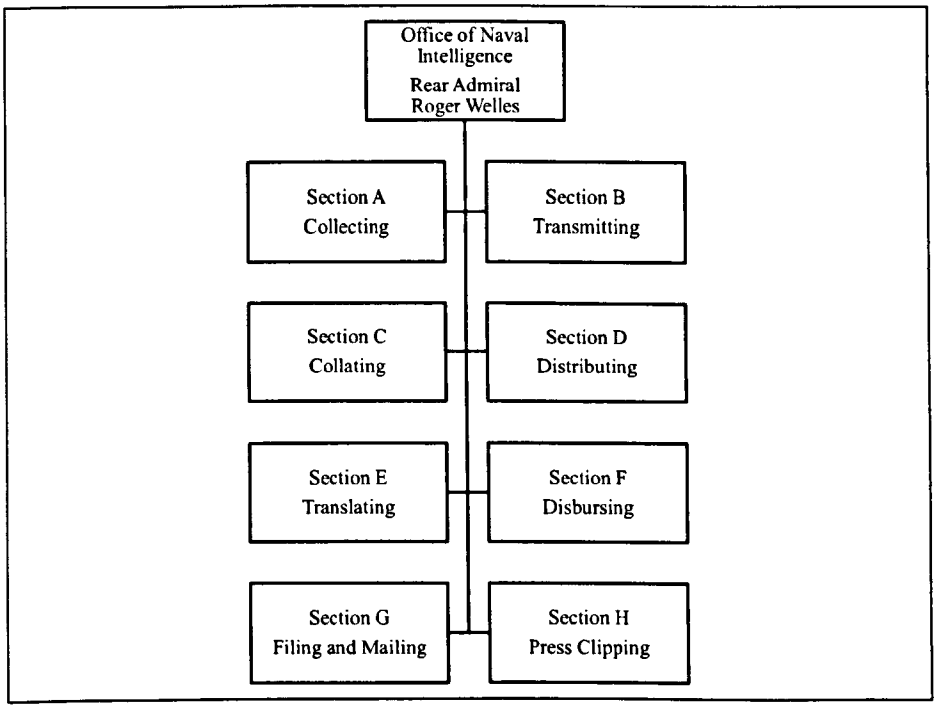

Figure 5 Organization of ONI as of May 1918.

[42] 'Office of Naval Intelligence, Division of Operations, Navy Department', 25 May 1918, NARA, RG 38, Entry 98, E-9-a, Register 10670A. For other descriptions of ONI organization slightly later in 1918, see. Packard, *A Century of U.S. Naval Intelligence*, p. 331. *History and Aims of ONI*, pp. 16-17.

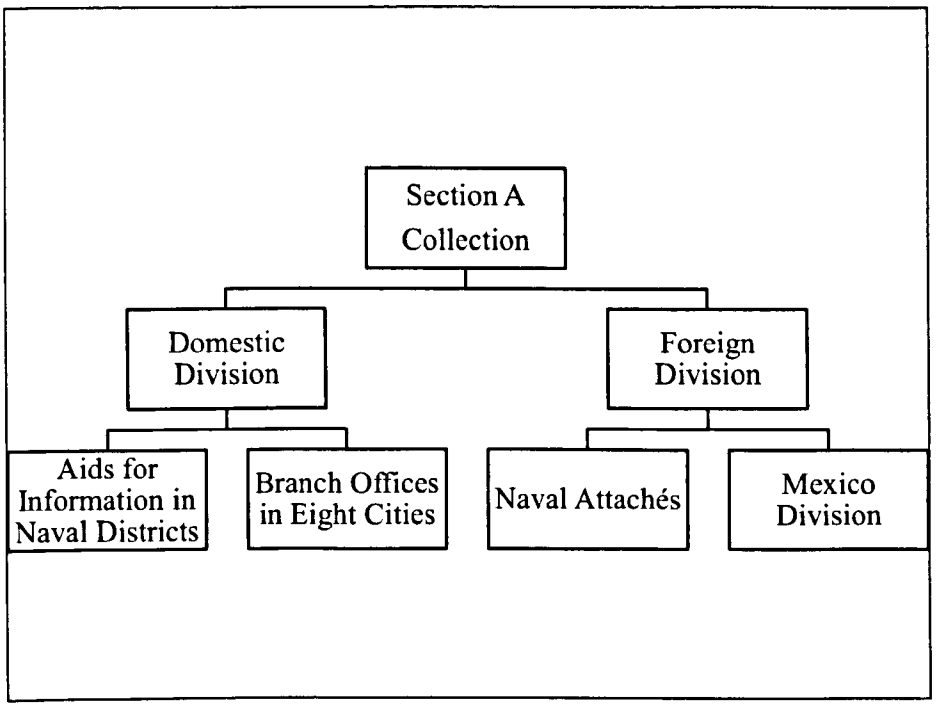

Figure 6 ONI Section A as of May, 1918.

The State Department

The State Department, which got into the intelligence field in 1915, was the closest thing to a central interagency coordinator of intelligence that existed in the US government. In theory, the direction within the department came from the Office of the Counselor, the number two man in the Department. The Counselor was Frank Polk, but he left most of the intelligence work to his subordinate, Leland Harrison and the 'Bureau of Secret Intelligence'.

Harrison, a 'mysterious and secretive man', a 'human sphinx', was deeply interested in espionage and he worked well with Ralph Van Deman in the War Department.[43] Under his tutelage, the State Department acquired intercepted telegrams, many of which it sent to Van Deman's people. It also coordinated a small array of Foreign Service and Consular Officers and agents of the Justice Department's

[43] Herbert O. Yardley, *The American Black Chamber*, (New York, 1981), p. 108.

Bureau of Investigation, Secret Service, and other organizations who did clandestine human intelligence collection on both political and military questions in such places as Switzerland, revolutionary Russia, and the Mexican border area. Much of the intelligence from these operations made its way back to the MID and ONI both of which, in exchange, shared a good deal of their own materials with the Department.

The State Department was also deeply involved in intelligence liaison with several governments. By far the closest such relationship was with Britain. The diplomat Edward Bell, assigned to the Embassy in London, developed firm ties with Admiral Hall's Naval Intelligence Division (NID) and other British intelligence agencies. While Hall shared relevant selections of his naval SIGINT with the US Navy, it was Bell, perhaps alone among American officials, who was truly in his confidence. With Bell he shared the results of his valuable diplomatic signals intelligence efforts. Bell, in turn, shared telegrams intercepted or clandestinely acquired by the Americans, with the NID.

Chapter 1

To the Eve of War

> *Just as we are superior to Europe in commercial organization, continental Europe is superior to us in military organization, and we cannot do better than to study the most advanced of our rivals as in commercial affairs they study us; we need not basely imitate, but we must change and progress with the age and be satisfied with only the best.*
>
> –Captain T. Bentley Mott, U.S. Army, 1903[1]

Modern American intelligence gestated during the nearly forty years between the early 1880s and 1917 when the country entered World War I. The process began slowly as an integral part of the reform movement that swept the Army and Navy in the early 1880s then gained speed from there, though not without the occasional setback. Then 1917 and 1918 saw breathtakingly rapid developments and maturation of intelligence as we know it. It is true that during the American Civil War both sides had developed intelligence organizations and mounted intelligence operations. However, all were ad hoc and lacking intellectual grounding. Thus, after the war when there was a massive demobilization of even the victorious Union, military intelligence vanished without a trace.[2] However, by 1917, when the United States entered World War I, the country had already started to grapple with some of the structural issues on which modern intelligence attended: it had created intelligence offices in the Navy and War Departments (though the latter was temporarily abolished in 1906, its influence remained); it had dispatched naval and military attachés to numerous capitals; and it had created a general staff in the War Department and was

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[1] T. Bentley Mott, 'The Organization and Functions of a Bureau of Military Intelligence', *Journal of the Military Service Institution of the United States*, 32:122 (1903), p. 194. Hereafter *JMSI*.

[2] On Civil War intelligence see William B. Feis, *Grant's Secret Service: The Intelligence War from Belmont to Appomattox*, (Lincoln, 2002) and Edwin C. Fishel,, *The Secret War for the Union: The Untold Story of Military Intelligence in the Civil War*, (Boston, 1996).

on the cusp of doing the same in the Navy Department. Moreover, at the conceptual level, it had already produced its first serious work on intelligence, Arthur Wagner's Service of Security and Information; it had already been faced with the problem of security measures on the part of foreign governments, not to mention creating them itself; and largely without meaning to, it had created a small cadre of officers, such as Ralph Van Deman, who had real experience 'doing' intelligence. Finally, in doing all of these things, the United States had consciously drawn on European experience, much as it would continue to do during World War I itself.

After the Civil War, much of American society became seized of an ideology sometimes called 'business pacifism', which held that war was evil not only because it involved killing but also because it was destructive of wealth. Many Americans believed that peacetime militaries were parasitic. In the American mind social Darwinism meant the survival of the economically 'fittest', that is to say the most efficient producers. Business, most notably the railroad industry, thrived. Given this, American society had no intention of letting slip the dogs of war, except perhaps against uncooperative Indians - best to concentrate on progress and prosperity and leave such retrograde habits to Europeans.[3] American society thus looked with contempt upon the armed services. This disdain was persistent. Just months before the Spanish-American War in 1898, an officer of the Military Information Division, which had been ordered to establish a War Department museum, explained the many

[3] Ronald J. Barr, *The Progressive Army: US Army Command and Administration, 1870-1914*, (New York, 1998), p. 3. Samuel P. Huntington invented the term 'business pacifism'. See his *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, (Cambridge, 1957), pp. 222-24.

difficulties inherent in carrying out this order by reference to the fact that 'the people of the United States have no interest in warlike matters'.[4]

This lack of interest showed in the state of America's armed forces. During the late nineteenth century, the U.S. Army was a small force in which officer advancement was slow and based on seniority rather than merit. This resulted in a steadily aging officer corps which had little interest in innovation. The 'Commanding General' had nominal charge of the forces in the field, but no staff to help him with this task. Actually, there was little need for a senior general when the Army was so small and operated primarily in penny-packets against the Indians in the Great Plains. At one point, General William T. Sherman, the Commanding General (1869-1883), left the country on a trip to Europe for 10 months but the Army continued operating in his absence just as it had in his presence. For two years (1874-1876) Sherman even moved his headquarters to St. Louis, far from the Secretary of War and the President in Washington. The office was so irrelevant that its near total isolation, even in an era of primitive communications, from the seat of government mattered little.

Most Army units spent the post-Civil War years on the frontiers, alternately fighting Indians and staving off boredom far from the vital political and social centres. One general described the army as a fire brigade which sat around the firehouse playing checkers because it had no fires to fight. In fact, the prospect of a war against a European-style military seemed so remote that the very purpose of an army came into question within its own ranks. Some reform-minded officers even argued that the Army's primary function should be to serve as a national police force suppressing labour unrest and inculcating American values into immigrants.

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[4] Reichmann, 'Notes on the Military Information Division', n.d. [1898], National Archives and Records Administration, College Park, MD, RG 165, M1024, File 639/5. Hereafter NARA.

The real power was vested in the Secretary of War and the bureau chiefs in Washington who presided over a system oriented on the bureaucratic needs of a peacetime army. The staff officers in the bureaus had fought hard to get their comfortable positions which came with virtually life tenure. Needless to say, the concerns of the line officers hundreds or thousands of miles away, soon receded from their minds. Neither the Secretary of War nor the Commanding General had a staff to do war planning, not that anyone thought a serious war was likely to happen. Of course, the bureau system had no procedures for mobilization or transitioning to a wartime army. Theodore Roosevelt reported afterwards that when he tried to organize a volunteer regiment of cavalry to go to Spain during the chaotic mobilization period of 1898, he had a terrible time getting horses and wagons from one of the bureau chiefs. Eventually the old general's resistance crumbled and he relented, sinking back in his chair with the words, 'Oh dear! I had this bureau running in such great shape and along came a war'![5]

The Navy's situation was similar. After the Civil War, it shrank drastically and its leaders eschewed progress, at one point even trying to eliminate the use of the steam engine. A mere fifteen years after the end of the Civil War, a standard British reference work did not rate the U.S. Navy in the top twenty navies of the world, judging it the inferior of the Peruvian, Portuguese, Greek, and Egyptian navies, among others. With the United States concentrating on consolidating its grip on the North American continent, and with war something that, according to many leading

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[5] Barr, *The Progressive Army*, pp. 4-7. T. R. Brereton, *Educating the U.S. Army: Arthur L. Wagner and Reform, 1875-1905*, (Lincoln, 2000), pp. 10-11. Roosevelt is quoted in Edward M. Coffman, *The Regulars: The American Army, 1898-1941*, (Cambridge, 2004), p. 5.

social thinkers, would no longer blight the lives of Americans, there seemed little need for a Navy or for serious war planning.[6]

Much like the War Department, the Navy Department was split into eight constantly feuding bureaus each of which jealously guarded its prerogatives against the others at the expense of the common good and each of which busily lobbied Congress. When the Navy finally began sending attachés abroad, the attaché in London, by now exposed to foreign practice, observed that 'no such example of defective administrative organization exists in any country as that...in ours...Our system is no system'.[7]

Both services were profoundly anti-intellectual and, when late in the century a new generation of officers started to rebel against this tendency, they came in for severe criticism from their elders and even some of their own cohorts. The chief of the Navy's Bureau of Navigation sniffed to Alfred Thayer Mahan that 'it is not the business of naval officers to write books' and a cavalry officer writing in 1895 was alarmed that his colleagues were reading too much despite the clear fact that army officers should be men of action, not bookworms. Had not Sir Francis Bacon warned that, 'too much time spent in studies is sloth'?[8]

Throughout the late nineteenth century, when it did ponder the conduct of war and the issues attendant thereon, American society and political elites generally reflected Jacksonian attitudes, disdainful of military skills and military professionalism, but enthusiastically, embracing maximalist war aims.[9] To many in the officer corps, the resultant emphasis on mass mobilization followed by total

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[6] Stephen Howarth, *To Shining Sea: A History of the United States Navy 1775-1991*, (New York, 1991), pp. 216-226, 241.
[7] Chadwick quoted in Paolo E. Coletta, *The American Naval Heritage in Brief*, 2nd ed., (Washington, 1980), p. 182.
[8] Howarth, *To Shining Sea*, p. 237. Matthew F. Steele, 'Military Reading; Its Use and Abuse', *Journal of the United States Cavalry Association*, 8:29, (1895), p. 94-95. Hereafter *JUSCA*.
[9] Huntington, *The Soldier and the State*, p. 265.

victory looked like national conceit, confidence unwarranted by America's actual abilities or the administrative capabilities of the War and Navy Departments. Moreover, it was particularly inapplicable to the realities of naval power. One officer who had this realization was a young ensign named T. B. M. Mason. Posted in 1869 to the flagship of the European Station, he was appalled to discover not only that the Navy was backward in naval construction and technology but that it was also ignorant with regard to European naval developments. Mason became a tireless voice for reform, soaking up ideas from Europe; France's willingness to detail its best naval officers to an 'intelligence bureau furnishing material for general improvement' particularly impressed him. Thirteen years later he became the Navy's first Chief of Intelligence.[10]

In this environment, a small group of officers began considering the problems of national defence in a structured fashion. One of their core tenets was that wars could not be fought successfully without serious preparation. This meant everything from equipping the forces in peacetime with modern weapons, to ensuring the existence of an educated officer corps versed in the latest aspects of military art and science. Such an officer corps was necessary to understand the strengths and abilities of a likely enemy in order to prepare credible war plans to mobilize a sufficient number of Americans.

This was the beginning of the professionalization of the American military which brought about the re-emergence of intelligence from its post-Civil War oblivion. A leading scholar attributes the beginning of professionalization to Generals

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[10] J. M. Ellicott, 'Theodorus Bailey Meyers [sic] Mason: Founder of the Office of Naval Intelligence', *Proceedings of the United States Naval Institute*, 78:3, (March 1952), 265-267. Hereafter *USNIP*. Jeffery M. Dorwart, *The Office of Naval Intelligence: The Birth of America's First Intelligence Agency, 1865-1914*, (Annapolis, 1979), pp. 13.

Sherman and Emory Upton and to Admiral Stephen B. Luce.[11] Although Luce eventually rose to head the Naval War College, he played little direct role in the creation of American intelligence. However, one critical idea that was crucial to the professionalization of the armed forces generally and thus to intelligence specifically occurred to him first. As a Lieutenant Commander, Luce met Sherman in January 1865 at Savannah and had an epiphany.

> After hearing General Sherman's clear exposition of the military situation, the scales seem to have fallen from my eyes...It dawned upon me that there were certain fundamental principles underlying military operations which it were well to look into; principles of general application whether the operations were conducted on land or at sea.[12]

After the war, Luce and Upton became friends, bouncing ideas about military reform back and forth. Others followed their lead as multiple generations of intertwining intellectual influences tied together the ideas of the two services. Before long, it became commonplace in professional writings for Army officers to refer to naval precedents and for Navy officers to refer to principles of land warfare.[13]

The reform movement certainly had its sceptics.[14] Nevertheless, Luce, Upton and the growing body of reformers were onto an important and persistent idea: that ground and naval operations shared underlying theory and that the two officer corps could learn from each other. In 1901, thirty-six years after Luce listened to Sherman, Navy Lieutenant John Ellicott wrote an article about intelligence for *Proceedings of the United States Naval Institute*, which contained a passage that Luce himself could have written.

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[11] Huntington, *The Soldier and the State*, p. 230.
[12] Quoted in *ibid*, pp. 236-237.
[13] For examples of such cross-service reference references, see Nelson Miles in *The American-Spanish War: A History by the War Leaders*, (Norwich, 1899), p. 514 and Yates Stirling, *Fundamentals of Naval Service* (Philadelphia, 1917), p. 104.
[14] The anti-intellectual contingent of the officer corps aside, there were some thoughtful critiques. See, for example, the discussion in Allan R. Millett, *The General: Robert L. Bullard and Officership in the United States Army 1881-1925*, (Westport, 1975), p. 157.

> The United States has led the world in the study of the art of naval warfare, and this study brings out clearly the analogy of methods on sea to those on land. Von Moltke has shown that preliminary reconnaissance is one of the greatest sureties of success in land campaigns. Let us who follow the sea be no longer blind to the lesson which this, by analogy, teaches, but let us get away among the first on the road to preparation in this important field.[15]

In short then, intelligence emerged from its post-Civil War oblivion as a result of a much larger professionalization of the American military.

Ellicott's words reveal one of the intellectual wellsprings for the professionalization movement as it thought about reform and modernization: European militaries. One of those who believed that the U.S. Army had much to learn from foreign practice was Sherman. In 1875, he sent Upton, then a forward-thinking instructor at West Point, to study the major militaries from Japan to Europe. Made a brevet major general for the purpose, Upton was met with open doors everywhere. Upon return he reported to the Adjutant General what he had observed and made numerous recommendations for reform. These appeared in 1878 as *The Armies of Asia and Europe.*[16]

Upton became the first American to call seriously for an intelligence service in the War Department, but this recommendation was not high on his list of priorities. In his letter of transmittal to the Adjutant General he laid out seven recommendations; none related to intelligence. However, toward the end of his report Upton put forward a proposal for an intelligence service. This could be a modest affair he believed. One or two officers would oversee this 'statistical section' (echoing French nomenclature) which would 'be charged with the collection of information and statistics relating to

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[15] John M. Ellicott, 'Naval Reconnaissance in Time of Peace', *USNIP*, 27:3, (1901), pp. 576-77.

[16] Emory Upton, *The Armies of Asia and Europe: Embracing Official Reports on the Armies of Japan, China, India, Persia, Italy, Russia, Austria, Germany, France, and England Accompanied by Letters Descriptive of a Journey from Japan to the Caucasus*, (New York, 1878).

all foreign armies, but especially...Mexico, Canada, and Cuba'. With such information in hand, Upton thought, the Commanding General of the Army would know 'the exact military resources of our neighbours, upon which calculations could be based as to the number of troops required for any given campaign'.[17]

After the publication of *The Armies of Asia and Europe*, the Army sent several officers overseas to collect information 'of value to the military service of the United States'. However, the Navy was first to create a formal organization devoted to information gathering, in large measure because President Chester A. Arthur had helped set the stage by encouraging a program for naval modernization.[18] The world of business greatly inspired naval officers of the day, particularly the fact that railroad managers collected masses of information from which they planned for the future. The Navy started to adopt some of these methods. The author of the March 1882 order which created ONI was a railroad man, Commodore John Walker. Walker had worked for two different railroads before moving to the Department of the Navy in August 1881.[19]

In his fundamental instructions to T. B. M Mason, the new 'chief of intelligence', the Secretary of the Navy directed the collection of fourteen categories of naval intelligence and the sharing of this information with the Naval Institute—a recently created professional organization of reform-minded officers—to educate and inform the entire officer corps. Young officers were to be encouraged to collect intelligence and write professionally. The directive, finally, called for the creation of a 'corps of correspondents, in the persons of naval attachés to our foreign legations'.

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[17] Ibid, *Europe*, pp. 330-331.
[18] Marc B. Powe, *The Emergence of the War Department Intelligence Agency, 1885-1918*, (Manhattan, 1975), pp. 14. Dorwart, *The Office of Naval Intelligence*, p. 12.
[19] Robert G. Angevine, 'The Rise and Fall of the Office of Naval Intelligence, 1882-1892: A Technological Perspective', *Journal of Military History*, 62:2 (1998), p. 297-298.

Despite this auspicious beginning, the first crop of officers at the Office of Naval Intelligence (ONI) was not chosen from among the Navy's most capable. One exception was Ensign Charles C. Rogers, already an established reformist. In 1883, Mason, who was beginning to be concerned about the apathy that had greeted ONI's creation, urged Rogers to write an article for *Proceedings* enunciating a concept and philosophy for naval intelligence. In complying, Rogers acknowledged his debt to the writings of Army and foreign thinkers, including Emory Upton; General Paul Bronsart von Schellendorf, the German Minister of War; Major C. B. Brackenbury, of the British Army; and retired Captain J. C. R. Colomb of the Royal Marines.[20] Rogers held that because the Army and Navy were small and weak and because the United States possessed minimal coastal defences, it was vitally important to fight intelligently and be prepared with information, particularly given that war was becoming more complicated, costly, and swifter in its unfolding. Closely paraphrasing Brackenbury, the British artillery officer who soon became head of British military intelligence, Rogers wrote, 'the naval authorities of Europe have also realized that there is no occult means by which neglect in peace can be atoned for in war. Most properly do they assert, as truer of navies than of armies, that if the required information be not ready it cannot be suddenly obtained'.[21]

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[20] Dorwart, *The Office of Naval Intelligence,* pp. 13-16. Charles C. Rogers, 'Naval Intelligence', *USNIP*, 9:5 (1883), p. 659. Aside from Upton's *Armies of Asia and Europe*, Rogers cited Bronsart von Schellendorf, *The Duties of the General Staff*, (London, 1880); C. B. Brackenbury, 'The Intelligence Duties of the Staff Abroad and at Home', *Journal of the Royal United Service Institute*, 19:80 (1875), 243-267; and Colomb's, *Defence of Great and Greater Britain* (London, 1880) and 'Naval Intelligence and Protection of Commerce in War', *Journal of the Royal United Service Institute*, 25:112 (1881), pp. 553-590. See Thomas G. Fergusson, *British Military Intelligence, 1870-1914: The Development of a Modern Intelligence Organization* (London, 1984), pp. 67-68 and 78-100 for discussions of Colomb and Brackenbury, respectively.

[21] Rogers, 'Naval Intelligence', pp. 660, 673, 677. Compare C. B. Brackenbury, 'The Intelligence Duties', *Journal of the Royal United Service Institute*, 19 (1875), p. 244.

Given this, Rogers saw two fundamental tasks for ONI: first, the 'collection, sifting and arrangement' (Brackenbury's precise phrasing) of information relevant to peacetime preparations for war, and second, the dissemination of such information throughout the force.[22] This information would directly help in preparing war plans and other activities and would also indirectly help by enhancing the expertise of every naval officer.[23] Moreover, in a comment that would prove its worth during World War I and which again closely paralleled Brackenbury's words, Rogers suggested that 'much good and no harm' would come from cooperation with the War, State, and Treasury Departments 'all of which must be consulted in time of hostilities'.[24]

Rogers' article also laid out a lengthy list of topics on which ONI should collect intelligence. These included foreign naval administration, policies, forces, weapons, infrastructure, tactics, ship movements, and personnel; port defences; the locations of submarine cables so that they could be cut, tapped, or protected; American and foreign laws governing trade; the likely influence of wars on international trade and commerce; foreign armies, especially their artillery developments; and naval history. Rogers further thought that ONI should collect information regarding the U.S. Coast Guard and Naval Reserve.[25]

In this pre-general staff era, the term 'intelligence' had not yet taken on its connotation of watching the outside world and still overlapped significantly with staff planning functions. Indeed, the actual requirements for ONI to collect domestic information were broader than Rogers stated. They included American engineering and manufacturing resources, 'clothing', and even 'all details of the United States

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[22] Rogers, 'Naval Intelligence', pp. 659-660. Compare Brackenbury, 'The Intelligence Duties of the Staff Abroad', p. 242.
[23] Ibid, p. 661.
[24] Ibid, p. 690. Compare Brackenbury, 'The Intelligence Duties', p. 265.
[25] Ibid, p. 680-689.

Army'.[26] Rogers and his colleagues were not contemplating counter-intelligence operations among American forces. Rather, they believed that to plan properly the Navy must examine its own potential reinforcements and, for that matter, the whole governmental context within which the Navy would operate. Nonetheless, the most important information would come from abroad, collected both by officers who happened to be abroad and attachés at American diplomatic facilities.[27]

As the high-tech service of its day and dependent on ships that took considerable time to build, the Navy relied little on mobilization. Instead it had to be ready to fight a come-as-you-are war. This meant that in its first decade ONI concentrated diligently on collecting technological intelligence: information about guns, armour, electrical systems, shipboard communications, and the like, serving the Navy's desire to catch up with world standards. The Secretary of the Navy also put ONI in charge of the Navy's technical library, which served as a service-wide resource—in essence as an intelligence-dissemination mechanism in its own right.

Mason's successor as Chief Intelligence Officer, Lieutenant Raymond Perry Rodgers, came to the position in the opening days of President Grover Cleveland's first administration in 1885. Rodgers quickly formed a partnership with the new Secretary of the Navy, William C. Whitney, who had reformist inclinations and believed that 'our true policy is to borrow the ideas of our neighbours so far as they are thought to be in advance of ours'. Whitney was interested in intelligence work and demanded a regular flow of intelligence materials. He was especially interested in the blueprints of new warships which ONI agents were acquiring from leading

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[26] A. P. Niblack, *The History and Aims of the Office of Naval Intelligence*, (Washington, 1920), p. 4.
[27] Rogers, 'Naval Intelligence,' p. 690-691.

European firms.[28] Rodgers and Whitney enjoyed the best sort of endorsement for this work: the president's. Cleveland had been appalled at the pathetic condition in which he had found the Navy and at how little the money spent on reform had thus far really bought. In his first annual message to Congress, the President stated that 'we must have a [Navy] Department organized for [shipbuilding] supplied with all the talent and ingenuity our country affords, prepared to take advantage of the experience of other nations, systematized so that all efforts shall unite and lead in one direction'. Consonant with this desire, he told Congress that he fully supported the detailing abroad of Army and Navy officers as attachés.[29]

In its reconstruction, the Navy specifically tried to make up for its lack of experience by 'systematic acquisition as to naval progress abroad', especially from Britain. This was particularly important as foreign navies were making 'rapid strides' during the 1880s. Such was the Navy's demand for information and its lack of understanding of the time and effort required even for overt intelligence collection in the field that attachés believed that the Navy was requiring them to report on 'everything'. Despite such demands, ONI was largely successful during the late 1880s and early 1890s. At a time when the best formula for the construction of battleships remained a question of considerable debate, ONI helped keep the US Navy abreast of foreign thinking on this and other topics. It also provided information necessary for the United States to develop the industrial base required for modern naval construction.[30]

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[28] Angevine, 'Rise and Fall', pp. 291-312. Dorwart, *The Office of Naval Intelligence,* p. 23-24.

[29] Grover Cleveland, 'First Annual Message [to the Congress]', December 8, 1885 in James D. Richardson, ed., *A Compilation of the Messages and Papers of the Presidents*, Vol. 11, (New York, 1897), pp. 4936 and 4923.

[30] United States Department of the Navy, *Report of the Secretary of the Navy, 1889*, (Washington, 1890), p. 7. See Dorwart, *The Office of Naval Intelligence,* pp. 33-36 and 39-40

Ironically, given its success, by 1892 ONI was a demoralized organization in decline; its officers were looking for other billets while many shipboard intelligence officers simply stopped sending in reports. One generally agreed reason for the decline lies in the increase in security measures on the part of European governments and militaries. As early as 1886, Navy Lieutenant S. A. Stanton reported with regard to his just-completed tour as Naval Attaché in Italy that 'the latest—and therefore the most desirable—developments in naval progress are guarded with considerable reserve; and, in fact, a principle seems often to be made of secrecy, even in relation to things which are pretty well known to all the world'.[31] These measures had resulted from an increasing appreciation among the leading powers of the importance of military technology to their countries and also in part from a series of small espionage flaps, that started not long after ONI's creation and proliferated over time.

One such flap arose in France. In 1892, the U.S. Military Attaché there, Captain Henry Borup, managed to purchase plans for the fortress at Toulon. The French then prosecuted the miscreant who had sold them to him. Borup, however, stupidly claimed public credit for the operation. The American Minister in Paris, appalled by Borup's actions, thought it 'perfectly useless for us to possess plans of seaboard fortresses in France; for even if war were possible, we have not a fleet to cross 3000 miles of ocean and attack a French city'. He promptly expelled the officer and followed this action with a private letter to the Secretary of State arguing that it was unwise to send abroad officers who are 'young and zealous but who cannot find

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for discussions of the collection of technology and weapons information by naval attachés in the late 1880s and early 1990's. Angevine, 'Rise and Fall', p. 312.

[31] Angevine, 'Rise and Fall', p. 310.

out what they want without adopting improper means'. The incident made the French more close-mouthed with the U.S. Naval Attaché as well.[32]

In the following years, there were more scandals and flaps in France that made the operating environment ever more difficult. Not all of these incidents involved Americans. By far the most infamous was the Dreyfus affair which sent an innocent French officer to Devil's Island in 1894 on charges of spying for Germany. U.S. Army officer T. Bentley Mott arrived as attaché in Paris in 1900 and found it still reeling from *l'affaire*. He found that the French intelligence chief 'lived in dread of some new echo of the Dreyfus scandal' and so wanted 'to see as little as possible of foreign attachés'. France's security personnel followed the members of the attaché corps around town, and its army had also excluded most foreign observers from its fall manoeuvres for several years.[33] Nonetheless, France was but a high profile example; the troubles were widespread and lasting. For instance, in 1889 Britain enacted its first Official Secrets Act which criminalized much of what had previously been polite discussion among professionals.

The Army soon followed the Navy's lead and created its own intelligence organization. In 1885 the Adjutant General, Brigadier General Richard C. Drum, established a 'Division of Military Information' within the 'Military Reservations Branch' of the 'Miscellaneous Branch' of his office. This division was to collect 'military data on our own and foreign services which would be available for the use of the War Department and the Army at large'. It soon sent out letters to other War Department organizations and commanders in the field asking them to forward

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[32] Dorwart, *The Office of Naval Intelligence,* p. 44-48. Angevine, 'Rise and Fall', pp. 309-310. See Fergusson, *British Military Intelligence,* p. 88-92 for a discussion of the security environment in Europe during this period and its effects on British intelligence operations. Brian Tyrone Crumley, 'The Naval Attaché System of the United States, 1882-1914', (unpublished doctoral dissertation, Texas A&M University), May 2002, p. 63. Alfred Vagts, *The Military Attaché* (Princeton, 1967), p. 223.

[33] Thomas Bentley Mott, *Twenty Years as an Attaché* (New York, 1979), pp. 86, 114.

information they thought might be useful. This would particularly include reports from officers' hunting and fishing trips in border areas and information on natural resources and transportation infrastructure in the United States and neighbouring countries. In 1887, the Division also asked commanders of several northern frontier posts to organize reconnaissance trips into Canada to obtain mapping data. Much as ONI had done, it began to collect information on National Guard and militia units.[34] Previously, the Army and Navy had often sent observers abroad under the title of 'military attachés' but these had been temporary assignments and the attachés returned at the end of their special duty, for example, when the war they had observed ended.[35] In late 1888, however, with the support of President Cleveland, who was eager to learn from foreign countries, the War Department persuaded Congress to pass an appropriation 'for the pay of a clerk attendant on the collection and classification of military information from abroad'. The War Department interpreted this as authorizing the establishment of a regularized system of military attachés operating at the State Department's embassies and legations abroad and regarding the ministers (ambassadors) as their 'superior officers'. These attachés were to use their official contacts, the newspapers, the bookstores and libraries to inform the War Department of important military or technical developments of interest. Under this new system, only the Secretary of War, the Commanding General of the Army, and the heads of the various War Department bureaus had the authority to request information from the attachés. The Secretary of War also determined that the

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[34] Bruce W. Bidwell, *History of the Military Intelligence Division, Department of the Army General Staff: 1775-1941*, (Frederick, 1986), pp. 52-53. Powe, *The Emergence of the War Department*, p. 16-17. For a discussion of MID and ONI reconnaissance in Canada, see Robert G. Angevine, 'Mapping the Northern Frontier: Canada and the Origins of the US Army's Military Information Division, 1885-1898', *Intelligence and National Security*, 16:3, (2001), pp. 121-145.

[35] Maureen Patricia O'Connor, 'In the Eye of the Beholder: Western Military Observers from Buena Vista to Plevna', (unpublished doctoral dissertation, Harvard University), 1996, pp. 424-425.

information collected would be treated confidential unless he decided otherwise and that only that same list of senior officials would have access to MID's information. The first attachés went to London, Paris, Vienna, Berlin, and St. Petersburg, the capitals of the leading military powers.

These activities created such a flood of valuable information that the Secretary of War in 1889 authorized the establishment of a Military Information Division (MID) directly under the Adjutant General instead of buried within the 'Miscellaneous Branch'. Despite this organizational promotion, the MID remained a small organization, consisting of a captain and four civilians, occupying one room in the State-War-Navy Building.[36]

While the bread and butter work of ONI in its first years was bringing the Navy abreast of the technological level of foreign navies, the work of the MID in its early years remained less focused and dealt to a greater degree with domestic affairs. As the 1890s began, the War Department began to consider the seemingly outlandish possibility that a future war might require a national mobilization. Were this to happen, the War Department would have to depend heavily on the various state militias and national guards. Accordingly, the Secretary of War wanted to 'bring the National Guard into better accord with this Department, and through it with the regular Army; to increase its numbers, [and] to improve its efficiency'.[37] Moreover, he thought that if the War Department were to manifest interest in the National Guards, the state authorities might be motivated to improve them.

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[36] Robert O. Kirkland, *Observing our* Hermanos de Armas*: U.S. Military Attachés in Guatemala, Cuba, and Bolivia, 1950-1964* (New York, 2003), p. 14. Bidwell, *History of the Military Intelligence Division*, p. 53-54. On Navy observers, see Angevine, 'Rise and Fall', p. 295.

[37] United States War Department, *Report of the Secretary of War*, Volume 1, (Washington, 1892), pp. 7-8.

At this time there was no general staff in the United States, so Adjutant General Drum assigned the task of gathering information about the states' national guards or militias to the MID, which was already responsible for compiling maps of the country and which was used to handling large amounts of data. In 1891, he sent a memorandum to the adjutant generals of the various states asking them to keep the MID apprised of the militias' 'strength, equipment availability...for service in case of a sudden demand'. The following spring the division reorganized to accommodate this new stream of data and ensure its 'scientific arrangement'. Based on this information from the states and the maps in its possession, the MID would now be responsible for holding 'carefully formulated' contingency plans against the possibility of a war.[38]

Small as it was, the MID thrived. It used the most modern information management system available at the time: the card catalogue. By the time the Secretary of War submitted his annual report to Congress in 1894, the MID's card catalogue of data had grown from 4000 cards the year before to 30,000 cards. The division had also published its first three major reports: the first on Hawaii, the second, 'The Organization of the German Army', and the third 'The Organized Militia of the United States'. The last was based on reports about the annual encampments of thirty-three state national guards during the 1893 season and a similar report was expected to be published documenting the Guards' progress in 1894.[39]

MID and ONI helped push along bureaucratic reform, technological progress, and war planning. They also contributed to the intellectual development of their

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[38] Powe, *The Emergence of the War Department,* p. 18.
[39] Secretary of War, *Report of the Secretary of War*, Vol. 1, (Washington, 1894), p. 181.

respective services.[40] ONI had led the way, serving from its earliest days as a source of professional information for officers. In 1884, for example, it published a book on modern European naval tactics.[41] Probably the most important avenue along which ONI sought the betterment of the officer corps, however, was the Naval Institute and its journal *Proceedings*. In fact, T. B. M. Mason had been Secretary of the Institute before becoming Chief Intelligence Officer. *Proceedings* ran an annual essay contest and the prize-winning essayists routinely thanked ONI for providing them with data. Moreover, two thirds of the first prizewinners between 1882 and 1900 were ONI officers, their themes almost always being modernization of the Navy's various endeavours.[42] The MID served a similar modernizing function. The Army-related journals also published articles by Americans engaged in intelligence work, as well as foreign articles translated into English by intelligence personnel. Furthermore, one of the components of the MID for much of the late nineteenth century was its 'Progress' or 'Progress in Military Arts' Section which laboured to ensure that the Army benefited from advances abroad.[43]

Such was the state of service intelligence by the mid-1890s. The intelligence services were both results of military reform and engines of it in their own right. Their emphasis was on the enemy's gross military power (the size of force he could mobilize, the number of ships he could put to sea, the technology of his weapons) as well as on the comparable indices of American military power. The purpose of having this information was to enable to the proper training and equipping of the forces and the preparation of national war plans. Because of the lack of service

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[40] O'Connor, 'In the Eye of the Beholder', p. 467fn.
[41] Commander William Bainbridge-Hoff, *Examples, Conclusions, and Maxims of Modern Naval Tactics*, (Washington, 1884).
[42] Dorwart, *The Office of Naval Intelligence*, pp. 9, 19.
[43] The functions of the Progress Section are described in Reichmann, to the Secretary of War, 14 September [1897?], NARA, RG 165, M1024, File 639/5.

general staffs, the intelligence function was not sharply differentiated from other staff functions. The 'intelligence' of the intelligence officer had yet to be teased apart from the 'information' of the staff officer.

Though institutionalized intelligence offices in Washington were an innovation, American military forces in the field or at sea had, of course, always had forces and tactics for finding the enemy and understanding his disposition. This was an endeavour in which MID and ONI could scarcely help, given the state of technology in the late nineteenth century. So, if the emblem of Uptonian service intelligence was the military bureaucrat consigning facts and figures to file cards, the emblem of combat intelligence was the cavalryman on patrol or the Navy captain commanding his ship as it sought out the enemy fleet.

The man who provided intellectual grounding to American reconnaissance operations in the context of intelligence was an infantryman, Arthur L. Wagner, whose modest record at West Point belied his brilliance. The young Wagner gained combat experience against the Sioux, Nez Perce, and Ute Indians before securing a position on the faculty of the Infantry and Cavalry School at Ft. Leavenworth in 1886.[44] This was scarcely a prestigious job; the school was universally known as the 'Kindergarten' due to its poor curriculum and teaching standards not to mention the appalling quality of the students; shirkers, troublemakers and 'artful dodgers' whom regimental commanders were more than happy to send away.[45]

Wagner had no intention of accepting the status quo at Leavenworth. He and the commandant, Colonel Alexander McCook, envisioned a vibrant, demanding and modern school teaching motivated students both in the classroom and in the field, 'a

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[44] Brereton, *Educating the U.S. Army*, p. 5. Timothy K. Nenninger, *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881-1918*, (Westport, CT, 1978), pp. 37-39.
[45] Brereton, *Educating the U.S. Army*, pp. 15-16.

valuable war college'. Wagner's teaching duties soon led him to think about how to apply the lessons of military history to present-day operations. He came to believe that the school's curriculum devoted too much attention to European military experience and he criticized 'Prusso-maniacs' who thought that Prussia's wars against Denmark, Austria, and France supplied all the tactical lessons anyone could want. By the same token, he maintained that the Army paid too little attention to American experience, particularly the Civil War. In 1888 he applied for leave to travel to Europe to test his various ideas. His request was granted and he spent six months in Europe visiting old battlefields, observing the Prussian army and visiting the Kriegsakademie in Berlin.[46] On returning he wrote his first book, *The Campaign of Königgrätz* (1889), in which he argued that Europeans failed to recognize that key aspects of what was now cutting edge military thought on that continent had actually appeared during the American Civil War. Nevertheless, he was quite respectful of the accomplishments of the Prussians, and extolled the virtues of Prussian drill in an article he wrote for the *Journal of the United States Cavalry Association* in 1889. This article led in 1891 to important changes in the Army's *Infantry Drill Regulations*.[47]

These regulations brought about some embarrassment in the classrooms at Ft. Leavenworth because there was no written theory underpinning them, so McCook ordered Wagner to fill this gap. Wagner soon produced two books, the relatively practical *Service of Security and Information*, published in 1893, and the rather more theoretical *Organization and Tactics*, published the next year. The Infantry and Cavalry School immediately adopted both as textbooks and they remained in the curriculum for a decade and a half. (Modestly revised editions *of The Service of*

[46] Ibid, pp. 17-22.
[47] Ibid, *Army*, pp. 35-37, 39.

Security and Information came out in 1896 and 1903.)[48] The War Department also approved them for use in instructing National Guard troops and students in far-flung posts studied Wagner's work on intelligence, and a 1907 handbook for non-commissioned officers was largely based on it.[49]

Like Upton's book, *The Service of Security and Information* was truly seminal. Unlike Upton's work, however, it was entirely devoted to intelligence, the first such American book. There was another difference, of course. Upton wanted to see the creation of an intelligence office filled with officers analyzing facts and figures. Wagner did support a 'bureau of military intelligence at the headquarters of the Army' that could provide information about the 'geography, topography, and resources of the theatre of operations', but he was more interested in how to find the enemy and attack him from an advantageous position.[50]

In this regard Wagner's book was like two important European works: French General Jules-Louis Lewal's *Tactiques des Renseignements* (Intelligence Tactics) and General Sir Garnet Wolseley's *The Soldier's Pocket-Book for Field Service.*[51] Wagner cited both in his bibliography. Wolseley devoted only slightly more than two pages to broad topics of intelligence but his influence on Wagner is unmistakable. Wolseley held that the efforts of the Foreign Office notwithstanding, during wartime the main intelligence burden must fall on the military commander. Aside from

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[48] Arthur L. Wagner, *The Service of Security and Information*, (Kansas City, 1893). The book went through new editions in 1896 and 1903, but the differences among these were minor. Except as specifically noted, I draw on the 1903 edition.

[49] The future Lieutenant General Robert Bullard studied it at Fort Stanton, New Mexico. Millett, *The General*, p. 77, 39-4. E. K. Massee, *Practical Instruction in Security and Information of Non-Commissioned Officer of Infantry*, 2nd ed., (Kansas City, 1907).

[50] Wagner, *The Service of Security and Information*, p. 16-18. In arguing for a 'bureau of military intelligence', Wagner referred to Bronsart Von Schellendorf's work which was available in an 1880 English translation done by Intelligence Branch of the Quartermaster-General's Department of the War Office: Bronsart von Schellendorf, *The Duties of the General Staff*, (London, 1880).

[51] Jules Louis Lewal, *Tactiques des Renseignements*, (2 vols. Paris, 1881, 1883). Sir Garnet J. Wolseley, *The Soldier's Pocket-Book for Field Service*, 2nd ed., (London, 1871).

reconnaissance operations, the means of collecting intelligence included the questioning of prisoners, deserters and locals, as well as intercepting letters, tapping telegraph wires and spies. Wolseley pointed out that a 'telegraph operator can, with a small pocket instrument, tap the wires anywhere, and learn the messages passing along them' and he indicated the implications of this fact for espionage. In fact, Wolseley was blunt in telling the English military commander to get over his qualms about spying and warned that he who in wartime eschews spying upon these grounds, 'had better sheathe his sword for ever'. Spies, of course, were also a threat to the English force, but a cunning commander could take advantage of the spies who were likely to be in or near his own forces or of 'those newly-invented curses to armies—I mean newspaper correspondents' by using them to pass false information to the enemy.[52]

Lewal was probably the most sophisticated writer on intelligence of the nineteenth century and he exercised the greatest influence on Wagner's thinking on the subject.[53] He was an early advocate of intelligence, having written an article on the topic in 1860. He was the first head of the Bureau de Reconnaissance et de Statistique, the first specialized intelligence organization in France, created in 1871. In 1881-1883, he published *Tactique des Renseignement*, as part of his massive series, Études de Guerre. Lewal started his work by alleging that while everyone paid lip service to intelligence, nobody paid sufficient attention to it or actually bothered to study it.[54] He believed that it was of supreme importance to establish an intelligence service and handle it well. Developing at length the same idea that Upton had

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[52] Wolseley, *The Soldier's Pocket-Book*, p. 81-82. Wolseley used newspaper reporters in precisely such a way in his 1873-74 campaigns in Ashanti land. See Byron Farwell, *Queen Victoria's Little Wars* (New York, 1985), p. 195.
[53] Hervé Coutau-Bégarie gists Lewal's work in '*Le Renseignement dan la Pensée Militaire Française*', www.stratisc.org/strat_073_aHCBdoc.html. Except as otherwise noted my discussion of Lewal draws on that article.
[54] Lewal, *Tactiques*, Vol. 1, p. 1.

enunciated in scant paragraphs, Lewal expounded on the need for national-level strategic intelligence, which he termed 'statistics'. This involved reconnoitring the enemy, terrain, resources, and the inhabitants of the theatre of operations.[55] Lewal thought that in peacetime intelligence would be obtained by 'statistics' and in wartime by reconnaissance, the focus of the book. In fact, he devoted some 700 pages to reconnaissance and only about 100 pages to 'statistics', espionage, and allied topics.

Wagner owed a great intellectual debt to Lewal and other lesser European writers. Like Lewal, Wagner devoted the bulk of his book to tactical reconnaissance and scouting and only a relatively small portion—one chapter in this case—to intelligence more broadly understood. Where Lewal's work was voluminous and pedantic, however, Wagner's was a small format book written in an accessible style and done in some 200 pages sprinkled with maps. Chapter 7 treated espionage, counter-espionage and the significance of newspapers to intelligence.

Wagner's book discussed in an organized fashion, and with reference to the European thinking on the subject, several issues that would be important to American intelligence during World War I, including the morality of espionage; issues relating to communication cables, both as sources of intelligence in their own right as means of exfiltrating data collected by spies; the importance of using neutral countries to enable intelligence operations behind enemy lines; disinformation; and the importance of newspapers to intelligence officers. As insightful as he was, however, Wagner's mind was still in the nineteenth century. He had in mind small armies in big countries, searching for each other and each other's flanks. Like all his colleagues, he was unable to imagine an enormous war in which a continuous front line would stretch hundreds of miles, separating armies numbering in the millions. Nor yet could

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[55] Ibid, p. 11.

he imagine that belligerents would use resources other than their combat forces to prosecute a war.

For Wagner the inseparable nature of security and information was the most important topic in intelligence, this presaged the conceptual unity of counterintelligence and intelligence that would become such an important topic during World War I. Information was important because it helped the battlefield commander guard against surprise. In particular, intelligence relieved an army of the requirement to keep constantly on alert which would 'ruin it by physical hardship'. The commander who had information about the enemy's location, movements, and strength, would be able to take the appropriate security measures at the appropriate times.[56]

Wagner bowed in the direction of Clausewitz, admitting that the information available to a commander would always be incomplete and inferential. Nonetheless, he was fundamentally optimistic in his assessment of the availability and utility of information. In fact, he thought that other things being equal, the commander with the best 'secret service' would be victorious.[57] Wagner's arguments on spies were quite similar to those of Lewal. Both men held that while cavalry was important to reconnaissance, it was not enough and must be augmented through the interrogation of local civilians, prisoners of war, and deserters.[58] Wagner and Lewal both had moral qualms about espionage, but felt that these must be subordinated to military

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[56] Wagner, *The Service of Security and Information*, p. 16.
[57] Ibid, p. 181.
[58] Ibid, pp. 16-18, 190-91. Lewal, *Tactiques*, Vol. 1, pp. 89-94. At this time, 'spies' were most often recruited for their ability to observe military forces or infrastructure. During the Civil War, in fact, the terms 'scout' and 'spy' were interchangeable and this continued afterwards. See Feis, *Grant's Secret Service*, p. 3. Spies were seldom recruited as penetration agents to steal secrets from inside a government bureaucracy. In short, spies were usually thought of as reconnaissance assets. Though there were individual exceptions, this remained broadly true for American espionage until World War I when American practice shifted substantially in the direct of present usage.

necessity. Wagner thought that officers who spied were often 'men of the most exalted character and distinguished courage' but other spies 'deserve[d] all the obloquy so freely cast upon spies in general'.[59]

Wagner was aware that the slow speed of communications at the time sharply circumscribed the utility of spies to a battlefield commander. This meant that spies were most useful 'during the concentration of armies on the theatre of operations, and during the investment of fortified places'.[60] On the other hand, closely paraphrasing Wolseley, he observed that spies could tap telegraph lines 'with a small pocket instrument' and thereby gain valuable information. 'This information can then be forwarded to the army by means of mobile spies, or under disguise through neutral territory'. Officers or other trusted personnel could be posted in neutral countries to receive this sort of information and transmit it immediately to the army's headquarters.[61]

In discussing disinformation Wagner advocated the use of the otherwise dangerous 'double spies', spies who work for both sides, to transmit false information to the enemy. Nevertheless, he warned that it was important to ensure that the officer giving the false information to the 'double spy' knew the true plan so as not to 'unwittingly give true information and [thereby] cause incalculable mischief'.[62] Newspapers were also a potential tool for disinformation. But, Wagner also quoted von Schellendorf again to the effect that 'complete and unfettered freedom of the

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[59] Wagner, *The Service of Security and Information*, p. 180-181. Lewal, *Tactiques*, Vol. 1, pp. 95-124. Coutau-Bégarie.
[60] Ibid, p. 181.
[61] Compare Wagner, *The Service of Security and Information*, p. 187-188 to Wolseley, *The Soldier's Pocket-Book*, p. 81-82.
[62] Wagner, *The Service of Security and Information*, p. 184. "Double spies" in Wagner's use are free-lancers selling to both sides. They are different from "double agents," a more modern term referring to someone who pretends to spy for one side but, in fact, serves the interests of the other side.

press is incompatible with a state of war'. An army must, therefore, designate a censor because:

> With the increasing means of gathering and transmitting news, and with the constantly growing popular demand for late and complete information, the trouble created in military operations by the mischievous energy of newspaper reporters will, more than ever, justify the characterization of such correspondents as the 'plague of modern armies'.[63]

Though it sometimes reads like a pastiche of Lewal and Wolseley's works, *The Service of Security and Information* was a major contribution to American military literature and, along with *Organization and Tactics*, it cemented Wagner's reputation as one of the country's leading military intellects and an influential force for progress and reform. The officer corps gave a warm reception to *The Service of Security and Information* in its various editions. Looking back at Wagner's career, a reviewer in the Journal of the Military Service Institution wrote in 1904:

> We think there will not be and we know there should not be a single dissenting voice in the whole United States Army to the following statement, viz.: that no officer (nor any dozen officers for that matter) has done as much as [Wagner] has in both word and deed, in book and on the maneuver field, to encourage study, research and efficiency in our army.[64]

Ironically given Wagner's debt to Lewal and Wolseley, some reviewers emphasized the American military's growing independence from European thinking. 'American military methods and ideas of to-day, as evinced in discussion, papers, essays and periodicals are aggressive and independent; we have finally cast off alien tutelage and it has left no trace', read a review of the first edition. A few years later a reviewer of the 1896 edition lauded the fact that America now had its own textbook on the subject and so was no longer dependent on British works or 'continental' works in translation. Now, he wrote, Americans were 'on an equal footing with other

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[63] Ibid, p. 190-192. Compare Wolseley, *The Soldier's Pocket-Book*, p. 82.
[64] Anon., 'Strategy', *JMSI*, 35:130 (1904), p. 137.

armies'. The 'value of the work', this reviewer continued, 'is shown by the rapidity with which a knowledge of its subject matter has been disseminated through the army and the national guard since its appearance. It...well deserves to be the textbook officially adopted for the examination of officers for promotion'. Not only did officers praise the book on its own terms, but some also praised it for its contribution to 'progress'. Hugh Scott, a West Point classmate of Wagner's, who was Army Chief of Staff when the United States entered World War I, thought that the book's publication, meant that 'a new era dawned for the army...that was to progress until it found us, at the outbreak of the World War, with our officers the best instructed of any army in the world'.[65]

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War is the acid test of a military, and in the Spanish-American War of 1898 the American military came up wanting. Among many other shortcomings, the war demonstrated that despite the intellectual strides made by the Army and Navy in thinking about intelligence, there was an enormous gap between even the primitive theory and practice both in Washington and in the field. Though Upton's call for a national intelligence capability was twenty years in the past, and ONI and the MID had existed for some 15 years, both turned in mediocre performances at best. The failings were not only on the side of the intelligence producers, however. The MID in particular confronted resistance from senior leaders, who occasionally were hostile to intelligence—sometimes on moral grounds—and at best were uninterested in

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[65] W. A. Kobbe, 'The Service of Security and Information', *Journal of the United States Artillery*, 3:1, (1894), p. 162. Hereafter *JUSA*. This is a review of the 1893 edition of Wagner's book. Anon., 'The Service of Security and Information', *JUSA*, 7:2 (1897), p. 261. This is a review of the 1896 edition of Wagner's book. Hugh Lenox Scott, *Some Memories of a Soldier*, (New York, 1928), p. 145.

intelligence information provided by outsiders. [66] Only for the Signal Corps was the war a real triumph. (See Chapter 2.)

The Spanish-American War also highlighted the extent to which, in this pre-general staff era, the U.S. military had not distinguished intelligence functions from other staff functions. These additional duties constituted a crushing drain on the MID which at the outset numbered only six or seven officers with a few civilian aids. On 29 March 1898, Secretary Russell A. Alger appointed Wagner to a two-man Army-Navy strategy board to prepare operational plans for the impending war. The Navy had long since decided what it would do in case of a war with Spain and codified its views in a war plan written under ONI's direction. The Army, however, had not considered the question. So Wagner found himself responsible for coming up with a plan, which he did without any appreciable help from the Secretary or the Army's Commanding General. As if that were not enough of a drain on the MID, because of its knowledge of the militias and national guards it found itself responsible for drafting an Army order of battle and mobilization schedule as well as handling a myriad of personnel matters.[67]

As preparations for the invasion of Cuba moved forward both the MID and ONI almost went out of business. All the officers of the MID except one lieutenant were ordered back to their regiments to prepare for combat duty. (At least one military attaché also returned to his regiment.) Every single ONI officer volunteered for sea duty and all were accepted. They were replaced by two retired officers, one of whom did triple duty also as Superintendent of the Coast Signal Service and Chief of

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[66] Powe, *The Emergence of the War Department*, p. 31.
[67] Ralph H. Van Deman, *The Final Memoranda: Major General Ralph H. Van Deman, USA ret., 1865-1952: Father of U.S. Military Intelligence*, Ralph E. Weber, ed., (Wilmington, 1988), pp. 4-6. Dorwart, *The Office of Naval Intelligence*, p. 56-57. Brereton, *Educating the U.S. Army*, p. 69-70, 73-74.

the US Auxiliary Naval Forces.[68] At the time, service-level intelligence agencies were able to offer so little, and their consumers were not particularly interested in having their product, so nobody seemed to mind.

The Navy normally operated in accordance with the general feeling of the time that espionage was best left to wartime. However, ONI had done some preparatory work on the Spanish armed forces. For instance, presumably using open means, Navy Lieutenant Raymond Rodgers, the attaché in Spain, sent back insightful reports in 1896 about the state of the Spanish Navy. He assessed that the Spanish were not very capable but would put up a spirited fight. Furthermore, the Navy leadership was issuing intelligence requirements to its attachés in Europe, in particular asking them about Spanish coal supplies. Unfortunately, during the crisis with Spain the Navy also burdened attachés with urgent duties pertaining to procurement.

A number of naval attachés in Europe provided information about Spain but the main action was in London. A key player was Lieutenant William Sims who during World War I would be Commander-in-Chief, US Naval Forces, Europe. In April 1898, as war with Spain was breaking out, Sims, who had been serving in Paris and St. Petersburg—'I don't like this work' he had written to his family—assumed the duties of attaché in London. There he temporarily relieved the regular naval attaché, Lieutenant John Colwell, who was buckling under the strain of the work. Colwell did not leave, however and the two officers soon found themselves at personal loggerheads, both recruiting clandestine agents to report on Spain. Straight away, Sims recruited an Italian and paid him $300 per month to report on the movements of the Spanish fleet, but only for the duration of the war. In early May this agent

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[68] Van Deman, *The Final Memoranda*, p. 7. John F. Votaw, *United States Military Attachés, 1885-1919: The American Army Matures in the International Arena*, (unpublished doctoral dissertation, Temple University), April, 1991, pp. 76-77. Wyman H. Packard, *A Century of US Naval Intelligence*, (Washington, 1996), pp. 330-331.

reported that a Spanish fleet under Admiral Cervera had sailed to the Cape Verde Islands bound ultimately for the West Indies or the United States. Sims also recruited a former Swedish army officer who reported from Port Said, Egypt, and an impoverished French baron and retired naval officer who reported from Madrid.

On 24 May, Sims reported that he could pass disinformation to the Spanish Ambassador to France through an agent he had recruiting while serving in Paris. The Navy took him up on the suggestion and a week later the Navy Secretary Long directed Sims to pass the story that the Army and Navy were deadlocked over where to land in Cuba and that American operations were at a standstill pending the resolution of this dispute. In early June Sims was also able to provide reporting on the poor maintenance conditions and lack of coal which were keeping large portions of the Spanish navy on the eastern side of the Atlantic.

For his part, Colwell hired an agent at the preposterous rate of $2500 per month and dispatched him to Spain in April. One of his agents—possibly the same one—was 'wounded' in early May. On May 12, Colwell reported that another of his agents in Spain had vanished. With the enormous amounts of money he was spending, Colwell had no difficulty recruiting replacements. Offering $1000 a month, he even managed to acquire an agent in the Spanish embassy in London. All told, Colwell spent about $27,000 buying intelligence during the war, but the Navy Department seemed to think it had gotten a good deal. Even after Cervera's fleet was eventually neutralized, Sims and Colwell continued providing reporting on the activities of the rest of the Spanish Navy. After the Spanish forces were decisively defeated, the Navy's clandestine sources in Spain provided political reporting on Spain, especially relating to war-termination issues.[69]

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[69] Crumley, 'The Naval Attaché System', p. 90-91, 111-133.

The work of the attachés notwithstanding, from an intelligence perspective, the war was not a stellar success for the Navy. ONI's greatest shortcoming was its failure to appreciate the true weakness of the Spanish Navy, let alone convey this message to the Navy's leaders. Major General Nelson Miles, the Commanding General of the Army, acidly remarked in 1899:

> The Navy of Spain, as well as her Army, having been engaged in active war for years, was naturally supposed to be prepared for immediate action, and therefore capable of the greater effectiveness at the commencement of the contest; and our authorities, as the event proved, were unduly cautious in ordering aggressive movements. This was very natural under the circumstances; but had they fully comprehended the enemy's weakness, notwithstanding the appearances, as well as the excellent state of discipline of the forces manning our Navy, the obvious movement, whether for aggressive or defensive operations was an immediate seizure of Puerto Rico.[70]

When the Navy did sail on Puerto Rico, the bill came due for ONI's failure to do proper 'preliminary reconnaissance' of this island in America's backyard. Admiral William Sampson was forced to attack the batteries protecting San Juan in order to determine their strength, risking seven warships and costing one American sailor his life. ONI came up short in the Philippines, as well, where it was unable to provide any information to support Admiral George Dewey in his operations against the Spanish fleet there. In the event, Dewey had to depend on the US Consul at Manila for information about the Spanish fleet and the defences at Manila. The consul was happy to help, but utterly lacked military or naval training.[71]

The intelligence activities of the MID, which since June 1897 had been under the leadership of Arthur Wagner, attracted much less attention from senior Army and War Department officials than ONI did from its superiors. For some time, however,

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[70] Nelson A. Miles, 'The Work of the Army as a Whole', in *The American-Spanish War: A History by the War Leaders*, (Norwich, 1899), pp. 516.
[71] Ellicott, 'Naval Reconnaissance in Time of Peace', p. 577-579. Charles Stuart Kennedy, *The American Consul: A History of the United States Consular Service, 1776-1914* (New York: 1990), pp. 199-201.

the MID had been preparing for a war in the Caribbean. In 1893, Captain George Scriven (who served as Chief Signal Officer, 1913-1917), submitted a report on the geography, infrastructure, public opinion and military forces in Cuba. An émigré organization, the 'Cuban Nationalist Junta' in New York, was also quite forthcoming in providing information to the War Department. Combined with other information that Wagner's men ferreted out, they provided much of the content of a June 1898 pamphlet entitled 'Military Notes on Cuba' that was widely disseminated within the Army.[72] In 1897, Captain Tasker Bliss, the Military Attaché in Spain also reported accurately on Spanish troop strength in Cuba.[73] In 1897 the MID started compiling an order of battle from Spanish forces in Cuba, drawing on reportage in Spanish newspapers of the insurgency on the island.[74]

Despite its needs for intelligence, the Army's senior leadership was not entirely comfortable with the moral implications of an intelligence service. In July 1897 the Navy sent a spy in disguise and under alias to survey Cuban topography and fortifications and Wagner wanted the Army to do the same, but the Adjutant General forbade the move on the grounds that it would be unethical. Wagner's appeals, which pointed out the inadequacies of the information coming from State Department's Consul in Havana, were in vain.

On 16 February 1898, the American battleship *Maine* blew up under mysterious circumstances while visiting Havana harbour. Americans assumed that the Spanish were behind the explosion and the two countries spiralled toward war

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[72] United States, War Department, *Military Notes on Cuba*, (Washington, 1898). There was a 1909 edition of *Military Notes on Cuba*, as well.
[73] Bidwell, *History of the Military Intelligence Division*, p. 60-61.
[74] More than a decade later, the Military Information Committee (as the MID had then become) remained proud of this product. Michael J. Lenihan, 'Military Intelligence', lecture 'before the officers of the Summer Conference of the Naval War College, 1909', pp. 17-18; Navy Historical Collection, Naval War College, Newport, RI, RG 8, Box 86 Folder 8, Hereafter NHC.

which Congress declared on 25 April 1898. This led the MID to step up its preparations for war and the War Department's restrictions on its operations eased somewhat. Wagner was able to arrange for the dispatch of two officers to the Caribbean to gather the information he had wanted to acquire the previous summer. These two men, First Lieutenants A. S. Rowan and Henry Whitney, left Washington during the twilight period after President McKinley asked Congress for permission to go to war but before the declaration of war actually passed Congress.

Whitney went to Puerto Rico, travelling in disguise. Rowan went to Cuba to gather information on the Spanish forces there. He never actually saw a Spanish soldier but he became famous for carrying the 'message to Garcia', the Cuban insurgent leader. In fact, apparently there was no particular message to Garcia other than a plea for information, but Rowan did carry back a message from Garcia, which after the American landings led to a face-to-face meeting between the insurgent and Major General William Shafter, the American commander in Cuba. At this meeting Garcia passed a great deal of important information to Shafter, particularly about the defences around Santiago which Shafter would soon attack. As a consequence, Rowan became a national hero. In 1915, he even became the subject of a feature film directed by D. W. Griffith. Certainly, Rowan was skilled at self-promotion, but to a great extent Army pushed him to the fore, eager to draw public attention away from its shortcomings. Nonetheless, the Army remained privately ambivalent for years about their hero and the moral issues associated with the actions that had made him famous.[75]

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[75] Joan M. Jensen, *Army Surveillance in America, 1775-1980* (New Haven CT, 1991), pp. 58-62. Bidwell, *History of the Military Intelligence Division*, p. 60-61. Secretary of War Alger's memoirs also do not mention Rowan, though he does devote a page to Whitney's mission. R. A. Alger, *The Spanish-American War* (New York, 1901), pp. 42. In 1923 the War Department finally gave the long-retired and alcoholic Rowan the Distinguished Service

Another aspect of this episode illustrates the immature nature of the relationship between the Army and the MID. While the Navy engaged in a dialogue with its attachés in Europe and issued intelligence requirements to them, the Army did nothing similar. Wagner had anticipated that the War Department might need information from the Caribbean, so he dispatched Whitney and Rowan of his own accord. Neither Commanding General Miles nor Secretary of War Russell Alger thought of asking for such information.[76]

Despite their efforts, MID's work did not make much of an impression on the Army. The Army's senior leadership, not entirely comfortable with an intelligence agency which engaged in morally questionable activities and which dared to speak truth to power, constrained not only MID's operations but also its analysis. Among the products that the MID prepared after the declaration of war was a paper about the susceptibility of 'northern troops' to yellow fever, a serious menace in Cuba. In a planning meeting chaired by the President, Wagner referred to the findings of this paper to explain why, despite the wishes of Secretary Alger, an immediate invasion of Cuba was ill advised. Alger was not amused and according to MID lore told Wagner that he would never be promoted again.[77]

The paper on yellow fever and the 'Military Notes on Cuba' may have been triumphs, but the MID's overall wartime work on Cuba was far from perfect and ultimately, the commanders on the ground made virtually no use of what MID did have to offer. For example, MID produced a large map of Cuba, but never considered that such a rugged island might merit a topographical map. Writing shortly after the war, General Shafter, commander of American forces in Cuba, said he had made

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Cross. See Bidwell, *History of the Military Intelligence Division*, p. 61. Jensen, *Army Surveillance in America*, p. 66-71.

[76] Powe, *The Emergence of the War Department,* p. 30-31.

[77] Brereton, *Educating the U.S. Army*, p. 72-73. Van Deman, *The Final Memoranda*, p. 5.

extensive efforts to understand the terrain, weather, and other conditions in Cuba. The MID did not figure at all in his recollection. Instead, he pointed to the *Journal of the Siege of Havana*, which described the experience of the English in Cuba in 1762, and his meeting with General Garcia and two other Cuban natives as important sources of information. In 1900 Shafter told a Presidential commission that he had not been given enough information about Cuba. Alger did not mention Wagner at all in his memoir of the war and referred to the Military Information Division only once.[78]

The situation was comparably bad for both services at the level of combat or tactical intelligence. Though the Navy understood well that the search for the enemy is a major and necessary component of naval warfare, it was unable to find the Spanish fleet in the Atlantic Ocean. This was not ONI's failing; the office had no relevant collection means, though in a feckless effort, they did send two ensigns and two yachts to Europe with orders to shadow the Spanish.[79] For its part, though the Army was an enthusiastic user of cavalry in both its reconnaissance and combat roles, when the time came to invade Cuba General Shafter rejected the suggestion that he have an intelligence officer—Wagner was the nominee—on his staff. Wagner got his revenge later when the Commanding General of the Army, Nelson Miles, asked him to write a report on the Army's performance in Cuba. The book took Shafter to task, not least for the inadequacies of his reconnaissance and intelligence operations.[80]

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[78] Van Deman, *The Final Memoranda*, p. 7. Bidwell, *History of the Military Intelligence Division*, p. 61. Wm. R. Shafter, 'The Santiago Campaign' in *The American-Spanish War: A History by the War Leaders,* (Norwich, 1899). pp. 180-81. Alger, *The Spanish-American War*, p. 53.

[79] Navy cruisers also patrolled the most likely routes from Cape Verde to the West Indies but, of course, this was not an ONI effort. They missed the Spanish fleet. Packard, *A Century of U.S. Naval Intelligence*, p. 384-386.

[80] Arthur L. Wagner, *Report of the Santiago Campaign, 1898* (Kansas City, 1908), pp. 140-141.

The Spanish-American War made it clear to Americans that the country would no longer be insular and isolated. As one naval officer put it 'our neglect of naval reconnaissance has not yet resulted seriously, because, until now, we have been an isolated power'. That time had passed, however, and the Navy (but his prescription could equally well have applied to the Army) must 'hasten to repair the neglect of more than a century' and learn in a 'comprehensive, systematic way...how best to carry war into countries beyond the seas'.[81]

The decision to occupy the Philippines in the course of the Spanish-American War may have been particularly ill advised. As the Army pulled together its occupation force, MID scrambled to find any information it could about the islands. One 'confidential' MID report was merely an article from the Encyclopaedia Britannica. MID passed on other reports that were 'known to contain inaccuracies', but advised that 'they can be readily amended as American reports are received'.[82] The US soon found itself fighting a colonial war in its new possession. Officially the brutal Philippine War lasted from 1899 to 1902, but low-level violence simmered along for another decade.

A number of intelligence failures marked America's military involvement in the Philippine Islands. The intelligence sources of the American commander, Major General Elwell Otis, were primarily upper class Manila residents who wanted to ingratiate themselves with the Americans. Their information allowed Otis to report to President McKinley with delusional sincerity that for the good of the Filipinos, the US should annex the islands to quell the rising unrest. The annexation led to an uprising. After it started, Otis ordered the creation of a 'Bureau of Insurgent Records' (BIR) to

[81] Ellicott, 'Naval Reconnaissance in Time of Peace', p. 563-564.
[82] Brian McAllister Linn, 'Intelligence and Low-Intensity Conflict in the Philippine War, 1899-1902', *Intelligence and National Security*, 6:1 (1991), p. 91.

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translate captured documents, but the Bureau did not really make a mark on operations. In fact, Arthur Wagner commented that the Army spent much of the war acting like 'a blind giant'. It was able 'to completely smash' any Filipino force with which it came to grips, but getting any information about the guerrillas was 'almost impossible', not helped by the fact that the guerrillas terrorized and often murdered Filipinos suspected of cooperating with the Americans.

Nonetheless, American ingenuity and the 'can-do' spirit found a way and by 1900 numerous officers had come up with their own local solutions. Some officers formed reconnaissance units that roamed the countryside raiding and gathering intelligence. Others relied on paid informants. Still others concentrated on interrogations of prisoners. By 1900 many of these efforts were paying off and were sufficiently productive that they could be combined with the efforts of adjacent American units or units could assist each other in their investigations. On occasion, subordinates successfully induced their superiors to compel the cooperation of other units, for example in manhunts.[83]

It was this vigorous, bottom-up innovation, and a few impressive analytic reports resulting from it, that finally caused the senior military leadership to pay attention to and invigorate the BIR. In mid-1900 General Otis left and his replacement was a veteran of the MID in Washington, Major General Arthur MacArthur. MacArthur cemented the centralization of intelligence activities in the BIR, which he reorganized and renamed the Division of Military Information (DMI) under Lieutenant Colonel Joseph Dickman, a former subordinate of Wagner at Ft. Leavenworth.[84] MacArthur ordered Dickman to ensure that important intelligence got

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[83] Ibid, pp. 90-99.

[84] Dickman later wrote the 1904 edition of the Army's *Field Service Regulations*. During World War I he was a division and then a corps commander.

to the provinces where it could be used to inform operations. He further ordered his forces to destroy the system by which the enemy moved supplies and information.

One particularly important innovation under Dickman was a card file of intelligence information. Local American commanders were obliged to prepare cards on guerrilla leaders, civilian officials, priests, and other important Philippine personages in their area of operations. These card files allowed the ready transmission of detailed local knowledge from a unit to its replacement. Furthermore, each Army post sent copies of these cards up their chain of command. If the higher headquarters amended the cards based on information they held, they would send a copy back down the chain. Finally, a copy of each card went to the central DMI.[85] In the event, not all officers cooperated, and guerrilla resistance effectively collapsed before the scheme could be fully implemented. Nonetheless, this was an important step in establishing the dominance of the central DMI—a task which it was never fully completed—and it was a brilliant use of the best information management processes of the day.

Though the Army had done many things well in the Philippine War, the war was controversial because many Americans opposed the acquisition of an overseas empire. Americans were equally uncomfortable with subjugating a foreign people who longed for freedom. The war was also controversial because of the various inevitable failures and shortcomings and, worse, because of the use of unpalatable methods by some American soldiers such as the administration of a torture called the 'water cure'. Because of the various controversies, the Army did not publish its official account of the war, nor did it disseminate outside the Philippines a potentially very important pamphlet on counterinsurgency written by one of its successful

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[85] Linn, 'Intelligence and Low-Intensity Conflict', p. 100-101.

generals. Arthur Wagner took note of the lessons in the Philippines, of course, and made some modest amendments to the next edition of *The Service of Security and Information* in 1903 and a few other officers wrote articles for the professional journals. By and large, however, the memories of veterans who had been there were the most important repositories of the lessons of the Philippine War.[86]

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From the beginning of the reform movement, the concepts of intelligence, war planning and general staffs were closely interrelated. When it came to preparing for war, the reformers realized that the improvisational ways of the past were no longer satisfactory. However, despite the technical merits of a general staff—most evident to line officers, less so to officers of the departmental bureaus—opposition was strong. Americans immediately thought of the 'Prussian General Staff', an institution which, it seemed to them, had some decidedly undesirable qualities: this dangerous 'military clique' was 'preponderantly aristocratic', and wielded 'considerable (and harmful) influence on foreign policy'.[87] Given this opposition, if the Army and Navy were to have general staffs, the reformers would have to approach the problem indirectly.

Perhaps, some reformers thought, an intelligence office could give birth to a general staff. In the early 1890s, a retired Army engineer, Major George Wheeler predicted just that. In a confidential report for the War Department on European 'intelligence departments and general staffs, he wrote that 'in continental Europe, the organized General Staff has preceded the full development of the Intelligence Branch, while in Great Britain and the United States, doubtless, the General Staff will have to

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[86] Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine 1860-1941*, (Washington, 1998), pp. 138-39 and 146fn65.

[87] Peter Daniel Skirbunt, 'Prologue to Reform: The 'Germanization' of the United States Army, 1865-1898', (unpublished doctoral dissertation, The Ohio State University), 1983, pp. 156-158.

be evolved from the latter'.[88] Others thought that the road to a general staff might lie through a war college. In the end, both predictions came true to some degree.

As before, the Navy moved before the Army. The reform movement that engendered ONI in 1882, also brought the creation in 1884 of the Naval War College, the first president of which was Stephen Luce, who hoped to use it to back the Navy into creating a general staff. In the 1890s the college's curriculum included lectures on foreign administrative techniques and the school undertook studies of the British Admiralty and the German General Staff. However, by mid-decade, the hopes of Luce and his allies were clearly coming to naught, so Luce decided that the faculty and students could work together to develop notional plans responsive to potential situations of interest. The College then sent summaries of these plans to ONI in Washington where they would be on file against the possibility that the Secretary might need them. In the years immediately preceding the Spanish-American War, and under the urgings of Assistant Secretary of the Navy Theodore Roosevelt, ONI also experimented with writing war plans of its own, focusing on Spain and Japan.[89]

As the Spanish-American war was breaking out in 1898, the Secretary of the Navy created the Naval War Board to which he named the Chief Intelligence Officer, the head of the Bureau of Navigation, and a Captain Albert Barker who was on 'special duty' with the Department, having recently returned from command of a battleship. Barker also was the Navy representative to the newly created two-man Army-Navy Board, the Army representative to which was Arthur Wagner, the head of

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[88] George N. Wheeler, 'Notes on Military Intelligence Departments and General Staff with [?] Brief Account of the Intelligence Branch of the British War Office', [1891?], NARA, RG 165, M1025, File MIC 639/ . Wheeler's bibliography cites, among others, von Schellendorf, Upton, Jomini, Brackenbury, Colomb, Charles Rogers' article in *USNIP*, and the *Annual of the Office of Naval Intelligence*.

[89] Hattendorf, John B., B. Mitchell Simpson III, and John R. Wadleigh, *Sailors and Scholars: The Centennial History of the U.S. Naval War College*, (Newport, 1984), pp. 43-46. Dorwart, *The Office of Naval Intelligence*, pp. 56-57.

the MID. Together, as we have seen, these two boards planned the war, and spurred in part by alarming intelligence dispatched by the attaché in Madrid, urged the President to order a surprise attack on Spanish forces.[90]

Two and three-man ad hoc boards were scarcely a satisfactory substitute for a real general staff, however. Accordingly, in 1900, the Secretary of the Navy created the General Board of the Navy, which initially consisted of Admiral Dewey, the most senior admiral and hero of Manila Bay; the Chief of the Bureau of Navigation; the Chief Intelligence Officer and his assistant; the President of the Naval War College and his assistant; and three other officers of at least Lieutenant Commander rank. Unfortunately, the change was more cosmetic than real. The General Board had no legislative sanction and only advisory authority; the real power continued to reside in the bureaus. Nonetheless, ONI found itself working primarily for the General Board and the Naval War College and hardly at all for the Bureau of Navigation, the authority to which it formally reported.[91]

The War Department was slower to create a War College. In the War Department, the reformist Secretary, Elihu Root, who was influenced in part by the writings of Emory Upton, in 1901 pushed through the creation of the Army War College. Like Luce in the Navy before him, Root intended his college to be a proto-general staff until Congress could be cajoled into creating a real general staff. In 1903 this finally happened. The new law replaced the largely useless position of the Commanding General with new position of the Chief of Staff. Under the new system, the 'First Division' of the General Staff dealt with administrative matters, the 'Second Division' was the MID, and the 'Third Division' handled advanced military

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[90] Dorwart, *The Office of Naval Intelligence*, p. 61. Brereton, *Educating the U.S. Army*, p. 69-70.

[91] Yates Stirling, *Fundamentals of Naval Service*, p. 239. Coletta, *The American Naval Heritage in Brief*, p. 212. Dorwart, *The Office of Naval Intelligence*, p. 87.

education, notably the new War College, but also war plans, joint Army-Navy operations, military doctrine, harbour defence and 'new developments'. Brigadier General Tasker Bliss, the President of the War College, interpreted the word 'college' in this case as meaning 'collegiums', and he thought it should be the Army's planning agency. Moreover, in early 1904 Arthur Wagner was assigned to be the deputy head of the new War College and then was promptly given the concurrent assignment of chief of the Third Division, which soon became known as the 'War College Division'.[92]

Both services now had intelligence offices, war colleges and the War Department had a General Staff. Furthermore, in 1902 the MID and ONI had agreed to share information collected by one that would be of interest to the other. The conditions seemed ripe for progress on a joint planning system. In fact, even as the War Department's General Staff was coming into being, the two services agreed to the establishment of the Joint Army and Navy Board under Admiral Dewey. This body took up the matter of war planning for the Secretaries of War and the Navy. Within a few years the system of joint planning was facilitated by the Navy's adoption of the Army's method of assessing military problems, the 'estimate of the situation'.[93]

Retrogression was soon to follow, however. During the protracted bureaucratic shuffling that followed the creation of the War Department's General Staff, the question soon came up of co-locating and then even consolidating the Second (MID) Division with the Third (War College) Division which, after all, was the greatest user of its services. The MID itself fought a merger tooth and nail, its

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[92] Henry G. Gole, *The Road to Rainbow: Army Planning for Global War, 1934-1940* (Annapolis, 2003), pp. 17. Brereton, *Educating the U.S. Army*, pp. 102, 106-107.
[93] Bidwell, *History of the Military Intelligence Division*, p. 70. Hattendorf, *et al*, *Sailors and Scholars*, pp. 69-73.

chief arguing in 1906 that the division should be protected because 'in all countries' intelligence 'is believed to be one of, if not the most, important function of a General Staff'.[94] This was a losing battle, however, and in 1908 the Chief of Staff ordered the two divisions collocated and almost immediately the MID, whose chief was, perhaps not coincidentally, junior to the head of the War College Division, lost its independent existence. In theory, the MID's functions became the responsibility of a newly formed 'Military Information Committee' (MIC). This committee, however, consisted of every officer assigned to the War College and they were all too busy to pay any attention to such matters. In 1911 when the defence of the Panama canal became a topic of concern, both the Naval War College and the War Department studied the matter. When the Secretary of War named a group within his department to study the problem, the Military Information Committee was not even mentioned.[95] The outer appendages of Army intelligence were still vigorous, but the core was sclerotic.

The Navy had yet to create a General Staff of its own. In 1909, Secretary of the Navy George Meyer tried to create a partial substitute, a system of four 'aids'—for operations, materiel, personnel, and inspections—to advise him and liaise with the appropriate bureaus, but the real power still remained with the bureaus. In 1910, as the Department was undergoing further reorganization, Captain Templin Potts took over as head of ONI and became the first head of ONI to hold the new title of 'Director of Naval Intelligence' (DNI), rather than 'Chief Intelligence Officer'. Pursuant to this reorganisation, ONI was placed under the Aid for Operations, along with the War College and the General Board, which for some years had been the

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[94] William D. Beach to Secretary, General Staff, 'Army War College Work', 2 June 1906, NARA, RG 165, M1024, 639/26. (Emphasis in original.)
[95] Bidwell, *History of the Military Intelligence Division*, pp. 76-77, 81-85.

primary users of ONI's material. The General Board was to designate countries against which war plans would be developed. ONI would then provide information on the potential enemy and the War College would write the plan itself. Finally, the General Board would review the plan and forward it to ONI where it would be kept on file for updating. With the new setup, the Navy soon wrote war plans for Nicaragua, Mexico, Japan (the first iteration of the famous War Plan Orange) and Germany (War Plan Black).[96]

Captain (later Rear Admiral) Bradley Fiske, found less to this process than met the eye when he became head of the war plans section of the General Board at the end of 1910. Not only did the war plans he found in the file not meet his preconceived notions of what a true (i.e. German) war plan should be, but he realized he did not have the education necessary to write a good one. Casting about for help, he found that 'the man who came the closest to knowing about things of that kind was Captain Potts' of ONI. The intelligence officers of ONI were the ones with the broadest perspective on strategy and the world. The alternatives, after all, were the bureaucrats entrenched in their bureau fiefdoms concerned with Washington politics and line officers who commanded ships in a navy which had tactics for ships 'but did not have fleet tactics'.[97]

Not everyone agreed with Fiske that the war planning process should be improved. When Woodrow Wilson moved into the White House in 1913, he ordered an end to all such planning and forbid the Joint Army and Navy Board from meeting.[98] In the fall of 1915, the Baltimore Sun reported that the Army's War College Division was making plans for a possible war with Germany (they were

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[96] Coletta, *The American Naval Heritage in Brief*, p. 217. Dorwart, *The Office of Naval Intelligence*, pp. 87-91. Bradley A. Fiske, *From Midshipman to Rear-Admiral*, (New York, 1919), p. 477.
[97] Fiske, *From Midshipman to Rear- Admiral*, pp. 479-480, 531.
[98] Dorwart, *The Office of Naval Intelligence*, pp. 93-94.

actually running a war game), and the President threatened to fire every officer on the War Department General Staff. The following summer Wilson found out that the War College Division was still running war games. He called his Secretary of War, Newton Baker, onto the carpet over the matter. Baker, though a pacifist at heart, defended the practice by posing a hypothetical question to the President. 'Suppose we had a war with France. Then a war is fought with France on paper, and the paper folded up and put away'. Unimpressed, the President replied, 'that seems to me a very dangerous occupation. I think you had better stop it'. Afterwards, Baker discreetly instructed the Acting Army Chief of Staff General Tasker Bliss to tell the War College to continue 'but to be on guard against their receiving any publicity'.[99] For its part, the Navy had no run-ins like this with the President and its planners continued to meet, but they did little actual planning. Wilson's obstinate opposition to war planning left ONI with little to do other than accumulate and file information in the hopes that someday it would be of use to somebody.[100]

A frustrated Bradley Fiske watched these developments, and in 1915, by which time he had ascended to the position of Aid for Operations, he acted to bring about change. In 1913 Wilson had appointed as his Secretary of the Navy Josephus Daniels. The lawyer and former newspaper man was busily turning the Navy Department upside down, making himself increasingly unpopular with decisions great and small such as banishing alcohol from ships and rejecting suggestions that he position the fleet to defend against possible Japanese action in the Pacific. Though many of Daniels' decisions were sound, the overall result, Dudley Knox of ONI thought, was 'utter disorganization, incomprehensible inertia and inefficiency, and

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[99] Elaine T. Wade, 'Ralph A. Hayes: Private Secretary in the Newton D. Baker Administration of the War Department During World War I', (unpublished doctoral dissertation, Georgia State University), 2001, pp. 61-64.
[100] Dorwart, *The Office of Naval Intelligence,* pp. 93-95.

rank insubordination and disloyalty'. Motivated in part by their reformist tendencies and probably also by their animus toward Secretary Daniels, a coalition of officers headed by Fiske, but including also the DNI and Knox, started agitating for the creation of a Naval general staff. When Daniels opposed the initiative, dismissing it as a 'plan to Prussianize the American Navy', the insurgents went behind his back to Congress which in 1915 passed legislation requiring the creation of the Office of the Chief of Naval Operations (CNO).[101]

Both services now had their own general staff and (when it was allowed to meet) they also had the Joint Army and Navy Board, as a formal venue within which to plan. The basic system was quite successful and remained in place until the eve of World War II.[102] This progress notwithstanding, however, as war raged in Europe, the Army had no central intelligence office worthy of the name and the restrictions imposed by President Wilson, impeded ONI's ability to do anything useful.

Despite the troubles besetting the home offices, military attachés did continue to serve abroad in an atmosphere of benign (i.e. funded) neglect. In February 1914, however, the Chief of the War College Division proposed the withdrawal of military attachés from Spain, Italy, Austria, and Belgium and questioned the need for attaches in Russia, the Balkans, and Turkey. He further suggested that should the US Army actually go to war, five more attachés, four of them posted to Europe, should be withdrawn and sent to troop units. Despite this proposal, when the World War broke out the United States had 30 attachés abroad (23 military and seven naval) the same

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[101] Ibid, pp. 97-98.
[102] Gole, *The Road to Rainbow*, pp. 19-20.

number as Russia and more than every other country in the world.[103] However, this tremendous effort bought the United States very little.

An official history of Army intelligence suggests that the beginning of the World War in 1914 occasioned a renewal of the attaché system, but this is only partly true. There was no more talk of bringing attachés home, their funding was increased, and observers were attached to the French, German, Austrian, and Japanese armies.[104] But this did not mean that Army was particularly interested in what the attachés had to say. The real problem was that the Army leadership simply did not value intelligence. Chief of Staff General Hugh Scott, who held the position from November 1914 to September 1917, was the locus of the problem. He was unfailingly loyal to his civilian superiors, but this did not necessarily ensure that they held a high opinion of him. President Taft described him as having 'wood to the middle of the head' but in fact he had an impressive knowledge of Indian sign languages and an abiding interest in packsaddles.[105] In short, Scott was still intellectually in the old Army of the frontier.

Scott held an opinion of the established intelligence structures that rested somewhere between indifference and hostility, though he felt comfortable making ad hoc arrangements to satisfy intelligence requirements. When in September 1915 newspapers reported that the Japanese might encroach on American interests in the Pacific, he feared being accused of whipping up a war scare in an effort to benefit the Army. He thought that the necessary investigation required a level of discretion that could not be obtained through existing channels. Accordingly, he sought and received permission from the Secretary of War to turn to outsiders. It is not clear who he used

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[103] Bidwell, *History of the Military Intelligence Division*, p. 92. Vagts, *The Military Attaché*, p. 34.
[104] Ibid, p. 93.
[105] John Patrick Finnegan, *Military Intelligence* (Washington, 1998), p. 22. Jensen, *Army Surveillance in America*, pp. 122-123.

and surviving War Department records say nothing about what spy network may have resulted from this request. Similarly, in 1916 when alarming reports came in of Japanese-Mexican plotting and possible nefarious plans by nationals of those countries resident in the United States, Scott arranged a special 'secret service' fund for General Frederick Funston (a famous veteran of the Philippines War) at Ft. Sam Houston, despite the fact that Funston's chief of staff was on record saying that the fears of Japanese and Mexicans were overblown. The money arrived anyway and, perhaps predictably, bought many alarming reports, some of which began to leak. Secretary Baker soon intervened and shut the program down.[106]

In the fall of 1916, William Lassiter, newly appointed to be Military Attaché to the United Kingdom, had occasion to experience Scott's utter lack of interest in established intelligence arrangements. When Lassiter arrived in Scott's office:

> [The Chief] showed surprise at my appearance, and I explained that I had been ordered to London, and had transited by way of Washington to find out what the War Department had in mind about the war and what sort of information I was particularly expected to gather. The General looked at me for a moment and then launched into a description of a row going on between him and...the Judge Advocate General. I tried several times to get him to talk about the matter which interested me, but without avail. The next morning I returned to the quest. As I seemed to be insistent, he looked at me intently, and said 'Oh, you want a letter of instruction'. I explained that what I would like was an informal statement...to serve as a guide in collecting information abroad. It appears that he had nothing special to confide to me, but he had the War College send me the next day one of those disquisitions that plagues the life out of Major A or Captain B...to produce at short notice.[107]

Once he got to London, Lassiter found himself mostly cut off from Washington. After the US declared war, a particular matter of intelligence policy arose on which Lassiter wanted guidance. He wrote in his diary: 'I will cable to

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[106] Jensen, *Army Surveillance in America*, pp. 123-124, 128-129.
[107] William Lassiter, 'Notes and Diaries, Vol. X, 1916-1917', pp. 4-5, United States Military Academy Library, West Point, NY, William Lassiter Papers, Box 1, Folder 'Vol. 5 1916-1917'. Hereafter USMA.

Washington on the subject and probably get no reply. No change in that respect'.[108] Lassiter's experience was the norm; Sherman Miles, who had been an attaché in Russia and then became head of the post-war Branch of MID that administered the attaché system, stated that during this period:

> There was a complete lack of system. The conduct of affairs of the Military Attachés was almost non-existent. You could not, for the life of you, find out whether your reports were, in substance and form, what the War Department wanted. Sometimes they would answer your letters and say that, if you did not hear from them, it was all right.[109]

One officer did rise up to protest this lack of a system. This was Major Ralph Van Deman, soon to become known as the 'father of American military intelligence'. He been a student of Arthur Wagner's at Fort Leavenworth and then served under Wagner in the MID. Subsequently, he did intelligence work in the Philippines under Dickman. When Van Deman came to the War College Division in early 1915, he was appalled at what he found. No officers were doing intelligence work in Washington and most of what was being done in the field was self-directed. Moreover, most reports coming in from abroad were, at best, read by the members of the War College Division before being filed. In 1916 he discovered a large pile of unfiled reports from General Pershing who was leading a punitive expedition in Mexico.[110] Van Deman soon began bombarding his superiors with lengthy memoranda urging change. He quickly convinced the Chief of the War College Division, Brigadier General M. M. Macomb who wrote to Scott in June 1916 that an impending reorganization of the

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[108] Lassiter diaries, p. 81.

[109] Sherman Miles, 'Lecture Delivered to the Officers of the Military Intelligence Division General Staff', 5 December 1917, NARA, RG 319, Entry 'CMH Background Papers', Box 52C, no folder name. Miles rose to become the Army's intelligence chief, a position he held early in America's involvement in World War II.

[110] Van Deman, *The Final Memoranda*, pp. xiii-xv, 19. See Mott, *Twenty Years as Attaché*, p. 109 for another example of attaché reporting being ignored. See also 'Statement of Marlborough Churchill', 25 September 1919,United States Congress, *Army Reorganization: Hearings before the Committee on Military Affairs,* Part 3, Sixty-Sixth Congress, (Washington: GPO 1919), pp. 303.

War Department would provide the perfect opportunity to re-establish a separate 'military information' organization within the General Staff, in consideration of the 'vital need...in modern war for the collection, classification, and distribution' of intelligence.[111]

Not long thereafter Joseph E. Kuhn replaced Macomb. Van Deman soon convinced him, as well. In early 1917 Kuhn reported to Scott that the War College Division was not circulating intelligence collected by the attachés in Europe among the officer corps and that the Division was not resourced or organized to do anything about this. Scott was still not to be budged. He pointed out that much of the information coming in from Europe was confidential and maintaining that the costs of disseminating such information were too high. When Kuhn subsequently tried to arrange for the publication in military journals of information acquired overseas on trench warfare and troop training, the Adjutant General quashed the idea on the grounds of illegality.[112] Another topic on which attachés and observers were busily reporting was the organization of Britain's military intelligence endeavours.[113]

During the early twentieth century, the US Navy took its place as one of the great navies of the world, but ONI—though surviving, unlike the MID—was entering a lengthy period of decline which would take it right to World War I. ONI's problems were manifold, rooted in changing international circumstances and in leadership.

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[111] Two of these memoranda can be found in *The Final Memoranda*, pp. 103-119 and 121-154. Macomb to Chief of Staff, 22 June 1916, NARA, RG 165, M1024, 639/115.
[112] Jensen, *Army Surveillance in America*, p. 131.
[113] See for example Geo. O. Squier, 'Intelligence Services of the British Army in the Field', 16 February 1915, NARA, RG 165, M1024, File 5353-3; James A. Logan, 'Organization of British Army Information Service', 1 March 1916, File 5353-5; Logan, 'Instruction for Intelligence Duties in Second Army (British)', 1 September 1916, File 5353-8; W. A. Castle, 'Report on Visit to the Somme Front', 21 September 1916, File 5353-9.

To begin with, ONI found itself spending more effort on what had previously been at best a secondary mission: protecting American information. This work came at the cost of collecting or analyzing foreign information. In the previous century, foreign attachés had been relatively restrained, but now ONI had to fend off their numerous intrusive inquiries and actual physical intrusions into restricted areas. In 1906, ONI even hired Secret Service agents of the Treasury Department to spy on Japanese at shipbuilding plants and coastal artillery batteries in Massachusetts and New Jersey. There were other concerns about security and secrecy, as well. ONI worried that the Navy's code was inadequate and arranged for the development of a new one. This emphasis on protecting information lapped over into the domestic realm. ONI even rejected requests from the Naval Institute for photographs of ships on the grounds that they were confidential. Approval was required from the Secretary of the Navy or his assistant to release ONI information to individual Navy officers.[114]

ONI further found that the collection of information was becoming more difficult. ONI's means of collection were becoming outmoded as foreign navies increasingly cast the same blanket of secrecy over their forces and industries that the US Navy was throwing over its own. The attachés, the traditional backbone of ONI's collection system, were becoming insufficient, though they continued to do some useful work. As a result, open source materials began to provide a growing fraction of the information that ONI collected.[115] The office struggled to adapt to new methods of collection of information that was not publicly available. In fact, by 1913

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[114] Dorwart, *The Office of Naval Intelligence,* pp. 86-88. The US Secret Service tracks counterfeiters, protects senior government officials, and through the World War I period performed a variety of intelligence and counterintelligence functions, particularly at the behest of other agencies. Today those functions belong to the Federal Bureau of Investigation. A rudimentary history of the Secret Service is Norman Ansley, 'The United States Secret Service: An Administrative History', *Journal of Criminal Law, Criminology, and Police Science*, 47:1 (1956), pp. 93-109.

[115] Crumley, *The Naval Attaché System*, pp. 244-247.

ONI had all but abandoned the attaché system as an important source of data, relying increasingly on special agents working overseas under cover, often as 'language attachés'. The future Admiral Chester Nimitz was one of these officers, gathering information in Belgium on U-boat engines. Similarly, when Mexico came to the fore as a target of intelligence interest, particularly in the wake of a report in 1911 that the Japanese were negotiating with the Mexican government to gain a naval base in Baja California, the Navy dispatched officers on special missions to Mexico.

The political peccadilloes of the Presidents were also problem for ONI. William Howard Taft had pursued a policy of 'Dollar Diplomacy' which entailed the aggressive, and within the Navy quite unpopular, use of attachés to win naval construction contracts. Wilson ended this in 1913, but as we have seen, he was hostile to war planning, ONI's main *raison d'être* as the Navy moved towards a sound planning capability. ONI also found itself at loggerheads with Wilson's generally unpopular Secretary of the Navy, Josephus Daniels. Not only was ONI essentially insubordinate when in 1915 it went behind Daniels' back to help Congress pass the general staff legislation, but it also clashed with him over the extent of the Japanese threat, about which Daniels appeared unconcerned.[116]

ONI morale and effectiveness were at rock bottom when Captain James Harrison Oliver took over as DNI in January 1914. He had served on one of those ad hoc intelligence missions that were increasingly eroding the attachés' position and as a young man he had attended lectures given by Emory Upton. Oliver was a committed reformer and he brought several officers of similar persuasion into ONI and then backed them as they promulgated their ideas. In particular, he set subordinates Dudley Knox and John Russell to work on reorganizing ONI in

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[116] Dorwart, *The Office of Naval Intelligence*, pp. 90-95, 100-101.

accordance with the latest principles of scientific management. Knox and Russell also suggested changes to the collection system that entailed closer cooperation with other agencies of government. Finally, they laid out a plan for a 'war information service' which would involve increased cooperation with other government agencies and the suggested the use of businessmen, journalists and other civilians as intelligence collectors.[117]

When war broke out in Europe, ONI was, thanks to Daniels, able to post five additional attachés abroad, though the State Department disapproved a plan to put observers on foreign warships. These arrangements were only of modest importance, however, until May 7, 1915 when a German U-boat sank the liner Lusitania en route from New York to Liverpool. President Wilson modified his views and began to welcome increased military preparedness and Daniels moved quickly to exploit the situation. The Navy drafted a mobilization plan for a war in the Atlantic and the planners ordered ONI to start gathering intelligence on the 'strength and movement of enemy's forces' and to plan a 'complete system of secret service and cipher codes'. Accordingly, DNI started to establish both counterintelligence operations at home and to implement Knox and Russell's plans for a 'war information service'. Oliver had seemingly unrealistic notions about the level of effort that would be needed. He thought that he could handle the surge with just a handful of retirees and volunteers as ONI had done during the Spanish-American War.[118] Actually, until war broke out Oliver was correct because through the end of 1916 Daniels severely restricted ONI's ability to spend money on collection operations. For ONI, World War I had started, but only haltingly.

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[117] Ibid, pp. 89, 96-97. Packard, *A Century of U.S. Naval Intelligence*, pp. 40-41. Charles H. Harris III and Louis R. Sadler, *The Archaeologist Was a Spy: Sylvanus G. Morley and the Office of Naval Intelligence*, (Albuquerque, 2003), pp. 27-28.
[118] Dorwart, *The Office of Naval Intelligence,* pp. 100-102, 105.

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In the run-up to America's entry into World War I ONI was at best holding its bureaucratic own and MID had gone out of existence. However, intellectually speaking, American intelligence had come a long way from the post-Civil War doldrums, largely as the result of motivated individuals, not the vision of senior leaders. In particular, during the 1890s Arthur Wagner had identified many intelligence issues which would loom large during World War I. In fact, American ideas on the topic in 1917 were comparable to those of the European powers when they entered the war in 1914, in part because they were drawn heavily from European thought.[119] The notion that the central intelligence office of a service would gather and assess information about potential enemies from open sources and attachés and now even clandestine sources was every bit as current in the US as in Europe, even if the Army's system for doing it was virtually non-existent. It was generally agreed that this information was a 'vital need' in wartime and that it should feed directly into the deliberations of the general staff. Like the Europeans, ONI (and as we shall see the Signal Corps), had realized that the defensive and offensive components of intelligence were inextricably linked and that the other side must be denied information, not only at the tactical level as Wagner had suggested, but also at the service or national level. Furthermore, the services both believed that United States territory itself was a legitimate venue for their inquiries, though the full implications of this were yet to be seen.

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[119] For a summary of the state of British intelligence in 1914, see the first parts of chapters 2-4 in Christopher Andrew, *Her Majesty's Secret Service: The Making of the British Intelligence Community*, (New York, 1987). For the French, see Douglas Porch, *The French Secret Services: From the Dreyfus Affair to the Gulf War*, (New York, 1995), chapter 4. For the Germans, see Markus Pöhlmann, 'German Intelligence at War, 1914-1918', *Journal of Intelligence History*, 5:2 (2005), pp. 24-54.

Furthermore, of course, the Americans bowed to no nation in the development of their thinking about cavalry and other forms of battlefield reconnaissance, Shafter's unimpressive performance in 1898 notwithstanding. As we shall see, however, when World War I started there were two emerging issues of intelligence, one with major potential for combat intelligence, the other with implications both for combat intelligence and service intelligence. Technology was bringing new dimensions to intelligence with the advent of aerial reconnaissance and the flowering of signals intelligence.

Chapter 2

Technology Reinvents Intelligence

Every new invention in war brings its counter-invention. To new guns and ammunition are opposed new methods of fortification and improvements in armor plate. To every move there is a counter-move. In the old days military men attempted to hear what was said back of the enemy's lines with the aid of scouts and spies and the capture of messengers or messages. For the more modern means of communication, new methods of listening had to be devised.

–John Manly, MI-8, 1927[?][1]

Over the centuries, technological innovations had often contributed directly to the ability of military forces to deal out death. As World War I loomed, however, reconnaissance or intelligence personnel had yet to benefit in any substantial way from these advances. By and large they still used the same basic tools available to Sun Tzu: eyeball, horse, and pen, the marginal help from the telescope and the tethered balloon notwithstanding.[2] Thus, it is not surprising that before 1914 American officers seldom considered technology and intelligence collection together. Nor is it surprising that combat arms officers felt comfortable acting as 'intelligence officers' and performed creditably in that role. Arthur Wagner, for instance, the author of the pre-war American text on intelligence, was the author of the leading text on operations. Frederick Funston, renowned for his intelligence exploits in the Philippines War, was an operational commander as well and went on to senior

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[1] John Manly, 'Supplementary 1st and 3rd Parts', pp 3-4, , Marshall Foundation Library, Lexington, VA Friedman Papers, Item 811. Hereafter ML. This is from a series of unpublished articles that Manly wrote for Colliers magazine in approximately 1927.

[2] For a brief discussion of skepticism about the utility of tethered balloons during the Russo-Japanese War, see Sam Hager Frank, *American Air Service Observation in World War I*, (unpublished doctoral dissertation, University of Florida), August, 1961, pp. 21-22. Frank describes the inauspicious use of the balloon in the Spanish-American war on pp. 73-74.

commands on the Mexican border.[3] Not only were these ersatz intelligence officers using old familiar tools, but these tools were bringing in small and easily manageable amounts of information.

The military of the 1890s had not been noted for its receptivity to the application of advanced technology to intelligence operations. The key proponent of technological progress was the Army's Signal Corps. This was a small group of men with scientific expertise and an insurgent mentality. An 1890 law had stripped them of their highest profile mission as the weather service for the Federal Government but this had not bothered their energetic leader, Chief Signal Officer (CSO) Brigadier General A. W. Greely. He was a man with a self-described 'native aptitude' for ciphers and an interest in aviation and he led the Corps with a progressive outlook and a great ambition. He found that ensuring the survival of his corps required 'constant warfare'. In particular, he went to war against MID. The 1890 law gave the Signal Corps 'the duty of collecting and transmitting information for the Army'. For a time, Greely brandished this legislation in a bid to take over military intelligence. He argued that the Signal Corps' 'young energetic officers' were practiced in the handling and transmission of intelligence and could readily accomplish its collection and classification. Some of this information would necessarily be kept confidential, but 'a system of regular distribution of such information as is not confidential should be inaugurated'. The distribution of this information to the officer corps and the establishment of a War Department professional lending library modelled on the Boston Public Library, could allow the officers to 'keep abreast of modern thought and research in their specialties'. The fact that ONI was ahead of the Army in information management was not lost on the Signal Corps, either. Signal Captain

[3] Funston recounts his exploits in the Philippines in Frederick Funston, *Memories of Two Wars*, (New York, 1911).

Scriven, a future CSO, wrote a memo in 1893 on the importance of card catalogues in 'classifying' information from abroad pointing out their vital necessity 'if we are to hold our own in military affairs, not only against foreign governments, but against the Navy whose admirable intelligence Office is well known'.[4] In the end, however, not only did Greely lose the fight to take over military intelligence, but he was obliged constantly to fight the 'tenacity and extreme conservatism of the ranking officers of the army in opposing any new methods of service—the cavalry experts, for instance, discredited any way of conveying military information save by a mounted messenger'.[5]

Despite the opposition it faced, the Signal Corps remained healthy under Greely, even with only eight officers and fifty enlisted men doing 'essentially scientific' work including all the Army's 'electrical work', telegraphic censorship, and aeronautics.[6] In fact, the Signal Corps was one of the few bright spots in the performance of American intelligence during the Spanish-American War. When war broke, out President McKinley ordered it to institute censorship on all telegraphic cables going abroad from the United States as well as telegraph lines in Florida and foreign-owned cables in Cuba. This the Corps did, assisted by Western Union. It also prohibited all telegrams in Spanish to and from Spain, Cuba, Puerto Rico, Haiti,

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[4] Memo A. W. Greely, 'Remarks', 12 January 1892, NARA, RG 165, M1024, File 639/2; Untitled document (from the Signal Corps), 5 May 1894, File 639/2; both NARA RG 165, M1024, File 639/2. Captain George P. Scriven, 'A General Statement of a Method of Classification of Military Information Suitable to the Use of a Card Index and to the System of Classification by Countries', 26 January 1893, NARA, RG 165, M1024, File 639.
[5] Rebecca Robbins Raines, *Getting the Message Through: A Branch History of the US Army Signal Corps*, (Honolulu, 2005), p. 81. Major General A. W. Greely, *Reminiscences of Adventure and Service: A Record of Sixty-Five Years*, (New York, 1927), p. 152. For Greely's interest in aviation see Frank, *American Air Service Observation*, p. 73.
[6] Howard A. Giddings, *Exploits of the Signal Corps in the War with Spain* (Kansas City, 1900), pp. 10, 15.

Jamaica, and St. Thomas as well as telegrams in cipher except for those of neutral diplomats.[7]

The Signal Corps and the Navy both believed that Spain should not be allowed to communicate with Cuba. The feeling in both was that one might 'as well allow the daily landing of arms, food, and reinforcements for the enemy as to allow him constant and undisturbed cable communication'.[8] Accordingly, when war came with Spain, the Signal Corps attempted to cut the cables connecting the island to the outside world at Santiago de Cuba while the Navy attempted to cut the cables off Cienfuegos and elsewhere along the Cuban coast. The intent was to make the Spanish forces unable to 'to make their necessities and condition known' to Spain itself. The American forces never completely isolated Cuba telegraphically; one cable left uncut had a terminus in Key West. Cutting the other cables may have forced more traffic onto this cable. Thus, the measures to isolate the island may have helped with intelligence collection, because censorship measures imposed on this cable (and, indeed, other cables) proved not just a prophylactic measure but a valuable source of intelligence whether other communications were forced onto it or not.[9]

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[7] Raines, *Getting the Message Through*, p. 89.Giddings, *Exploits*, p. 115.

[8] Giddings, *Exploits*, p. 23. For a similar comment from Rear Admiral G. E. Belknap in 1897 in the context of a possible war with Britain, see G. E. Belknap, 'Some Aspects of Naval Administration in War, With Its Attendant Belongings of Peace', *USNIP*, 24:2, (1898), pp. 263-300.
The Navy had long envisioned the possibility of cutting submarine cables. As early as 1883, Ensign Charles Rogers had written that naval intelligence should know the locations of foreign submarine cables in order that they might be cut or tapped in wartime. International law had even allowed the cutting of cables in wartime since at least 1884. Rogers, p. 684. William Sampson, 'The Atlantic Fleet in the Spanish War', in Charles D. Sigsbee, *et al*, *The United States Navy in the Spanish-American War of 1898* (n.p., 1899), p. 912. Commander C. H. Stockton, 'Submarine Telegraph Cables in Time of War', *USNIP*, 24:3, (1898), pp. 451-452.

[9] For the Navy's efforts, see Evelyn M. Cherpak, 'Cable Cutting at Cienfuegos', *USNIP*, February, 113:2 (1987), pp. 119-122; and Sampson, 'The Atlantic Fleet', p. 912. For the Signal Corps' work see Raines, *Getting the Message Through*, p. 90; Giddings, *Exploits*, pp. 23-36; United States Army Signal School, *Historical Sketch of the Signal Corps (1860-1928)*, (Ft. Monmouth, 1929), pp. 43-44. Bidwell, *History of the Military Intelligence Division*, p. 62.

The big combat intelligence problem during the Spanish-American War was the location of the Spanish fleet which had slipped right past the patrolling US Navy ships in the Atlantic.[10] The US Army was massing in Florida preparing to sail to Cuba, but if Admiral Cervera's Spanish fleet intercepted the troop transports, the result would be disastrous. Nearly as bad, the Spaniards might appear off the East Coast and shell American cities.

The Signal Corps, not ONI or the MID, found Cervera's fleet through a clever combination of technical means and human intelligence. A Colonel Allen, the censor in charge of the submarine cable at Key West, had managed to recruit an employee of the cable company in Havana. On 18 May 1898 Cervera's fleet sailed into the harbour at Santiago de Cuba. Cervera immediately cabled news of his arrival to Madrid but the message went on a Cuban cable via Havana where Allen's agent learned of it. (The irony that the U.S. was trying to cut cables to prevent the transmission of precisely this sort of message in which the Spanish fleet so conveniently made its 'necessities and condition known' to Madrid never seems to have occurred to the American forces.) Within an hour the agent informed Colonel Allen in Key West. Allen immediately sent word to the President and the Secretary of Navy. Greely, aware of the information's provenance, assured the nation's leaders that it was reliable. Unfortunately, the idea that sound naval information would come through such unorthodox channels was so revolutionary that President McKinley, reflecting the general scepticism of the nation's leadership, asked for confirmation from another source. Within a day the Signal Corps' censor in New York provided confirmation.

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[10] Giddings, *Exploits*, pp. 37-38.

The Secretary of the Navy was convinced, and at once ordered a blockade of Santiago. Still skeptical, however, the Navy itself dragged its feet for 10 days before carrying out the order, though Allen's source sent daily updates about the status of the Spanish fleet. Meanwhile, on 3 June, the Naval Attaché in London, Williams Sims, cabled to the United States that an agent he had recruited had told him that the Spanish fleet was now at Santiago with their hulls and engines needing overhaul. This was a triumph for human intelligence and for Sims as an attaché, but the technology of the Signal Corps had proved its superiority even if the Navy was reluctant to admit it.[11]

Despite the occasional victory such as that, new technology embedded itself in the military and in the intelligence business only slowly. In the decade directly preceding America's entry into the Great War, military journals occasionally ran articles on intelligence, sometimes reprinting works from foreign journals. These articles indicated that many officers still thought about intelligence and reconnaissance in ways more reminiscent of the Franco-Prussian War or the wars on the Great Plains than of modern realities. *Infantry Journal*'s decision to publish a two-part translation of a French work entitled 'The Service of Information: A Practical Study' starting in the July-August 1914 issue illustrates this point.[12] The editors evidently believed that it would be a good use of paper and ink to publish an article that quoted Lewal saying that 'the spy reveals himself by...his great

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[11] Ibid, pp. 38-40, 46. Greely, *Reminiscences of Adventure and Service*, pp. 181-183. The Secretary of War, with whom Greely had a dispute, appears not to have been in the know. Greely did not share confidential information with him. Crumley, *The Naval Attaché System*, pp. 125-126. Interestingly, Sims had some experience tapping cables himself. In a letter home in early 1898 he claimed to have tapped 'an underground wire' in St. Petersburg Russia 'with excellent results'. He expected that the Russian government would be very unhappy if it found out. Nothing further is known of this incident. Crumley, *The Naval Attaché System*, pp. 118-119.

[12] J. Raoult de Rudeval, (French), 'The Service of Information: A Practical Study', *Infantry Journal*, 11:1, (July-August, 1914), pp. 88-114; and 11:2 (September-October, 1914), pp. 264-288. Hereafter *IJ*.

politeness...his calculated self-effacement, his habit of looking at or hearing things without appearing to do so';[13] which discussed the danger of the enemy disguising his soldiers as peasants for the purpose of espionage;[14] and which mentioned cavalry but not the aeroplane and signalling with fires and smoke, but not by radio or telephone.[15]

World War I, however, saw rapid and revolutionary changes in American intelligence. A leading reason for this was technological change. A small cadre of technophilic officers brought technology to the fore, in the process doing much to create modern-day bureaucratized intelligence staffs populated by professional technical experts. In what one scholar has aptly called an 'analog revolution',[16] aerial photography and signals intelligence were about to provide unprecedented amounts of information in staggering detail to intelligence personnel, swamping the card files, attaché reports, and terse reports from cavalry officers which had previously characterized the intelligence business.[17]

The increased availability of intelligence led to a disproportionate increase in the size of military staffs. One prominent historian and strategist has argued that the logic of war (effectiveness) and the logic of technology (efficiency) are at odds.[18] During the World War I era, efficiency was the order of the day in the United States.

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[13] Ibid, 'The Service of Information', p. 105. Wagner copied this phrase without citing Lewal. See Wagner, p. 189.
[14] Ibid, p. 111.
[15] Ibid, p. 269
[16] Michael Warner, 'Building a Theory of Intelligence Systems', in Gregory F. Treverton and Wilhelm Agrell, eds., *National Intelligence Systems: Current Research and Future Prospects* (New York, 2009), p. 33.
[17] 'Naval Intelligence; Foreign Intelligence "Supply and Demand"; "Combat Intelligence"', extracts from *Monthly Information Bulletin, Office of Naval Intelligence*, 1931; File UNV, RG8, NHC. Walter C. Sweeney, *Military Intelligence: A New Weapon in War*, (New York: 1924), pp. 1-2.
[18] Van Creveld, *Technology and War*, (New York: 1989), pp. 316-319. For an application of this argument to radio and its implications, see John Ferris, 'The British Army, Signals and Security in the Desert Campaign, 1940-1942', *Intelligence and National Security*, 5:2, (1990), pp. 256-260.

The late 1880s to the early 1920 saw the country swept by efficiency experts who studied industrial and bureaucratic processes in order to 'scientifically' optimize them, wringing out 'wasted motion', maximizing profit, and contributing, they thought, to the moral betterment of the nation.[19] This efficiency craze might be said to have exploited predictability to optimize performance.[20] So, for example, Henry Ford's assembly line could be highly efficient because it was possible to predict in advance precisely how the machinery and parts would act and the workers on the line could be trained to act nearly as automatons.

Similarly, it was easy to imagine how one might efficiently deliver firepower from a million man army. In fact, in the years running up to World War I, many technology enthusiasts imagined such schemes. Of course, it would turn out that the simplest thing was difficult. During this period, the most discussed technological tool was the aeroplane. In the opinion of some, it promised to make the entire battlefield visible to the commander and show him the precise location of the enemy's forces. These enthusiasts thought that a commander would soon have such a comprehensive view of the battlefield that command could depend less upon intuition or genius and become more a matter of doing the self-evidently right thing, the efficient thing. At the same time, the unfolding revolution in telecommunications was creating unprecedented opportunities for a commander to know where his own forces were and to fine-tune their actions. The words of future Chief Signal Officer George Scriven that the sound which most interested Japanese general Kuroki Tamemoto during the 1904-1905 Russo-Japanese War was not that of combat, but rather the 'click of the telegraph instrument which left nothing to the doubt of vision, but told him exactly

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[19] For an excellent discussion of these ideas, see Samuel Haber, *Efficiency and Uplift: Scientific Management in the Progressive Era 1890-1920*, (Chicago, 1964).
[20] Martin Van Creveld, *Technology and War*, pp. 316-319.

what each unit was doing', were typical of the mood of the small band of technology enthusiasts in the military during this period.[21]

However, the steel, glass, and rubber in Henry Ford's factories did not try to prevent themselves from being made into cars by wrecking the machinery and killing and maiming the workers. This is precisely what happens with the objects upon which an Army acts. These objects are the opponent and 'given an opponent who is capable of learning, a very real danger exists that an action will not succeed twice *because* it has succeeded once'.[22] The efficiency experts may have been partially successful in creating a civilian work force of happy automatons, but the military force that operated in a repetitive, mechanical, efficient fashion, whether at the level of the individual or at the level of the army or fleet, was going to find itself decisively and brutally defeated in short order. An entry in the notebook of a student at the AEF's intelligence school hinted at this very lesson. 'Remember when [the enemy] does something with success once, he is sure to repeat. Watch it'.[23]

The utility of aircraft and modern telecommunications threatened to give a decisive advantage to the side using them. No opponent would allow this situation to obtain unchallenged; he would fight back in all domains. In the air, he would try to down reconnaissance planes. In the ether and on the cables, he would encrypt his signals and hide them. He would also use the jujitsu of signals intelligence. As helpful as electronic telecommunications were in arraying and controlling one's military or political assets, the results of one's plan falling into the enemy's hands—and such was the risk every time a message was sent over the wires or broadcast into

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[21] George P. Scriven, *The Transmission of Military Information*, (Governors Island, 1908), p. 11. Scriven is quoting Frederick W. Palmer from a 1905 paper the latter read before the Military Service Institution.
[22] Martin Van Creveld, *Technology and War*, (New York: 1989), pp. 316-319.
[23] Notebook entry, nd [summer, 1918], Marshall Library, Lexington, VA, Robert J. Fischer Papers, Box 1, Folder 1, Hereafter ML.

the ether—could be genuinely catastrophic. For the first time in history, the use by combat forces of an efficient new technology could be counterproductive. Two great armies were now, in essence, sending their secret orders directly to each other. Codes and ciphers had been around for centuries, but as Pershing's intelligence officer put it, the 'importance of breaking the secret communication system of the enemy was multiplied many times by the use of a new weapon – wireless telegraphy'.[24]

Each of these methods—air defences, communications security, and signals intelligence—required the opponent to procure more materiel, more staff, and more information. A mirror logic forced each side to do what the other was doing. Soon both sides had reconnaissance aircraft and fighter aircraft to protect them and bomber aircraft to (among other things) attack the enemy's air forces. They also had intelligence, maintenance, and training infrastructures behind each of these. Soon both sides had not only signal units but code compilation units, monitors of friendly communications, and signals intelligence units and the various infrastructures necessary to support them. Staffs, information, and the complexity of modern military operations ballooned on all sides.

A century earlier, Clausewitz had emphasized the limits of the knowable. He wrote that 'all information and assumptions are open to doubt' and that new information usually increased uncertainty. Given this fact, the military genius had to be capable of the *coup d'oeil*, the 'inward eye', the ability to quickly understand the situation.[25] Certainly, this was not the only period during which the discourse emphasized the limitations of the knowable. At other times, however, discourse has emphasized the great and growing possibilities of knowing. Among the technophiles,

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[24] Nolan 'History', p. 118.
[25] Carl von Clausewitz, *On War*, Peter Paret and Michael Howard trans. (Princeton, 1976), pp. 102, 117-118.

the pre-World War I period, was such a period. In the view of some, the aeroplane promised to make the entire battlefield visible to the commander and show him the precise location of the enemy's forces. At the same time, the unfolding revolution in telecommunications (the telegraph, the telephone and the turn of the century radio) was creating unprecedented opportunities for a commander to know where his own forces were and to control them. The application of progressive thinking was turning art into science in civilian factories and offices. Why should it not do the same in the military?[26]

Clausewitz was well known in America, but only imperfectly understood.[27] Nevertheless, Americans did pay lip service to his views on the subject. For instance, Wagner, whose books were still in use, drew on Clausewitz's work in preparing *The Service of Security and Information*, and some passages in it evoke the Prussian, such as the observation that 'knowledge of the enemy's movements and objects is generally incomplete and usually inferential'.[28] In 1913, the Navy's Lieutenant Commander W. S. Pye, cited Clausewitz explicitly in making the same point.[29]

All this notwithstanding, these officers and others such as Chief Signal Officer Greely, typically chose to emphasize those aspects of Clausewitz's work that

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[26] Samuel Haber has noted that the advocates of scientific business management during the Progressive era frequently used analogies to the human body, machines, and the military. However, the analogies sometimes flowed the opposite direction. Note, for instance, the title of a book written by one of the Navy's leading intellectuals during the time, Bradley A. Fiske, *The Navy as a Fighting Machine*, (New York, 1916).

[27] Christopher Bassford, *Clausewitz in English: The Reception of Clausewitz in Britain and America, 1815-1945*, (New York, 1994).

[28] Wagner, *Service of Security and Information*, p. 16.

[29] W. S. Pye, 'Intelligence Service in Peace and War', 1913, NHC, Record Group 8, XING, Accession #1913-186. For a similar point made by an Argentinean whose work was reprinted in the US, see R. E. Goubat, 'Cavalry Exploration in Co-operation with the Aeroplane', *Technical Conferences [at] the Army Signal School 1911-12*, Conference No. 2, p. 4, Combined Arms Research Library, Ft. Leavenworth, Kansas. Hereafter CARL.

underscored the importance of intelligence.[30] Pye, clearly a devoted reader of Wagner's works, for instance, turned Clausewitz on his head maintaining that 'uncertainty with regard to the enemy's forces and probable course of action constitutes one of the chief impediments in the formulation of a plan of campaign'. Given these realities, Pye held, it is important to make an 'estimate of the situation' and then to stick confidently with the resulting plan until substantiated evidence shows that the plan is no longer appropriate. '*Absence* of information', he counsels, 'is best personified as a little devil who constantly whispers in one's ear, "You better change your plan"'. In other words, for Clausewitz, the temptation to make bad decisions lay in too much (inevitably false) information, whereas for Pye that temptation resided in too little information. In fact, the 'failure to alter a plan upon *adequate information*', he wrote, 'is only one step better than changing it upon *insufficient information*'. Moreover, accurate timely information 'bestows the power of initiative, which, if properly used, may be the decisive factor in the campaign. Victory or defeat often rests upon the veracity and opportuneness of the information received'.[31]

It seemed that no longer would an 'inward eye' be necessary. In essence, the technophiles thought that technology now promised to provide a much more powerful outward eye that could see the enemy's forces and divine his very intentions. Especially due to the aeroplane, a commander would soon be able to see the

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[30] A. W. Greely, Chief Signal Officer, 'Lines of Information. Their Development and Their Value to Strategy and Tactics,' *JMSI*, 36:134, (March-April, 1905), p. 225. W. S. Pye, 'Intelligence Service in Peace and War', 1913, Naval War College, NHC, Record Group 8, XING, Accession #1913-186, p. 1. For a balanced discussion of Clausewitz' views on intelligence, see David Kahn, 'Clausewitz and Intelligence', in Michael I. Handel (ed.), *Clausewitz and Modern Strategy*, (London, 1986), pp. 117-126.

[31] W. S. Pye, *The Service of Information and Security*, (Washington, 1916), pp. 6-7. Emphasis in original. In title, form, and content, this book is quite like Wagner's. Portions of this book were lectures that Pye gave at the Naval War College. See W.S.,Pye, 'The Service of Security', 27 July 1914, NHC, RG 14.

battlefield with sufficient certainty that command could depend less upon intuition or genius and become more a matter of doing the self-evidently right thing, given the arrangement of the various pieces on the chessboard.

Indeed, the very utility of aircraft and modern telecommunications created grave vulnerabilities. Obviously, if aircraft could make the enemy's forces readily visible to friendly commanders, then presumably the enemy commanders could derive a comparable benefit from their use. In the realm of communications, for the first time in history, the use by combat forces of an efficient new technology could be counterproductive.[32] As helpful as electronic telecommunications were in arraying and controlling one's military or political assets, the results of one's plan falling into the enemy's hands—and such was the risk every time a message was sent over the wires or broadcast into the ether—could be genuinely catastrophic.

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During the pre-war era, military journals devoted a great deal of space to the implications of the new-fangled aeroplane. Pilots typically argued for combat roles for aircraft, but they were a small, junior group of officers who tended to die young.[33] Instead, most discussion focused on the aeroplane's potential for reconnaissance or 'observation'.[34] Some officers had an expansive view of this potential and while they

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[32] John Manly, 'Supplementary 1st and 3 arts', pp 3-4, ML, Friedman Papers, Item 811.
[33] Herbert A. Johnson, *Wingless Eagle: U.S. Army Aviation Through World War I*, (Chapel Hill, 2001), pp. 67, 73.
[34] For foreign contributions to the American debate, see, e.g., R. A. Campbell, 'Aeroplanes with Cavalry', *JUSCA*, 22:86, (September, 1911), pp. 311-314, reprinted from the April, 1911 issue of the British *Cavalry Journal*; Captain Niemann, 'Airships and Cavalry in the Reconnaissance Service', *JUSCA*, 22:89, (March, 1912), pp. 873-877, reprinted from the *Kavalleristische Monatshefte* of January, 1912; R. E. Goubat, 'Cavalry Exploration in Co-operation with the Aeroplane', *Technical Conferences [at] the Army Signal School 1911-12*, Conference No. 2, pp. 3-10, CARL, reprinted from *Revista Militar*, August, 1911; H. S. Massy, 'Aircraft in War', *JMSI*, 55:190, (July-August, 1914), pp. 133-149, the text of a lecture delivered at the Royal Artillery Institution, reprinted from *The Journal of the Royal*

admitted a continued role for cavalry, they thought that branch would soon be decidedly secondary in importance. Not surprisingly, the head of the Signal Corps enunciated one of the most grandiose visions. In 1915, Brigadier General George Scriven wrote that the 'air craft' had:

> altered...the theory and application of grand tactics. It now appears that the actual game of war is played openly with cards laid on the table, and opportunity no longer is given for inference as to concealed movements or for surprises, perhaps not even for the exercise of the high military quality of anticipation of the unseen movements of the adversary...The possibility of brilliant and unexpected blows by enterprising commanders has been largely eliminated from modern operations of war by the information supplied by the aviators. It is proved that the modern air craft lays open to the field of mental view the whole visible area of the immediate theater of war... The air craft sees and indicates the larger operations of war and points out to the slowly moving men on the ground not only the object to be attacked or defended, but to reconnaissance troops, especially the cavalry, the objective to be sought, the localities to be searched, and the character of information to be obtained.[35]

Others thought along similar lines. Lieutenant Hap Arnold, future leader of US Army Air Forces in World War II, predicted in 1913 that turning movements could now only rarely be successful, and that enemy movements would 'appear like the movements in a map problem'.[36] A student at Fort Leavenworth foresaw in 1915 that 'aerial reconnaissance would permit of the discovery of all hostile movements...Within a few hours a commanding general would expect to have air reports of any enemy within a radius of eighty miles'. This, he thought, would place a premium on superior generalship, 'celerity' of movement, and concealment.[37] Another officer was concerned that the military would let down its guard against

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Artillery. All of these officers supported the contention that aircraft and cavalry could complement each other in the reconnaissance role.

[35] George P. Scriven, *The Service of Information United States Army*, (Washington, 1915), p. 21.

[36] Henry H. Arnold, 'Air Craft and War', *IJ*, 10:2 (1913), p. 226.

[37] H. L. Landers, 'Critique on the Strategical and Tactical Uses of Balloons and Aeroplanes', in *European War of 1914-1915: Papers Prepared for Conference in Historical Research, April 7, 1915, by Members of the Staff Class*, Department of Military Art, Army Service Schools, 1915, pp. 54-55, CARL.

journalists, given that the aeroplane now meant that 'secrecy of movement can no longer be maintained and strategic surprises are no more possible'.[38]

Most officers thought that cavalry would still be necessary and, for its part, the cavalry community felt only slightly threatened, even perhaps seeing advantages in aircraft. One cavalry officer expressed the hope that observation aircraft might free the cavalry to 'throw caution to the winds and without let or hindrance gallop to points of advantage' there to engage in combat.[39] A British officer, whose work was reprinted in an American journal, pointed to the need for cavalry to do reconnaissance during inclement weather and at night. Still better, he thought, the cavalry would be increasingly available for offensive action.[40]

The British officer represented a set of officers who emphasized the cooperation of the aeroplane with other means of collection. They maintained that though there would always be gaps and uncertainties in the information derived from any single source or means of collection, these could be reduced by using complementary or redundant means. As early as 1906, one officer had a primitive form of this idea, suggesting that cavalry and 'spies' could usefully interact.[41] As the aeroplane matured, these officers tended to believe that aircraft would complement the cavalry and 'broaden the field of operations for cavalry' because cavalry 'will still be required to confirm and develop the information obtained in a general way by the

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[38] Frank Geere, 'The Press in Time of War', *JMSI*, 56:193, (1915), pp. 12. For similar views from a British officer published in an American journal, see W. A. de C. King, 'Aerial Reconnaissance, Its Possible Effect on Strategy and Tactics', *JMSI*, 53:186, (Nov-Dec 1913), pp. 450-455.

[39] David L. Roscoe, 'The Effect of Aeroplanes Upon Cavalry Tactics', *Technical Conferences [at] the Army Signal School 1911-12*, Conference No. 1, p. 13, CARL.

[40] De C. King, p. 451, 'Aerial Reconnaissance', p. 455.

[41] Charles D. Rhodes, 'The Duties of Cavalry Preceding a General Engagement, as Developed by Two Recent Wars', *JMSI*, 38:141, (May-June, 1906), p. 407.

aeroplane observer'.[42] Colonel John Wisser, a former attaché in Berlin, put it most clearly in 1910.

> Both methods and means of reconnaissance have their respective advantages and disadvantages, and our armies need both. Reconnaissance from an air-machine is dependent primarily on being able to *see*; consequently, this means of reconnaissance is out of action every day from evening to dawn, and at other times in fog or in very cloudy weather. On bright, clear days the air-machines have considerable advantage over the cavalry in that they can make accurate, connected observations and render prompt reports, but the more detailed but slower reports of cavalry, which can work by night as well as by day, in foggy or cloudy weather, by hearing as well as by seeing, disconnected although they may be, are still of as vital importance as ever.[43] [Emphasis in original.]

The question soon arose of how to prevent the enemy from using this new tool against one's own forces. An officer in the Indian Flying Corps was reported in the United States in 1914 to suggest that the very possibility of losing air superiority and thus one's eyes in the sky argued for the maintenance of cavalry as a backup reconnaissance force.[44] Lieutenant Benjamin Foulois, who would later twice be Pershing's Chief of Air Service, predicted that in future war there would be a battle for air superiority which would probably be dispositive of the war itself because the victor would 'have no difficulty in watching every movement and disposition of the opposing troops'.[45]

These issues intruded on official doctrine in 1915 when the Army undertook an ambitious project to prepare a '*Statement of a Proper Military Policy for the United States*', grappling with the organization, size, equipping and numerous other

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[42] [Anonymous], 'Aeroplanes in War', *JUSCA*, 21:81, (November 1910), p. 570. See also Massy, 'Aircraft in War', p. 142.
[43] John P. Wisser, 'The Tactical and Strategical Use of Dirigible Balloons and Aeroplanes', *JUSCA*, 21:81, (November, 1910), p. 422.
[44] H. S. Massy, 'Aircraft in War', *JMSI*, 55:190, (July-August, 1914), pp. 142, reprinted from *The Journal of the Royal Artillery*. A lecture delivered at the Royal Artillery Institution by Colonel Massy attributes these views to a Captain Scaton Massy who purportedly had enunciated them some eighteen months earlier.
[45] B. D. Foulois, 'Military Aviation and Aeronautics', *IJ*, 9:3, (1912-1913), p. 318.

issues of the Army and pointing out where new legislation was needed. Reflecting the discussion in the journals and what little they knew about the ongoing war in Europe, the study's authors wrote that all 'strategical reconnaissance is now carried on by aircraft'. Furthermore, 'it is often said that due to the use of aeroplanes surprises are no longer possible. Generally speaking, this is so, provided both sides are equally well equipped with machines and weather conditions are favorable. If, however, complete 'command of the air' is obtained by one side, the chances of surprising the enemy are greater than they have ever been before'.[46]

These confident assertions notwithstanding, the War Department as an institution knew little of how the Europeans were using aircraft. Colonel Samuel Reber, head of the Signal Corps' Aviation Section lamely testified before Congress in December 1914 about whether the Army was in touch with developments in aviation, saying 'I think we are—as far as it is possible to say we are keeping abreast of conditions that we do not know anything about'.[47] To the man charged after the Armistice with compiling the history of Army aviation's wartime efforts, looking back on that time, it appeared that the service had entered the war with information about aviation 'so meagre as to be useless'.[48]

Certainly, once the war broke out in Europe in 1914, information became harder to get as belligerents clamped down even further on security.[49] Nevertheless, the reporting of the military attachés and military observers might have kept the Army well informed on this rapidly developing topic, but it did not apparently because the

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[46] United States, War Department, War College Division, 'Military Aviation', supplement to *The Statement of a Proper Military Policy for the United States*, November, 1915, pp. 1, 6, 8, NARA RG 165, M1024, File WCD 9311-1,
[47] Arthur Sweetser, *The American Air Service: A Record of Its Problems, Its Difficulties, Its Failures, and Its Final Achievements*, (New York: 1919), p. 26.
[48] Quoted in I. B. Holley, Jr. *Ideas and Weapons*, (Washington: 1983), p. 37.
[49] Sweetser, *The American Air Service*, p. 35.

Signal Corps closed its ears to it.[50] Though the Army's senior leadership generally discouraged the dissemination and exploitation of intelligence from abroad and the War College Division seldom disseminated what was collected, in this case, the War College diligently forwarded attaché reports on aviation to the Chief Signal Officer both before the war and after the outbreak of hostilities.[51] Between 1909 and 1914, military attachés in Europe provided significant reporting on developments both in the design and use of aircraft. Other useful reporting came in during the war.[52]

Actual American experience in 1916 made a very modest contribution to American understanding of aerial reconnaissance. When, in the spring of that year, Brigadier General John J. Pershing led a punitive expedition into Mexico to capture the bandit Pancho Villa, he requested aircraft to help him with reconnaissance and communications. However, the squadron of eight aircraft that he received under the command of Major Benjamin Foulois proved to be of little use for these tasks. Mechanical and navigational problems made it a major undertaking even to deploy the planes from the United States to meet up with Pershing's forces which were already in Mexico. Worse yet, on the first day of active operations, one of the aircraft crashed. Hap Arnold recalled that the climate was so arid 'that we spent most of our time trying to keep the planes from drying out and falling to pieces'. A few reconnaissance missions were successful, and one found an enemy camp, allowing the Americans to conduct a successful cavalry raid. Exactly a month after entering Mexico, however, the last operational aircraft crashed while on a photoreconnaissance mission. Pershing's cavalry had to pick up the slack. Pershing himself, however, was

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[50] Bidwell, *History of the Military Intelligence Division*, p. 93.
[51] NARA RG 165, M1024, File 5770 for files on French aviation (and other topics) before and during the war. See also file 6382 (Russia), 6552 (Germany and the Netherlands), and 7031 (Britain).
[52] For example, W. A. Castle, 'Report on Visit to the Somme Front', 21 September 1916, NARA RG 319, M1024, File 5353-9. Castle was an observer with the British Expeditionary Force.

undaunted. The report he filed after the expedition was over carefully enunciated all the handicaps under which his aviators had had to operate in this their first time out. Nevertheless, he rendered 'unstint[ing] praise' to the aviators for their 'most exceptional service' and their 'many important reconnaissances' and quoted and endorsed a paragraph from Foulois' report to him that 'the knowledge gained...should result in more rapid and efficient development of the aviation service'.[53]

Before World War I, American officers thought that the most important use of aviation would be reconnaissance. This turned out to be the case. Despite the adulation (and attention from girls) that was heaped on pursuit (fighter) pilots, most wartime aviators agreed that the *raison d'être* for aviation was to gather information about the enemy. 'Observation is without doubt the most important of all Air Service specialities', thought the chief of the Training Section in the Air Service of the AEF's rear area.[54] Though, over time, bombing might grow more important, for the nonce, 'aerial combat, purely as an expression of military power, is absurd', wrote one observer in a book commissioned by the War Department after the war.[55] Even Eddie Rickenbacker, America's leading ace, thought that all applications of air power other

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[53] Johnson, *Wingless Eagle*, pp. 162-168. Bidwell, *History of the Military Intelligence Division*, p. 95. 'Report by Major General John J. Pershing, Commanding, of the Punitive Expedition', 10 October 1916, pp. 44-45 and 86-91, CARL.

[54] Chief, Training Section, HQ S.O.S., Office of the Chief of Air Service to Chief of Air Service, AEF, 26 December 1918, NARA RG 120, M990, Gorrell's History of the American Expeditionary Forces Air Service, 1917-1919, Series A, Volume 15. Hereafter *Gorrell History*.

[55] Harold E. Porter, *Aerial Observation*, (New York, 1921), pp. 33, 38. See also Daniel P. Morse, Jr., *The History of the 50th Aero Squadron*, (Nashville, 1990), pp. 11-12,17. This history was originally privately printed in 1920. See also Theodore Macfarlane Knappen, *Wings of War: An Account of the Important Contribution of the United States to Aircraft Invention, Engineering, Development and Production during the World War*, (New York: G. P. Putnam's Sons, 1920), p. 199, (quoting Brereton); Elmer Haslett, preface to Porter, *Aerial*, np. See also Stephen Noyes, to Air Service Commander, First Army, 23 December 23, 1918, *Gorrell History*, Series A, Volume 15,

than observation were 'trivial' compared with the 'vast importance' of knowing where the enemy was and 'looking before you leap'.[56]

However, the pre-war techno-enthusiasts failed to take adequate account of enemy countermeasures against observation aircraft. Van Creveld's comment about the tension between technology and war applied to aerial observation. In principle it was possible to see the battlefield with unprecedented fidelity. However, both sides found themselves locking into a cycle of measure and countermeasure, required to make huge investments in order to be able to see the enemy while remaining unseen themselves. On the offensive side, they built and supplied enormous fleets of observation planes and trained pilots and observers to fly in them. They bought cameras, built photo labs, and recruited and trained photo interpreters. On the defensive side, they built and supplied a vast fleet of pursuit planes and trained pilots to fly them. They camouflaged their emplacements (in the US Army, this led to the creation of a Camouflage Corps) and accepted the inefficiencies of moving troops at night and assembling them for attacks under cover in forests.[57] The belligerents even had to create components of their intelligence staffs to follow developments in the enemy's air forces, locating new air fields, assessing aircraft production, and building card indexes of prominent enemy pilots.

The relatively quiet months before the St. Mihiel offensive started on 12 September were an auspicious time for the AEF to develop an understanding of the observation airplane and the camera as weapons of war. In the field, observation aviation boiled down to three fundamental missions.[58] The first two exemplified the lack of differentiation at the time between 'intelligence' as information about the

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[56] Eddie Rickenbacker, *Fighting the Flying Circus*, (New York, 1919), p. 128.
[57] Porter, *Aerial Observation*, p. 110.
[58] For a similar typology, see Frank, *American Air Service Observation*, pp. 57-62.

enemy and 'intelligence' as whatever information would be helpful to one's commander. The first was the infantry contact patrol to identify the forward edge of friendly troops for the benefit of friendly commanders and artillery units. The second was adjusting friendly artillery fire, artillery '*réglage*'. The third was reconnaissance and scouting: mapping the enemy's defences, finding his artillery batteries and headquarters, identifying increased concentrations of men, weapons or logistics that might indicate an impending attack. It was sometimes possible to see enemy soldiers on aerial photographs. More easy to see as well as more revealing were the enemy's tools (artillery, trucks, etc.) and the marks that he made upon the ground (trenches, beaten paths, etc.). As a French officer told an Army War College audience in August 1917, 'a hostile attack, or a projected retreat, are written in advance on the field'.[59] The proponents of aerial reconnaissance learned that it could provide nine-tenths of the information 'upon which an army now acts'.[60]

Tactical reconnaissance missions usually entailed the use of the eyeball while strategic reconnaissance at greater depth more often involved the use of cameras which were high technology tools in their own right at the time. As early as 1912, Foulois had foreseen aerial photography and the placing of radios in planes and Pershing's short-lived squadron in Mexico had actually taken aerial photographs.[61] However, the virtues of aerial photography were not evident to the General Staff, even in the early months of American involvement in the war. Given the size of the war, the number of aircraft the Americans intended to fly and the size of the force they intended to deploy, many cameras, much photographic equipment and many

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[59] Captain de la Grange, 'Employment of Aircraft in War,' War Department, *Bulletin of the Intelligence Section, Training Department,* 1:3, 8 January 1918, p. 5, NARA RG 120, Entry 129, Box 6215, Folder 'Air Service AEF, Bulletins of the Information Section, Nos. 1-130'.
[60] AEF France, Office Chief of Air Service, 'Aerial Observation', *Bulletin of the Information Section, Air Service, AEF,* 3:104, 17 April 1918, p. 2, NARA, RG 120 Entry 129, Box 6215, Folder "Air Service AEF, Bulletins of the Information Section, Nos. 1-130"
[61] B. D. Foulois, 'Military Aviation and Aeronautics', *IJ,* 9:3 (Nov-Dec, 1912), pp. 314-332.

trained photo interpreters would have been necessary. All this required planning and infrastructure, but four months into American involvement in the war, neither the General Staff nor the Signal Corps had taken action to bring about an aerial photography effort.[62]

During the summer of 1917, a newly commissioned officer named James Barnes took it on himself to energize the War Department on the issue. He borrowed all the MID's files on the topic, finding them unread. These reports convinced him that the Army was making a grave mistake ignoring photography. It was clear to him that the aircraft-mounted cameras 'under trained direction', backed by 'special, trained laboratory forces', which could 'quickly, accurately and scientifically' process the information and communicate it to commanders, amounted to a new weapon of war. By making himself a 'pest', he convinced the Signal Corps to create a Photographic Division. Soon the British sent a Major Campbell to train this new office. Barnes then he set about proselytizing the General Staff. He arranged for Campbell to provide a lecture to it. Only about a dozen, mostly junior, staff officers came, but despite Campbell's almost impenetrable accent, they were mesmerized. A few days later Campbell repeated the lecture to a packed house including senior officers. The General Staff was amazed at the potential of aerial reconnaissance and 'the ball had been started rolling'.[63] In November, Barnes shipped out for France with Foulois.[64]

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[62] James Barnes, *From Then Till Now: Anecdotal Portraits and Transcript Pages from Memory's Tablets*, (New York, 1934), pp. 475-76.
[63] Barnes, *From Then*, pp. 479-481.
[64] *Gorrell History*, Series G, Volume 1, 'History of the Photographic Section. Manual for photographic officers. History of the photographic section in the Zone of Advance', p. 10.

Aerial photography seemed to promise 'absolute precision' while minimizing the human element.[65] Even 'the best thousand' observers 'couldn't compete for a moment...against the camera lens' because the latter had 'no personal imagination, no nerves, no prejudices'.[66] An example was the ability to locate enemy artillery batteries. Information from prisoners on this topic was 'extremely erratic and often wholly false' while information from a human observer in an airplane could be good to within 250 meters. New techniques such as flash and sound-ranging were somewhat better, but only photographs were 'very accurate'.[67] An intelligence officer visiting his French counterparts even got the impression that 'information of the battlefront from other sources was considered unreliable unless it could be verified by photographs'.[68]

Photographs did not take themselves however. Specialized cameras and trained 'observers' who were also the eyes of an aircraft on non-photographic missions were also necessary. Soon the Army established a training school at Fort Sill for aerial observers, though one student described it as teaching 'practically nothing of real help'.[69] The graduates of Fort Sill did further training at Amanty in France, where a training school was established in January 1918. Graduates of this course flew with French units until American observation squadrons started arriving in France in April, 1918. Eventually the AEF had forty-five aero squadrons and twenty-one photographic sections in theatre.[70] Of course, the photo-interpreters

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[65] N. N. Golovine, 'Cavalry Reconnaissance', *Cavalry Journal*, 31:127 (April, 1922), p. 185. Hereafter *CJ*.
[66] Porter, pp. 166-167.
[67] 'Inclosures to the Report of the Chief of Artillery, American E. F., Part V. Artillery Information Service', 10 May 1919, NARA RG 120, Entry, 129, Box 5954, Folder '38 Artillery Information',
[68] Finnegan, *Shooting*, p. 178.
[69] Frank, *American Air Service Observation*, p. 111.
[70] Elmer Haslett, *Luck on the Wing: Thirteen Stories of a Sky Spy*, (New York, 1920), pp. xi-xii. Terrance J. Finnegan, *Shooting the Front: Allied Aerial Reconnaissance and*

needed their own school, and the AEF soon established one at Langres, also the home of the intelligence school.[71]

Despite its advantages which were evident to aviators and intelligence personnel, however, the AEF never used photography 'as fully or as intelligently' as it might have. There was a shortage of trained photo-interpreters, an unclear delineation of photographic duties between the Air Service and the G-2 and, perhaps most importantly, a 'lack of knowledge in the army at large as to the value of photography and its uses'.[72]

Whether ground officers realized it or not, photography offered scientific precision. Nevertheless, photography was not the be-all and end-all of aerial reconnaissance. There was a trade-off between precision of information and the timeliness with which it could be in the hands of commanders. Photographs, of course, could show precisely what the enemy's disposition was in specific places, but in order to make this happen, the plane had to land and the plates had to be rushed to a lab and developed. Then a trained photographic interpreter had to look at them and communicate his findings to commanders. For some applications, such as planning future offensives, such a slow process was acceptable. Often it was not, especially when American forces started their rapid advance toward the very end of the war. In late October 1918, for instance, the 'information officer' of an artillery brigade, while conceding the potential utility of aerial photography of the 'area covered by the divisional artillery', lamented the fact that by the time the prints had made their way through official channels, American troops were invariably occupying the ground

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Photographic Interpretation on the Western Front—World War I, (Washington, 2006), pp. 114-115.

[71] Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

[72] *Gorrell History*, Series A, Volume 15, blind memo, HQ, Air Service, SOS, AEF, Office of the Chief of Air Service, Photographic Section, 'Aerial Photography', December 26, 1918.

they showed.[73] When more urgent information was required, typically in tactical reconnaissance, observers would write down what they had seen them, put these notes in small canisters, and drop them onto friendly command posts.[74]

One of the principal arguments for the retention of cavalry in the reconnaissance role had been that only it could operate at night. This turned out not to be true. Human observers in aircraft proved to be effective at night locating lights and fires. When intelligence personnel combined their observations with daytime aerial photographs, the enemy's secrets seemed to be laid bare. T. Bentley Mott, Pershing's liaison in Foch's headquarters, memoed to Nolan late on 7 July 1918 that the French G-2 had put together an 'atlas' derived from a methodical plan of day and night reconnaissance that clearly showed the movement toward Allied lines of a large German force. Each page of this atlas showed 24 hours of coverage. 'It may as well be said at once', Mott wrote, 'that during the day time no abnormal activity has anywhere at any time been observed'. Rather, the outlines of the German movement could be discerned by plotting over time the leading and trailing edges of an advancing wave of bivouac fires and abnormally lit and active railways stations.[75] Eight days later the Germans launched what became the Second Battle of the Marne. The AEF's intelligence school was soon teaching the importance of looking for lights in the rear area.[76]

The extensive aerial reconnaissance effort led to a substantial influx of data. During about seven months of observation flights, the AEF took 18,000 photographs

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[73] *Gorrell History*, Series C, Volume 13. G. T. Lindstrom, to Chief of Air Service, 3rd Corps, 'Report on Liaison with 5th Division', October 20, 1918,

[74] Predictably, this practice led to angry memos about the observers' poor handwriting. See for instance, *Gorrell History*, Series, C, Volume 12, N. A. Hall, , to CO 50th Aero Squadron, 14 September 1918.

[75] Mott to 'G2', 7 July [1918], 'Activity Behind the German Lines June 27 July 7', T. B. Mott Papers, Box 1, Folder 'Memoranda 1918', USMA.

[76] Notebook entry, no date, Robert J. Fischer Papers, Box 1, Folder 1, ML.

of enemy positions during the war (though this was far fewer than the more than the 500,000 that the British took).[77] Technicians might have to make many tens of prints of an interesting photograph and the cartographers made use of photographs, as well.

A bureaucracy was necessary to handle all these photographs, as well as the numerous other issues attendant on aerial intelligence. A critical advance was the establishment of the 'Branch Intelligence Officer' (BIO) system, although, in the event, the amount of data collected soon exceeded the ability of this system to process and disseminate it.[78] In October 1917 the G-2 came to the idea of detailing representatives within the squadrons in the field. The Air Service argued that the intelligence function within squadrons rightfully belonged to them, but in March 1918, consultations with the British, who were thought to have the best air intelligence organization, convinced both parties that the function should be G-2's. This led to the creation of G-2-A-7, the Office of Air Intelligence. This office oversaw the training and work of the BIOs whom it began sending out in May. Each observation and bombing squadron got a BIO as did, eventually, the G-2 in every Army and Corps and their Army and Corps 'Observation Groups'.[79]

The BIO was a conduit for extracting intelligence from the squadrons and groups and sending it up the chain. Not only did the BIOs debrief observers, but also

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[77] James J. Hudson, *Hostile Skies: A Combat History of the American Air Service in World War I*, (Syracuse, 1968), p. 299. Porter, *Aerial Observation*, pp. 174-175fn.
[78] Finnegan, *Shooting*, p. 229.
[79] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report', RG 120 Entry 113, Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'. *Gorrell History*, Series M, Volume 2. 'Air intel compiled by the G-2-A-7 section and reports on the functioning of that section'; 'Report of Technical Section G2-A7 GHQ American E.F.'; Alfred R. Bellinger, 'Relations of the Air Service with G-2'. 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report', NARA RG 120, Entry 113, Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'. 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report', n.d., RG 120 Entry 113, Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'.

the primary responsibility for photographic interpretation fell on them, a task in which draftsmen and sometimes even the observers themselves aided them.[80] The BIOs also provided intelligence to the fliers, for instance by putting up maps in the observers' room showing enemy air defences, searchlights, and other significant objects. Nevertheless, it turned out that the effective BIO had to be technically skilled and have a winning personality, because the benefits of the BIO's presence did not immediately impress the flying personnel. The BIO was not a flyer, after all, and he often seemed incapable of asking intelligent questions.[81] In short, the BIOs were outsiders who had to make themselves effective by diligent work and sometimes sheer dint of personality.[82]

The camera may have been a purely dispassionate observer, but its output was Delphic, requiring interpretation by humans. Though Dennis Nolan wrote airily after the war about the ease of detecting an impending enemy attack by means of aerial photography, this comment glossed over the very difficult interpretation task the BIOs faced.[83] Interpretation required all sorts of unusual types of people. The ground looked quite different in black and white from above than it did in colour from ground level, but the implications of this were disputed.[84] Shadows were the key to many problems, but some people thought that the photo-interpreter had to know them 'as a scientist' not an artist would.[85] The officer in charge of the Photographic Section of

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[80] Finnegan, *Shooting*, p. 225.
[81] *Gorrell History*, Series A, Volume 15, F. P. Lahm to Chief of Air Service, AEF, 6 January 1919.
[82] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report,' n.d., RG 120 Entry 113, Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'.
[83] Dennis Nolan Papers, Box 3, Folders 'Comments on John J. Pershings "My Experiences in the World War"', p. 357, United States Army Military History Institute, Carlisle, PA. Hereafter Nolan, 'Comments'.
[84] For a discussion of the art and science of photographic interpretation during this period, see Finnegan, *Shooting*, pp. 133-152.
[85] Porter, *Aerial Observation*, p. 184.

the Intelligence School at Langres disagreed. He thought that the best photo interpreters were men with artistic training, because they had the 'quick intelligence, the temperament and knowledge of the effect of light and shadow'.[86] One American thought that photographic interpretation required a 'peculiar mind—the type of mind that would work out chess problems' or crossword puzzles.[87] Another officer found it 'meticulous and keen work', that was particularly easy for people with the 'racial characteristics' of the French but that might be harder for Americans.[88] Some form of this perception may have influenced the decision to adopt for American use the French manual on photographic interpretation.[89]

The 'science' of aerial observation was 'progressive' and an officer's 'efficiency [would] become markedly impaired should he...fail to keep posted on the newest developments of the subject' or allow his skills to atrophy through lack of practice.[90] Nowhere was this more true than in the field of photographic interpretation, all the more so because the enemy did many things to confound the interpreter. The most difficult challenge was camouflage. This was a topic with 'no history and little literature', but now there was a fierce 'battle between the camera and the camouflage'.[91] Barnes likened it to a poker game with aces up the sleeve. Camouflage netting was a problem, but then it was discovered that filters on cameras revealed the difference between natural and artificial foliage. Then, knowing that camouflage could be detected, the two sides started building fake ammunition dumps

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[86] J. H. Wheat, 'Lecture Delivered to the Officers [of the] Military Intelligence Division', 21 April, 1920, NARA RG 165, Entry 65, File 10560-328/179, ,
[87] Barnes, *From Then*, p. 494.
[88] *Gorrell History*, Series A, Volume 15, blind memo, HQ, Air Service, SOS, AEF, Office of the Chief of Air Service, Photographic Section, 'Aerial Photography', 26 December 1918.
[89] This was US Army, Division of Military Aeronautics, *Study and Exploitation of Aerial Photographs*, translated by from the French, (Washington, July, 1918).
[90] *Gorrell History*, Series C, Volume 12: HQ Air Service Army Group, AEF, Operations Bulletin No. 2, 'Instruction of Observers and Pilots of Observation Squadrons', n.d.
[91] Powell, *Army Behind the Army*, p. 82.

and the like and camouflaging them to divert the photo interpreters' attention. Meanwhile, the real dump might be hidden in the cellars of a wrecked building or dug under a railway bed.[92] Planes could be kept inside hangars when an air build-up was underway. Dummy planes could be put outside in clear view when no build-up was intended.[93] Photo-interpreters learned that snow, grass, and even dirt changed their appearance after people walked on them. This provided a way of finding objects of interest: follow the paths to the target. The Americans then discovered that a certain type of earth-coloured matting used as women's apparel in Madagascar looked from above like a well-worn path in the dirt. The Camouflage Corps bought 10,000 miles of the stuff and laid a maze of fake paths to waste the time and divert the attention of German photo-interpreters.[94]

The information that the BIOs managed to wrest from the Germans went up to G-2-A-7 in Pershing's headquarters where analysts combined it with other sources of information, such as technical information obtained through the examination of crashed German aircraft, and data derived from liaison with British and French air intelligence. In September 1918, tired of inadequate reports on the interrogation of German pilots coming back from laymen, the office took over that function. It published the daily 'Summary of Air Information', which reported on friendly and enemy air activity, enemy air order of battle and force dispositions, enemy airfields and technical information. G-2-A-7 was further responsible for estimating German aircraft production and understanding its aircraft logistics.[95]

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[92] Barnes, *From Then*, p. 495.
[93] *Gorrell History*, Series C, Volume 12: Fred W. Clark, to CO First Observation Group, 1 Sept 1918.
[94] Porter, *Aerial Observation*, (New York, 1921), p. 215.
[95] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report', n.d., NARA, RG 120 Entry 113, Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'.

G-2-A-7 also played an important role in bombing. The G-2 (at the Army level, after the First Army stood up) selected potential targets in cooperation with the Air Service operations officer. Then G-2-A-7 developed maps and photographs of the targets for passage to the bomber squadrons.[96] In selecting targets they looked out to the full 'practicable radius' of bombers. This radius was not just what Allied aircraft could reach at the time. Rather, the office added 50 percent depth to allow for the development of new aircraft and an additional depth to account for probable advances of the front line. It also spread to either side to accommodate possible lateral shifts of American forces.[97] G-2-A-7 borrowed many of these target folders from the British. However, these contained scant information on why the target was worthy of bombing. It was determined that American flyers were more likely to perform well if they were privy to this sort of information, so in the run-up to the St. Mihiel offensive, G-2-A-7 modified the British target folder format to add it.[98]

With the time rapidly approaching for the first American offensive and the science of aerial reconnaissance evolving rapidly, and with American aerial force structure expanding equally rapidly, the Air Service was concerned that few officers knew the observation business well. They decided to concentrate the few experts in a place where they could benefit all concerned. Accordingly, in late August, the First Army's Air Service (under Brigadier General Billy Mitchell) established an 'Observation Wing' and put Major Lewis H. Brereton in command. The wing's primary function was to instruct and inspect the army's various observation groups

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[96] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report,' n.d., NARA, RG 120 Entry 113 Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'.

[97] *Gorrell History*, Series M, Volume 2, 'Report of Technical Section G2-A7 GHQ American E.F.', n.d.

[98] 'Report of Bomb Target Section, Office of Air Intelligence, General Headquarters, Amer. E.F.', n.d., NARA, RG 120, Entry 113, Box 5773, Folder 'Report of Bomb Target Section, Office of Air Intelligence, General Headquarters, Amer. E.F.'.

and squadrons and photographic sections and to develop and promulgate to them new ways of conducting aerial observation.[99]

The Americans kicked off their first offensive on 12 September 1918, quickly crushing the St. Mihiel salient, a victory only somewhat devalued by the fact that the Germans there were already in the midst of a retreat to more defensible positions. A week later, the AEF launched its even more ambitious Meuse-Argonne Offensive which lasted until the Armistice on 11 November. Much greater movement and manoeuvre characterized both of these offensives than had been the case for most of the war to date.

With increased manoeuvre came differences in the business of aerial reconnaissance. It was found that while observation aircraft in a quiet sector could often provide their own protection, this was not true in an active sector where pursuit units must be brought in. This made the execution of reconnaissance operations more complicated.[100] There were dramatic changes in the immediate tactical support of frontline units. In a development that signified the death of cavalry, in literally the last few days of the war the Air Service developed the idea of 'cavalry reconnaissance' patrols. Low-flying airplanes would observe the terrain immediately in front of American infantry, looking for enemy positions that were likely to retard the American advance. They would drop word of these to American troops or simply machine gun the enemy themselves.[101]

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[99] Maurer Maurer, ed., *The U.S. Air Service in World War I, Volume 1: The Final Report and a Tactical History* (Washington, 1978), p. 237. For examples of the wing promulgating guidance downward see *Gorrell History*, Series C, Volume 7, documents such as HQ Corps Observation Wing to Chiefs of Air Service of I, IV, V Corps, August 31, 1918; and HQ Corps Observation Wing, "Note on Observers Reports and Dropped Messages", September 1, 1918.
[100] F. P. Lahm, to C.A.S., AEF, 17 August, 1918, Benjamin Foulois Papers, Box 9, Folder 11, Library of Congress, Manuscript Division. Hereafter LOC.
[101] Frank, *American Air Service Observation* , pp. 359-360. See also *Gorrell History*, Series C, Volume 13, John C. Sharrick to K. P. Littauer, Chief of Air Service, 3rd Corps; Howard T.

There were further changes. Artillery *réglage* against fixed targets became less relevant as there were fewer fixed targets on which to fire. On the other hand, the problem of 'fleeting' or 'fugitive' targets came to the fore and the Air Service devoted a great deal of attention to means of spotting these targets and then quickly passing the data to artillery batteries assigned to fire on them.[102] In theory, each division attempted to keep an observation aircraft equipped with a radio flying over its zone of attack in 'continual' radio communication with the division command post and designated artillery units.[103] However, observers never made themselves fully comfortable with this exotic piece of gear. Even in the final weeks of the war, some observers still preferred to drop messages even when a perfectly good radio was on board.[104]

With regard to aerial reconnaissance at greater depth, though during static warfare enemy units moved primarily at night, during the war of movement they often had to move during the day, making reconnaissance easier.[105] Unfortunately, even during the counteroffensive on the Marne in July 1918, movement was sometimes so rapid that that it was impossible to photograph the entire area in front of friendly forces. The staff could only direct photographic missions to critical areas. The AEF also found that while they could learn aspects of the enemy's organization from

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Douglas, 'Operations Order for November 4th, 1918', 3 November 1918. In addition, Maurer Maurer, Vol. 1, p. 254.

[102] Porter, p. 155.

[103] 'Air Service Army Corps 1st Corps Obser. Group,' n.d. [1919?]. Gorrell's Air Service History, Series C, Volume 12. pp. 5 and 10. RG 120 NARA.

[104] *Gorrell History*, Series C, Volume 12, Office of the Chief of Air Service, HQ 1st Army Corps, AEF, 'Operations Order No. 16', 3 Oct 1918; and Fred E. D'Amour, 'Memorandum to Observers', n.d.. See also *Gorrell History*, Series C, Volume 13, HQ Third Corps Observation Group, Operations Department, 'Operations Memorandum,' 10 October 1918. Maurer Maurer, *The U.S. Air Service in World War I, Volume 1*, p. 254.

[105] Frank, *American Air Service Observation*, p. 304.

photographic reconnaissance during static warfare, this was scarcely possible during the war of movement.[106]

Furthermore, during mobile warfare the situation on the ground changed so rapidly that timely transmission of intelligence was much more important than during static warfare. In IV Corps, the G-2, Joseph Stilwell, decreed that a dedicated telephone line would connect his shop to the BIO at the Corps Observation Group so that he could most rapidly exploit the intelligence that flowed in.[107] On the other hand, after the war, another school of thought held that the Air Service should report its information directly to the G-3 during times of rapid operations and not have to filter it through the G-2. [108]

Through much of 1918 the AEF had struggled to find an efficient method of providing the necessary photographic coverage. Into the summer, the system was largely one of 'individual reconnaissance' applied in a 'more or less haphazard' fashion. Given the cost and danger inherent in aerial photography this was a poor use of resources. So, by mid-July, the Photographic Section began to argue for a more systematic approach that would allow a sector to be 'entirely and systematically covered at frequent intervals'.[109] Though the AEF made great strides, this turned out to be easier said than done. Not only did manoeuvre make such efforts problematic, but also the weather did not cooperate during the AEF's great offensives.

One of the key pre-war arguments against the utility of aircraft had been that they would be unable to conduct reconnaissance during bad weather, in contrast to the

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[106] *Gorrell History*, Series C, Volume 15, GHQ AEF, 'Notes on Recent Operations: Air Service', March 1919, p. 56.
[107] Unsigned memo from IV Corps G-2, to Chief of Staff, 7 September 1918, Stilwell Papers, Box 8, Folder 5, Hoover Institution Archives, Stanford, CA. Hereafter HIA.
[108] *Gorrell History*, Series A, Volume 15, F. P. Lahm, to Chief of Air Service AEF, 6 January 1919.
[109] Gorrell History, Series G, Volume 1, Memo for the from Captain R. J. Steichen to Chief of the Air Service, 12 July 1918. pp. 193-194.

cavalry. This turned out to be only partly true. Particularly during the Meuse-Argonne offensive, the squadrons, pressed by the corps intelligence staffs, would launch photographic reconnaissance missions against the highest priority targets even when it seemed unlikely that the weather over the target would be favourable, so valuable had photographic intelligence become.[110] However, it turned out that non-photographic visual reconnaissance could be done in all weather conditions save downpours and low fog.[111] During the Meuse-Argonne offensive, the Air Service kept observation aircraft in the air in front of friendly forces constantly as long as the weather permitted. The Air Service boasted that it was able to keep the enemy 'constantly under surveillance'.[112]

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Before the war, there was less discussion of signals intelligence (SIGINT) in the professional literature than there was of aircraft. Wagner's brief note that spies could use a pocket instrument to tap telegraph cables was about as sophisticated a level as such discussion reached.[113] There was correspondingly little tangible preparation in the Army or Navy to conduct SIGINT operations, though some *ad hoc* operations took place. The US may have tapped some Spanish cables out of Cuba during the Spanish-American War and in 1898 the Naval Attaché in St. Petersburg, William Sims, who later commanded US naval forces in Europe during World War I, claimed in a letter home to have tapped 'an underground wire' in St. Petersburg Russia 'with excellent results'.[114] Not surprisingly, codebreaking received

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[110] Frank, *American Air Service Observation*, pp. 352-353.
[111] Maurer Maurer, *The U.S. Air Service in World War I, Volume 1*, p. 243.
[112] *Gorrell History*, Series C, Volume 12, 'Air Service Army Corps 1st Corps Obser. Group', n.d. [1919?]. Maurer Maurer, *The U.S. Air Service in World War I, Volume 1*, p. 252.
[113] Wagner, *Service of Security and Information*, p. 188.
[114] Crumley, *The Naval Attaché System*, pp. 118-119.

comparably little attention, although in 1901 Frederick Funston famously deciphered a captured letter to Filipino guerrilla leader, Aguinaldo. It requires a close reading of his account to discern that this feat had nothing to do with his subsequent capture of Aguinaldo.[115]

Even the outbreak of war in Europe did little to change this. In 1916, the Army internally published a useful but rather naïve small book on solving military ciphers by infantry officer Parker Hitt, a cipher enthusiast. Cipher work, Hitt warned, was not for someone who expected results at once. Rather, it required 'concentration and quiet' for long hours. To his credit, he recognized that because the enemy might use the same cipher on widely separated parts of the 'zone of operations', each Field Army should have a single cipher office in its headquarters intelligence section. Nevertheless, Hitt's vision was far too modest, suggesting a lack of knowledge of what was transpiring in Europe. 'One radio receiver' with a 'small antenna' and three operators would suffice to provide the office with material to work on, he thought. Assuming the enemy was not 'exceedingly vigilant' and did not 'change keys and methods frequently', 'in a few days', this office would be able to read all enciphered intercepts 'with practically no delay'. Unfortunately, the Germans were already proving 'exceedingly vigilant' and the book's focus on ciphers did not match the German Army's tendency to rely on codes at the tactical level.[116]

Starting in 1916, when it acquired enciphered materials (usually dealing with Mexico), the War Department would send these documents to those few people who knew something about codes and ciphers with requests that they send the solutions back as soon as possible. These included Hitt; Joseph Mauborgne, a signal officer;

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[115] Funston, *Memories of Two Wars*, pp. 389-390.
[116] Parker Hitt, *Manual for the Solution of Military Ciphers*, (Fort Leavenworth, 1918), pp. 2-3. For the inadequacy of Hitt's book, see Moorman, 'Wireless Intelligence', 13 February 1920, NARA, RG165, Entry 65, 10560-328/168.

and a professor of English at the University of Chicago named John Manly.[117] The War Department received additional cryptanalytic help from an eccentric millionaire named George Fabyan who had established the 'Riverbank Laboratories' not far from Chicago and staffed it with a small team of people to investigate the theory that Francis Bacon had written Shakespeare's works.[118] The foremost mind on Fabyan's staff belong to William Friedman who was to play a major role in American intelligence history.[119] Fabyan even employed a retired sergeant to drill his employees.[120] In March 1917, as America edged towards war, he offered his laboratory's resources to the US Government. Soon the War Department was routing documents collected by itself, the State, Justice, and Navy Departments to the laboratory.[121]

Clearly, such *ad hoc* measures were unsatisfactory. So Major Ralph Van Deman, the head of the MID, cast about the Army and found three officers reasonably conversant with code and cipher work. These were Hitt, Mauborgne, and Frank Moorman of the Coast Artillery Corps. None was available, however.[122] The answer presented himself in the form of a volunteer, Herbert O. Yardley, a State Department

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[117] For examples of correspondence with Hitt, Mauborgne, and Manly, see NARA RG 165, Entry 65, File 10020. Manly's papers are at the University of Chicago. Additional Manly papers are in the William Friedman papers at the Marshall Foundation, Lexington, VA. During the war Mauborgne, working with AT&T invented the only literally unbreakable cipher system, the 'one-time pad'.

[118] For a discussion from a literary perspective of the origin of the Baconian Theory and its ultimate implications for cryptology, see Henry Veggian, *Mercury of the Waves: Modern Cryptology and U.S. Literature*, (unpublished doctroal dissertation, University of Pittsburgh), 2005, pp. xiv-xv and 78-91

[119] Years later Friedman achieved fame by overseeing the breaking of Japan's PURPLE code before World War II. Frank Rowlett and his immediate associates however, did the actual cryptanalytic work.

[120] Fabyan to Van Deman, 20 April 1917, NARA, RG 165, Entry 65, 10020-2.

[121] See David Kahn, *Reader of Gentlemen's Mail: Herbert O. Yardley and the Birth of American Codebreaking*, (New Haven: 2004), pp. 22-27 for an account of the Riverbank Laboratories.

[122] *MID History*, p. 474.

code clerk, who received a lieutenancy in July 1917.[123] Van Deman put the young man in charge of MI-8, a new code and cipher shop, where he proved himself a quick study and an able administrator. For its part, the US Navy made a brief foray into signals intelligence, but found the field too difficult. The hapless officer in charge spent some months in early 1918 trying to read a large collection of coded German messages as *cipher* messages, 'naturally an unremunerative work', the poor man recalled afterwards.[124] Before long, ONI assigned an officer to work with MI-8 and otherwise abandoned the field. Thereafter, it would pass its intercepted messages to MID for decryption.[125]

Slowly, MI-8 grew in size and capability. Among other people, it hired John Manly, who became Yardley's right-hand man, and the former helped bring two other Chicago faculty and two former Chicago graduate students (one who had studied under him) into the organization.[126] By May 1918, the War and State Departments stopped sending intercepts to Riverbank, ostensibly over concern about Fabyan's excessive enthusiasm for publicizing (and sharing with the Japanese) sensitive information, but really because they no longer needed Fabyan's services.[127]

MI-8 received enciphered materials from a variety of sources. The AEF in France forwarded to it diplomatic and other enemy signals, both collected by its intelligence organizations and passed to it by the Allies, that did not appear to be of

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[123] See Kahn, *Reader of Gentlemen's Mail*, pp. 20-21 and 28-31 for an account of Yardley's commissioning and his early steps to establish MI-8.
[124] H. E. Burt, 'A Summary of the Organization, Activities, and Achievements of the Code and Cipher Section of [the] Military Intelligence Division', November 1918, NARA, RG 38, Entry 98, File F-6-d, 11466-C.
[125] For examples, see Naval Communication Service to MIS War College in January, February, 1918 in NARA, RG 165, Entry 65, Files 10531-137/26, 10531-163/3, 10531-169/2. Some regular reports from ONI's liaison officer to MI-8 are in NARA, RG 38, Entry 98, File F-6-d 11466-C.
[126] Kahn, *Reader of Gentlemen's Mail*, p. 30.
[127] Ibid, p. 27. On the secrecy dispute, see several documents filed under NARA, RG 165, Entry 6510020-192, NARA RG 165, Entry 65

immediate relevance to the fight in France. It also received signals from the Navy, from the State Department, especially acquired by the department's intelligence liaison officer in London, Edward Bell, who had a remarkably close relationship with Admiral Hall and his Naval Intelligence Division, Britain's SIGINT powerhouse. It also got 'unbelievably great' amounts of ciphered materials from the censorship of international mail (most of it relating to 'clandestine love making') and from the Navy's censorship of cables. Law enforcement and concerned citizens also sent in an 'enormous' number of 'aimless and meaningless scribbles' found in telephone booths that were 'sufficiently unintelligible' that they looked like spy codes.[128]

Finally, the War Department itself operated a highly clandestine Radio Intelligence Service that mostly collected communications emanating from Mexico. Buried within MI-10, which was otherwise responsible for censorship, this organization started operating in late February 1918 and operated mobile 'radio tractors' along the Mexican border and two clandestine stations, one in Mexico itself—some evidence suggests it was at the US Embassy—and another in Houlton, Maine. The latter pulled down long-haul German messages, particularly between Berlin and the German embassy in Madrid.[129] During the last year of the war and the

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[128] John Manly, 'IX', p. 3 and 'XI', pp. 1-2, Friedman Papers, Item 811, ML.

[129] Bidwell, *History of the Military Intelligence Division*, p. 199. Kahn, *Reader of Gentlemen's Mail*, p. 39. A brief oral history with an intercept operator from a radio tractor unit is at Egolf, Richard Egolf, Radio Intelligence on the Mexican Border, World War I: A Personal View, (n.l., n.d.), http://www.nsa.gov/about/cryptologic_heritage/center_crypt_history/publications/radio_intel_mexican_border.shtml. Campbell to MID, 12 June 1918, NARA, RG 165 Entry 65, 10531-372/2 mentions a receiving station in the US Embassy in Mexico. American Embassy Mexico Military Attaché , '4th Supplement Work and Activities of the Military Intelligence Branch from June 22 to June 29, 1918', NARA, RG 165, Entry 65, 10560-717 says 'the radio intelligence officer stationed in Mexico City as Military Attache has reported for duty, and is engaged in installing his apparatus'." '5th Supplement...June 30-July 6, 1918', at the same location similarly notes 'the radio officer in Mexico City has reported the system employed in many of the Radio Stations. There were One Hundred messages intercepted during the week and turned over to the Military Attache, who in turn forwarded them to this office'. The 'office' in question may have been MI-1. 'Weekly Supplement...for the Week Ending August 17, 1918' says 'the radio sub-section received...from Radio Officer in Mexico City 168

subsequent six months, MI-8 decrypted 10,735 electronic and written messages in numerous systems.[130] Not infrequently, MI-8 was able to do the decryption because the State Department or other components of the MID had acquired the relevant code book for them. These might be obscure commercial codes or purpose-made government codes.[131] Sometimes these other organizations clandestinely acquired coded messages which made their way to MI-8. For instance, both former President Alfredo González Flores of Costa Rica and Miguel R. Avila[132], an exiled former private secretary of Mexican President Venustiano Carranza de la Garza, turned over cryptographic materials from their respective countries to the US Government.[133]

Besides MI-8, the other locus of cryptanalytic effort was in the AEF. When Pershing arrived in Britain in June 1917, his small staff included only two officers to do intelligence: Dennis Nolan, who would become his G-2 and Arthur Conger, who became the head of G-2-A, the 'positive intelligence' component of G-2. A round of visits to French and British intelligence organizations impressed on Nolan the importance of an 'intense and unremitting' signals intelligence effort and moved him to establish G-2-A-6, the Radio Intelligence Section at the end of July.[134] Unable to

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intercepted messages in Spanish, code, and English and information of value in regard to Chapultepec and unknown station "JE"'.

[130]Churchill to Chief of Staff, 'Permanent Organization for Code and Cipher Investigation and Attack', 16 May 1919, NARA, RG 165, Entry 65, 10994-20.

[131] Commercial codes were sold to provide a modicum of privacy to commercial telegraphic communications and, often more importantly, a substantial compression of the message. Compression made the telegrams much less expensive to send.

[132] It is not clear if this is the same Miguel R. Avila who a decade later sold sensational but forged documents about anti-American activities by the Mexican government to one of William Randolph Hearst's reporters. See Ferdinand Lundberg, *Imperial Hearst: A Social Biography*, (Westport, 1970), pp. 284-285.

[133] 'Special Employee' to C.E. Breniman, Esq., Special Agent in Charge, San Antonio, Texas' no date but entered into the War Department files 28[?] March 1918, NARA, RG 165, Entry 65, 10531/227/1. In the same Record Group and Entry, see Yardley to Leland Harrison at State, 20 May 1918, 10531-342/2; R. C. Bannerman to R.S. Sharp, Special Agent, Department of State, , 13 May 1918, 10531-342/3. Yardley to Harrison, 6 June 1918, 10531-342/5. Nicholas Biddle to Chief, MID, 28 May 1918, 10531-342/6.

[134] Nolan, 'History', p. 119, USAMHI.

get Hitt or Mauborgne to head the office, he took Frank Moorman, which was why the latter was unavailable when Van Deman started looking shortly thereafter.[135]

Moorman and the nascent G-2-A-6 spent their first three months in consultation with the Allies and the Signal Corps, which would do the actual interception work.[136] In the fall of 1917, the AEF opened the first of what became five intercept stations.[137] Soon a fire hose of data opened, the likes of which had never before been seen by an American military staff. In their roughly one year of operation, the five intercept stations pulled 72,688 German messages out of the air, some 200 per day.[138] This did not count the stations set up to intercept long-range German transmissions.[139] Nor did it count intercepts given to the AEF's G-2 by the French and British allies. The head of the French military cryptologic bureau estimated that the French intercepted some 100 million words during the course of the war, though how much of that they passed to the Americans is unknown.[140] Even if only a tiny fraction of that data made its way to the Americans, it would have been a substantial amount of data in itself and American and French forces did enter into a variety of arrangements for the exchange of raw intercepts.[141] Nor did this total count the intercept stations operated by the divisions, or the data from the four intercept stations supporting the 'Security Service', a component of G-2-A-6 that monitored

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[135] Nolan, 'History', pp. 120-121, USAMHI.
[136] 'Final Report of the Radio Intelligence Section, General Staff, General Headquarters, American Expeditionary Forces, 1918-1919' p. 15, NARA, RG 457, Entry 9002, Box 12. Hereafter 'Final Report, RIS'.
[137] Nolan, 'History', pp. 122-123. David Kahn, *The Codebreakers: The Story of Secret Writing*, (New York, 1996), p. 333.
[138] David Kahn, *The Codebreakers*, p. 334. According to Kahn the eight American direction-finding stations also took 176,913 bearings.
[139] War Department, Office of the Chief Signal Officer, Final Report of the Radio Intelligence Section, General Staff General Headquarters American Expeditionary Forces, (Washington: GPO, 1935), p. 1.
[140] Kahn, *The Codebreakers*, p. 300.
[141] See RG 120, Entry 105, Box 5767, Folder 'Correspondence – Capt. Hitchings File 520'.

American communications for purposes of communications security.[142] Finally, it did not include the data coming from the "listening stations," which monitored German (and, for security purposes, American) telephone communications when the front was sufficiently stable, and whose operations seemed to one officer, not in the signals or code and cipher business, to 'verge on the miraculous'.[143]

This flood of data was greater than G-2-A-6 could handle. In principle, Moorman's men might have tried to break into all German codes, but this would have been a slow process and the Germans would have changed codes faster than they could be broken. Instead, at any given time Moorman concentrated his manpower on a few German codes hoping to break into them quickly and thus extract intelligence data before it got too old to be tactically useful.[144]

The tension between war and technology certainly manifested itself for the military application of the radio.[145] The efficient way for a commander in the AEF to promulgate an order was to transmit it *en clair* by radio. This, however, must often mean the thwarting of that order by the enemy, if the British estimate that the Germans intercepted 75 percent of everything transmitted was at all correct.[146] The effective way entailed a cumbersome encrypting of the order for transmission and then decrypting at the other end. This introduced delays and required the training and maintenance of numerous code clerks who might otherwise be in the infantry, or not

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[142] 'Final Report RIS', p. 30. Kahn gives the number of Security Service intercept stations as four. *Codebreakers,* p. 331.

[143] See Ernest H. Hinrichs, *Listening In: Intercepting German Trench Communications in World War I,* (Shippensburg, 1996) for the memoirs of a participant in these intercept operations. 'Final Report, RIS', p. 33. Edward Alexander Powell, *The Army Behind the Army,* (New York, 1919), p. 16.

[144] 'Final Report, RIS', p. 7.

[145] For an enunciation of essentially this argument in a British context, see John Ferris, 'The British Army, Signals and Security in the Desert Campaign, 1940-1942', *Intelligence and National Security,* 5:2, (1990), pp. 256-257.

[146] See, eg. 'American Three Letter Code, Survey by General Staff, B.E.F., Section Intelligence E (c)', June 30, 1918, NARA RG 120, Entry 105, Box 5763, Folder 'US Codes – Miscellaneous'.

even on the government payroll. It also required a staff to compile and regularly replace code books. Of course, the Germans were potentially subject to the same inefficiencies, but in order to inflict these inefficiencies on them (and thereby also gain valuable intelligence), the Americans and their allies had to train and maintain large cryptanalytic staffs, as well.

Scholars have observed that during World War I civilian experts influenced and modernized the business practices of the Army.[147] Similar effects manifested themselves with the influx of intelligence personnel which affected both the practices and culture of the Army. By November 1917, G-2-A-6, flooded with intercepts, started a frantic manhunt for personnel. Eventually, the unit grew to 72 people.[148] However, men were needed the likes of whom had seldom before graced an army in the field. Code and cipher work required special people with unusual, even eccentric abilities and inclinations. Back in Washington, Yardley felt that ideally men would have 'cipher brains', but where were such men to be found?[149] In Europe, Moorman's consultation with the British and others led him to hypothesize that, while preferably one would find men who had experience working with codes and ciphers, men of any age would be adequate if they had 'spent their lives studying hieroglyphics, cuneiform characters and the like'. The idea was to get men 'familiar with the workings of the human mind and capable of long hours of close thinking even when no results are obtained'. The British further advised that advanced age should not be an impediment.[150] Moorman also thought that the ability to think independently, not then a traditional military skill, was essential. He was surprised at how difficult it was

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[147] Jennifer D. Keene, *Doughboys, the Great War, and the Remaking of America*, (Baltimore, 2001), p. 31.
[148] Nolan 'History', pp. 122-123. Kahn, *The Codebreakers*, p. 333.
[149] Yardley, *American Black Chamber*, p. 69.
[150] Moorman, 'Notes on Personnel Required by Radio Intelligence Service, A.E.F.', no date [1917], NARA, RG 120, Entry 105, Box 5765, unlabelled folder.

to find men capable of 'actually thinking without a guardian'.[151] Poor eyesight was also no impediment and at least one woman was recommended for service in G-2-A-6, although it did not act on the recommendation.[152]

Actual hiring practices reflected the British advice. Yardley hired, among others, a scholar of Chaucer, a professor of Latin whose usual work was identifying sources of error in medieval manuscripts, a classicist, and an authority on Hittite.[153] The AEF's finds included two lawyers, a reporter, a music critic, a polyglot architect, a chess expert, and an amateur archaeologist. It even found two men with prior experience working with codes, one of them William Friedman—himself originally trained as a geneticist—who topped off the triumph of professional staffs over patriotic civilian enthusiasts by escaping Shakespeare and Bacon and shipping out for France.[154]

Yardley found that even in the comfort of Washington some cryptologists could not stand the nervous strain of the painstaking code and cipher work.[155] Not surprisingly, then, in France, Moorman soon realized that:

> The real code man, the one making original solutions, has a difficult task. He must fix his mind absolutely on the work in hand. If his feet are cold, if he is hungry or thirsty or ill, if the office is noisy, if the light is bad, if he is wondering what became of his bedding roll during

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[151] 'Final Report RIS', p. 15.
[152] Churchill to Fabyan, 28 June 1918, NARA RG 165, Entry 65, 10020-175(13).; also Fabyan to Van Deman 22 March 1918, 10020-174(1). Powell to Nolan, 25 Feb 1918, J. Rives Childs Collection, Randolph Macon College Library Special Collections, Ashland, VA, Box 'WWI Papers V. 1.'. Hereafter RMC.
[153] Kahn, *The Reader of Gentlemen's Mail*, pp. 29-30.
[154] Kahn, *The Codebreakers*, p. 333. For similar discussions from the immediate post-war period of the special types of people necessary for code and cipher work and their rarity in the Army, see Churchill to Chief of Staff Subject "Permanent Organization for Code and Cipher Investigation and Attack," May 16 1919, NARA, RG 165, Entry 65, Box 3862, 10994-20; and Frank Moorman, to DMI, 2 December 1920, NARA RG 165, Entry 65. This document has no file number on it, but it is filed under 9944-102.
[155] Yardley, *American Black Chamber*, p. 132.

> the last move or what kind of a billet he will get after the next one, his work is certain to suffer.[156]

Given these considerations, the cryptologists should not be too close to the front lines. On the other hand, they should not be too far in the rear as then it would take too long to get raw intercepts. A place was found for them at General Headquarters intelligence section where, in the words of another, the 'quiet atmosphere remind[s] one of the work of an office in time of peace'.[157]

The code and cipher men required special treatment in other ways, as well. The finicky eccentrics of G-2-A-6 found that the translations services offered in G-2 were not adequate. They had to translate captured German documents dealing with codes and communications themselves, because only they had the necessary combination of the linguistic and technical knowledge.[158] They even required their own code to communicate about their work.[159]

The investment in G-2-A-6 paid off. The Germans liked using radio and it proved a valuable source of intelligence. Communications intelligence played an important role in helping tactical commanders in France to understand their adversaries' intentions and force dispositions. Occasionally intercepted signals would provide political or strategic information of use to commanders in France. More often, such intercepts benefited leaders in Washington, and MI-8 usually processed the German signals thought most likely to contain such information. Nolan found that signals intelligence was much more valuable and much more "interesting" than

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[156] Frank Moorman to Chief, G-2-A, 'Jan 2 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.
[157] Nolan 'History', p. 122. N. N. Golovine, 'Cavalry Reconnaissance', *CJ*, 31:127 (April, 1922), p. 184.
[158] Frank Moorman to Chief, G-2-A, Jan 2 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.
[159] 'Special Code for Use Between Second Section (G-2,A-6), First Army Headquarters and Second Section (G-2,A-6), General Staff', n.d., NARA, RG 120, Entry 105, Box 6699, Folder 'Administrative Duplicates'.

espionage work.[160] He discovered, for instance, that as many as two thirds of the identifications made by the British and French of German divisions on the other side of the trenches were owed to signals intelligence.[161] Some staff officers outside the G-2 came to value the SIGINT take above all others.[162]

At lower levels, the Germans primarily used codes and decryptions of these provided warning of raids, impending barrages, and other useful information.[163] At higher levels, the Germans tended to use ciphers. They used the famous ADFGX cipher, for instance, to communicate between corps and their divisions. The few keys that the Allies, mostly the French, were able to recover provided valuable information about German intentions and movements during the Second Battle of the Marne. The 'Fuer God' cipher, sent from the German radio station at Nauen, near Berlin, was found to contain communications to a detachment of the German General Staff's Political Section which was trying to foment anti-Allied feelings among the Arabs of North Africa.[164] In 1918, the German high command began to use a variant of the ADFGX cipher to communicate with elements in Constantinople, Ukraine, the Caucasus, and the Balkans. A key recovered by the Americans allowed the decryption of a message providing advance knowledge of the German withdrawal from Romania. Within two days the decrypt was in the hands of the Supreme War Council, the group of British, French, American, and Italian senior military representatives formed in 1917 to oversee war strategy.[165]

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[160] Nolan, 'History', p. 118.
[161] Ibid, p. 119.
[162] See Lee West Sellers, untitled typescript, J. Rives Childs Collection, box 'WWI Papers V. 1', RMC, for one such testimonial.
[163] For examples see 'Final Report, RIS', p. 20.
[164] The Americans called this the 'Fuer God' cipher because all the messages they intercepted were addressed to a German unit with the call sign 'GOD'. The Allies knew this cipher more formally under the name 'Wilhelm'.
[165] For an extensive discussion of the content and the cryptographic details of the attacks on these various cipher systems, see J. Rives Childs, 'The History and Principles, of German

Decrypted messages could be popular with old-line officers, though these officers often wondered why G-2-A-6 wasted so much time decrypting worthless messages, but G-2-A-6, going to new heights of military abstraction, could glean more than this from German messages.[166] Goniometry, or 'direction-finding', as it is now known, was a useful source of information, too, given that radios were typically associated with German headquarters. The Americans learned that tracking the location of these stations could give clues about enemy's force lay-down and intentions.[167] Goniometrists also took note of enemy call signs and which radios transmitted to which other radios and in what volume over time.[168] Such information, they found, could help determine the organization of the German forces and give clues as to impending attacks.[169] To an outside officer writing after the war, this kind of intellectual feat exceeded even those of Sherlock Holmes.[170]

The extraction of this information, however, entailed great intellectual effort and a never-ending struggle with the Germans. Just as there is a dynamic relationship between air forces and air defenders, and between tanks and anti-tank forces, these relationships tilting to the advantage of one then to another, so too there has long been a relationship between the cryptographer and the cryptanalyst. Manly observed in this context that 'every new invention in war brings its counter-invention'.[171] During World War I, the balance between the two tipped crazily back and forth in a

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Military Ciphers, 1914-1918', Paris, 1919 in J. Rives Childs Collection, Box 'WWI Papers V. 5', unlabelled folder, RMC.

[166] Moorman, 'Lecture delivered to the Officers of the Military Intelligence Division, General Staff', 13 February 1920, NARA, RG 457 Entry 9032, Box 1, Document 17.

[167] 'Final Report, RIS', p. 32. Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA RG 120, Entry 74 Box 6199, Folder "Report of G.2-A."

[168] Though it was not then recognized as a separate discipline, today this is known as 'traffic analysis'.

[169] [redacted], 'The Origination and Evolution of Radio Traffic Analysis: The World War I Era', *Cryptologic Quarterly*, 6:1, (1987), pp. 21-40. This document was obtained from the National Security Agency through the Freedom of Information Act (FOIA).

[170] Powell, *The Army Behind the Army*, p. 19.

[171] John Manly, 'Supplementary to 1st 3 arts', Friedman Papers, Item 811, ML.

remarkable tight cycle. In general, the challenge of extracting content information from German signals became greater and greater as the war went on, and it was only through strenuous intellectual effort that the Americans and their Allies stayed in the game.

Three factors determined the security, and the longevity of the security, of a cryptosystem: the intrinsic qualities of the system; the amount of encrypted text available to the enemy; and the extent of operator error.[172] The Germans seemed remarkably disciplined in their use of codes and ciphers. They eventually began changing call signs every day, eschewing any kind of observable system in their application. They also started using lateral communications across unit boundaries, complicating efforts to determine their command structure, though the real network usually 'showed up clearly' during very active periods. Equally troublesome, the Germans progressively restricted their use of the radio. In 1918, they began to use low-power transmitters and directional antennas. They even discussed the idea of using deceptive communications, though it is not clear that they ever did so. As a result of all these factors, G-2-A-6 found that the 'by the end of the war very little could be done in the way of solving their code messages'.[173]

During World War I, the United States sometimes faced the dilemma of whether it was better to intercept an enemy's communications to one's own benefit, but, in the process, allow the enemy to continue his own operations, or to stop the enemy from communicating entirely, thus foregoing any intelligence advantage but

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[172] William F. Friedman, 'The Use of Codes and Ciphers in the World War and Lessons to Be Learned Therefrom', in War Department, Office of the Chief Signal Officer, *Articles on Cryptography and Cryptanalysis Reprinted from The Signal Corps Bulletin,* (Washington: GPO, 1942), p. 195. For a similar formulation see Lee West Sellers, untitled typescript, n.d., J. Rives Childs Collection, Box "Box: WWI Papers, V. 1', RMC.

[173] G-2-A-6, 'Report on the Liaison Service and the Liaison Intelligence Service of the German Army', n.d., NARA, RG 120, Entry 105, Box 6700, Folder 'Report on the Liaison Service and the Liaison Intelligence Service of the German Army'. Frank Moorman to Chief, G-2-A, 2 January 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

impeding the enemy's operations. It arose primarily in the context of strategic, diplomatic, or espionage-related communications.[174]

The United States had faced this problem before in the context of signal intelligence's close cousin, telegram censorship. However, American officials had not then realized that there was a dilemma. During the Spanish-American War, the Signal Corps reviewed outbound telegrams. Messages of 'treasonable character' they mined for data and then destroyed.[175] They did this seemingly without pondering the fact that they might have alerted the enemy to the fact of interception and thus motivated him to engage in deception.

However, during World War I, the Americans were conscious that they faced a dilemma. This time intelligence intruded directly on operations. In London, Ned Bell came down firmly on the side of reading the enemy's communications. 'Personally, I have always considered', he wrote in the context of mail censorship, 'that it made no difference what the enemy said or did if one was in a position to know it oneself. In fact, the more freely they are able to communicate the better provided you can find out what they say'.[176]

Thus, when in early 1918 Bell was (erroneously) informed that Admiral Sims, the U.S. naval commander in Europe, had requested that the State Department make the Spanish government shut down the German radio station in Madrid, he cabled back in alarm that the Department should 'discreetly take such steps as may be necessary to prevent the occurrence of any such catastrophe'.[177] Precisely those communications were of great value to Hall's Naval Intelligence Division. 'You

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[174] For a brief discussion of this topic with regard to the major belligerents, see [redacted], 'Comint and Comsec: The Tactics of 1914-1918—Part II', *Cryptologic Spectrum*, Fall, 1972, pp. 10-11, obtained from the National Security Agency through the Freedom of Information Act.

[175] Giddings, *Exploits*, p. 116.

[176] Bell to Harrison, 20 June 1918, NARA, RG 59, Entry 350, Box 5, File 121.

[177] London Cable 8705, 16 February 1918, NARA, RG 59, Entry 350, Box 4, Folder 103.

realize, of course...that the thought of the Madrid source being blown upon always causes more or less of a balloon ascension in these parts from which I am not, perhaps, wholly immune," he wrote to Washington by way of explanation a few weeks later when the matter had been sorted out.[178]

A few months later the issue arose again when a conference on 31 May 1918 of Army and Navy officers met in the office of the Director of Naval Communications to discuss the powerful German radio station at Nauen which was thought to be transmitting to clandestine German agents in the Western Hemisphere. They raised the question of whether it was better to jam the Nauen broadcasts or copy the messages and hope to break the cipher. The question was complicated by the fact that the MID had thus far been unable to break the cipher, but on the other hand if the US started jamming the signals the Germans might retaliate by jamming AEF radios in France. The conference recommended that these questions be taken up at a forthcoming meeting of the Inter-Allied Radio Commission in Paris. Leland Harrison, the State Department's intelligence coordinator; Yardley; and, in London, Admiral Hall; all agreed that Nauen should not be jammed. The proper arrangements were soon made behind the scenes.[179]

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[178] Bell to Harrison, 6 March 1918, NARA, RG 59, Entry 350, Box 4, Folder 103. It is well known that the British NID shared intercepts from the Berlin-Madrid communications link with Ned Bell. Less well known is the fact that the French shared similar information with the US Naval Attaché in Paris. The Attaché forwarded this information to Sims and to Washington. The difference was that the French refused to tell him how the data was acquired, even when the Attaché brought a specific request for that information from the American Chief of Naval Operations. 'History of the Office of the United States Naval Attaché, American Embassy, Paris, France, during the period embraced by the participation of the United States in the War of 1914-1918, pp. 197-199, 'FDR Papers as Assistant Secretary of the Navy, 1913-1920', Box 2, Folder 'Official files, Navy Department: Attaches Paris: History:1914-1918', History of the Naval Attaché's Office in Paris. Franklin D. Roosevelt Presidential Library, Hyde Park, NY. Hereafter 'History of Naval Attaché, Paris' and FDRL.

[179] London 450, 20 July 1918; State 349, 24 July 1918; 'Report of a Conference Between Representatives of the Navy and War Departments Relative to Transatlantic Radio Service', 31 May 1918; all in NARA, RG 59, Entry 350, Box 5, File 117. See also Jonathan Winkler, *Wiring the World: US Foreign Policy and Global Strategic Communications, 1914-1921*,

Before the US entered the war, W.S. Pye had written that in combat 'the advantage given to a force by early accurate information makes manifest the necessity of denying information to the enemy' and, in a broader sense, the hunt for spies during every war was a validation of the same idea.[180] However, during this period the United States Army, Navy, and State Department had not matched this theory to their cryptographic practices which, in fact, were lamentable. Despite the fact that foreign countries were known to have Black Chambers, the US Government gave little consideration to the fact that this meant that their communications might not be private, and there was scant respect for the need to have good codes and ciphers. The State Department seemed perpetually to be losing code books. The Spanish were reported to have a copy of the Department's main code before the Spanish-American War, but the Department did not change the code. The Germans once even returned to the US Consulate in Leipzig a codebook they had found. When the US and the Ottoman Empire severed relations in 1917, the Department gave the Swedes there a copy of its 'Blue Code' for safekeeping and then continued using that code on cables to Stockholm.[181]

The War Department was little better. Yardley was appalled when in 1917 a veteran of the 'old Army' (Friedman alleged that it was George O. Squier, former attaché in London and future Chief Signal Officer) scoffed at the cumbersome modern cryptographic procedures. The veteran explained that a simple superencipherment, merely adding the number 1898 to all the code groups (which the Spanish probably

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(unpublished doctoral dissertation, Yale University), May, 2004, p. 175. 'Book I. Supplements of the Work and Activities of Military Intelligence Division Containing First Supplement for Week ending Aug 31, 1918','M.I. 8, Codes, Ciphers, and Secret Writing', p. 2, NARA, RG 165, Entry 65, 10560-717.

[180] W. S. Pye, 'Intelligence Service in Peace and War', 1913, p. 4, RG 8, XING, Accession # 1913-186, NHC.

[181] David Paull Nickles, *Under the Wire: How the Telegraph Changed Diplomacy*, (Cambridge, 2003), pp. 171-172.

knew already), had been sufficient in his day.[182] While this may have been an extreme case, the general lack of interest in communication security was not uncommon. The Department had consciously developed its 1899 code to emphasize economy, not security. It developed no new code at all between 1906 and 1915 and the new one in 1915 was quite weak. The US Army did have two crypto systems for low-level traffic when WWI broke out. One was based on principles known since 1500. The other was a system copied from the British who had used it for many years before the war.[183] Yardley's concern was well-founded. The Army had never made communications security a priority. Not long after MI-8 was organized in Washington, it learned that the Germans had 'copies' of the 1915 code book and were able to read the cables being sent back by Pershing and General Tasker Bliss, the American representative on the Supreme War Council. MI-8 set to work compiling a new and better one. This was completed in July 1918 but another element of the Army almost immediately misused it in such a way that a new one had to be prepared, a task which was not completed until after the Armistice.[184] During the war itself, even the MID field offices in the United States were lax in their protection of War Department codes.[185]

Wartime files abound with warnings and complaints of poor American cryptographic practices from signal intelligence personnel who knew precisely the advantages to be gained by breaking into an adversary's crypto systems. John Manly, for instance, complained to Leland Harrison in mid-1918 that the representative of the Committee for Public Information (CPI) in Petrograd was using an egregiously

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[182] Yardley, *American Black Chamber*, p. 17. For Friedman's handwritten comment, see the hand annotated copy of *American Black Chamber*, p. 42 in the William Friedman Papers at the Marshall Foundation.
[183] Wayne G. Barker, ed., *The History of Codes and Ciphers in the United States Prior to World War I*, (Laguna Hills, CA: Aegean Park Press), 1978, pp. 118-133.
[184] *MID History*, p. 479.
[185] Buck to Dunn, 4 February 1919, NARA RG 165, Entry 65, 10560-152/89.

insecure cipher system, perhaps under the influence of a recent ill-informed article in *Scientific American* about the unbreakable nature of the system. He pleaded with Harrison to prevent such 'criminal' negligence from going on with future overseas missions.[186] On another occasion, MI-8 deciphered two mysterious messages sent to them by the State Department that that turned out to be from CPI agents in Russia. One had been enciphered with the keyword 'blackbread', the other with 'cabbage soup'.[187] In late November, 1918 Bell 'beg[ged]' Harrison to see that a new secure code was developed for the use of the American delegation to the Peace Conference and particularly for the use of the President in his travels. This was so necessary, Bell thought, because 'no code which we now have is worth the powder to blow it up'.[188]

Up to this time, the intelligence officer had always stood in a subordinate relationship to the operator. At most, the intelligence officer offered advice to the operator as to what should be done. During World War I, however, the technological advances in the intelligence business began eroding that subordinate relationship. The code and cipher men began to dictate to the operators how they could issue orders and what they should be allowed to communicate over cables and through the airwaves.

Unfortunately, modern cryptographic technology did not accommodate itself to the realities of human users. Rather, the humans had to accommodate themselves to the exacting requirements of the technology. A failure by a communicator to adapt his behaviour to the technology's demands would result in a garbled message if he were lucky. If he were unlucky, it would lead to the compromise of an entire system

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[186] [Manly] to Harrison, 8 July 1918, NARA, RG 165, Entry 65, 10531-347/5. The article in Scientific American may have been Otto Holstein, 'A New Cipher', *Scientific American Supplement*, 14 April 1917, p. 235.*i*

[187] 'Book I. Supplements of the Work and Activities of Military Intelligence Division Containing First Supplement for Week Ending Aug 31, 1918','M.I. 8, Codes, Ciphers, and Secret Writing', p. 2, NARA, RG 165, Entry 65, 10560-717.

[188] Bell to Harrison, 20 November 1918, NARA, RG Entry 346, Box 1, Folder 'Misc. Edward Bell Letters Rec'd'.

and the deaths of friendly troops. G-2-A-6 was particularly aware of the finicky requirements of the technology because, according to one estimate, 75 percent of their success in breaking enemy code and cipher messages depended on the German operators making mistakes.[189] Even a radio or telegraph operator who followed all the rules precisely might still be identified by the personal quirks of his own technique if he did not turn himself into a living automaton.[190]

The first efforts at a cryptographic system for use in the front lines produced two sets of relatively simple code books the output of which was to be superenciphered. This superencipherment proved impractical for troops at the front and of limited utility. So, a specially-formed Code Compilation Section (which reported to the Chief of Signals, not the G-2) took on the task. It produced a series of high-quality trench codes, an average of three per month for the last five months of the war. Whenever one code was compromised, G-2-A-6 would oversee its immediate replacement which took only about two days.[191] To ensure their soundness, the AEF would submit codes to the British for a security evaluation.[192]

The code and cipher men had little trouble convincing the senior staff of the necessity of strict rules and regular replacement of code books. The French had already convinced Nolan of the necessity of good communication security, pointing out how the Russians had not heeded French warnings about the inadequacies of their

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[189] Moorman to Conger, 21 March 1918. NARA, RG 120, Entry 105, Box 5761, Folder 'Duplicates (Misc)'. For an example, a German mistake which allowed the Allies to gain entry to the 'ALACHI' cipher which the Germans used to communicate with their forces in the Near East and the Caucasus, see GHQ AEF, G-2-A-6, Herbert C. Skinner, 'Transposition Ciphers Used by the Germans (February, 1918 to November 1918)', 28 November 1918, J. Rives Childs Papers, Box 14, Folder 'Materials on German Ciphers & Codes', University of Virginia Library, Special Collections.

[190] Moorman to Nolan, 31 October and 9 November 1918, NARA RG 120, Entry 105, Box 5762, Folder 'Preparation of Codes and Ciphers File 240'.

[191] Kahn, *The Codebreakers*, pp. 326-328.

[192] See, eg. 'American Three Letter Code, Survey by General Staff, B.E.F., Section Intelligence E (c)', June 30, 1918. See also Hay to Moorman, 24 June 1918. Both are in NARA, RG 120, Entry 105, Box 5763, Folder 'US Codes – Miscellaneous'.

codes. He concluded that 'when it is realized that our knowledge of the subject of codes and ciphers when we entered the war in 1917 was at least no better than that of the Russians in 1914, the very great importance of this subject to our Army becomes self-evident'.[193] Notified of transgressions of the security rules, the AEF's Adjutant General wrote blistering memos. One to General Hunter Liggett, for instance, complained about 'criminal carelessness' in the use of codes by the First Army and demanded a 'rigid investigation' followed by courts martial of the officers who had furnished information of vital importance to the enemy'.[194] Such memos had little effect, however, and seldom was anyone brought to account, leading Moorman in a fit of frustration to fantasize about hanging a few of the offenders *pour encourager les autres*.[195] So two days before the Armistice, alarmed by the continuing leakage of accurate data to the Germans, Moorman recommended the assignment to each division, corps, and army, of an officer to enforce uniformity of procedure.[196]

Nevertheless, the constant warnings that the enemy was always listening had some effect on some line officers. America's first use of Native American 'code talkers' was an *ad hoc* effort by line officers in the 36th Division who were convinced that the Germans were eavesdropping on every word they communicated. When in late October 1918, a dangerous tactical situation particularly required secure communications, clever officers pressed Choctaw soldiers into service in the radio room.[197]

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[193] Nolan, 'History', p. 120.
[194] Adjutant General AEF to Commanding General 1st Army, 17 September 1919, NARA, RG 120, Entry 105, Box 5762, Folder 'Preparation of Codes and Ciphers File 240'.
[195] Kahn, *The Codebreakers*, pp. 331-332.
[196] Moorman to Nolan, 31 October and 9 November 1918, NARA, RG 120, Entry 105, Box 5762, Folder 'Preparation of Codes and Ciphers File 240'.
[197] Scattered evidence suggests that this innovation may have occurred elsewhere in the AEF. The Marine Corps and, to a much lesser extent, the Army, made major use of this technique during World War II. William C. Meadows, *The Comanche Code-Talkers of World War II*, (Austin, 2002), pp. 16-32.

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The implications for intelligence of the 'analog revolution' were profound. During World War I, modern realities—not least the need to cope with the vulnerabilities created by aerial reconnaissance and modern telecommunications and to inflict the corresponding vulnerabilities on the enemy—forced an increase of staffs and complexity within the Army. It became clear that intelligence was a peculiar discipline with its own finicky requirements and that its emerging high-technology sub-fields of aerial photography and 'code and cipher work' were fields unto themselves. If the essence of a modern bureaucracy is the creation of exclusive sub-fiefdoms within the overarching bureaucracy, then this was what came to pass in the AEF staff. Nolan observed that each division of the general staff acted like it was in a 'watertight compartment' oblivious to what was going on elsewhere. This tendency, he thought, was particularly strong in the G-2.[198] The esoteric technical experts who came into intelligence during World War I contributed heavily to this separation.

Technology, aerial reconnaissance and signals intelligence had led intelligence to penetrate the length and breadth of the AEF. G-2-A-6 had quickly realized that its work must be especially secret, yet its officers had also realized that they had to insinuate themselves into much of the work of the staff, the fighting forces, and even the allied staffs in all sorts of ways that were far removed from actual code and cipher breaking. The field had become so important, so broad, and also so deep, that, as one scholar has observed, the chiefs of the cryptanalytic offices of the period spent little if any time doing actual solutions themselves but instead were managers and executives.[199]

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[198] Nolan, 'History', p. 334.

[199] Kahn, *The Codebreakers*, pp. 348-349. For a discussion of the realization that code and cipher work must be more secret than other intelligence work, see Moorman, 'Lecture

In the case of aerial reconnaissance, its immediate applicability was usually to tactical commanders, so the task of immediate exploitation was pushed forward into the front-line units where the BIO's, once schooled in the fundamentals of photographic interpretation, came to know intimately their part of the battlefield. Nevertheless, aerial reconnaissance could have strategic implications as well, betraying the enemy's preparations for major offensives and indicating where the blows would fall. Thus, it was important to transmit the data up the hierarchy to G-2-A-7. Signals intelligence was different. An enciphered message collected at one end of the front was likely to be in the same cipher system as one collected at the other end of the front. Therefore it only made sense to concentrate the code and cipher men at the highest levels of the staff.

In 1917, the Americans were behind the best standards of the European powers when it came to the practice of intelligence. They had to catch up quickly if they were to contribute to the Allied effort and avoid being ruthlessly exploited by the Germans. This they were able to do. By the end of the war they did not have the leading technical intelligence capability in the world, but they were competitive with the leaders. In part, this is due to the fact that some Americans had done much thinking about intelligence and its implications (even though the military had implemented little of this thinking). It helped that this thinking had drawn heavily on European work. Thus, the Americans were thinking along similar lines as the Europeans. However, it is also due in part to the fact that two of the most important tools of the intelligence officer in World War I existed, if at all, in extremely embryonic form in 1914. The Europeans in 1914 could scarcely be expected to have facility in them as they were new technologies. So it was easy for the US to follow

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delivered to the Officers of the Military Intelligence Division, General Staff', 13 February 1920, NARA, RG 457 Yardley Papers Entry 9032, Box 1, Document 17, NARA.

closely in the European wake. It is perhaps fortunate that the United States awoke from its military slumber in the earliest days of the technological revolution of the early twentieth century when it was relatively easy to catch up.

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Chapter 3

A New Kind of War: Intelligence at Home

Counter Espionage, as conducted by the...MID, was predicated upon the necessity of maintaining thorough and continuous cover of the whole country, in both the civilian population and the military establishment.

–MID Official History, 1919[1]

Another driver of intelligence change was the expanding nature of warfare itself. The Great War was a total war of entire national systems to an extent that no war before it had been and this placed unprecedented demands on intelligence systems. Belligerents now thought that their adversaries could affect every aspect of the modern all-encompassing military system by means of spies, saboteurs, and propagandists. The enemy might bring about dissension, revolution, the violent overthrow of the American government, or even, as one officer fretted, a limitation of armaments.[2] Defeatism and pernicious propaganda loomed large in the worries of the armed services. Some officers thought that the development of propaganda as both an offensive and a defensive weapon was fully comparable to the development of the aeroplane.[3] Others thought the problem even more dramatic. General Pershing, for instance, attributed the crushing Italian defeat at Caporetto in the fall of 1917 to socialist propaganda. Concerned lest such a catastrophe befall his forces, he urgently wired the War Department recommending that MID engage in positive domestic

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[1] *MID History*, p. 87.
[2] C. H. Mason, 'The Doctrine and Practice of General Staff Intelligence', lecture delivered at the General Staff College, Washington, 23October 1919, Leroy Yarborough Papers, Box 2, Folder 'MI Division, US Army General Staff, History, Work and Activities, Organization and Function', USAMHI.
[3] 'Conference of US Military Attaches at the Hague 16-19 July, 1919, inclusive', RG 8, Accession 1991-372, XINA, NHC.

propaganda as well as counter-propaganda efforts and encourage similar efforts by other government agencies and public figures such as preachers.[4]

Pershing found a ready audience in Washington where there were rampant concerns about espionage, subversion, and sabotage in the continental United States. Indeed, the classified 1919 official history of the MID observed that the war:

> was not fought by the military forces alone. There were economic, psychologic [sic], social, political, and even literary forces engaged, and it was essential, in order to defeat the enemy, to understand fully the strength of each...It was equally necessary that we throw every possible safeguard about our own preparations for war and discourage enemy agents who in one way or another attempted to lower our morale, damage our industries, or debauch our soldiers. We had to look to the foe within as well as to the foe without.[5]

It was a 'truism' that 'war is carried on not only with military but also with economic weapons', the MID's manual for military attachés noted in December 1918.[6] Elsewhere the MID opined in the sort of language that would soon come from the mouths of strategic bombing enthusiasts that

> as the success of armies depends more and more on the scale on which their preparation, equipment and reinforcement are conducted at home, so the enemy in seeking to destroy the base of the army, attacks the army at that distant point by the grand strategy of propaganda....The propagandist threatens to cut [an army] off from its base, to stop the flow of reinforcements, supplies, ammunition, equipment, food, comforts, and above all, to weaken the moral support that sustains the troops in the hardships and cruelties of war far from home.[7]

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[4] Nolan, 'Comments', p. 137. Perhaps inspired by concerns similar to those of Pershing in the wake of the battle of Caporetto, *Infantry Journal* after the war published an article by the head of the Bureau of Investigation,: William J. Burns, 'Combating Propaganda', *Infantry Journal*, 20:6, (June, 1922), pp. 599-603.

[5] *MID History*, p. 3. For a similar statement of purpose from the Director of Naval Intelligence at the time, see Roger Welles, quoted in A.P. Niblack, *The History and Aims of the Office of Naval Intelligence*, (Washington, 1920), p. 16, RG 8, Box 71, Folder 3, NHC.

[6] 'Manual for the Military Attaches,', December 1918, Section II, 'Appendix to Section II, Part 2', NARA, RG 165, Entry 65 10560-993.

[7] Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, (Washington, n.d. [1918]). pp. 2-3.

Both the Army and the Navy agreed that saboteurs had to be kept away from vital defence industrial facilities.[8] With subversion on the march and German-Americans forming a large percentage of the American population, the services for the first time decided that they needed a bureaucratized process to ensure the loyalty and reliability of their officers, men, and civilian employees. All this required an extensive bureaucracy, devoted to 'negative intelligence'. In addition, even as the war was under way, the US Government evinced substantial concern over domestic manifestations of Bolshevism and similar radicalism. Given the Bolshevik revolution of 1917 and the strength of the International Workers of the World in the United States, the threat did not seem to be one to be taken lightly.

In short, then, during World War I, the Army and Navy involved themselves directly and deeply in domestic surveillance, counterintelligence, counterespionage and counter-sabotage to a degree unique in American history. The contrast with previous American experience was stark. During the Spanish-American War, the Secret Service, part of the Treasury Department, had stepped into the breach of domestic security and counterintelligence on its own initiative.[9] After a few early successes however, President William McKinley transferred this responsibility to the War Department.[10] However, the Department had neither the personnel nor the inclination to carry out the function and refused to use Army officers as investigators, so it subcontracted the work right back to the Secret Service.[11] In the course of the war, the Secret Service received a great number of tips from the general public, most of them, according to the head of the Service, based on 'trifling suspicion'. In most cases its operatives merely found that some American had been 'injudicious in their

[8] See *MID History*, pp. 1129-1161 for a discussion of the MID's plant protection efforts.
[9] John E. Wilkie, 'The Secret Service in the War', in *The American-Spanish War*, pp. 423-425.
[10] Wilkie, *The American-Spanish War*, pp. 426-428, 430-436.
[11] Jensen, *Army Surveillance in America*, p. 79.

conversation, or...too outspoken in their friendship for Spain'. These cases it dropped. Only when individuals expressed an intention to act against the United States should the occasion arise did the Government act. Usually a mere warning that the government was watching was sufficient to resolve the issue.[12]

While the Secret Service handled approximately 1000 cases during the entire Spanish-American war, by the time World War I ended, ONI alone was handling 15,000 domestic cases a week.[13] Why this dramatic shift? Historians have probably focused more attention on domestic security than on any other American intelligence issue of that era. However, their studies have not brought to bear the full set of approaches available to historians of intelligence. As a result, explanations to date for the flourishing of domestic intelligence remain unsatisfyingly thin.

There are three predominant approaches to intelligence history. Some scholars focus on intelligence as a tool of foreign and defence policy, others attend to its role in domestic security, while still others study the role of intelligence services in the system of state oppression.[14] Though many scholars have written about the changes and expansion in American intelligence during the war, the lion's share of their work has dealt with domestic surveillance and approached the question from the second and third perspectives.[15] Typically these authors are centrally concerned with

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[12] Wilkie, *The American-Spanish War*, p. 429.
[13] Dorwart, *Office of Naval Intelligence*, pp. 117.
[14] Len Scott and Peter Jackson, 'The Study of Intelligence in Theory and Practice', *Intelligence and National Security*, 19:2, (Summer 2004), p. 141.
[15] For examples, see Theodore Kornweibel, Jr., *Investigate Everything: Federal Efforts to Compel Black Loyalty during World War I* (Bloomington, 2002); Joan M. Jensen, *Army Surveillance in America, 1775-1980* (New Haven, 1991); and Roy Talbert, Jr., *Negative Intelligence: The Army and the American Left, 1917-1941* (Jackson, 1991). Charles H. McCormick, *Seeing Reds: Federal Surveillance of Radicals in the Pittsburgh Mill District, 1917-1921* (Pittsburgh, 1997). Further, see Joseph W. Bendersky, *The "Jewish Threat": Anti-Semitic Politics of the U.S. Army* (New York, 2000), especially Chapters 1 and 2 and Mark Ellis, *Race, War and Surveillance: African Americans the United States Government during World War I* (Bloomington, 2001), especially Chapters 4 and 5. See also Wray R. Johnson, 'Black American Radicalism and the First World War: The Secret Files of the

civil liberties and the threat that the American military or intelligence services pose(d) to them. Their works often examine these questions of civil liberties through lenses such as labour history, the history of leftist radicalism, of African-Americans, or of Jews. Their standard narrative describes domestic surveillance by the intelligence services, particularly those of the military, as an effort by racist, reactionary and ruling classes to oppress the little man.

There is much to be said for this body of work. Both MID and ONI sought out upper class officers who were unlikely to be particularly sympathetic to the marginalized portions of American society. General Marlborough Churchill, who succeeded Colonel Ralph Van Deman as head of the MID, noted that in putting together an organization to do 'counter-spy' work, Van Deman had consciously recruited almost exclusively from 'the class which, for want of a better term, may be called the "best citizens of the community"'. This decidedly did not include private detectives (not an upper-class profession) because they had 'low ethical standards'. 'It is difficult to describe a "best citizen"', Churchill admitted, 'but if we think of him as a man of standing in any given community who has much to lose if he "goes wrong"; who stands for law and order and good government, and who puts the interests of the country above political or personal interest, we shall have a fair picture'.[16] ONI brought a similar class of people to bear in its counterintelligence work, some of them golf or tennis buddies of Assistant Secretary of the Navy Franklin Roosevelt.[17]

Military Intelligence Division', *Armed Forces & Society*, 26:1, (Fall 1999), p. 27-54; and Robert C. Cottrell, 'Roger Nash Baldwin, the National Civil Liberties Bureau, and Intelligence During World War I', *Historian*, 60:1 (Fall 1997), p. 87-106.

[16] M. Churchill, 'The Military Intelligence Division, War Department, General Staff', 4 September 1919, p. 2, File 57-35, Army War College Curriculum Archives, USAMHI. For a similar view on detectives see, Martin, 'Selection of Operatives', 7 November 1918, 10560-328/130, NARA RG 165, Entry 65.

[17] Dorwart, *Office of Naval Intelligence or DNI? (City, Year)* pp. 108-112.

The people who worked in the New York offices of the MID and ONI exemplified this approach. The MID chief in the New York office was a deputy New York City police commissioner, Nicholas Biddle, a Harvard man from a family of bankers. In 1916, ONI looked to a civilian, Spencer Eddy, also a Harvard man, to set up their office in New York City. Eddy found office space on Wall Street which he leased 'naturally at my own expense'. One member of Eddy's unit was Ralph Pulitzer, the newspaper magnate and son of the man who established the Pulitzer Prize.[18]

As sound as they may be, however, these class- and race-centric assessments of military domestic intelligence typically give short shrift to the actual military context of the military's actions. In particular, scholars seldom seek any deep understanding of the military's beliefs about how domestic surveillance fitted within the context of the broad field of 'negative intelligence' (today's 'counterintelligence') nor how that field related to warfare generally or contributed to the defeat of the enemy. They merely lament the application against dissident Americans of a tool properly meant to combat foreign agents. In truth, however, most intelligence officers saw foreign agents and dissident Americans as merely different coins in the same system of military currency.

Accordingly, this chapter assesses the expansion of American intelligence into the counterintelligence realm specifically in the context of modern war. The increase in domestic surveillance was a result of a particular understanding of how modern war worked and, in fact, the military did not merely engage in such activities among the civilian population at home, but also abroad in their own forces and even within

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[18] Hunnewell, Hollis H., *History and Anecdotes of the New York Branch of the Office of Naval Intelligence*, (New York, n.d.), n.p. See also entries for Biddle, Eddy, and Pulitzer in Frederick S. Mead, ed., *Harvard's Military Record in the World War* (Boston, 1921).

France to the extent possible. Of course, it is not coincidental that when the military turned its gaze to the continental United States, unpopular social and political groups suffered, but oppressing those groups was not itself the point of domestic surveillance.

Beyond the military implications already mentioned, the importance of tracking down the enemy's spies and agents, be they foreign intelligence officers or dissident Americans, also followed from the understanding that in war, 'knowledge is power'.[19] This theme showed up repeatedly in American military writings before World War I. Information made a military more formidable in battle, so the lack of communications could be more serious to a navy than 'inferiority in ships'.[20] Good intelligence could help compensate for the inadequacy of America's coastal defences.[21] Arthur Wagner had maintained that the 'commander will be victorious who has the best secret service'.[22] Given the importance of information, it was imperative to deny it to the enemy.[23]

Denying information to the adversary seemed to be a particularly important task when facing the Germans. An unrealistic respect for German intelligence capabilities was built into the very genetic material of American military intelligence. Wagner had complained about the 'Prusso-Maniacs' who idolized everything about Prussian military science. Prusso-mania led to an unrealistic view of what the Prussians could do in the field of intelligence. In 1896, for instance, the head of the MID lauded the 'perfection of the intelligence bureau of Germany' which

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[19] John M. Ellicott, USN, 'Naval Reconnaissance in Time of Peace', *Proceedings of the United States Naval Institute*, 27:3, (1901), p. 579. George P. Scriven, *The Transmission of Military Information*, (Governors Island, 1908), p. 13.
[20] George Owen Squier, "The Influence of Submarine Cables Upon Military and Naval Supremacy", *Proceedings of the United States Naval Institute*, 26:4, (December, 1900), p. 602.
[21] Charles C. Rogers, USN, 'Naval Intelligence', *Proceedings of the U.S. Naval Institute*, 9:27 (1883), p. 677.
[22] Wagner, *The Service of Security and Information*, pp. 181.
[23] Howard A. Giddings, *Exploits of the* (Kansas City, 1900).

immediately took note of 'each and every change and important movement throughout the world affecting the military and political status of all organized governments'.[24] Such views conditioned American expectations about the extent of the German espionage effort in the US. For instance, initially it was an object of faith that the Prussian spymaster Wilhelm Stieber had deployed enormous numbers of spies, including some thirty thousand or more on French territory during the Franco-Prussian War, so it only made sense to look for the same phenomenon in the U.S. and in the French rear area after the AEF deployed.[25] ONI carefully retained a copy of a 1901 report from the Military Attaché in Paris which reported that:

> There exists in the Naval Intelligence Office in Berlin a book entitled 'Coast Defence Book – United States'....The book consists of navigating coast charts of every harbor or place of military interest on the coast; the location of each battery and its armament, of dock yards, arsenals, etc., is clearly marked on them in red ink, with such brief notes as to the best means of attack, local conditions, etc., as a man of war would find it useful to have...In most cases, sketches and photographs and often more minute descriptions are attached to the chart so that the commander could recognize by eye the thing whose location was shown on his map...This book [is] about 30 x 40 inches large and 15 or 20 inches thick....Each ship which might be sent to our coasts thus has all ready the information it needs.

The attaché's only caveat was, 'naturally I have not seen [this book], but there is no doubt in my mind whatever as to its existence'.[26]

These concerns were persistent. The War Department reported in mid-1918 that the General Staff was quick to appreciate America's relative weakness when the country:

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[24] Vincent to Secretary of War, 13 October 1896, NARA, RG 165, M1024, MIC639/ (file not further specified).

[25] For wartime references to Stieber and his legions of spies see, e.g.: Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, p. 6; "Memorandum for Captain Hunt", 16 January 1918, NARA RG 319, Entry 'CMH Background Papers', Box 52C, No folder name. Roger Welles, 'German Espionage System', August 1918, NARA, RG 38, Entry 98, File U-1-J, 9919.

[26] US Military Attaché, Paris to Adjutant General of the Army, 6 September 1901, NARA, RG 38, Entry 98, File E-6-A, 02/36.

> found itself pitted against a nation that had developed military intelligence in all its branches to a degree far surpassing any other similar organization known to history. The capacity for patient painstaking effort, which the German has developed as his heritage, had served him well in this task. For two generations, with the determination of making wars for conquest, he had winnowed with minute care every grain of information concerning every possible enemy.[27]

During 1917 and 1918, the default assumption was that there surely must be spies everywhere. All the major agencies agreed on the point. General Kuhn, the head of the War College Division, warned in the spring of 1917 that 'we know that [the Germans] have already established here a very complete and efficient espionage service....Agents are found all over the country and in every walk of life of our population. They are also to be found in our military service, not only in the ranks of the Army, but in our offices, arsenals, and munition plants'.[28] This view, though it evolved and eroded over time, remained substantially intact for the duration of the war. Hence, the head of ONI during the war thought that probably every factory in the US had 'at least one paid agent of the German Government who kept that Government informed of everything that was going on. There is no doubt that even in the departments at Washington, German agents were at work at all times'.[29] 'Every [Army] camp has its share of organized spies', advised an Army intelligence officer in 1918.[30] The 1919 authorized history of the quasi-official American Protective League (APL) put the number of German spies at 250,000 to 300,000.[31] Given these apparent facts, it would have been astonishing if upon America's entry into the war the services—regardless of the political views of their officers—had not insisted that a major effort be put into domestic counter-espionage.

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[27] Draft of 'Annual Report of the Military Intelligence Branch for the fiscal year ending 30 June 1918', n.d., RG 165, Entry 65, 10560-111(1).
[28] Joseph E. Kuhn to the Chief of Staff, 15 June 1917, NARA RG 319, M1024, 639-154.
[29] Niblack, *History and Aims,* p. 16.
[30] Fisher, 'The Number One', 6 November 1918, NARA, RG 165, Entry 65, 10560-328/127.
[31] Emerson Hough, *The Web*, (Chicago, 1919), pp. 58, 89, 94-95.

Not only were the methods of war expanding, but the Germans were at the forefront of expanding the methods used by intelligence services in support of the war effort. The War Department found as the war went on that 'the Germans were practically the first people, apparently, to adjust their intelligence work so as to recognize the unity of the modern state and to employ, directly or indirectly, all sorts of commercial, political and economic organizations for governmental intelligence purposes'.[32]

These ideas even penetrated the consciousness of President Woodrow Wilson who was by no means a military theorist. The idea of a broad form of warfare appeared in many of his most important speeches, including his speech in April 1917 asking Congress for a declaration of war.[33] In this speech, he complained that the Germans had planted spies throughout American communities and in the U.S. Government. He elaborated on this theme in his Flag Day speech of 1917, where he once again described the German transgressions that had forced the United States into war. In order, they were: the introduction of 'spies and conspirators' into the United States; the dissemination of seditious ideas and pro-German American propaganda to Americans, particularly by German diplomats; industrial sabotage and economic warfare; inciting Mexico and Japan to go war against the United States; and attacks on American shipping. He concluded the passage not with reference to the numerous Americans who had died at German hands, but by noting that 'many of our own people were corrupted. Men began to look upon their own neighbors with suspicion and to wonder whether there was any community in which hostile intrigue did not

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[32] *MID History*, p. 1640.
[33] *Ibid.*

lurk. What great nation in such circumstances would not have taken up arms?'[34] In these various speeches, it is likely that he had in mind the case of an American journalist from New York who in late 1916 agreed to spy for the Germans against the British. George Bacon, was caught by the British and only saved from a firing squad in the Tower of London by American intervention. In exchange for a reduction in his sentence to life imprisonment, Bacon testified against his German handlers, by now arrested in the States, who were convicted and sentenced to two years hard labour. The court handed down the Germans' sentences a mere week before Wilson asked for the declaration of war. In its deliberations over war, the House of Representatives considered a report from the Foreign Affairs Committee that discussed German malfeasance in the United States, including revolutionary propaganda, instigation of strikes, passport fraud, and sabotage.[35]

The U.S. Government was unaware of the travails of the German intelligence services, probably because of its own lack of experience in the field. This meant that American imaginations could run wild. The American Ambassador to Germany was so afraid of spies within his own embassy and the State Department itself that he

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[34] Woodrow Wilson, *President Wilson's State Papers and Addresses* (New York, 1918), p. 413. For similar themes in Wilson's speeches, see his state of the union address of December 1915, pp. 150-152 and his speech to Congress in April 1917 asking for a declaration of war, pp. 379-380. The Flag Day speech resonated broadly with the American public and the president's close adviser, Colonel House, predicted that Germany would 'be centuries freeing herself from the indictment', Charles Seymour, *The Intimate Papers of Colonel House*, Vol. 3 (Boston: 1928), pp. 137-138. An annotated version of the speech published at the behest of the Committee for Public Information was printed in numbers of some 6.8 million. George T. Blakey, *Historians on the Homefront: American Propagandists for the Great War* (Lexington, 1970), pp. 43. For similar themes in Wilson's speeches, see his state of the union address of December 1915, pp. 150-152 and his speech to Congress in April 1917 asking for a declaration of war, pp. 379-380.

[35] *MID History*, p. 1640. Christopher Andrew, *Defend the Realm: The Authorized History of MI5*, (New York, 2009), pp. 73-75. According to Andrew, Roslyn Whytock, another American journalist recruited at the same time as Bacon, volunteered to work as a double agent for the British and thus escaped serious consequences. Indeed, he eventually later became a captain and served the U.S. Government as the MID's port control officer in New York. For an additional brief mention of Whytock's MID career, see Gene Fowler, *Skyline: A Reporter's Reminiscence of the 1920s*, (New York, 1961), p. 260.

communicated directly by courier to the President when a particularly sensitive diplomatic issue arose.[36] In March 1917, Van Deman and Leland Harrison, the intelligence coordinator at the State Department, agreed that the Germans maintained a card file with an entry for every officer in the US Army, including an assessment as to whether the officer could be bribed. Through unspecified apparently clandestine measures Harrison actually acquired two of these cards, one of them with biographical data on Dennis Nolan, who would soon be named General Pershing's intelligence chief.[37]

In practice, then, Americans considered espionage to be hostile activity 'other than by a military force' carried on outside the territory occupied by the enemy. This included the collection and transmission of information; 'the transmission of money, material and supplies'; propaganda or the encouragement of disloyalty or discontent; and sabotage or the 'immobilization of resources'.[38]

When the World War broke out in the late summer of 1914, the Americans did not immediately come to the conclusion that a new kind of war had arrived.[39] This realization arrived only slowly during the more than two and a half years that Europe was in flames and the United States stood aside. The United States, under the leadership of Wilson and his pacifist Secretary of State, William Jennings Bryan, kept the country out of the war arguing that it was Europe's business, not America's. However, in an economic sense, the war very much became America's business. The

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[36] James W. Gerard, *My Four Years in Germany* (New York, 1917), pp. 253.
[37] Correspondence between Van Deman and Harrison, March 1917, NARA RG 165, Entry 65, 9793-67, 9793-75 and 9793-77. Van Deman, *Final Memoranda* (Wilmington, 1988), pp. 42.
[38] Wrisley Brown, lecture delivered to the officers of the Military Intelligence Division, General Staff, 19 December 1919, NARA, RG 165 entry 65, 10560-328/111.
[39] Except as otherwise specifically noted, this discussion of the German espionage and sabotage campaign in the United States is drawn from Tracie L. Provost, *The Great Game: Imperial German Sabotage and Espionage against the United States*, (unpublished doctoral dissertation, University of Toledo), May, 2003; and Michael Warner, 'The Kaiser Sows Destruction', *Studies in Intelligence*, 46:1, (2002), pp. 3-9.

British naval blockade of Germany rapidly made trade with that country next to impossible even as trade with Britain and France remained feasible. These latter countries had voracious appetites for a variety of goods from America, not least military materiel such as munitions and horses, appetites that American businessmen were more than happy to feed. Wilson, though determined to maintain the country's neutrality, was personally pro-British, so he did not intervene.

The burgeoning transatlantic trade was a serious problem for Germany. In this greatest ever industrial war, that country did not relish the prospect of struggling against the industrial might of three great western powers, even if it only faced two of their armies in the field. When diplomatic protests did not change America's behaviour, the Germans turned to other measures. However, prior to World War One, the German military had not clandestinely collected intelligence in the United States, though its attachés painted for the General Staff an 'excellent picture' of the American Army.[40] Because they had not made an investment during peacetime, when combat broke out in Europe, the Germans had to improvise their operations in America, building off of their Ambassador, Count von Bernstorff; military attaché Franz von Papen; naval attaché, Karl Boy-Ed; and Heinrich Albert, the commercial attaché in New York.[41] Through them, the Germans—General Staff IIIb under Walther Nicolai, the General Staff's Political Department, and the Admiralty—launched several spy rings, though the emphasis before the US entered the war was really on sabotage, rather than intelligence collection. However, coordination among these rings was minimal.[42]

W. Nicolai, *The German Secret Service*, (London, 1924), pp. 106-107. Pöhlmann, 'German Intelligence', p. 28.

[41] Pöhlmann, 'German Intelligence', p. 37. David Traxel, *Crusader Nation: The United States in Peace and War, 1898-1920,* (New York: 2006), pp. 159-160.

[42] Pöhlmann, 'German Intelligence', p. 37.

First, in late January 1915, Germany cabled an order to its diplomats in the United States to conduct sabotage against 'every kind of factory for supplying munitions of war'. Second, in February 1915 Germany ordered its submarines to sink any ships, even those flying the flags of neutral nations, found in an exclusion zone around the British Isles. This second order led a few months later to the sinking of the liner *Lusitania*, an act which more than any other poisoned American public opinion toward the Germans. In particular, it enraged President Wilson who ordered the US Secret Service to expand its functions from protecting him and hunting counterfeiters to watching German diplomats. The Secret Service soon managed to steal the briefcase of a German commercial officer and inside it they found documents describing the sabotage campaign which was getting underway.

When Germany decided to mount its campaign against the United States, it had no intelligence infrastructure in place there aside from the routine presence of a military and naval attaché.[43] The January 1915 cable that launched the German sabotage campaign named three people who could help the German military attaché find local helpers. These individuals, one each in Philadelphia, Chicago, and New York, were all Irishmen, who had been nominated by the self-styled Irish 'ambassador' to Germany, Sir Roger Casement. The Germans also dispatched a number of additional officers to the US to conduct such business. The most famous and enterprising of these was Germany Navy Captain Franz von Rintelen, who arrived in the United States in April 1915, bearing a Swiss passport. Drawing on a few interned sailors of German citizenship, as well as Irish-Americans, German-Americans and other Americans who, though not necessarily sympathetic to Germany, had a gripe with the United States, notably African-American dock

[43] The German military attaché was Franz von Papen who later became Chancellor of Germany and who played an instrumental role in Hitler's rise to power.

workers, the German agents cobbled together an extensive if less than fully effective campaign of sabotage. By December 1915, President Wilson was complaining bitterly about naturalized Americans 'who have poured the poison of disloyalty into the very arteries of our national life; who have sought to bring the authority and good name of our Government into contempt, to destroy our industries...and to debase our politics to the uses of foreign intrigue'. He told Congress that these 'infinitely malignant ...creatures of passion, disloyalty, and anarchy must be crushed out'.[44]

The most famous incident of sabotage was the dramatic explosion engineered by three German saboteurs in July, 1916 at 'Black Tom', a pier in New York City stacked high with munitions meant for France and Britain. One hundred people were injured, three killed, and the authorities estimated the damage at $20 million. In January, 1917 the Germans arranged to set fire to a shell-packing plant in New Jersey. Thousands of people fled their homes as shells flew through the air. In 1915 and 1916 some 36 ships were the targets of bombings or other forms of sabotage or attempted sabotage at the behest of German agents. Many other smaller incidents also took place. The Germans undertook other less traditional measures as well, experimenting with infecting livestock bound for France with glanders and setting up dummy companies to tie up war materiel that might otherwise have gone to France or Britain.[45]

The Germans faced problems beyond their inability to coordinate their efforts. Germany's disadvantageous geography and the prophylactic efforts undertaken by the Allies had a crippling effect on its intelligence collection efforts in the Western Hemisphere. In fact, gathering intelligence information in America 'presented

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[44] Woodrow Wilson, *President Wilson's State Papers and Addresses*, pp. 150-151.
[45] The glanders incident is the subject of Robert L. Koenig, *The Fourth Horseman: One Man's Secret Mission to Wage the Great War in America* (New York, 2006).

extraordinary difficulties', in Nicolai's words, though it was possible to get some information out of the US, albeit with substantial time lags.

> The route to America was barred in the West by England, France, and Italy in the East by Russia and Japan. The seas of the world were controlled by England, which exercised an almost inescapable surveillance over traffic. It was all but impossible to send Germans for espionage to America. There remained the attempt to get information from South America. But even to send trustworthy persons there was almost impossible, and was a success only in a few isolated cases. Communication from America presented the same difficulties. In these circumstances an independent service was created by pro-Germans living on the American continent; but this was not to be compared with an organized information service; it was, on the contrary, dangerous in itself, as the sources of information were unknown in Germany and their trustworthiness could scarcely be estimated.[46]

Moreover, when the United States declared war, most German saboteurs and spies, not willing to face the wartime penalties for their acts, fled the country.[47] This was precisely the time when Germany most needed timely intelligence out of the U.S. However, as Nicolai dolefully recounted:

> The obstacles to German espionage in America increased...Traffic on the direct route between North America and the Continent became quite impossible for German agents. All news obtained over the route *via* South America was henceforth outstripped by events and therefore worthless. The circumstances led to an almost complete abandonment of the costly attempt to keep up a secret service in America itself. There remained nothing more than to watch the American military forces from the moment when they landed on European soil.[48]

The net result was that, according to Nicolai, 'of all the belligerents America was the least threatened on her own territory by German espionage'.[49]

Nevertheless, the German sabotage campaign was a wake-up call to some American officers. They saw the broadening of warfare and realized that this meant that intelligence had to broaden itself, too. They simply failed to perceive that the

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[46] Nicolai, *The German Secret Service*, pp. 107-108.
[47] See, e.g. *MID History*, p. 1643.
[48] Nicolai, *The German Secret Service*, pp. 108-109.
[49] Ibid, p. 109.

actual threat of clandestine and covert activities in the United States had plummeted when the United States finally went to war.

Morale and propaganda—the latter 'an act and method of war', the 'cheapest' and 'most efficient' weapon ever devised, especially against a country 'governed by public opinion'—became matters of intense intelligence interest, though the MID lamented that judges and non-military personnel tended to overlook 'its direct military importance' because 'organized attacks on the psychology of peoples is [sic] too new a weapon of war to have penetrated the judicial mind as yet'. Moreover, the weakness of the laws pertaining to propaganda and subversion frustrated American officialdom at least until mid-1918.[50] Thus, efforts by pacifists, Lutherans, conscientious objectors and others to impede conscription or argue against the continuation of the war directly served German military interests, as the MID saw it. Anyone 'who prevented the enlistment of one soldier, impaired his loyalty, prevented or delayed his arrival in France, hampered the supplies he required, or in any other of a thousand ways canceled that one man's usefulness to this nation, did as much for the Kaiser as the German soldier who killed an American in battle'.[51] The Germans purportedly played upon American pacifists to such an extent that they became 'unwittingly recruited' agents of the German cause. The military services thought that whispered tales of military disasters, atrocities, or the immorality of Red Cross nurses, or publicly voiced scepticism about the value of Liberty Bonds, could all strengthen the hands of the pacifists and encourage draft resistance. Even when it was impossible to demonstrate that such stories originated with the German government,

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[50] Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, pp. 1-2, 6. 'Book I. Supplements of the Work and Activities of Military Intelligence Division Containing First Supplement for Week ending Aug 31, 1918', 'Conference Matters, May 23, 1918', No. 61, NARA, RG 165, Entry 65, 105650-717. Hough, *The Web*, p. 55-57.

[51] *MID History*, p. 9.

they were 'no less dangerous for being of American origin'.[52] Finally, of course, weak civilian morale could also undermine the determination of the Army itself.[53] The military also investigated a great many cases in which women were told by telephone or by anonymous letter that their son had died in France when, in fact, no such thing had happened. The military likened these attacks on civilian morale to 'air raids on peaceful towns...and the big gun bombardment of Paris'.[54]

When such rumours or anonymous letters were aimed at African-Americans, as often happened—doubtless, the authorities thought, from a 'directing source'—this played on an additional fear in the hearts of the white officer corps which was definitely rooted in racism but whose potential military import was also substantial.[55] Not only would the Army be called upon to help restore order in the event of widespread rioting (and many African-Americans now had military training and access to weapons), but the labour-hungry Army and Navy both depended vitally on African-Americans even if they formed a relatively small proportion of actual combatants. Similarly, one week before the war ended, an intelligence officer lecturing to the MID in Washington discussed the 'Negro soldier of the south, a fertile field' for trouble. He described rumours that had circulated, 'doubtless emanating from Germany', about how African-Americans were being abused in the AEF. He added that, 'there have been riots ever since the beginning of the war. Germany knew that it was part of her business, she knew the sore spots, she went into the south and

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[52] Ibid, pp. 12-14.
[53] Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, , p. 3.
[54] *MID History*, p. 1333.
[55] For an instance of such rumors, see 'Weekly Report of the Work and Activities of [the] MILITARY INTELLIGENCE DIVISION for the Week Ending 19 September 1918', Army War College Curriculum Archives, Records Section, File 117-3B/3, USAMHI.

played upon that prejudice which existed between the Negro and the white race...We have never had any real riots in the Negro camps, but we have been fearful of them'.[56]

In short, during World War I, intelligence officers saw themselves as defenders of a country engaged in a life and death struggle with an enemy that had demonstrated a ruthlessly amoral inclination and an impressive ability to further its military aims through the use of tools not previously found in the military kit-bag. Dramatic and unprecedented measures were necessary to thwart his efforts.

To the armed services, it appeared that two things needed to be done. First, the United States needed to secure its actual armed forces against propaganda, subversion, espionage and other such threats. Secondly, given the whole-of-society nature of warfare, the United States needed to stamp out such things in the broader American public, as well, while supporting the public's morale. Propaganda, subversion, sabotage, and defeatism, all could be threats to the military effort whether or not they were actually sponsored by Germany, though, certainly, the military tended to see the Kaiser's hand even when it was not present.[57]

The Navy, which, unlike the War Department, had not previously disestablished its intelligence office, acted first. It took its first step in 1916 spurred by the sinking of the *Lusitania* the previous year. Despite his pacifist leanings, the Secretary of the Navy, Josephus Daniels, ordered the preparation of a mobilization plan and also ordered ONI to 'arrange for securing information abroad as to the strength and movement of enemy forces. Plan and prepare now for a complete system of secret service'. These instructions led not only to the invigoration of naval collection activities abroad, but also to the establishment of a domestic intelligence

[56] 'Lecture by Capt. Wagner. In Re: The Work Done Among Troops by Negative Intelligence;, 4 November 1918, NARA, RG 165, Entry 65, 10560-328/122. For a similar claim see 'Lecture by LT. Shields – II: On the Handling of Cases of Propaganda', 8 November 1918, NARA, RG 165, Entry 65, 10560-328/132.
[57] *MID History*, p. 1837.

system. The Director of Naval Intelligence set up 'Information Services' in all the Naval Defence Districts. Each service was run by an 'aide for information' who would work with the U.S. Secret Service to set up an intelligence system, including a network of local informants who could be activated in the case of war. Also in 1916, ONI started establishing undercover 'branch intelligence offices' in major cities, beginning with New York. These it manned with civilians who later received reserve commissions.[58] Needless to say, the fact that these major cities sometimes also housed aids for information led to problems in coordination.[59]

The War Department was the more important player, however. As mobilization proceeded, its forces grew much larger and it bore the brunt of the actual fighting. Eventually, the MID grew far larger than ONI. As soon as the United States entered the war, Britain and France prevailed upon their new ally to organize itself quickly for counterintelligence. Less than two weeks after the declaration of war, Brigadier General Kuhn, the head of the War College Division, memoed to the Chief of Staff that the British and French governments would not allow American troops on their soil unless the War Department had taken steps to purge its forces of spies. This, Kuhn advised, required the immediate establishment of an organization to do the work.[60] Two days later he reported that the British had offered to dispatch officers to help with counterintelligence work within the US Army.[61]

The War Department soon acted. On 3 May, it created a Military Intelligence Section within the War College Division and made it responsible for military intelligence, espionage, counter-espionage and coordination with allied intelligence

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[58] Dorwart, *The Office of Naval Intelligence*, pp. 102-103, 110. Wyman H. Packard, *A Century of US Naval Intelligence*, (Washington, 1996), pp. 250, 271-274.
[59] O. W. Fowler, Memorandum for DNI, 29 March 1918, NARA, RG 38, Entry 98, E-9-a, 10670. Chief, ONI Section A, 'Section 'A' Report and Recommendations', n.d. [1919?], NARA, RG 38 Entry 98, F-6-d, 11466-A,
[60] Joseph E. Kuhn to the Chief of Staff, 17 April 1917, NARA RG 319, M1024, 639-143.
[61] Joseph E. Kuhn to the Chief of Staff, 19 April 1917, NARA RG 319, M1024, File 639-144.

services in the US and abroad, placing it under Major (soon to be Colonel) Ralph Van Deman.[62] Van Deman had served in the MID during the run-up to the Spanish-American War under Arthur Wagner, the author of the first serious American book about intelligence. Whereas Wagner emphasized 'positive intelligence', Van Deman was a born 'negative intelligence' officer. As a captain he found himself in the Philippines, a leading figure in the Division of Military Intelligence (DMI) there, which was responsible for tracking down insurgents. Van Deman was a mixed blessing for the Army in the Philippines. He was an innovative officer, who maintained liaison with the intelligence sections of the local police services and got the best out of his officers in the field. On the other hand, he also led the DMI to waste a good deal of its effort investigating Japanese agents and nebulous conspiracies rather than the all-too-real enemy guerrillas.[63] During World War I, both American and foreign colleagues invariably found him an impressive 'secret service leader'. His successor, at the helm of War Department intelligence, Brigadier General Marlborough Churchill, was always deferential to Colonel Van Deman and thought that he had 'a most remarkable foresight and knowledge of human nature'.[64]

The mandate of the new section was not broad enough to satisfy Kuhn and Van Deman, however. By mid-May, Kuhn was urging the Department to think more broadly. He again wrote to the Chief of Staff, maintaining that the Government must take comprehensive action to prevent espionage, subversion and sabotage by enemy agents.[65] These could be discovered as they attempted to enter the United States, or they could be rooted out once they were already in the country. Such 'negative

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[62] Talbert, *Negative Intelligence*, p. 9.
[63] Linn, 'Intelligence and Low Intensity Conflict', p. 100.
[64] Edward Bell, untitled memorandum, 1 May, 1919, NARA, RG 319, Entry 350, Box 5, File 121. M. Churchill, 'The Military Intelligence Division, War Department, General Staff', 4 September 1919, Army War College Curriculum Archives, File 57-35, USAMHI.
[65] Joseph E. Kuhn to the Chief of Staff, 13 May 1917, NARA RG 319, M1024, File 639-150.

intelligence' work would have to be conducted within the armed forces themselves by uniformed personnel. However, there would be a need also for 'civilian counter-espionage agents who should be under civil control'. It would also be necessary to prevent the transmission of military information abroad. This would require cable, telegraph, telephone, wireless and other types of censorship. This work could be done by civilian agents in close touch with military authorities.

Fortunately, Kuhn went on, the War College Division 'is at present handling matters of this character and has been since the beginning of the trouble on our Mexican border'. It had already started collecting information on German activities in the US, Hawaii, Panama, Puerto Rico, Philippines and the Americas generally. This had involved cooperation with ONI, the Bureau of Investigation, the State Department, and various police departments.[66]

The laws against espionage, sabotage and propaganda were at best weak, however. This gave the various security services little authority and few tools to work with. However, in June 1917, Congress passed and President Wilson signed the Espionage Act. Its sweeping language accorded with the new, expansive understanding of war and gave the Federal Government wide latitude to pursue enemy agents and those who acted like them. Of course, the Act made the transmission to foreign agents of information about the national defence a felony punishable during wartime by death. However, it also made attempts to obtain such information with intent or reason to believe that it would be used to the detriment of the United States a felony. In addition, it made a crime of the loss through negligence of national defence information by those lawfully entitled to hold it. Finally, it swept up vast amounts of speech into its maw, making the utterance of false statements intended to interfere

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[66] Ibid.

with the war effort, the promotion of refusal of duty, insubordination or disloyalty, and the interference with conscription or enlistment punishable acts.

In the conduct of counterintelligence and enforcement of the Espionage Act, many agencies would have roles to play alongside the War Department. Only the War Department and the Navy looked at both the armed forces and civil society. Other important players, though they never focused on the military forces themselves, included the Treasury Department, largely through its Secret Service; the Justice Department largely through its Bureau of Investigation; and the State Department, through its Chief Special Agent, who often borrowed the services of agents from the Secret Service or the Bureau of Investigation. The Justice Department, indeed, struck hard at the supposed German spy apparatus even before the passage of the Espionage Act. Acting on the authority given by portions of the notorious Alien and Sedition Acts of 1798, which were found to be still on the books, it detained most male German citizens in the United States shortly after the declaration of war.[67]

With so many players, there was great potential for confusion and chaos. Kuhn had held that while it was not necessary to have centralized control of counterespionage, 'although, doubtless, that would be desirable', it was vital to pool counterespionage information. 'All that is necessary is to establish a central registry for the purpose of entering and carding the information sent in, with a group of limited size which can consider and collate the information'. It seemed 'beyond question' that this registry should be held and analyzed by the military. Kuhn had a rationale for urging this centralization of functions beyond merely the aggrandizement of the War Department. The British General Staff controlled that country's espionage and counter-espionage services and had urged him to see that the American

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[67] *MID History*, p. 1643.

equivalents fell under the American General Staff so as to facilitate cooperation between the two militaries.[68] Kuhn also noted that a similar condition obtained in France and that the French General Staff would certainly also cooperate.

The goal that soon developed in the MID was to create, in effect, one massive surveillance bureaucracy.[69] This was not to be, however. In fact, the War Department was never seriously in the game. By early 1918, in fact, the Department of Justice had won a bitter battle with the Treasury Department which had offered itself or State as the hub for domestic counterintelligence activities. For the next several decades, the Justice Department would be the pre-eminent player in domestic counter-intelligence.[70]

Despite the wrangling, almost immediately upon the declaration of war the various intelligence agencies began discussing how to cooperate. In Washington, cooperation among Justice, the MID and ONI was adequate if not always enthusiastic. There was a weekly meeting among the heads of the Bureau of Investigation, the MID and ONI, all joined by John O'Brian, the Special Assistant to the Attorney General for Wartime Statutes.[71] The agencies also exchanged liaison officers. The Justice Department also sent to the MID a weekly report, compiled at the MID's request, on the 'industrial situations' in areas of labour unrest. For a time there was a system under which the MID, ONI, and the BOI would bring lists of new suspects and their corresponding files to the liaison officers' spaces in the Justice building for

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[68] This characterization of the subordination of the British services was at the time and is still disputed. However, the explanation given to Kuhn is a reasonable one. At this time, the domestic service (later MI-5) and the foreign service (later MI-6) were subordinated at least administratively to the War Office. See Philip H. J. Davies, *MI6 and the Machinery of Spying*, (London, 2004), p. 40.

[69] Ibid.

[70] John F. Fox, Jr., 'Bureaucratic Wrangling over Counterintelligence', *Studies in Intelligence*, 49:1, (2005), https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol49no1/html_files/burcaucratic_wragling_2.html.

[71] *MID History*, p. 1278.

coordination. This system worked fairly well in Washington (at least until ONI withdrew its officer) but the three agencies still at times worked 'in a spirit of competition, not cooperation'.[72] There was a well-worn system by which the MID could request that the Justice Department arrest someone.[73]

Coordination in the field was more problematic. However good the relationship among the three was in Washington, it was hard to stitch together three large bureaucracies spread across the length and breadth of the country and dealing in minutely detailed cases in very large numbers. Sometimes this could be helped by collocating BI, MID and ONI offices, as in Pittsburgh.[74] The system of file sharing was also implemented in some of the larger cities, though New York, a whirling vortex of counterintelligence activity, was not among them and in February 1918 the MID and Justice agreed on a daily exchange of suspects names in local city offices throughout the country.[75] Military intelligence officers around the country were trained to meet and develop good relations with their Justice counterparts.[76] Often this worked, sometimes it did not. The problem was less local enmity (though that could occasionally be a problem) than a lack of coordination. The story even circulated that after months of investigation and cultivation an undercover agent of the Justice Department arrested an agent of ONI who had been investigating him. The Justice agent had posed as a German saboteur planning to blow up an oil plant in Mexico, the ONI agent as a retired German military officer. A similar tale involved

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[72] Alexander B. Coxe, 'The Negative Branch', 17 December 1919, NARA, RG 165, Entry 65, 10560-328/155. Raymond E. Horn to DNI, 31 January 1919, NARA, RG 38, Entry 98, F-6-d, 11466-D.
[73] 'Military Intelligence Division General Staff Hand Book of Office Practice', July, 1918, NARA, RG 165, Entry 65, 10560-438.
[74] McCormick, *Seeing Reds*, p. 19.
[75] *MID History*, pp. 1278-1281.
[76] See e.g. 'Lieutenant Fielder', n.d., NARA, RG 165, Entry 65, 10560-328/111. This was a talk given to MID officers by a MID officer who apparently served in San Antonio. More generally, MID records, notably this record group and entry, are rife with admonitions to consult with agents of the Justice Department on civilian matters.

an ONI agent and a Justice agent selling each other secret documents as part of a pair of sting operations gone badly awry.[77]

Despite the fact that there never was one seamlessly integrated security system, the War Department established a vast security presence throughout the length and breadth of the country and its possessions. Even before the war broke out, the Department already had some infrastructure to build on which allowed it in short order to blanket the country with intelligence officers. In 1916, the Army, like the Navy, had established the position of Department Intelligence Officers (at this time the Army in the United States was organized into regional 'departments'). These Department IOs were under the command of the senior officer in their Department, but sent intelligence information up the chain to the MID in Washington. Their Department IOs did not initially focus on counterintelligence, but when 1917 came along, they quickly took on such tasks, though their precise work varied. The Southern Department, which included the border area with Mexico, was considered an especially sensitive point because it was a logical point of entry into the United States for spies and saboteurs. The Western Department had different problems, suffering from labour unrest, largely a result of the radical International Workers of the World (IWW). Accordingly, the War Department created an additional level of 'District Intelligence Officers' in a long list of cities in the south and the west. These District Intelligence Officers reported to their respective Department Intelligence Officers, but all were eyes and ears for MID in Washington. MID itself also established its own offices that were actually directly under its command in the country's most 'strategic metropolitan points': New York; Philadelphia; Pittsburgh;

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[77] Hunnewell, *History and Anecdotes*.

New Orleans; St. Louis; and San Juan, Puerto Rico.[78] MID also put Port Control Officers put in strategic ports.[79] Back in MID's headquarters in Washington, eventually two distinct branches developed to handle the bulk of the counterintelligence work: MI-3 and MI-4. The former was responsible for counterintelligence in the Army, the latter for counterintelligence among civilians.

Domestic counterintelligence was not just a matter to be pursued within the United States proper, however. Following the lead of the British, all the agencies of the U.S. Government agreed that it was better to stop a spy from entering the United States than to have to track him down once he was in the country. The influx of spies appeared to be a very serious problem. Had not the Military Attaché in Copenhagen cabled to the MID that 'according to my knowledge of German methods and observation here, [I am] convinced [that] practically all steamers carry German agents into United States'?[80]

Hence, domestic counterintelligence had an important overseas component. In particular, Army and Navy intelligence personnel worked closely with State Department officers to keep spies from obtaining visas to travel to the United States. The arrangement in Paris was typical. Every day the U.S. Embassy would bring to the Naval and Military Attachés the list of that day's requests for visas, passport renewal, and permission to travel. The State Department would not act on these requests until it had received input from the two military departments. [81]

The attachés in France performed another counterintelligence function. The French authorities shared with them lists of deserters and also of suspects the French believed to be in the U.S. and the Americas. Put into a card file, these lists proved

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[78] *MID History*, p. 88-89.
[79] Ibid.
[80] RG 165, Entry 65, 9944-U-8 Military Attaché Copenhagen Undated cable [July 1917] evidently to MID using transparent cover terms.
[81] 'History of Naval Attaché, Paris', p. 109, FDRL.

useful in passport control and other counterespionage efforts. Not infrequently also the American authorities would detain suspects reported by the French. The French, of course, were happy to return the favour to the Americans.[82]

The military viewed the fact that the United States attracted so many immigrants as a serious problem. Some ethnic minorities purportedly provided the Kaiser's agents with 'fruitful fields' for espionage and propaganda.[83] A large proportion of the civilian population, hence of the draftees, spoke a foreign language as its first language. Many spoke no English at all. In fact, many were technically enemy aliens. A great number of them, the intelligence services believed, 'if not directly sympathetic with what they conceived to be the cause of the Central Powers, felt nothing but repugnance toward the prospect of themselves serving against Germany'. The 77th Division, for instance, being drafted largely from New York City, was, in the words of one intelligence officer, 'not altogether Anglo-Saxon'.[84] In October, 1917, Camp Upton, which contained troops from that division, had 800 enemy aliens in American uniforms, the bulk of them 'Austrian'.

Enemy aliens were not necessarily hostile to the United States, however. Many of the Czechs, for instance, opposed the Austro-Hungarian government with which the United States was at war and hoped for independence for their homeland.[85] Conversely, of course, a good number of the subjects of the British Empire who were in the United States, notably Irish and Indians, were hostile to British rule and also sought independence for their homelands. This put them in a potentially ambivalent position with regard to the United States' part in the allied war effort. The US

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[82] Ibid, pp. 93-95, 105-106.
[83] See, e.g. *MID History*, p. 1608 for the views of the MID's office in Seattle on these questions.
[84] J. S. S. Richardson, 'Contre-Espionage in the AEF', 26 January 1920, NARA, RG 165, Entry 65, 10560-328/162.
[85] *MID History*, pp. 10-11. 'Lecture by Capt. Wagner. In Re: The Work Done Among Troops by Negative Intelligence', 4 November 1918, NARA, RG 165, Entry 65, 10560-328/122.

Government, for its part, found itself in an awkward position, too. The British, of course, were very interested in tamping down Irish revolutionary activity. The Irish found the Great War an auspicious time for a resurgence in their independence efforts, even mounting the Easter Rising of 1916. Accordingly, British intelligence passed to American intelligence an endless stream of leads about Fenians operating in the United States. The American took these seriously, but declined ever to crack down seriously on such activities. Even when Nicholas Biddle, the influential head of MID's New York office, recommended in October 1918 to the First Assistant Secretary of State that there should be an intensive investigation of the issue in concert with the British, the US Government did not move, probably having in mind not only the large numbers of Irish voters, but the Irish background of many American politicians. As the MID history put it, this was the decision 'presumably because the interests of the British and the Americans in such investigation were so clearly dissimilar'.[86]

It was not just non-citizens, of course, who were potential threats. Often the security services found themselves pursuing miscreants who turned out to be Americans. This was a problem because prosecuting Americans for crimes the evidence of which had been obtained through secret means, in a legal system characterized by often unsympathetic judges, numerous delays, technical loopholes, and the necessity of convincing twelve men chosen at random, was a tall order.[87] In those cases, however, where the suspect was a naturalized citizen, the services found a simpler way. Courts could occasionally be persuaded to denaturalize a citizen if they determined that he had lied when he swore to the court that he would be loyal only to

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[86] *MID History*, p. 1903.
[87] Ibid, p. 1323.

the United States. Again, however, the MID was often frustrated that excessively 'out-spoken' people were allowed to retain their citizenship.[88]

The all-encompassing conception of war made the behaviour and even beliefs of many Americans a matter of concern to the military. Bolsheviks, members of the IWW, and radical labour unionists notably came in for scrutiny. The leading historian of ONI has observed that during the war the line 'between legitimate security concerns and suppression of divergent opinions' had become 'indistinct'.[89] The point is well made. The MID claimed in a publicly disseminated report in 1918 that:

> It is certainly one of the most exquisite impudences of the Prussian strategy that some of the most active open allies of Germany and the most persistent opponents of all efforts to prevent her world conquest are zealots who uphold peace at any price, demand free speech while freedom itself is threatened, and fearlessly defend certain clauses of the Constitution against those who are trying to defend the very existence of the Constitution and the nation it constitutes.[90]

Defeatists, those people who spoke pessimistically about the war, might be operating at Germany's behest. Even when they operated instead from a basis of 'narrow or perverted patriotism' they were helping the German war effort. The MID opened a file on the Hearst newspaper chain on such grounds.[91] Pacifists came under similar suspicion and the MID found that some of the 'loudest' among them were German agents.[92] ONI saw things similarly, for instance, investigating workers who did not buy war bonds or contribute to the Red Cross.[93]

Religious denominations and clergymen often came under suspicion if their utterances seemed too pacifistic. Sometimes these groups saw which way the wind

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[88] Ibid, p. 1315, 1323-24.
[89] Dorwart, *Office of Naval Intelligence*, p. 118.
[90] Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, (Washington, n.d. [1918]), p. 7.
[91] *MID History*, p. 1872-1875.
[92] Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*, (Washington, n.d. [1918]), p. 7.
[93] Dorwart, *Office of Naval Intelligence*, p. 118.

was blowing and bent with it. The Seventh Day Adventists, for instance, agreed to withdraw from sale some 135,000 copies of 'objectionable books' and the publishers 'volunteered to revise these books to meet the approval of MID and to change them from anti-war to pro-war documents'.[94]

Lutherans, however, were a particular target, because their Church had many German followers and purportedly 'contained many elements of disloyalty and activity in behalf of the enemy'.[95] Ironically, widespread Lutheran pacifism stood in sharp contrast to the 'Prussian will to power and...spirit of unscrupulous warfare'.[96] Nevertheless, this did not spare the Church from close scrutiny. Not surprisingly, the military's concern was greatest with regard to pastors preaching to servicemen at military camps, but clergymen in purely civilian life also were investigated. In one of many such cases, private citizens of Chambersburg Pennsylvania reported their pastor, the Reverend J. C. Nicholas, to the MID on the grounds that he refused to include prayers for the success of the American Expeditionary Force in his Sunday service because he thought this would be dictating to God. It did not help that Nicholas had denounced Selective Service, had opposed contribution to the Belgian Relief Fund, and had only contributed one dollar to the Red Cross. The National Lutheran Commission subsequently appointed him as a camp pastor at the Newport

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[94] 'Supplement...for the week ending October 3, 1918', 'Book II. Supplement of the Work and Activities of Military Intelligence Division Containing Reports for week ending Sept. 7th to Week ending Nov. 21, 1918', NARA, RG 165, Entry 65, 10560-717. At least one of the titles in question appears to have been *The World's Crisis in the Light of Prophecy* which had 1914, 1915, and 1918 editions. A 1919 reference work indicates that the 1918 edition—from an in-house Seventh Day Adventist publisher, was 'revised and passed by the Chief Censor, Division of Military Intelligence, Washington'. Margaret Renton, ed., *War-Time Agencies of the Churches: Directory and Handbook*, (New York, 1919), p. 308.

[95] *MID History*, p. 529.

[96] Ibid, p. 1811.

News point of embarkation and the MID kept him under close observation, but could find no excuse to have him removed.[97]

With regard to espionage, the MID was greatly concerned that the Lutheran church collected detailed information on a routine basis from its camp pastors about how many Lutheran soldiers were at their camp, how many were coming and going and where they were going to. This information could be used to develop a detailed order of battle of the Army and to discern when units were embarking for France.[98] The question, then, was whether this information was making its way to Germany. Ultimately, apparently after the war, MID concluded that though the church had gathered data 'that they did not need to possess' and which should have been held within the US Government, 'no satisfactory evidence' existed that the church's gathering of information was done at the behest of Germany or exploited by Germany, rather that the church had done this for its own pastoral purposes.[99] This did not mean that Lutheran pastors had not violated the law. At least eight were interned or convicted under the Espionage Act.[100]

In late July, 1918, MI-4, which had been following Lutheran matters for some time, did a review of what it knew about the subject. They brought to bear three officers to investigate clergymen and camp pastors, another officer bringing in evidence gathered through censorship and another who studied the 'general motives of the church and its propaganda'. These officers 'set in order a mass of data that amply demonstrated the potential danger from German sympathizers in the Lutheran denomination and even cast some doubt upon the good faith of the church as an

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[97] Ibid, pp. 548-549.
[98] Ibid, pp. 1821-1830.
[99] Ibid, p. 1835.
[100] Ibid, p. 1836.

organization'.[101] Word of this soon made its way to Congress and the Church itself. Neither was pleased and the impression grew that 'Military Intelligence was seeking to discredit the entire church'. In fact, however, the views of the investigating officers were not shared by all of their superiors and the classified MID history recorded that the views of the investigating officers were not even fully shared even by their immediate superiors, and the 'MID had no united opinion that could warrant any drastic policy in an exceedingly delicate matter'.[102]

In fact, when in August 1918 the MID took a comprehensive look at the problem of Lutheran pastors it found that of some 9800 pastors, only about 200 should be considered suspects and even that number was 'in need of further reduction'. Furthermore, some of the evidence against even the 200 was 'exactly of the kind that has been exploded in previous instances'.[103] In fact, the MID history concluded that while the 'full extent' of the 'pernicious influence' of Lutheran ministers on the population could not be computed, but it was now clear that 'the Lutheran clergy on the whole were not a fertile source of pro-German agitation'.[104] After the war, MID admitted in its official history that the German-speaking communities were by-and-large a 'happy disappointment' to the 'prophets of evil who had feared wholesale insurrections or insidious intrigues'. Indeed, some of the most German areas, such as Milwaukee, 'made themselves almost amusingly conspicuous by an Americanism which, whether genuine or not in spirit, was satisfactory in its outward manifestations'.[105]

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[101] Ibid, p. 1808.
[102] Ibid, pp. 1808-1809.
[103] Ibid, p. 1815.
[104] Ibid, p. 1818. In the document, the handwritten word 'vigorous' was inserted before 'pro-German', somewhat qualifying the claim.
[105] Ibid, p. 1807.

Sometimes it seemed that every simpleton, conspiracy theorist, and scoundrel would report suspicious activities to the authorities. As a result of the involvement of the enormous and hyperenthusiastic APL and the relative inexperience of many of the governmental counterintelligence personnel, the services gave innumerable 'frivolous' leads 'prolonged attention'.[106] ONI's office in New York received a tip from Washington to investigate the establishment of a German spy nest, replete with suspicious telephones and wires. It turned out to be a branch office of the New York Telephone Company under construction.[107]

The MID's official history confessed afterwards that 'transmission by signal-lights and wireless was a method continually suspected and never clearly proved...Across the Mexican border... some hostile radio communication may have been attempted; but the telephone was vastly simpler'.[108] Sometimes these cases could be little short of comic. In July 1918, the MID enthusiastically ordered the investigation of a case of visual signalling from a hotel in Nuevo Laredo, reported by the State Department's vice consul at Laredo. 'This would seem an extremely good opportunity...to finally convict Madame Learn [the wife of the hotel's proprietor] who has been under suspicion for a long time'. An unconfirmed report had indicated that she had had dealings with German agents in Mexico City. The MID's local investigator discovered that the signal light was actually a bare light bulb swaying from its cord on the back porch of the hotel. The indecipherable flashing was caused by the bulb's intermittent obscuration by trees and latticework. Further investigation turned up the fact that the Madam Learn had once reported the consular officer for bringing prostitutes into the United States from Mexico, leading to an investigation of

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[106] Raymond E. Horn to DNI, 31 January 1919, NARA, RG 38, Entry 98, F-6-d, 11466-D.
[107] Hunnewell, *History and Anecdotes*. Raymond E. Horn to DNI, 31 January 1919, NARA, RG 38, Entry 98, F-6-d, 11466-D.
[108] *MID History*, p. 1767.

his activities by the Department of Justice. The local MID office further reported that it had followed up the reports of Madame Learn's activities in Mexico City and found no corroboration for them.[109]

In the same vein, in January 1918, an Army radio unit in New York picked up an unusual coded signal. Once the code finally gave up its secrets, Army intelligence was alarmed to discover that one message read 'TUSCANIA SAILED HOBOKEN TWO THOUSAND TROOPS', the prototypical spy message. A joint Army-Navy effort to locate the transmitter ensued which even included the installation of a covert radio receiver in the lighted sign of a major New York City hotel. Eventually they tracked the transmitter to an office building in New York City. It turned out to be a secret experimental US Navy transmitter.[110] Army security officers in 1918 investigated and hounded an officer in Mississippi, an American citizen with the unfortunate name of Otto Holstein on the grounds that he owned a radio and was enthusiastic in learning about codes and ciphers and other intelligence matters. He was eventually exonerated after the war when it turned out he had been corresponding with the MID in Washington which had been encouraging his interests.[111]

The Signal Corps and the Office of Naval Communications also spent substantial time trying to figure out how the German agents were communicating across the Atlantic. As early as July 1917, the Office of the Chief Signal Officer thought such communications 'without doubt' existed, so it formed a special working group to find them. First, it worked with the Navy, which was responsible for censorship, to ensure that censorship was working properly and all censors and cable operators had been properly vetted. Then, it arranged for the Signal Corps to intercept

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[109] Sholes to Secretary of State, 24 June 1918; Mott to Chapman, 3 July 1918; both in NARA, RG 165 Entry 65, 10531-377.
[110] *MID History*, p. 1767.
[111] See correspondence filed under 10020-124 in NARA RG 165, Entry 65.

all long-haul radio messages coming to or from North America and forwarded these signals to Yardley's MI-8 for decryption. It even investigated an intelligence report that:

> A cable had secretly been laid across the Atlantic by the enemy and that the American end of the cable terminated on the New England coast; that the European end of the cable terminated in a submerged buoy off the coast of a neutral country; that at frequent intervals connection was made at the buoy with a German submarine vessel equipped with cable sending and receiving apparatus; and that in this manner prompt and reliable communication was maintained between the United States and Germany.

The military obtained the cooperation of experts from the phone companies and scoured the entire Atlantic coast from Canada to New York. It found nothing.[112]

Just months into the war, a few relatively sober-minded security personnel were starting to conclude that perhaps the actual German espionage threat had been overplayed. One officer noted that while Stieber may have planted thirty thousand spies in France years before the Franco-Prussian War, it was becoming increasingly clear that the Germans had done no such thing in the United States, a country which Germany had never contemplated invading. Such conclusions—which were common, though certainly not universal in the intelligence business—did not lead to a reduction in the level of effort devoted to negative intelligence. For instance, instead of an enormous number of stationary spies, perhaps Germany was employing a small number of travelling spies. Such a circumstance called for the monitoring of people who travelled extensively around the country.[113] In the event, relatively few spies were ever caught and convicted in the United States. The Attorney General made a

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[112] United States War Department, *Report of the Chief Signal Officer to the Secretary of War,* 1919, (Washington, 1919), pp. 138-139.

[113] 'Memorandum for Captain Hunt', 16 January 1918, NARA RG 319, Entry "CMH Background Papers", Box 52C, No folder name. For further skepticism about the implementation of the Stieber system in the U.S., see 'Book I. Supplements of the Work and Activities of Military Intelligence Division Containing First Supplement for Week ending Aug 31, 1918', 'The German Spy System', NARA, RG 165, Entry 65, 10560-717. *MID History*, pp. 1268 and 1639.

joke of the matter in April 1918, writing to one of his U.S. Attorneys, 'there is quite a deal of hysteria in the country about German spies. If you will kindly box up and send me from one to a dozen I will pay you very handsomely for your trouble. We are looking for them constantly, but it is a little difficult to shoot them until they have been found'.[114]

Certainly there were a few genuine spy cases. One 'Pablo Waberski', for instance, was arrested on the basis of a tip from a double agent when he crossed into Nogales, Arizona from Mexico. Yardley's MI-8 was able to read an encrypted document he was carrying which conveniently read in part, 'the bearer of this ...is a German secret agent'.[115]

One of the few genuine spy cases that met the 'specifications for an international adventuress' to which the public had become accustomed in mystery novels, was one Madame de Victorica, the daughter of a German general, trained by German naval intelligence and dispatched in 1916 to the U.S. to encourage pacifism among Catholics, especially Irish, and to plant pro-German articles in the media. Meanwhile, an associate was to acquire military and naval information and engage in sabotage. However, Victorica was not only indiscreet but was also a morphine addict. Converging investigations by Justice and the MID led to her arrest in August 1918. Eight other people were also arrested as part of her ring.[116]

There were also a number of puzzling cases that the MID never got to the bottom of that have the ring of genuine German operations. Between January and August, 1918, for instance, six men came to the United States from neutral countries in Europe, as well as Mexico, all bearing introductions from the U.S. Military

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[114] Quoted in Fox, 'Bureaucratic Wrangling over Counterintelligence'.
[115] David Kahn, *The Reader of Gentlemen's Mail* (New Haven, 2004), p. 41-44.
[116] The Victorica case is summarized in the *MID History*, p. 1645-1661.

Attaché, all claiming to be loyal Americans who had been approached by the German service, recruited as spies, asked to acquire military secrets, given money, secret ink, and codes and dispatched to the United States.[117] However, they all said, being actually loyal Americans, they wished to serve as double agents. A review of the files showed that another American with a similar story had arrived in 1917, but had been turned away by U.S. intelligence. After a time, the MID began to suspect that they had actually been dispatched as triple agents. After consultations between the Justice Department, which had always been sceptical of their *bona fides*, and the MID, most of them were arrested on 20 August 1918 in an effort to shake loose the truth. However, when the war ended there was still no proof of the 'perfidy' of any of the men individually, but with MID 'convinced that an attempt [had been] made to double-cross this Government'. What was indisputable was that these men had consumed vast amounts of the War Department's money and staff time. The official history noted that, though overseas the attachés made more extensive use of double agents, the MID back in Washington preferred not to, finding it 'always risky'.

Given the pre-war problems with German-inspired sabotage, it is not surprising that one of the major intelligence functions of both services was plant protection.[118] ONI, for instance, worked to protect important naval industrial facilities both out of its central office and out of its branch offices around the country. Starting in November 1917, companies working for the Navy were obliged to report to ONI with a census of their workers, information on labour unrest at their facilities, and a resume of their measures to prevent fire and sabotage. They also had to agree to fire any employee that the Navy found undesirable. Some employers even cooperated

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[117] These 'double agent' cases are summarized in *MID History*, p. 1662-1702.
[118] For a discussion of MID's rather baroque part in plant protection, see Bidwell, *History of the Military Intelligence Division*, pp. 206-208.

with the Navy in the arrest of suspicious employees, 96 of them, for example, at the Sperry Gyroscope Company in Brooklyn.[119]

Over time, ONI's emphasis shifted from 'Plant Protection' to 'Plant Intelligence', which focused less on direct, close-in protection of the physical plant and progressively more and more on the discovery of pro-German, radical, pacifist, or other undesirable people either in the plants themselves or in the surrounding communities.[120] ONI came to recognize strikes and labour actions as the greatest threats to productivity in naval factories. The Bolsheviks and the IWW often seemed to be behind these actions, operating, or so ONI thought, at the German direction. Accordingly ONI representatives would deliver inspirational speeches in the plants, and sometimes met with labour leaders to avert strikes.[121]

During the nineteenth century, the War Department, and arguably much of the Federal Government, underwent a process or organizational modernization. This process entailed a move from a relatively decentralized, informal, relationship- and consensus-based system toward a more formalized, centralized, hierarchical processes intended to rest on a sound scientific basis and produce rational outcomes.[122] This manifested itself in how the Army and Navy decided to address a particular problem foisted upon them by modern war. The services decided that they had to protect not only those facets of America's economy and society which were important to the prosecution of the war, but also they had to protect their own ranks from penetration. This was a modern new problem. Before WWI, there was no perceived need for a formal process to check on the background and trustworthiness of military personnel.

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[119] Dorwart, *Office of Naval Intelligence,* pp. 117-118.
[120] Ibid..
[121] 'Naval Intelligence Office Organization', 1 September 1918, RG 38, Entry 98, File E-9-a, 10670-A. See also Hunnewell, *History and Anecdotes* for an explanation of how the Navy ran plant protection in New York.
[122] Daniel R. Beaver, *Modernizing the American War Department: Change and Continuity in a Turbulent Era, 1885-1920* (Kent, 2006), p. x.

Informal expectations arising from notions of honour and duty and from personal relationships held sway. During the war, however, this changed.

The task of policing the Army proved to be a big job. The military camps required monitoring, of course. In order to deal with the problem of penetration, the Army established an intelligence presence in all the camps and units as they sprouted up all over the country. Some of these unit intelligence officers reported directly to the MID, others reported through the Department intelligence officers, but the effect was the same.[123] By the end of the war a doctrine developed under which the intelligence officers in each camp or unit would recruit a 'Number One' from among the officer corps who would in turn recruit a network of 'Number Twos' throughout the camp, who, ideally, would never know they were working for the intelligence officer and who might even recruit 'Number Threes' to report to *them*.[124] The intelligence officers also took care to maintain liaison with the YMCA which in each camp 'they have chosen a representative that is really their Intelligence Officer'. The MID knew that privates were likely to confide in the YMCA man when they had done something wrong.[125]

There were other problems in the officer corps. To begin with, there were many 'efficient...thorough and seemingly *conscientious*' German officers in the Army and though 'some doubtless were loyal' some of them had 'high-level' relatives whom they might have visited, or with whom they stayed in contact. Such cases required investigation and many German-American officers were transferred to less

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[123] *MID History*, p. 70.
[124] Captain Fisher, 'The Number One', 6 November 1918, NARA, RG 165, Entry 65, 10560-328/127.
[125] Lieutenant Smith, 'Special Problems in Camp Organizations', 6 November 1918, NARA, RG 165, Entry 65, 10560-328/129.

sensitive positions.[126] Indeed, with the increasing role of technology and industrialization in military affairs, the various staff corps became increasingly important to the Army. Unfortunately, MI-3 found itself investigating a disproportionate number of disloyalty cases in these corps. The problem, it thought, was that because Germany had for years been the world leader in applied sciences, German-Americans and Americans trained in Germany were disproportionately likely to fill these highly technical positions.[127] Other groups came in for special scrutiny because of the particularly sensitive information to which they had access, or their greater opportunity for sabotage. These included Signal Corps personnel (both those members dealing with communications and with aviation), and the members of MI-10's radio intelligence service.[128] Herbert Yardley, desperate for men with 'cipher brains' was forced to pass on a likely candidate because he was not a U.S. citizen.[129] Often these concerns went to extremes. ONI went so far as to investigate one officer because his housekeeper looked German.[130] Even Assistant Secretary of the Navy Franklin Roosevelt got in on the act as when in June, 1917 he sent the following note to ONI:

> I have been told by a man just back from Florida, who knows parts of the Florida coast pretty well, that one Gus Muller has been taken into the Naval Coast Defense Reserve as a Lieutenant, and that while there is nothing definite against him he will bear watching. He was either born in Germany or here of German parents; also that a boat named JOYEUSE, last reported at Fernandina, will bear watching.[131]

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[126] 'Lecture by Capt. Wagner. In Re: The Work Done Among Troops by Negative Intelligence', 4 November 1918, NARA, RG 165, Entry 65, 10560-328/122,
[127] *MID History*, pp. 951-952.
[128] Ibid, pp. 907-914.
[129] Kahn, *Reader of Gentlemen's Mail*, p. 29.
[130] Dorwart, *Office of Naval Intelligence*, p. 119.
[131] Roosevelt to Office of Naval Intelligence, 22 June 1917, 'FDR Papers as Assistant Secretary of the Navy, 1913-1920', Box 2, Folder 'Official Files Navy Department: Intelligence General', FDRL.

The Army also determined that it was necessary to vet people entering the service. It was alarmed that civilians could gain access to the MID's secrets merely by passing the Civil Service Exam. Shortly before the war ended, the MID coordinated with Civil Service Commission to close that loophole.[132] The most immediately visible problem, however, was vetting civilians who were being considered for officer commissions, but this was an immense task. Here, the Army turned to outside organizations for help. They preferred to work with the Department of Justice, but it was overtaxed and overstretched too. A volunteer organization, the American Protective League (APL), stepped into the breach taking on many of these investigative duties.[133] This was a grass-roots organization that emerged initially in Chicago in early 1917 out of a chance conversation between a Justice Department official and a leading resident of the city, 'a seething center of alien activity'. Soon informal cooperation ensued and the 'best men of the city', 'reliable business men' flocked to the group. On 1 March, application was made to the Justice Department whose sanction was forthcoming on 22 March. Before the end of March branches opened in Milwaukee and St. Louis. Before long, war was declared and the organization spread like wildfire, eventually counting 250,000 members. It was not until November 1917, by which time the APL had thousands of members in every state, that it moved its headquarters to Washington, DC. Such a sprawling organization required structure and leadership, so Charles Daniel Frey of Chicago wrote an organizational plan and three National Directors (the number would later grow) were named, all of them from Chicago. One of them was Frey who obtained a

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[132] Churchill to John A. McIlhenney, 29 October, 1918, NARA, RG 165 Entry 65, 10560-139/1.
[133] *MID History*, p. 1281.

captaincy in the Army and became the APL's liaison to the MID. The APL also maintained an office at MID which eventually grew to 36 people.[134]

Not only did the APL help the Army vet its prospective members, but it also vetted applicants for positions in certain volunteer organizations such as the overseas services of the Red Cross, YMCA, Jewish Welfare, and the Salvation Army. The APL also helped enforce conscription laws and reported to MID on harmful rumours that were current in the country.[135] It also took on a wide variety of miscellaneous cases for the MID, such as investigating a man who showed particular interest in poison gas, and investigating a rash of war savings certificates by reputedly pro-German inhabitants of Alma, Wisconsin.[136] It even occasionally gathered positive intelligence, for instance, from people who had travelled abroad to places of intelligence interest.[137]

As time went on the relationship between the MID and the APL became progressively closer. The APL's office at the MID eventually grew to 36 people.[138] In fact, in the end, though numerous other smaller organizations like the APL sprang up around the same time, the APL was the only private organization that did major amounts of investigative work at MID's behest. It handled some three million cases for the War Department before disbanding in February 1919.[139] This was deadly serious business, or so the APL thought. Its authorized history maintained that two million German-Americans were loyal in their hearts to the Kaiser and that only fear of punishment kept them in line. 'It was *fear* that held our enemy population down—*fear* and nothing else. It was the League's silent and mysterious errand to pile up

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[134] Hough, *The Web*, pp. 29-39.
[135] Ibid, pp. 47-49.
[136] *MID History*, p. 1282.
[137] Hough, *The Web*, p. 50.
[138] Ibid, p. 45.
[139] Ibid, p. 34.

good reason for that fear'.[140] In so doing, the APL saw itself as a non-uniformed adjunct to the country's fighting forces. In the words of its authorized history, the organization arose to 'to meet and absolutely to defeat, the vast and highly trained army of the German espionage system...It met that German Army as ours met it at Chateau-Thierry, and in the Argonne'.[141]

The APL was but one entity with whom MID's Negative Branch interacted. In January 1918, Van Deman sent a letter to the police chiefs of all cities of population 10,000 or greater asking them to report to MID any information they might come to acquire that potentially pointed to German agents. MID also negotiated similar arrangements with the American Federation of Labor and other private organizations. However, they soon scaled back such arrangements. Liaison with local governments and private organizations entailed revealing MID's counter-espionage activities to a greater extent than MID found comfortable. Also, many reports turned out to be impossible to follow up. Finally, a sense that the man-on-the-street might resent the appearance of a vast governmental system investigating their private behaviour and bring countervailing pressure to bear through Congress argued for restraint.[142] Apparently, being surveilled by volunteer citizens' groups such as the APL was less disturbing to the public, even if those groups were tightly connected with the government.

All in all, the domestic counterintelligence function was a necessary one in modern war, the officers of the MID and ONI thought. However, even while accepting that the military might have a domestic role in an emergency and while believing that any opposed military action required intelligence support, many

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[140] Ibid, p 59. Emphasis in original.
[141] Ibid,, p. 13.
[142] *MID History*, p. 1283-1284.

(though by no means all) intelligence officials had become uncomfortable with their domestic activities. By and large, as soon as the war ended the officer corps looked for ways to shed this duty. A mere nine days after the Armistice, Brigadier General Marlborough Churchill, the head of the MID, after consulting with the Army Chief of Staff sent out a circular letter to his subordinates across the country. It said that 'the emergency no longer exists that required investigations among the civil population'. Unfinished disloyalty and enemy activities cases were to be turned over to the Justice Department, and the MID's civilian investigators were to send their credentials back to Washington.[143] As we shall see, this was easier said than done.

During World War I then, the U.S. military misjudged the real German espionage threat. Furthermore, in its naiveté it endangered cherished American civil liberties not to mention the rules of fair play. This was a dangerous failure on the part of the military and, indeed, on the part of those civilian authorities who should have exercised control or checks and balances upon it. To its credit, however, most intelligence personnel, at least those who remained in the service after the war, displayed a healthy distaste for prying into the political lives of Americans.

All that being said, the military's work during the war, misguided as much of it was, did lay the groundwork for a later style of warfare, or at least international struggle. They prematurely perceived a type of war that would one day exist, one in which espionage, sabotage, subversion, and propaganda would occupy central positions, and they designed the basic building blocks of an edifice that could withstand it.

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[143] Talbert, *Negative Intelligence*, pp. 135-137.

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Chapter 4

Human Intelligence: From Scouting to Stealing Secrets

> *The question of retention of any system of secret service agents in time of peace requires consideration. It is believed that to continue the employment of secret service agents in time of peace would be to the prejudice of the official status of the Military Attaché, and at the same time opposed to the democratic ideals and conception of foreign relations for which our Government stands. Of course, it is assumed that agents, to a limited and legitimate degree, for the protection of our own national interests will be employed at the discretion of the Military Attaché. It is important, however, that each Military Attaché be thoroughly familiar with the methods of obtaining, training and employing agents, and that he has at all times and up-to-date working plan for the employment of such agents as a preparatory measure against the outbreak of war.*
>
> --Report from a conference of military attachés, July 1919[1]

Human intelligence or Humint, as the collection of intelligence through the agency of people is now known, comes in two varieties. The first is overt collection. In the military domain during the World War One period this was most often carried out by attachés accredited to foreign governments, though it could also be carried out by the observers who were often attached to foreign forces, as Pershing had been during the Russo-Japanese war, or travellers such as Emory Upton on his world tour. The second is espionage or clandestine collection, the realm of spies, sometimes carried out by attachés but more often done by others as attachés typically have felt obliged to maintain their diplomatic status.

Though overt collection continued much as it had before, the total nature of World War I and the broadened requirements for intelligence information forced profound changes in the character and aims of American espionage. First, the war began the transition of human intelligence away from a 19th century model which

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[1] 'Conference of US Military Attaches at the Hague 16-19 July, 1919, inclusive. (Re. Organization and Administration of duties of Military Attache', RG 8, Accession 1991-372, XINA, NHC.

primarily involved observation-based means of collection. Before World War I, the U.S. government most commonly used spies for their ability to observe military forces or infrastructure; spies were reconnaissance assets. Indeed, during the Civil War, 'spy' and 'scout' were interchangeable terms.[2] Seldom before the war did the armed services recruit spies as penetration agents to steal secrets from inside a government bureaucracy. When information had to be obtained from a foreign bureaucracy, this was accomplished, if at all, by politely asking for it. Put another way, the distinction between intelligence acquired in the form of observation of things and that acquired through 'access to human thought processes or meanings' had not yet become clear.[3] During the war, however, the new modes of collection placed a much greater emphasis on acquiring information from inside bureaucracies.

There was also a growing sense that the target was the important thing not the officer who got the information. Hence, government personnel started discussing more how they would cover a particular country or acquire an answer to a particular stream of questions. Previously an officer might have been rewarded for what could be called espionage piecework. Now there was an increasing emphasis on the management of espionage processes, what sort of system might service might establish to provide coverage of an area or a set of issues, what sort of tradecraft

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[2] William B. Feis, *Grant's Secret Service* (Lincoln: University of Nebraska, 2002), p. 3. Arguably this identification had existed in English at least as long as the King James edition of the Bible: 'And Moses sent them to spy out the land of Canaan', Numbers 13:17. In an American context, Christine Bold dates this 'elision' in the United States to the dime spy novels of the nineteenth century in which hunters and woodsmen (scouts) 'infiltrate hostile Indian tribes and outlaw bands'. Christine Bold, 'Secret Negotiations: The Spy Figure in Nineteenth-century American Popular Fiction', *Intelligence and National Security*, 5:4, (October 1990), p. 25.

[3] Michael Herman, *Intelligence Power in Peace and War*, (Cambridge, 1996), pp. 82-83. David Kahn has made a similar argument with regard to what he called 'verbal intelligence', but he applied it primarily to signals intelligence. David Kahn, 'An Historical Theory of Intelligence', *Intelligence and National Security*, 16:3 (2001), pp. 81-84.

might they apply, and what sort of systematic support would they need from headquarters.

This required a new form of critical judgment, a new understanding of geography, or at least one which was new to military officers. Before World War I, intelligence officers had always been required to examine the terrain with the eye of a general, knowing it from the perspective both of the friendly and enemy commanders. What pieces of the ground might hide enemy forces or could provide cover for friendly forces? What were the best positions in which to place observation posts? Where must reconnaissance be conducted and how might a reconnaissance force or a scout get there?

These skills remained necessary in the new form of war. Now, however, faced with the requirement to acquire not merely military but also political, economic, 'psychologic', and often counterintelligence information, the problem became more generalized. It was not a matter of finding an answer once, of a there and back mission. Now questions or requirements had to flow on a continuing basis from intelligence headquarters to the target area and answers or intelligence information had to flow in the opposite direction. All of this had to happen without the knowledge of the entity (typically a government) that was the target of the espionage. This more generalized problem allowed more flexibility of means. Now it was not always necessary to put intelligence personnel (government officials) in the target area. Officials of friendly governments might do. More often private citizens could meet the need. These might be people who were actually friendly or they might be those who had been persuaded, bought, seduced, or tricked into cooperating.

Intelligence officers began to look at the terrain with new sets of eyes, those of diplomats, international businessmen or smugglers. Cartesian distances were not

always important. It might require Herculean efforts to gather information from a mere 20 miles away but be a trivial matter to discover what was happening thousands of miles away. Practical distances—*access*—became the critical variable. So, intelligence officers needed to know which countries had friendly diplomatic relations with which other countries. They needed to know which international businesses had branches in which other countries or where there was cross-border business or labour traffic. When crossing a hostile border, it became important to know the political sympathies of the population on the other side. It became important to know where émigré communities were, or where foreign students went to school because they might have connections back into the old country.[4] In order to get information out, it also became important to know about the mail systems and the censorship systems in the various countries, where the telegraph cables ran, where friendly diplomatic couriers plied their routes, and where the battle lines were.

The war also led to a relaxation of the ethical norms governing the human acquisition of information. Before the war, Americans had generally not been comfortable with espionage. Scholars of literature have generally argued that the spy novel, though an American invention with James Fenimore Cooper's 1821 novel *The Spy*, found generally infertile ground in a republican America proud of its openness and democracy. What American spy fiction there was during the nineteenth century did not derive its dramatic tension from the intricacies of the espionage business, but from questions of loyalty, identity, and physical survival. Only the identification of espionage with pure, patriotic, and quintessentially American causes could counteract its negative qualities.[5]

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[4] Churchill to Military Attaché London for Van Deman, 14 September 1918, NARA, RG 165, Entry 65, 9944-60.
[5] Bold, 'Secret Negotiations'. pp. 22-23, 27.

Before the outbreak of World War I, the State Department's unease with espionage was palpable. John W. Foster, Secretary of State under President Benjamin Harrison and grandfather to Allen Dulles, addressed this issue in his 1906 book, *The Practice of Diplomacy as Illustrated in the Foreign Relations of the United States*. He wrote that in its early days the Republic's 'standard of diplomacy was very low. Even in time of peace it did not hesitate to make use of bribery, espionage, and deliberate deceit'. However, he continued, it is 'evidence of the progress of the nations that no self-respecting government today would countenance such practices in its foreign intercourse'. He told Americans that they could be proud of the role that their government and their representatives overseas had taken in 'purifying diplomacy'.[6]

American military officers, for whom spying was not a matter of cheap entertainment or abstract ethics, but a genuine professional dilemma, were also quite concerned about the moral implications of espionage. They confined it mostly to wartime though even then officers tended to hold their nose at the topic and leave such grubby work to civilians. Examples abounded of American officers' disdain for espionage. America's leading pre-World War I thinker on intelligence, Colonel Arthur Wagner, thought that civilian spies richly deserved the 'obloquy so freely cast upon' them.[7] In 1904, Lieutenant Commander Roy Smith, the Naval Attaché to France and Russia, reported back to ONI that most European countries apparently had 'secret service[s] for acquiring confidential information on military and naval subjects', but he found it 'not a very honorable or attractive occupation'. In the sort of terms that one might use with regard to prostitutes or contract killers, he sniffed

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[6] John W. Foster, *The Practice of Diplomacy as Illustrated in the Foreign Relations of the United States*, (Boston, 1906), p. 381. John W. Foster was grandfather to Allen Dulles and John Foster Dulles.
[7] Wagner, *Service of Security and Information*, p. 181.

that 'there are always people to be found who are willing to take it up'.[8] Similarly, in 1913 Lieutenant Commander William S. Pye at the Naval War College registered his concurrence with British Colonel George Armand Furse who in his 1895 book *Information in War* held that the notion of espionage excited a feeling of 'repugnance' and that the use of spies was 'unchivalrous'.[9]

Despite these feelings, many leading prewar thinkers recognized that espionage was necessary in wartime. Wagner was matter of fact about it: 'spies are indispensably necessary to a general; and, other things equal, that commander will be victorious who has the best secret service'.[10] Smith granted that 'perhaps' espionage could be necessary 'in self-defense'.[11] Pye, quoting Furse, came to a similar conclusion.

> In war spies are indispensable auxiliaries; and when we are precluded from obtaining information by any other means, we must discard all questions of morality... Necessity knows no laws, and means which we would disdain to use in ordinary life must be employed in the field, simply because we have no other that we can turn to profitable account. Information has been sought through spies in all wars, and we can plead in our favor that the enemy will not scruple to employ them in his behalf.[12]

By the time World War One ended, however, these views had started to change certainly because of considerations of wartime expediency, but perhaps also because the responsibility for spying was now much more diffuse, spread across comparatively large bureaucracies. The growing, though by no means universal

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[8] Roy C. Smith, Naval Attaché Paris, No. 38, 6 May, 1904, NARA, RG 38, Entry 98, File E-1-a, 4941.
[9] William S. Pye, 'Intelligence Service in Peace and War', 1913, p. 11, RG 8, XING, Accession # 1913-186, NHC. See also George Armand Furse, *Information in War: Its Acquisition and Transmission* (London: 1895), pp. 240.
[10] Wagner, *Service of Security and Information*, p. 181.
[11] Roy C. Smith, Naval Attaché Paris, No. 38, 6 May, 1904, NARA, RG 38, Entry 98, File E-1-a, 4941
[12] Pye, 'Intelligence Service in Peace and War', p. 11.

feeling was that if asking for needed information was infeasible or ineffective, then the information could be—nay, *should* be—stolen.

During World War I, the distinction—particularly linguistic, but also conceptual—between 'case officer' or 'handler' on the one hand and 'asset', 'source' or 'agent' was not yet fully clear. The influx into government services of great numbers of American civilians from all walks of life contributed to the imprecision. The various American clandestine intelligence collectors, whether responsive to the State Department or the War or Navy Departments, were not just established military officers or members of the Consular or Foreign Services. A great many private citizens became clandestine collectors for the government, sometimes hired as government employees, sometimes simply operating on a volunteer basis as sources. Sometimes these people were dispatched from the U.S., sometimes they were recruited by attachés from among the expatriate community. The military attaché in Buenos Aires, for instance, made contact with the directors of some forty American companies in Argentina, as well as 'certain individuals', soliciting their help. The businessmen would report to him whenever any of their employees was planning a trip into the interior of the country and he would provide them with a questionnaire covering the intelligence topics he was concerned about. When investigations, particularly of a counterintelligence nature, were required, the attaché would call for the 'assistance of those managers or directors whose business best covers the particular matter'.[13]

The three Departments conducting clandestine collection overseas used a variety of different covers. Often the military services leaned on the State Department in this regard. State allowed ONI and MID to post some of their agents abroad as

[13] RC [Military Attaché Buenos Aires] to MID, 28 October 1918, NARA, RG 165, Entry 65, 9944-L-7.

Vice Consuls, a subordinate position in the already low-status Consular Service, which had yet to be merged with the more prestigious Foreign Service. However, most of the 'agents' that ONI dispatched overseas were provided with some form of commercial cover, not infrequently that of a newspaper. ONI was gratified that American companies typically responded positively and with 'alacrity' to requests to use their names and corporate infrastructure in this way.

It soon became clear that many things could go wrong quite easily in clandestine operations, particularly when non-official cover was being used. ONI found that sooner or later most of its agents had their cover blown and they had to be withdrawn to the United States. In Latin America the covers of being in the mining, cattle, or timber business were used so frequently that they lost credibility and became the topic of knowing jokes.[14] Personnel operating under official cover could often use encrypted government communications or the diplomatic pouch which was (in theory) immune from search. Personnel operating under non-official cover had to rely on less secure means of communication such as the mail or plain language telegrams. In October 1918, the War Department was briefly stymied in its efforts clandestinely to transfer $1500 to a person in Mexico for intelligence purposes. The War Department had been using the good offices of the American Smelting and Refining Company of New York City which routinely transferred funds across the border. The company's cryptic phrasing of its telegram about the matter to its branch in Mexico aroused the suspicion of the U.S. Cable Censor which refused to allow the telegram onto the wires

[14] N. L. R. Edgar, to DNI, 17 December 1918, NARA, RG 38, Entry 98 F-6-d, 11466-H. Nolan to Chief MIB, 17 August 1918, NARA, RG 165, Entry 65, 9944-R-44. Cable Christiana [Solbert] to MID, 30 July 1918, NARA, RG 165, Entry 65, 9944-U-70. Harris and Sadler, *The Archaeologist Was a Spy*, p. 182.

until the matter had been fully explained. A quiet phone call from the MID to the Censor's office ultimately straightened the matter out.[15]

Ethical relaxations, and the proliferation of modes of human intelligence collection aside, there were additional changes during World War One. Seldom before the war did civilian agencies acquire and disseminate military information. Seldom also did the armed services recruit spies to acquire economic, political, or social information. During the war, however, both of these happened on a routine basis. In fact, so broadly did the War Department spread its intelligence collection efforts that officers might reasonably start to find it 'logical that the MID should so develop that its system should gather all kinds of S[ecret] S[ervice] information for practically all branches of our government in foreign countries', as one attaché recommended toward the end of the war.[16]

* * *

The American military entered World War I with substantial experience with overt human collection and very little that it remembered with clandestine collection against targets abroad. It is true that an attaché had once illicitly acquired the plans to a French fortress but he was promptly sent home, not by the French, but by the U.S. Ambassador.[17] The Army and the Navy had also conducted a few operations in Europe to collect information about the nature and movements of Spanish forces during the Spanish-American War. Even during that war, however, the very concept of spying was still a little vague, as its application to Rowan's 'Message to Garcia' incident, which was in truth little more than a courier mission, showed. (See Chapter 1.) The Army, Navy, and the Bureau of Investigation also engaged in scattered

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[15] See documents filed under 9944-G-7, NARA RG 165, Entry 65.
[16] O. N. Solbert to Director, MID, 4 November 1918, NARA, RG 165, Entry 65, 9944-U-112.
[17] Vagts, *The Military Attaché*, p. 223.

clandestine operations during the early 20th century, particularly operations aimed at Mexico. However, these operations were often undertaken at local initiative. In the case of the War Department, which at this time lacked a centralized intelligence structure, this meant that there was nobody to compile these experiences, learn from them, refine them, and promulgate them back out to others. The Navy's ONI did exist throughout, but it was very small and President Wilson and his Secretary of the Navy Josephus Daniels were reluctant to prepare for war or spend money on espionage. For its part, the Bureau of Investigation never tried to spread its wings any farther afield than Latin America. Its priorities were at home, and this was especially true once the United States declared war.[18]

Not surprisingly, then, when the United States entered the war, it immediately became obvious that espionage required a great deal more attention from both services. However, the United States faced a steep learning curve in the realm of clandestine collection, every bit as steep as it simultaneously faced in aerial reconnaissance and 'code and cipher work'. Despite the occasional setback or blunder, American espionage capability went from near nil at the beginning of 1917 to respectable though—as with its signals intelligence capability—not a world leader by the end of the war. In the process, the State Department, Army and Navy began the transition from a conception of espionage as an almost purely observational activity to one which provided insight into the thinking of human beings of interest.

To its credit, the Navy had managed to lay down some plans for wartime expansion of espionage. However, the Navy's wartime efforts were by far the least productive or sophisticated of the government agencies that devoted significant

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[18] For a useful discussion of the twentieth century pre-war American espionage scene, see Charles H. Harris III and Louis R. Sadler, *The Archaeologist Was a Spy: Sylvanus G. Morley and the Office of Naval Intelligence* (Albuquerque, 2003), pp. 1-16, 24-25.

attention to espionage. To its credit, the Navy had been thinking in an organized fashion before the war about how it might conduct espionage operations. In June, 1915 Navy Secretary Josephus Daniels approved a plan to expand the attaché system.[19] Then, in May 1916 the Chief of Naval Operations directed ONI to:

> Select reliable agents at various points and ports in and near enemy country and in probable field of operations and keep the list of such dependable persons corrected to date; prepare a complete system of secret service and cipher codes to be used in communicating with such agents; and make such plans and arrangements now as will reduce paper work and other work...to a minimum on the eve of and during war.[20]

ONI was happy to comply, feeling that 'the work of selecting reliable agents in neutral countries is of such great importance that it should be undertaken immediately'. Otherwise it thought it would be forced to pay later either in delay or in poor performance. ONI recommended that agents be selected from among the ex-patriate community in Lisbon, Copenhagen, the Azores, Port Said (Egypt) and Singapore and in China at Hong Kong, Amoy, and Shanghai. In order to preserve the diplomatic status of the naval attachés the selections should be made by retired officers or officers travelling apparently innocently on leave. With regard to implementing this plan, ONI gave priority to establishing a 'Naval Information Service' in China.[21] In January 1917, the DNI assessed that ONI was making 'steady progress' in preparing for war.[22]

During the war, however, ONI's efforts were unimpressive. Even the post-war head of ONI's counterintelligence section felt that the office had spent too much effort on counterespionage and that this had come at the expensive of its foreign

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[19] Rhodri Jeffreys-Jones, *American Espionage: From Secret Service to CIA* (New York, 1977), pp. 52.
[20] 'ONI' to Chief of Naval Operations, 'Preparations necessary to insure a state of readiness for war', n.d., NARA, RG 38, Entry 86 Box 1 of 1, unlabelled folder.
[21] *Ibid.*
[22] Jeffreys-Jones, *American Espionage*, p. 52.

intelligence efforts. There seems to be merit in this complaint.[23] ONI's efforts in Europe were modest and marked primarily by amateurism. Roger Welles, the head of ONI during the war, allowed that 'our men are like babes of innocence in spite of their drinking and playing and profanity'. He though they were 'not up to it in diplomacy and intrigue, nor indeed, in tact and wisdom'. The one arguable exception, Edward Breck, who had had some minor success in Spain during the Spanish-American War, was posted by ONI to Lisbon, an intelligence backwater.[24]

The Navy's main effort in human collection was through attachés, but during the war ONI also dispatched 'agents' to countries in which there was no Naval Attaché.[25] However, a post-war report on operations in Europe and South America found substantial shortcomings among these agents, as well. The report observed that the US lacked what Germany had: 'men with a knowledge of intelligence work and an understanding of secret service methods'. As a result, ONI simply looked for civilian volunteers who spoke the requisite languages and then, after an 'elementary and incomplete course of instruction' sent them abroad. Damning with faint praise, the report noted that 'the greater number of Agents thus selected was found to be fairly competent and some of them developed ability of a high order'. These agents largely depended on American citizens, primarily business men, to provide them intelligence information for transmission back home.[26]

> Every agent sent from this Office was provided with a cover, consisting usually of an appointment as travelling representative of American business houses or newspapers...It was found, however, by experience that in many cases the enemy, after the lapse of a more or less extended period, discovered their identity, and when this fact was ascertained beyond doubt, they were immediately recalled. By

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[23] Chief of ONI Section A, 'Section "A" Report and Recommendations', n.d. [1919?], NARA, RG 38, Entry 98, F-6-d, 11466-A. Stills, *The Crisis at Sea*, p. 39.
[24] Dorwart, *Office of Naval Intelligence* (Annapolis, 1979), pp. 130.
[25] Admiral Sims' office in London, while it had a small intelligence office, did not conduct espionage.
[26] Edgar to DNI, 17 December 1918, NARA, RG 38, Entry 98, F-6-d, 11466-H.

> arrangement with the State Department, this Office was also given the privilege of appointing Agents under the title of Vice Consul. They were paid by this Office, but were accorded facilities in the Consulates and the privilege of using the diplomatic pouch. Wherever there were Naval Attaches, the Agents reported directly to them and not to this Office. Where, however, as in Switzerland, there was no Attache, the cover as Vice Consul was practically indispensable as being the only method by which the agent could correspond with this Office without exposing his mail to the danger of being tampered with.[27]

ONI's main effort before the war had been in Asia, but during the war, Latin America and Asia vied for pride of place. Its primary foreign intelligence effort was focused in the United States' backyard where the hostility of Mexico and Colombia and the 'favorable basing area for submarines furnished by the Caribbean and Gulf Sea and Gulf of Mexico demanded primary attention'. The hunt for radio stations also consumed a substantial share of ONI's effort in Latin America.[28] In 1917 ONI began hiring archaeologists and anthropologists as agents to conduct 'archaeological reconnaissance' in Mexico and Central America. As one might imagine, the Navy was not genuinely interested in Mayan ruins. It was, however, acutely interested in the possible presence of secret German submarine bases in Mexico and it wanted them found, if they existed.[29] ONI also spent a great deal of effort investigating Japanese intrigues in the Pacific region, often lumping (nominal ally) Japan into the same files as enemy Germany and Austria-Hungary. Efforts against Japan were generally not successful. While it was easy to spy on Japanese pearl fishermen in Panama (and ONI did so extensively), conducting operations in Japan was another matter entirely. The Naval Attaché in Tokyo tried to collect intelligence in that

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[27] Ibid.

[28] 'Office of Naval Intelligence, Division of Operations, Navy Department', 25 May 1918, NARA, RG 38 Entry 98 E-9-a, 10670-A. A typed notation at the top of the article says that it was deemed too sensitive to be used publicly.

[29] Harris and Sadler, *The Archaeologist Was a Spy* recounts in detail the experiences of one such archaeologist searching for German bases.

country, but beyond some successes in counting merchant ships, was unable to accomplish much. Japanese security was just too tight.[30]

Though the War Department had no intelligence office as such in the years immediately preceding World War I, it did maintain military attachés abroad. Perhaps more significantly, however, it had gained some modest but important experience in the Pershing-led 1916 Punitive Expedition to hunt down Pancho Villa in Mexico. Not only did the Punitive Expedition conduct rudimentary aerial reconnaissance and signals intelligence operations (See Chapter 2.) but it also conducted human intelligence operations and two of the key officers involved in this effort undertook similar endeavours in the AEF G-2. Most notably, the Expedition recruited a number of Japanese living in Mexico who had a variety of links to Villa, his wife, and his brother. The Japanese gained Villa's confidence and provided some excellent information on his strength and actions. Captain W.O. Reed, the head of the intelligence section, provided poison to two of the Japanese in order that they might poison Villa. (It seems likely that the Japanese were handled more routinely by an officer named Nicholas Campanole, a skilled Japanese linguist who had performed a number of unorthodox missions earlier in his career, and who was Reed's deputy and then succeeded him as chief intelligence officer.) In any event, Villa had long been wary of such a possibility and drank only a little of the poisened coffee and so did not die. When rumour of this operation reached the Attorney General, he brought it to the attention of the Secretary of War and a quiet investigation ensued. Some evidence even suggests there was a cover up. Be that as it may, the War Department cleared Pershing of any wrong-doing in February 1917. Van Deman, even before seeing the

[30] Dorwart, *Office of Naval Intelligence*, pp. 137-138. The Military Attaché found the security situation comparably bleak. 'No foreign spy can do much work in Japan without being caught [and] There are no Japanese I know of who can be trusted', he reported. Moreover, the Japanese government was constantly dispatching provocateurs to the embassy. Military Attaché Tokyo to War College Division, 30 June 1917, NARA, RG 165, Entry 65, 9944-H-1.

evidence, dismissed the whole matter: 'I am very sure that somebody is lying...the story about poison is simply absurd'.[31]

Two main avenues of American clandestine collection developed in the War Department. The first was through the offices of the attachés and the second was through the AEF itself. The prospective development of American military espionage caused some apprehension in French and British quarters. However, espionage conducted out of attachés' offices grew organically and while the British and the French were in no particular position to stop it, they certainly tried to shape it to their own ends. Early on, British intelligence officials gave mixed messages to the American Military Attaché in London, William Lassiter. On the one hand, through him they encouraged the United States to quickly establish its own 'secret service bureau' modelled on the British one and they offered to lend three British officers to serve in it. They also said that the AEF should have an intelligence section like that of the British Expeditionary Force (BEF), and that American attachés should be allowed to 'establish confidential relations' with allied attachés. On the other hand, the British advised Lassiter that the Americans should not 'duplicate' existing allied efforts in Europe. Scandinavia, the British thought, might be an acceptable field for American espionage, but Latin America and the Far East would be even better. They recommended using people who were already in place such as bankers or representatives of Standard Oil rather than specially dispatched personnel. Remarkably, the British also sought Lassiter's help in getting an American vice-consul who had been serving in Turkey a commission in the British Army so they

[31] Charles H. Harris III and Louis R. Sadler cover this whole incident in the chapter entitled 'Termination with Extreme Prejudice: The United States Versus Pancho Villa', in *The Border and the Revolution* (Las Cruces, 1988), pp. 7-23. See also Katz, *Life and Times of Pancho Villa* (Stanford, 1998), pp. 608-611.

could send him to Syria for intelligence work.[32] Similarly, the British asked Nolan early on to encourage a particular American professor to work for British intelligence Russia.[33] The idea seems not to have occurred to the British that the Americans might use these people themselves. The Americans found themselves boxed out in another realm of espionage, as well. In the AEF, Dennis Nolan decided not to use female agents in large part because most of the good ones were taken. 'To have hired any of them would merely have deprived the French or British of their services by paying them more than our Allies could pay'.[34]

In general, the British and the French displayed an ambivalence about welcoming new players onto the pitch (particularly from the AEF) that was in marked contrast to their firm insistence that the United States undertake vigorous *counter*-espionage measures. In part, this was a function of the initial French and the British hope to use American troops as replacements to make good their own staggering losses and not as an autonomous national army in their own right. What need was there for an American intelligence staff in Europe if there was no American force for it to support? Hence, the head of the French 'secret service' was alarmed at the prospect that the AEF might establish a spy system behind German lines, potentially interfering with French and British efforts. He thought that if the Americans simply donated their men to the Allied armies, there would be no need for an inevitably slipshod American intelligence structure.[35] Similarly, in June 1917 the British, including Admiral Hall, told the AEF G-2, Dennis Nolan, that it would be dangerous

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[32] Military Attaché, London to WCD, 1 June 1917, NARA, RG 165, Entry 65, 9944-A-9. Lassiter Diary, Vol. X, pp. 65 and 81, Lassiter Papers, USMA. Though Lassiter endorsed the idea, it is not clear whether the American got his British commission.
[33] Nolan, 'History', p. 184.
[34] Ibid, pp. 193-194.
[35] Nolan, 'Comments', pp. 43-44. See also Nolan, 'History', pp. 179-183.

to blunder around where the British, French, and Belgians were already operating. They offered instead to share the NID's take with him.[36]

Such subordinate arrangements in the intelligence field might have been acceptable to the Army Chief of Staff, General Hugh Scott, whose initial inclination had been to let the Allies handle the whole intelligence business anyway, but Pershing and Nolan, his G-2, wanted none of it. They figured that if there were an intelligence failure and the AEF suffered a catastrophic attack, they did not want to have to tell the American public that they had left the job of protecting the American troops from surprise attack to foreigners.[37]

Even into 1918 the Allies continued to try to mould the American espionage effort. In February, the Interallied Bureau, a venue created at the French Ministry of Defence for intelligence coordination among the allies, recommended that the United States should stay out of the areas right behind the German front lines, though if it wanted to send agents east of the Rhine it should feel free to do so. It encouraged American operations in Switzerland using 'influential personas of whom we have many versed in German politics and commerce...such...as Mr. Rockefeller', or through interviewing deserters and travellers, but urged the United States to eschew running 'small' agents because of the substantial overhead costs involved. The Allies also urged the Americans to become active in Sweden, Denmark and Russia 'stating that their own efforts in those countries had been a total failure', and they proposed specific American companies as platforms in those countries. They further 'pointed to Spain and South America as good recruiting ground for agents able to travel in

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[36] Nolan, 'History', p. 179. The sort of concerns the French and British had were later illustrated by British complaints that an American in Switzerland had been driving up the price of intelligence by offering an exorbitant sum of money for the formula of a new German gas. The British also griped that an American in Holland had employed as a source someone who had been on the British 'suspect list' since the beginning of the war. Nolan, 'History', pp. 184-185.

[37] Van Deman, *The Final Memoranda*, p. 21. Nolan, 'Comments', pp. 43-44.

enemy countries with small danger of detection'. American Jews, Poles and Slavs could be sent to Russia on intelligence missions, 'while Spaniards and South Americans are able to enter Germany with comparative safety, either through Switzerland or Holland. Agents sent to Russia will encounter no difficulties reaching Switzerland by way of Bulgaria and Germany, or by Warsaw-Kiev to Switzerland'. The British even offered to support the cover of agents sent along the latter routes.[38]

In the event, MID did little itself in terms of directly dispatching undercover 'agents', and as had been the case with ONI, such efforts as it did undertake were far from uniformly successful. For instance, in May 1918, the MID dispatched to Japan, China and Siberia one 'Donald Thompson, a moving picture operator', representing one or more of the major firms in the business. MID assured the Military Attaché in Vladivostok that Thompson was 'discreet and trustworthy'. Instead, the American forces in Siberia found him 'neither discreet nor trustworthy—a moral degenerate and a liar of the first water. He could not be worse. His information are [sic] fabricated'. We 'can't forgive above qualities'.[39]

Despite such hiccups, however, MID kept casting about for ways to perfect its centralized collection system. In September 1918, elaborating upon suggestions made independently by the attaché in Denmark and Ralph Van Deman from his perch in Europe, it implemented a far-flung plan to acquire information through American corporations which had offices abroad. The MID realized that local cooperation between businessmen and the attachés, though timely, might be risky both for the government and the company (which had not stopped some attachés from doing this on their own initiative) if the relationship should be found out. Thus, it decided to

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[38] Nolan, 'History', pp. 182-184. Ralph Van Deman, in late 1918, also suggested using Latin America as a launching point for operations against Germany. Van Deman to Churchill, 20 October 1918, NARA, RG 165, Entry 65, 10560-235/5.
[39] Dunn to Slaughter, 11 May 1918, NARA, RG 165, Entry 65, 9944-37.

approach the chief executives of major American firms such as United Fruit, Guaranty Trust, US Steel, National City Bank, Standard Oil of New Jersey and the Singer Sewing Machine Company. The executives agreed to forward questionnaires pertaining to 'economic, political and psychological' issues composed by the MID to their overseas office and send the results to the MID through a cut-out address in Pennsylvania. In theory, the corporate employees, be they American or foreign, would never know that they were providing information to the US Government. When peace intervened, the plan withered before producing anything more than meagre results.[40]

The American Expeditionary Force (AEF) G-2 was an important part of the overall espionage effort, contributing in a variety of ways. The AEF ran its own clandestine operations, the most important of which centred on a Czech émigré named Emmanuel Victor Voska. In addition, the AEF augmented the attachés' offices in Switzerland, the Netherlands, Denmark, and Sweden. Each of these received four or five officers trained in 'secret service' work either at the AEF or by the British or French. The AEF also provided money to support the operations of these officers, but it demanded no information from them as to precisely who they had recruited, a lesson Nolan had learned from the French.

> The experience of the war had shown that no one should have a complete list of the agents employed on espionage work, and that the agents should not know each other; the danger being that in case one agent was captured he could be forced to reveal the names of the others engaged in the work. This catastrophe had happened to the French system early in the war and had resulted in a large number of their agents being executed....The French cautioned me especially in this respect and I duly warned our attachés, directing them to deal personally with only one or two people, and each of whom would deal

[40] Churchill to Van Deman, 18 October 1918, NARA, RG 165, 9944-U-106. O. N. Solbert to Chief MID, 13 July 1918, 9944-U-73 RG 165, Entry 65. Van Deman to Churchill, 28 September 1918, NARA RG 165, Entry 65, 9944-U-105. DMI to Military Attaché Copenhagen, 19 March 1919, RG 165, Entry 65, 9944-U-141.

> with not more than four or five others who were unknown to each other. These in turn would deal with another group of agents who were also unknown to each other and known only to their immediate employer. In other words, neither the military attaché nor his principal agents would have lists of the people who were operating in Germany.[41]

Indeed, from the first day, the American attachés learned much from the Allies, both directly and through the men Nolan dispatched. Davis, attaché in the Netherlands, recalled that 'none of these tasks which we undertook was new or original. They were old when we came into the War. So when we marched toward their solution we first 'caught step' with our Allies and got the benefit of their experience and momentum'.[42]

The clandestine activities of the attachés in the Netherlands, Switzerland and Scandinavia exemplified War Department clandestine practices and were undoubtedly the most important that the Department conducted through the offices of the attachés. The MID assessed that the Netherlands was the most important post not only because it was a neutral country bordering Germany—so too were Switzerland and Denmark—but because it also bordered occupied Belgium, where the civilian population was friendly to the Allied cause.[43] This raised the wonderful prospect of relatively easy crossings into enemy-controlled territory. Instantly upon the American declaration of war, the attaché (first Captain A. Poillon, later Lieutenant H. D. Rose and, from July 1918, Colonel Edward Davis) sent in a lengthy report on clandestine operations and how he thought they should be conducted in the country to which he was accredited. This report drew extensively on information that his new allies were

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[41] Nolan, 'History', pp. 186-187.
[42] Edward Davis, 'Military Attache', p. 372, Edward Davis papers, box 1, USAMHI, Carlisle, PA. This is document is Davis' unpublished memoirs. Hereafter Davis, 'Military Attaché'.
[43] *MID History*, p. 416.

suddenly willing to share with him. Two matters loomed large in his report: counterespionage and train watching.[44]

Once the attaché's office in the Netherlands was fully active it identified its primary tasking as the gathering of 'facts'. This meant a broad array of data covering what intelligence officers charged with writing monographs or estimates for military leaders were already calling the 'combat', 'political', 'economic' and 'psychologic' [sic] factors. For Colonel Edward Davis, this meant the:

> enemy's plans for his military operations...his battle losses and his gains in recruits; his production output of arms and munitions of every type; the number of troops he was moving from Russia to France, and vice versa, or north and south in Belgium; all his various activities behind his lines in France; new military devices and methods; his food and clothing production and its sufficiency or insufficiency; the health and the morale of his armies and his population; the relations existing between the various countries that were combined against us; the condition of all their railways and rolling stock; the characteristics of the principal commanders in the enemy armies and of influential political leaders.[45]

Of course, not only was the enemy actively trying to deny access to this sort of information, but the types of people who might be able to provide it were often problematic, sources of uncertainty in their own right. Davis found that many spies were 'unstable and easily bought', others were 'over-tactful and prone to tell their Chief what they think he wishes to hear'. As a result, 'much worthless information is received along with each item of great value. The trick of the trade is quickly to separate the wheat from the chaff. This ability comes with actual comparisons and in no other way'.[46]

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[44] 'HS' [Military Attaché, Hague] 'On the Intelligence system Necessary in Case U.S. Troops are Ordered to the Continent', 15 April 1917, NARA, RG 165, Entry 65, 9944-X-1.
[45] Davis, 'Military Attaché', pp. 371-372.
[46] Ibid, p. 374. These sorts of problems were not, of course, confined to the War Department. For instance, a State Department intelligence officer was the victim of a blackmail attempt by a disgruntled source whom he had let go. Foglesong, *America's Secret War*, pp. 343-344.

Davis also found that he could not use American citizens to penetrate Germany because they would inevitably give themselves away with some small error. However, 'the Fatherland itself was not so difficult of penetration by agents as might seem because the necessities and incidents of trade between the two countries demanded a certain amount of travel back and forth'. Lots of people had the right papers and genuine reasons to cross the border.[47] Given this, the attachés in the Netherlands could use the sort of chain system that Nolan had advised which allowed the office to reach into the target's territory, passing 'orders in one direction and...information in the other' often without its ultimate source being aware that his material was going to the Americans. Davis had some seven or eight such 'systems' of spies, some networks operated in the Netherlands, some in Germany, some in Belgium.[48]

The Attaché's office in The Hague ran an important if not particularly flashy case that provided information pursuant to many important issues. Someone had recruited a German newspaper official who was able to travel to The Hague and who passed along the German government's press guidance which provided information about what Berlin did *not* want reported, secret information in itself. This provided clues as to the German assessment of the military situation on the Western Front, German propaganda aims, strains among the Central Powers, and crop statistics and other important economic information, among other things.[49]

The office ran several other important cases, too. For instance, in western Germany an 'old gentleman of some local rank and distinction' was an important 'indirect source' on German military plans. This man had a friend who was a German

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[47] Davis, 'Military Attaché', pp. 378-379.
[48] Ibid, pp. 372-373.
[49] Ibid, pp. 376-378.

Colonel of Engineers who would confide in him. He would then share this information with his circle of friends where Davis' sources would pick it up. In this way Davis got information on the successive lines to which the German Army would withdraw when it began its collapse in the West. From a similarly indirect route the Attaché's office was able to learn from a member of the German General Staff that the German army was going to withdraw from Belgium, though the Armistice came before such a withdrawal could be completed.[50]

Davis' predecessor, Captain Poillon had reported from the Netherlands in the spring of 1917 that one of the primary tasks of allied intelligence personnel in the Netherlands was train watching: keeping track of German military train traffic in Germany and occupied Belgium. He noted that the Allies had a sophisticated cooperative system of reporting on these matters and that the information could provide a valuable tip-off of the timing and direction of impending German offensives.[51] (By reaching more deeply and more persistently into enemy territory, train watching could provide warning farther in advance than could aerial reconnaissance, albeit with less precision and a greater time lag in reporting.) Doubtless to the relief of the Allies, the Attaché's office in the Netherlands did little if anything in the realm of train watching, aside from report to MID on its theory and practice which it learned from the Allies. However, the attaché in Denmark was able to put these ideas to work establishing train watching systems at Madgeburg, Cologne, and Frankfurt. At war's end they were also working on establishing such

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[50] Ibid, p. 379; *MID History*, pp. 420-421.

[51] Ibid, pp. 380-381. The Allied train watching operations are well documented in a number of places. Christopher Andrew discusses train watching and its relationship to broader issues of British human intelligence operations on the Western Front in *Her Majesty's Secret Service,* chapter 4, starting at p. 141. For a discussion of the micro-level of the collection and analytic issues associated with train watching from a British officer, see Henry Landau, *All'sFair: The Story of the British Secret Service*, (New York, 1935), pp. 61, 65-69.

systems at Mainz, Mannheim, Karslruhe, and Strasbourg which was then part of Germany.[52]

The Military Attaché in Copenhagen was also able to take advantage of the geographic position of Denmark to gather information about the state of the German army and navy. Following the practice of allied states, he established a system to find and interview German deserters who came across the border. This he accomplished bringing together the efforts of the State Department, local American businessmen, and paid Danish citizens, primarily farmers. He gained agreement from the State Department to establish four Vice Consular posts along the Danish-German border. One the State Department manned itself, the other three it allowed the Attaché to man with energetic American businessmen that he recruited. The Attaché then appointed a consular clerk to each of these posts to serve as chief agent. Each clerk, in turn, hired a sub-agent who was, in turn, responsible for recruiting farmers along the border to route deserters to the sub-agent. The farmers, who in theory, did not know for whom they were working, were paid for each deserter they found. [53]

The AEF itself also conducted important human collection operations. After Pershing and Nolan had made clear to the allies in 1917 that there would be a separate AEF intelligence shop, Pershing directed Nolan, apparently at Nolan's instigation, 'to make preparations to install a system of espionage which would cover the front our armies would occupy, and while cooperating cordially with the French and British always, would not be entirely dependent on their sources of information'. Clandestine work became the business of G-2B under Lieutenant Colonel W. O. Reed, who had been Pershing's intelligence chief during the Punitive Expedition and who had

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[52] Military Attaché Copenhagen to Military Section, Military Intelligence Division, 20 November 1918, NARA, RG 165, Entry 65, 9944-U-130/1. Military Attaché Copenhagen, 'German Train Watching System Carried on by this Office, n.d, 9944-U-130/2.
[53] Military Attaché Copenhagen to Chief, MID, 20 November 1918, NARA, RG 165, Entry 65, 9944-U-125.

supplied the poison given to Pancho Villa. (Reed was replaced in the Spring of 1918 by Nicholas Campanole who, in turn, was relieved in October 1918 by Colonel Alexander B. Coxe.) G-2B was made up of two subsections, one of which was for espionage under Lieutenant Colonel Nicholas W. Campanole, the Japanese linguist who for a time had been Reed's subordinate and then successor in Mexico. The other subsection did counter-espionage under the leadership of Major Aristides Moreno.[54]

However, as time passed Nolan found clandestine intelligence less interesting and less useful in providing timely information than the work of the code and cipher men.[55] Van Deman in Europe commented on this in a late October 1918 letter to Churchill, during that period when AEF intelligence was finally beginning to hit its stride.

> The situation has changed somewhat since I wrote you on the subject two or three months ago. At that time it seemed important to get agents over who would get back the usual sort of military information. Since then our front line Intelligence work—observation, examination of prisoners and deserters, airplane photos and observation, wireless and other interceptions, etc., —has improved very greatly and we feel that we can get much of the purely front line military information in that way that formerly we had to rely upon agents to receive.

However, Van Deman wrote, one type of information obtainable through espionage 'has vastly increased in importance from a military point of view'.

> That is the actual conditions in the interior of Germany—the financial situation, political conditions, particularly as affecting future developments connected with the German Government, the morale of that part of the population which will have a direct influence on the prosecution of the war, changes in the higher offices of the Government and of Military Naval Officials, etc. The ordinary agent cannot get this kind of stuff.[56]

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[54] Nolan, 'History', pp. 185-186. United States Army, Center of Military History, *United States Army in World War I, 1917-1919*, Volume 13, (Washington, 2001), p. 7. (Hereafter CMH, *United States Army in World War I.*) Campanole and Moreno had been on a list of officers whom Pershing had requested by name shortly after he deployed to Europe in 1917. Pershing, *My Experiences in the World War*, Vol. 1, (New York, 1931), pp. 103fn.

[55] Nolan, 'History', p. 118.

[56] Van Deman to Churchill, 20 October 1918, NARA, RG 165, Entry 65, 10560-235/5.

Despite Nolan's general lack of enthusiasm about espionage, the AEF was active in the espionage field. In late 1917 it inherited a network of Russian agents previously controlled by the Russian military.[57] G-2-B also mounted one of the bolder clandestine operations of the war, using a Czech émigré. However, it had to struggle to maintain control over him as he had an agenda which he pursued passionately—Czechoslovak independence from Austria-Hungary—that while not opposed to the AEF's interests was decidedly different from them.

Emanuel Voska was a Czech-American, an immigrant from Austrian-dominated Bohemia (as the Czech homeland was then most commonly known). He was an ardent supporter of Czechoslovak independence and was the American representative of Thomas Masaryk, who would eventually become the first President of an independent Czechoslovakia. In 1914, under orders from Masaryk to help the Allied cause, Voska formed an 84-person intelligence organization headquartered in New York, which thoroughly penetrated Austro-Hungarian and, to a lesser degree, German operations in the United States. When Voska's organization gathered information on espionage, sabotage, or economic warfare activities by the Central Powers it passed the information to British intelligence, first to the naval attaché, later to MI-1(c) and the Providence Rhode Island *Journal*. Over time the organization began to pass some information to the Justice Department's Bureau of Investigation and other newspapers, as well. The operations also involved occasional and small-scale liaison with Russian intelligence.

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[57]Thomas M. Johnson, *Our Secret War: True American Spy Stories 1917-1919*, (Indianapolis, 1929), pp. 209-210. Despite the generally low quality of American post-WWI literature about intelligence, this book seems reasonably reliable and it is remarkably sober throughout. Much of this books content can be readily confirmed with other sources that were consulted in the preparation of this dissertation. Johnson, a journalist with the AEF during the war, confesses in his introduction that 'it was the steady day and night labor of the many, rather than the "stunts" of the few, that enable American Intelligence' to succeed during the war. He thanks 'many friends who...fought in our secret war' and 'four Chiefs of American Military Intelligence' for helping him with the book.

The organization's sources were primarily ethnic Czechs, Slovaks, and occasionally 'South Slavs' (Yugoslavs), particularly independence-minded members of these ethnic groups who held official positions in the Austro-Hungarian government. Voska had four different penetrations into the office of the Austrian Consul General in New York including a man named Von Nuber who in his regular job served as a communications conduit for many covert and clandestine matters not only for the Austro-Hungarians, but also for the Germans. Voska's work required extensive communication with 'fellow revolutionists' in Austria-Hungary so he established a courier system, with help from British naval intelligence and the theft of blank Austrian passports by one of his sources. Soon Masaryk himself, by now in exile in London, was using these channels to communicate with his homeland.[58]

When the United States entered the war, Voska turned his domestic operations over to the US Government and offered his services to the State Department. State, believing his value to be greater to the military, vigorously urged the War Department to commission him. Van Deman thought this was a fine idea, but he had difficulties persuading Secretary of War Newton Baker. The Secretary's concern was that much of what Voska proposed to do in Europe was to cause disturbances and labour strikes in enemy territory. This, the Secretary noted, was precisely the sort of thing that President Wilson had castigated the Germans for trying to do in the United States. (Apparently the distinction that the United States had been neutral at the time while Austria-Hungary was a belligerent did not occur to the Secretary.) After a trip to France, however, Baker relented. Voska was made a captain and allowed to choose three subordinates, all from the Bohemian National Alliance, a political group in the United States, who could become lieutenants. Before departing for France, Voska

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[58] Emanuel Victor Voska and Will Irwin, *Spy and Counterspy*, (New York, 1940), pp. 16-211 *passim*.

consulted extensively with the State Department which 'charged him with certain things which they wish[ed] accomplished in Austria-Hungary'. He also met with the Committee on Public Information to discuss how could help them in propagandizing Austria-Hungary.[59]

Voska arrived in France on 4 July 1918 and immediately proceeded to AEF headquarters at Chaumont where he was assigned to G-2B in the AEF. By 23 July, Nolan and Ralph Van Deman—now relieved from running the MID and assigned to Nolan as an adviser and roving inspector—had apparently approved Voska's plans essentially as he had laid them out all along.[60] Assigned to the G-2B Voska found himself in charge of a section collecting military, economic, and political intelligence from Germany, Austria, Bulgaria, and the occupied parts of France and Italy. In conducting these operations, he worked out of four locations: the AEF headquarters in Chaumont, France; the Netherlands; Switzerland; and Padua, Italy. Voska drew into his organization a number of his colleagues from his New York intelligence operations. The MID combed the Army for German-speakers and sent several to him. Voska also recruited volunteers extensively from Czechs and Slovaks in France, Switzerland, and Italy. In the Netherlands, he joined forces with a former courier from his New York organization whom Masaryk had put in charge of an effort to collect information on the munitions factories in western Germany.[61] As he recounted in his memoirs on the eve of World War II, in Switzerland, Voska was able to use a

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[59] Voska, *Spy and Counterspy,* p. 212. Van Deman to Nolan 5 July 1918, NARA, RG 120, Entry 194, Box 6035, Folder "Secret Service Capt. E.V. Voska Reports". Van Deman, *The Final Memoranda*, p. 54-55. Van Deman clearly had access to a copy of his 5 July 1918 memo when writing this passage in *The Final Memoranda.* Writing some 30 years later, he recollected that he was 'sure' the Secretary would come back from Europe viewing the question of covert action from a 'different angle'. Upon returning, the Secretary, did, in fact, approve the 'entire proposal' regarding Voska.

[60] Van Deman, *Final Memoranda*, p. 57.

[61] Voska, *Spy and Counterspy*, p. 259-262. Voska, 'Memorandum' possibly to Nolan, 23 July 1918, NARA, RG 120, Entry 194, Box 6035, Folder 'Secret Service Misc. Reports by LTS Ruditsky & Voska'.

small intelligence outfit set up by Masaryk and Eduard Beneš in 1915 which had established a courier service to Prague.[62] When inserting people into Germany, Voska's people typically got them across the border as vendors or labourers, as there was a thriving cross-border traffic of such people. Typically, they brought back information from agents operating deeper in the enemy interior.[63]

Voska's most important activities were conducted out of Italy against the Austro-Hungarian Empire, however. Even before he set up shop in Italy, Czech deserters had set up an intelligence effort with the help of the Italian Army using line crossers and bringing out military intelligence information from sympathetic units of the Austrian Army, as well as distributing propaganda leaflets in the opposing army and running a courier service to Vienna and Prague. The courier service consisted of Czech soldiers travelling on leave. When Voska arrived he took over running these efforts on behalf of the U.S. Army, but in close liaison with the Italian forces. He arranged to get his son, Lieutenant Arthur Voska, who had not worked with him in New York but had observed the work up close, transferred from an aviation to unit to work with him as second-in-command of the effort. The third-in-command was Lieutenant N.P. Ruditsky, an electrician in civilian life who had done audio surveillance work for Voska's group in New York.[64]

The involvement of the armed services in espionage was to be expected. Not foreordained was the State Department's entry into the realm of clandestine collection. Perhaps the State Department's clandestine collection of military information was the most remarkable intelligence result of the new total war. During the period of American neutrality after the outbreak of war in 1914, State started

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[62] Voska, *Spy and Counterspy*, p. 263.
[63] Ibid, p. 264.
[64] Ibid, pp. 271-278.

appointing 'special agents', using a few 'operatives' from the Bureau of Investigation and the Treasury's Secret Service to conduct 'investigations of a highly confidential nature'. Much of this work was focused on domestic counterintelligence though it did employ one agent on U.S. soil to collect information about Mexico.[65] Before long, the Department was also employing 'agents' in other countries. As Secretary Lansing described it in his memoirs, this 'necessitated an office...to issue instructions to [agents and operatives] and to digest and analyze their reports without their going through the regular channels of departmental correspondence'. Thus, one can perhaps date the beginning of State's formal role in clandestine intelligence to the designation of the secretive Leland Harrison in April, 1916 to run what became the 'Bureau of Secret Intelligence' (BSI) under the general supervision of Counsellor Frank Polk, the number two person in the Department and from May 1917 Polk's deputy, Gordon Auchincloss, the son-in-law of Colonel Edward House.[66] During World War I, the BSI dispatched a modest number of collectors abroad, perhaps fifteen or so.[67] More commonly, however, it served as a coordinator, clearing house and sometime champion for the clandestine efforts of other agencies. In March 1917, for instance, Counsellor Frank L. Polk, to whom Harrison reported, 'went to Congress re: money for Secret Service'.[68]

As the war dragged on, there was an emerging sense of complementarity among the Army, Navy, and State Department collectors. A military man might be able to get what a naval man could not and vice versa and diplomats, in their turn, could acquire information not available to the services. All of these inputs were

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[65] John F. Chalkley, *Zach Lamar Cobb: El Paso Collector of Customs and Intelligence During the Mexican Revolution, 1913-1918*, (El Paso, 1998).
[66] Robert Lansing, *War Memoirs of Robert Lansing, Secretary of State* (Indianapolis, 1935), pp. 318. Jeffreys-Jones, *American Espionage,* p. 46.
[67] Harris and Sadler, *Archaeologist*, p. 21.
[68] Jeffreys-Jones, *American Espionage*, p. 47.

necessary in order to form a sound understanding of the 'picture puzzle' that was the overall situation.[69] Nevertheless, of the three Departments that took the lead in espionage, State was the most aggressive in its efforts to recruit penetrations agents in foreign organizations of interest, including the German military. By the time it was fully operational during the late months of the war, the Department had a small but vigorous clandestine capability that operated aggressively acquiring secret information, sometimes stealing it from inside enemy bureaucracies, other times acquiring it in chaotic lawless regions. As might be expected, much of the State Department's collection was on political matters that were of secondary interest to the armed services, but its collection of military information was to prove important and its direct assistance to the military services in their collection efforts was to prove equally so.

The State Department focused most of its initial espionage efforts on Mexico and the ongoing tumult in that country, but after the United States entered the war the Department's intelligence horizons expanded greatly.[70] Much as in the Army 'spying' and 'scouting' were tightly linked and only began to be definitively teased apart during World War I, so, too, did the operations of the State Department in revolutionary Russia illustrate the close relationship between espionage and the normal activities of diplomats. Much of what the diplomats did in revolutionary Russia was simply travel about the country and observe more or less overtly what was happening, speaking to whatever members of the population they could find who could provide insight into the situation. Diplomats might sometimes refer to this as

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[69] See also United States Congress, *Army Reorganization: Hearings before the Committee on Military Affairs,* Part 3, Sixty Sixth Congress, Statement of Marlborough Churchill, 25 September 1919, (Washington, 1919), p. 304.

[70] See Chalkley, *Zach Lamar Cobb* for a discussion of the most prominent espionage operation against Mexico. Mexico was also the primary focus throughout the war of the MID's signals intelligence efforts.

'intelligence' work and, in a sense it was.[71] However, the only real difference between this and regular diplomatic and consular work was a perception of risk; this 'intelligence' work was done in the violent, hinterland of a country in chaos rather than in the staid capital of a country at peace. Nevertheless, the State Department also began to conduct operations that were less and less purely diplomatic and became more like espionage. Some of these operations were centred in Washington, or at least closely monitored by Leland Harrison in Washington. Others were undertaken at local initiative.

In its efforts to identify anti-Bolshevik forces—an entirely legitimate diplomatic task—and to provide discrete (and ultimately extremely limited) support to those which supported continued resistance to the Germans, the State Department had occasion to form an 'information service' that began to take on more and more of the trappings of espionage.[72] The requirements of the war led the U.S. Government and its Allies to become deeply interested in what was going on in Bolshevik-controlled areas of Russia. Accordingly, the Department went to great lengths to collect military, political, economic and social information from the country. These efforts became substantially more difficult, however, when in late February 1918 the advance of German troops forced the Department to evacuate Petrograd, the Russian capital. Meanwhile, anti-Bolshevik forces of various types sprang up all across the

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[71] See DeWitt Clinton Poole's comment that his work in Rostov and Novocherkassk in 1917-1918 was that of an 'intelligence officer', Foglesong, *America's Secret War*, p. 309.

[72] Foglesong, *America's Secret War,* pp. 311-319. It should be noted that Foglesong interprets the activities of the State Department in Russia as being focused primarily on the Bolsheviks not the Germans and the ongoing war. In his view, the Department's activities amounted to what today might be called covert action against the nascent regime. David Langbart places a greater emphasis on operations against the Germans. See, his '"Spare No Expense": The Department of State and the Search for Information about Bolshevik Russia, November 1917-September 1918', *Intelligence and National Security,* 4:2, (Apr. 1989), p. 316-334. See also Langbart's 'Five Months in Petrograd 1918: Robert W. Imbrie and the US Search for Information in Russia', *Studies in Intelligence,* 52:1, (March. 2008), (Web Supplement, https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol-52-no-1/index.html).

unoccupied portions of the former empire. Amidst all this chaos, and with US diplomats only in spotty and slow communication with Washington, in about March 1918 Xenophon Dmitrievich de Blumenthal Kalamatiano, an American businessman in Russia, who had been doing work for Maddin Summers, US Consul General in Moscow since the fall of 1917, volunteered to form an 'information service'. Summers accepted the offer and Kalamatiano became the 'Chief Observer'.[73] When Summers died in May 1918, this budding information service fell under Dewitt Clinton Poole, who ascended to the post of Consul General.[74]

Poole denied any nefarious intention for the 'information service' and even purportedly informed the Bolshevik Foreign Commissar about it. He explained this move to the Department by writing that 'I explained to him that it was quite innocent, that we were entitled to know what was going on and it was the only way we could find out'.[75] Nevertheless, the essential feature of this service was clandestinity. Poole recalled that:

> The information we needed was simply the ordinary flow of news such as one would read in the newspapers in a normal situation, but in view of the Bolshevik totalitarian methods of government and their strict control of information, it was necessary to organize this on the well-known secret service system of cut-outs—that is, only two or three men were to know and have any contact with Kalamatiano. Then each of these men had two or three men in contact with him, and so on down, with the least possible cross-contacting.[76]

Kalamatiano put together a system of some thirty men and women who travelled about the country and reported their observations. He used these reports to

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[73] Richard B. Spence, 'The Tragic Fate of Kalamatiano: America's Man in Moscow', *International Journal of Intelligence and Counterintelligence*, 12:3, (Fall 1999), p. 350.
[74] Foglesong, *America's Secret War*, pp. 305-306, 320. Poole would serve during World War II as the head of the Foreign Nationalities Branch of the OSS. During the early Cold War, he was the president of the National Committee for a Free Europe (NCFE), a CIA-funded organization that ran Radio Free Europe. For a useful discussion of the NCFE, see Hugh Wilford, *The Mighty Wurlitzer: How the CIA Played America* (Cambridge, 2008), Chapter 2.
[75] Foglesong, *America's Secret War*, p. 321.
[76] Ibid, p. 322.

produce 'bulletins' for the consulate which the consulate would put into telegrams to the embassy and to Washington.[77] Early reports from the service tended to focus on economic matters, but Kalamatiano urged his agents to gather more information about the military situation and they soon began to respond.[78] Many of the agents were Russians. Others were Latvians and Czechs. Some were officers in the Red Army. One worked in the military censor's office, another source worked in the mobilization staff of the Yaroslavl district. Kalamatiano was also in communication with the anti-Bolshevik Boris Savinkov, who launched an unsuccessful uprising from Yaroslavl in July 1918. His best source was a Latvian who worked as a senior official in the military communications department of the People's Commissariat of War. Kalamatiano was also able to use the varied party affiliations of his non-governmental sources to good advantage in acquiring political and other types of information.[79]

Predictably, after Allied troops landed at Archangel and in Vladivostok, relations between the Bolshevik government and Allied governments soured. The US Consulate in Moscow downsized and Consul General Poole, came home. However, Kalamatiano volunteered to stay behind on the theory that the Bolsheviks had become *de facto* Allies of the Germans and therefore that the service he could render to his country by reporting on events there was comparable to the service rendered by someone reporting from enemy territory.[80] On 25 August 1918 Poole hosted a meeting of Allied representatives at the US consulate. Besides Poole, Kalamatiano attended for the Americans; also in attendance were the soon-to-be infamous Sidney Reilly for the British, the French consul, inexplicably a French journalist, and Martial-Marie-Henri de Verthamon, a French naval officer charged with carrying out sabotage

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[77] Ibid, pp. 322-323.
[78] Ibid, pp. 323-325.
[79] Ibid, pp. 325-326. Spence, 'Tragic Fate', p. 351.
[80] Ibid, p. 329.

operations in Russia to prevent war materiel from falling into German hands.[81] The American report from this meeting blandly states that the representatives agreed to share their intelligence. The French journalist, whose loyalty was at best divided, reported to Feliks Dzerzhinsky that the meeting had laid plans for sabotage in support of an impending coup against Bolshevik power.[82] Both stories are plausible, though Poole reported to the Department afterwards that he had heard tell of the coup in advance but had no knowledge of sabotage.

What is clear, however, is that Kalamatiano had found himself in the outer rings of the 'Lockhart Plot', one of the most famous incidents in twentieth century intelligence history. This 'Lockhart Plot' was an embarrassing and unsuccessful British effort to overthrow the Bolshevik regime with the cooperation of purportedly disaffected Latvian troops. It was also a provocation, fully under the control of the Bolshevik authorities from the very beginning. When on 30 August a probably unrelated assassination attempt against Lenin failed, the Cheka used the opportunity to crack down and, among other actions, crush the Lockhart Plot. When the plot collapsed, Kalamatiano was arrested and much of his network rolled up. The Bolsheviks sentenced him to death but released him in 1921.[83]

Petrograd remained a vital location, one on which it was important to gather information. Accordingly, in March, Maddin Summers, the Consul General in Moscow, ordered Vice Consul Robert Imbrie (who did not speak Russian) into Petrograd to report on events there. He arrived on 5 April. Though he had to continue doing consular duties, his priority was intelligence collection and by mid-month he had established an 'Information Service' in the area, the primary purpose of

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[81] Note that Foglesong identifies the French officer as 'Colonel Henri de Vertement', but this is incorrect. Foglesong, *America's Secret War,* p. 332, Gordon Brook-Shepherd, *Iron Maze: The Western Secret Services and the Bolsheviks* (London, 1998), pp. 43-45, 87-88.
[82] Brook-Shepherd, *Iron Maze,* pp. 105-107. Foglesong, *America's Secret War,* pp. 352-4.
[83] Foglesong, *America's Secret War,* pp. 335-342. Spence, 'Tragic Fate', pp. 353-356.

which was to collect intelligence on German military movements and other German activities. So much reporting resulted that it was necessary to set up a regular courier service between Petrograd, the U.S. Embassy which had been relocated to Vologda, and the U.S. Consulate in Moscow.

The Consul General had dispatched Imbrie for the express purpose of recruiting agents to collect military information on the Germans as well as political information on the general situation, which was to say Russia. He also collected information on the Russian Baltic Fleet. To accomplish these tasks, he sought out men of 'energy' and military expertise, soon choosing a group mostly made up of Russians, though it also included one Finn and one Swede. The group numbered about a dozen men, as well as two women who 'were employed because of their intimacy with certain of the Bolshevik leaders'. The men were mostly officers, two of them former 'professional spies' for the Czarist government. After seeing that they had a detailed military briefing and training in the recognition of German insignia, Imbrie dispatched them to the field. When they returned, he would not forward any of their reports to Vologda or Moscow until another of his agents, unbeknownst to the first, had double-checked it. Most agents did not even know for whom they were working, merely reporting to a 'Head Agent' who reported to Imbrie. Imbrie reported afterwards that 'on repeated occasions our Agents penetrated the enemy's lines, passing through to the other side and, returning, bringing exact information unobtained by any other similar service of the Allies, winning the commendation from the Allied Military Missions in Moscow who informed the Consulate General that our reports were the most valuable turned in'.[84]

[84] Langbart, 'Five Months in Petrograd'.

The fact that Imbrie was also collecting against the Bolsheviks turned out to be fortuitous. 2 August 1918, the United States broke off diplomatic relationship with Russia. Four days later, one of his sources provided him with a copy of a purloined Bolshevik telegram ordering his arrest. At the end of the month with the help of Norwegian diplomats he escaped the city.[85] Some evidence suggests that Imbrie used British officer Paul Dukes, who passed through Helsingfors (Helsinki) at this time on his way back into Russia for secret intelligence work for Britain's MI-1(c), to communicate with one of his agents, a Russian naval officer in Vyborg.[86]

Another State Department clandestine operation aiming largely at military information which involved much less derring-do, but which (apparently) reached deep into an enemy's bureaucracy, was that run by James McNally. This operation, however, unlike the operations in isolated Bolshevik Russia, was subjected to close monitoring from Washington. This case also opened for the first time the difficult security questions that can arise when an intelligence officer purposely consorts with the enemy in the course of his efforts to steal secrets. McNally, a consular officer whose son-in-law was a German naval officer, was posted to Switzerland during the war, whence he produced a great volume of reporting primarily on naval topics from contacts with German officers. Though Britain's Naval Intelligence did not think much of McNally's reporting, and despite the fact that McNally was, to put it charitably, hard to work with, much of his reporting went to President Woodrow Wilson, as well as senior military leaders.[87] The U.S. Naval Attaché in France

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[85] Ibid.

[86] Paul Dukes, *Red Dusk and the Morrow: Adventures and Investigations in Red Russia* (New York, 1922), p. 11. MI-1(c) later became the 'Secret Intelligence Service', popularly known as MI-6.

[87] Klaus Schwabe, 'U.S. Secret War Diplomacy and the Coming of the German Revolution in 1918: The Role of Vice Consul James NcNally', *Diplomatic History*, 16:2, (Spring 1992), pp. 175-200. L[anier] L. W[inslow] to Leland Harrison, 5 April, 1919, Leland Harrison Papers, Box 105, Folder 'McNally, J. C.', LOC.

described McNally's work as of 'great value', providing 'excellent information', adding that he had confidence that McNally 'would be able to obtain all important information concerning German Naval affairs that was valuable'.[88]

McNally had been in the Consular Service since 1898, getting consistently unenthusiastic appraisals from his superiors in his various postings in Europe and Latin America. In 1907, the Department appointed him Consul in Nanking where an American businessman accused him of embezzlement in 1909, a charge that dogged him for years before he was formally exonerated in 1913. By that time, he had been transferred to Tsingtau, a German colony, where he became friendly and popular with the Germans and his daughter married a German naval officer named Friedrich Mensing. However, after a time, poor health forced McNally to resign his position. As his health recovered, the Department, under the influence of McNally's important friends who included the President's secretary, Joseph Tumulty, nominated him to be Consul in Nuremberg, Germany. However, this position required Senate confirmation and this was not forthcoming because of his earlier alleged impropriety.

The Department was obliged to appoint McNally to lower ranking positions which did not require Senate confirmation: Vice-Consul at Kehl (opposite Strasbourg) and later Hamburg. During this time, McNally developed contacts in the German Navy, purportedly because his son-in-law's father was an admiral and a friend of the Kaiser. McNally passed the information he gathered through these contacts to the U.S. Naval Attaché in Berlin, Walter Gherardi, who made them the basis of many of his own reports and who assessed McNally's work as 'invaluable'. In late February 1917, he sought a personal meeting with Secretary Lansing and delivered to him a briefing on the 'submarine situation' in Germany which apparently made such a big

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[88] R. H. Jackson to Director of Naval Intelligence, n.d., NARA, RG 38, Entry 98, E-9-a, 10670-C.

impact that the Department tried again to get him confirmed as a Consul and then, when that failed, assigned him to Zurich, whence he was able to maintain his German contacts after the United States declared war. In mid-April 1917, McNally reported to Washington about the details of a December 1916 memorandum from Chief of the Admiralty Staff Admiral Henning von Holtzendorff to Hindenburg urging unrestricted submarine warfare, which memo led to the German announcement on 9 January 1917 of unrestricted submarine warfare.[89]

McNally knew that the information he gathered was highly valued in Washington, so he was disgruntled that his rank did not correspond with his contribution to national security. In August 1917 he boasted that 'no country has ever entered a war with such a detailed knowledge of an enemy's fighting branch as does ours, due to my work'. President Wilson was sympathetic and urged action on Secretary Lansing who arranged a pay raise, but not a formal promotion. This led McNally to complain to Frank Polk, the number two official in the State Department, that the Senate's refusal was costing the country 'thousands of lives and millions of dollars'.[90]

The intelligence that McNally reported was remarkably rich and nuanced, appearing to answer many of America's intelligence needs. Some of his information was high level and political in nature. Not only had McNally reported on the genesis of the unrestricted submarine warfare campaign, but in February, 1918 he reported that German Chancellor Hertling had expressed the willingness to restore Belgium for the sake of peace. Much of McNally's information was more fine-grained, however. On 25 August 1917 he submitted a lengthy report on the food and supply situation in

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[89] McNally to Lansing, 16 April 1917; Harrison to Polk, 17 April 1917, both NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.
[90] McNally to Polk, 5 October 1917, NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.

Germany and a variety of military tidbits such as a detailed account of the sinking of the Lusitania; the news of the formation of a new squadron of submarines, three of which he named; and German estimates of the amount of allied tonnage sunk per month.[91] On 10 June 1918, he reported that nine submarines had left Kiel bound for the American coast. He also reported on the repartee at a 2 June dinner party of German submarine captains, whom he named.[92]

McNally's ego and somewhat erratic ways did not endear him to those around him and soon doubts began to arise about his loyalty. The phenomenon of an American officer in direct personal contact with the country's avowed enemies was a novel experience for the United States. Not surprisingly, McNally made numerous enemies among the Americans, among them the attaché and diplomatic figures with whom he had to live. A future head of the CIA, Allen Dulles, who served in Switzerland at the same time, never did figure out if McNally was a 'crook' or a good American. Other American officials were far less ambivalent in their views. McNally openly associated with his German officer son-in-law and purportedly made anti-Allied statements. He also started to make enemies among the Allies who observed that his closest friends in Zurich were pro-German.

These tensions came to the boil in March 1918 when the French requested and received permission from the State Department to detain McNally as he tried to cross the Spanish-French border. He was only allowed free to report to the U.S. Embassy in Paris. When he arrived in Paris, General Nolan, the AEF G-2 was delighted and sent Major Nicholas Campanole, by now the AEF's chief of espionage, to meet with

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[91] Blind memo from McNally, 25 August 1917, NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.
[92] 'Paraphrase of Cable 3623 from Berne to Washington', 10 June [1918], NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.

him to discuss how they might augment his efforts.[93] Other American officials, allies of McNally's enemies in Switzerland, had other ideas. They informed him that he was under investigation for treason and interrogated him for a month. During this time, the U.S. Minister to Switzerland Pleasant Stovall, strongly supported by his Second Secretary F. R. Dolbeare and the Military Attaché Colonel Godson, advised the Department to bring McNally home in the interest of maintaining relations with the Allies. In London Admiral Sims' staff received a memo from the Admiralty urging McNally's immediate recall and accusing him of having made various comments indicative of disloyalty to the Allied cause. The American had, for instance, reportedly told the French Vice-Consul about a naval engagement during which two British destroyers had purportedly been put to flight. He had also told several people that he thought France was 'bled white' and might be obliged to give up the fight. The British also offered the unsubstantiated opinion that McNally's son-in-law was feeding him disinformation.[94]

McNally had friends in high places, however. The Department suspected that Stovall was suffering from professional jealousy of a subordinate who was able and even encouraged to communicate directly to the highest levels of the Department and the government. Furthermore, Lansing assured the American authorities in Paris that McNally was not authorized to pass any information to his son-in-law. Leland Harrison wrote to Hugh Wilson at the Legation in Berne on 18 April 1918:

> We have lately been very interested in the McNally case and I must say that from the information so far received, it would seem that the Legation is perhaps unnecessarily exercised about him. Admitting that his son-in-law and other German agents with whom he may come in contact are allowed to see him for the particular purpose of getting

[93] Morgan Taylor to Wilbur Carr, Chief of the Consular Service, 31 May 1918, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.
[94] Bell to McNally, 11 April 1918. RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'. For a similar account of the incident, but one which downplays the drama, see Van Deman, *The Final Memoranda*, p. 61.

> information, I must say I cannot see how they can get anything from McNally that they can not get from anybody else in Zurich. He gets no information from the Department...On the other hand, he has from time to time sent very good stuff to the Department.[95]

Harrison concluded by admitting that the reliability of McNally's naval information had been falling off of late but that nevertheless, and notwithstanding the views of the military attaché and of the British and French, both the MID and ONI wanted McNally returned to Zurich to continue his work.[96] In the end, Wilson demanded that his man be allowed to return to Zurich, believing that McNally could deliver information about expected German offensives.[97] McNally was promptly cleared and returned to work.

Back in Switzerland McNally still had enemies. Foreign Service Officer Allen Dulles wrote on 27 May to his 'Uncle Bert', the Secretary of State, urging him to recall McNally because of his 'indiscretions' and the danger he posed 'to the cause and our work here in co-operation with our Allies'. Dolbeare and Godson also continued to intrigue against McNally, or at least that is the way McNally described it in a 22 June cable to the Secretary. The Director of the Consular Service allowed to the Secretary that McNally was 'very indiscreet; in many ways a very poor consular officer; not intelligent; [and] his loyalty may even be open to question' but that his was work of great value and he should be maintained at his post, no matter how his colleagues felt about him. All of these materials were sent to President Wilson who responded tartly in a short memo to Lansing on 26 June:

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[95] Harrison to Wilson, 18 April 1918, NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.

[96] Ibid. For a positive retrospective view of McNally's worth from ONI's perspective see R. H. Jackson to Director of Naval Intelligence, 'ORGANIZATION – OFFICE OF NAVAL INTELLIGENCE – FRANCE, n.d. [1918 or 1919?], NARA, RG 38, Entry 98, E-9-a, 10670-C.

[97] Schwabe, 'U.S. Secret War Diplomacy', p. 188fn59.

> I am sorry that the Legation should feel as they do about McNally, but I think that they should abide loyally by our decision [to keep him in Switzerland.] We see more of the elements involved than they do. I do not know who Dolbeare is, but, whoever he is he ought to be told very emphatically to mind his own business or come home.[98]

McNally stayed in place until January 1919 at which time, his utility largely ended, his exasperating qualities became too much for the Department and he was abruptly relieved.[99]

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It is fair to say that clandestine operations were a vigorous and occasionally significant part of America's conduct of World War I. Nevertheless, the vast bureaucracies that would conduct espionage during later wars were still in their infancy and espionage was still to some degree influenced by nineteenth century moral attitudes. At the same time, technical means of collection were truly flowering. Nolan thought that perhaps only 15%, 'a very minor part', of the AEF's intelligence came from 'secret service espionage'.[100] Despite the moral reservations of many, espionage persisted beyond the signing of the Armistice, as we shall see. A certain romanticism was starting to attach itself to the business and rogues (lovable and otherwise) seemed to flock disproportionately to it. As one popular writer put it, espionage brought 'secret romance and adventure' which 'provide[d] the color to the sadness and gray monotony of the war'.[101]

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[98] Dulles to Lansing, 27 May 1918; McNally to Lansing 22 June 1918; Carr to Lansing, 21 June 1918; Wilson to Lansing, 26 June 1918 all in NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.

[99] Cable State Department 248 to Paris, January 11, 1919, NARA, RG 59, Entry 344 Box 2, Folder 'File 48 Wirth and McNally'.

[100] Nolan, 'History', pp. 178-179.

[101] George Barton, *Celebrated Spies and Famous Mysteries of the Great War* (Boston, 1919).

Chapter 5

Intelligence Support for Commanders

If General Nivelle could have been removed from the thick fog of theoretical strategic and tactical teachings stemming from the Napoleonic Wars and made to understand the possibilities of innovation capable of transcending past military procedures, he would have given more receptive attention to the reports of his Military Intelligence Section as essential to the successful pursuit of modern warfare.

--AEF intelligence officer Thomas Curtis Van Cleve[102]

During World War One, the concept of 'war' became so broad that the unity of command became more than a little frayed. Of course, under the Constitution, President Wilson was the 'Commander-in-Chief' of the armed forces and as the head of the Executive Branch he could issue orders to the Department of State, the Department of Justice, and the other organs of the Federal Government which were involved in the war effort. Nevertheless, many factors limited the degree to which he could involve himself in the micro-level details of the execution of the war. These included his own personal expertise and proclivities, the immense volume of data to be digested and decisions to be made, and the difficulties of trans-oceanic communication. It would be decades before the White House had both the ability to and interest in controlling tactical operations in real-time.

Pershing was the closest that the United States came to a single commander and he tasked his G-2 to keep him informed about military, political, and other events far removed from western Europe because he realized that they could influence the situation he faced in France. In reality, of course, Pershing was far from the sole commander under President Wilson. Certainly Admiral Sims, ensconced in London, was not under Pershing's command. Nor yet, were the military or naval attachés who

[102] Thomas Curtis Van Cleve, *Observations and Experiences of a Military Intelligence Officer in Two World Wars*, (Maine[?], Potts Point Books, 2005), p. 29.

followed the direction of MID and ONI, respectively. Finally, of course, the State Department's diplomats and intelligence agents were even farther removed from Pershing's control. However, all of these agencies conducted operations which were intended to (and sometimes did) influence the situation which Pershing faced on the battlefields of France.[103]

During the World War, the primary stateside function of the War Department was to send forces overseas for use by General Pershing in his American Expeditionary Force (AEF). The AEF itself performed virtually every other function with regard to the War Department's effort.[104] The members of the MID knew where the action was and it was not in Washington. Indeed, Marlborough Churchill, the head of the MID, argued in September 1918 for a rotation of personnel between the MID and the AEF G-2 on the grounds that 'M.I.D. morale is almost entirely dependent upon every physically fit officer having before him some hope of foreign service.'[105] In particular, the AEF supplied nearly all its own intelligence and conducted most of its own intelligence operations, albeit often supported with various degrees of coordination by the military and naval attachés and occasionally, quite indirectly, by State Department personnel.

In so doing, the AEF developed an intelligence system nearly as sophisticated as that of the French or the British and of comparable though not yet equal quality. Several factors made it possible to rapidly expand the size of the AEF's intelligence effort while steadily improving its quality. The French and the British, having already gone through their own stumbling learning phase in the early months of the war, were able to dispense sound advice and followed their own enlightened self-interest by

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[103] Not least, of course, the War Department, at Pershing's request, directed the attachés in Europe to forward war-relevant information directly to the AEF. Nolan, 'History', p. 188.
[104] *United States Army in World War I*, Volume 13, p. 5.
[105] Churchill, 'Memorandum A "Intelligence Personnel"', accompanying letter to Van Deman dated 16/18 September 1918. RG 165, Entry 65, 10560-235/1,

being quite willing to do so. They welcomed American visitors to their units and offices, they took American students into their training schools, they shared their doctrinal publications, they shared their substantive intelligence reporting, and they eventually came to treat the Americans as colleagues, not students. On the American side, Dennis Nolan, the G-2, was willing to be receptive. There is no indication that he came in with an *idée fixe* about how intelligence work was to be done. With this attitude Nolan stood in sharp contrast to Pershing, who had crossed the Atlantic determined that the doughboys must reject French and British practice and get out of the trenches and fight open warfare, an idea to which he stuck with dogged determination. Finally, Nolan established personnel policies that were focused on quality not merely on filling vacancies. He and his subordinates were not shy about rejecting or relieving men who were not up to the peculiar demands of intelligence work.

There were several reasons for the AEF's near total autonomy in intelligence matters. Pershing's strong personality had something to do with it. In addition, at least with regard to signals intelligence, neither the MID nor the AEF's staff made great efforts to stay in effective contact through visits or officer exchanges.[106] The poor state of communications between Europe and Washington also played its part. Though many military officers thought that the World War was a new type of war, one fought throughout the depth of all belligerent nations, the fact remained that the physical battlefield was where things could go most wrong most quickly and conversely where the most decisive successes might be most quickly gained. Therefore, slow staff processes could be fatal. The British Forces could readily communicate with London and the French forces with Paris. The picture was quite

[106] Frank Moorman, 'Lecture delivered to the Officers of the Military Intelligence Division, General Staff', 13 February 1920, NARA, RG 457, Entry 9032, Box 1, Document 17.

different for the Americans. Transatlantic written communications were slow and uncertain. Long-haul radio was still in its infancy and while cable communications were faster and able to carry more data, trans-Atlantic bandwidth was inadequate.[107] In February 1918, a British study shared with the US Army and Navy estimated that assuming significant repairs to the existing set of cables, the AEF should be able to send 600,000 words per week for all purposes back to the United States.[108] To make matters worse, shortly thereafter the German Navy launched a major albeit only partially successful effort to cut every trans-Atlantic cable.[109] Moreover, every trans-Atlantic electronic communication was subject to enemy interception and possible decryption. This was obviously the case with radio messages, but even telegraphs sent by cable could potentially be intercepted, as the US Navy proved in March, 1918 when it successfully tapped an American submarine cable and read the messages passing through it without the cable operators being any the wiser.[110]

Given these considerations, General Pershing's American Expeditionary Forces grew a substantial intelligence staff, the AEF G-2, which eventually numbered approximately 300 people.[111] In so doing, it called upon the experiences of both the British and the French. After an extensive study of information about the French and British intelligence systems available in the War College's files, querying of liaison officers, and visits to allied units, they decided that the AEF's intelligence structure would imitate the British system not only at the AEF level, but down through the echelons. The AEF also adapted its first Intelligence Regulations from those of the

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[107] Winkler, *Wiring the World*, pp. 152, 160-61, 168.
[108] Navy Department, Office of the Chief Censor to J. H. Whitehead, US Army Signal Corps, 2 April 1918. Covers a memo from the British General Post Office, 'Atlantic Cable Communications', 7 February 1918. NARA, RG 457, Entry 9032, Box 24, Folder 'British Memorandum on Atlantic Cable Communications'.
[109] Winkler, *Wiring the World*, pp. 169-175
[110] Ibid, pp. 194-197. See also Yardley, *American Black Chamber*, p. 16.
[111] Beach, 'Origins of the special intelligence relationship?', p. 236.

British Second Army. Pershing insisted on reviewing these personally, paragraph by paragraph, with General Charteris, the intelligence chief of the British Expeditionary Force (BEF).[112] The AEF applied the moniker 'G-2' in imitation of the French *Deuxième Bureau*. British and French instructors taught American intelligence personnel in many places and many of the field manuals and pamphlets on intelligence topics that the AEF disseminated to the troops were translations of French publications.[113]

Intelligence provided Pershing and the other commanding officers of the AEF a variety of potentially useful tools aside from simply producing information about the enemy's actions. Some of these tools were offensive: this war saw America's first serious experiments with a variety of forms of what is today called covert action as well as some fumbling attempts at deception. Other tools were defensive: intelligence sections tracked down enemy spies, and prevented the inadvertent leakage of information that could be useful to the enemy. Finally, the intelligence sections provided technical information, largely in the form of maps.

The Navy's forces deployed to Europe fell under Admiral William Sims, the Commander-in-Chief, U.S. Naval Forces, Europe. Their functions amounted largely to anti-submarine warfare and escort duty.[114] Sims and his staff were in a constant state of feuding with ONI, among many other things over control of the naval

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[112] Dennis E. Nolan, 'Lecture Delivered to the Officers of the Military Intelligence Division, General Staff', 20 January 1920, NARA, RG 165, Entry 65, 10560-328/159,.

[113] Many of these manuals can be found in the 'World War I Pamphlet Collection' at CARL. This approach was not limited to the AEF intelligence staff. Speaking with regard to counter-espionage and security functions in France, the US Naval Attaché found that it was best to study the 'French System' and then 'reinforce' it. R. H. Jackson, to Director of Naval Intelligence, n.d. NARA, RG 38, Entry 98, E-9-a, 10670-C. See also Van Cleve, *Observations and Experiences*, pp. 13-46.

[114] For a brief account of American naval operations in the broad context of the naval war, see Paul G. Halpern, *A Naval History of World War I*, (Annapolis: 1994). For a voluminous American-centric account, see William N. Still, Jr., *Crisis at Sea: The United States Navy in European Waters in World War I*, (Gainesville: 2006).

attachés. Just as Pershing had his G-2 staff, Sims established a 14 man intelligence cell under John Babcock in his American Naval Planning Section in London. Sims' staff worked cooperatively with British Admiral Hall's Naval Intelligence Division—though they were never as deep into Hall's confidence as was the State Department. The Navy also did significant amounts of negative intelligence work in France, primarily under the auspices of the Naval Attaché in Paris.[115]

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AEF G-2 came under Dennis Nolan who started the war as a major and ended it as a brigadier general. Nolan, who looked every inch the professor, had been an outstanding graduate of West Point, and had served under Pershing in the Philippines. He had also taught history at West Point before serving in the Intelligence Section on the first War Department General Staff, from 1903 to 1906. This stint gave him what was by American standards extensive intelligence experience - as much as Van Deman.[116] Under him, the intelligence staff at General Headquarters (GHQ) soon grew to comprise four sections. G-2A was responsible for analysis as well as certain technical collection activities, notably signals intelligence and, in a more attenuated fashion, a great deal of aerial reconnaissance (see Chapter 2.) G-2B had responsibility for espionage and counterespionage and some covert action. G-2C had charge of topography and mapmaking and G-2D was in charge of censorship, press affairs and propaganda. Each section provided General Pershing and his subordinate commanders with capabilities that were important for the prosecution of the war and the defeat of Germany, some new, some old but now understood to fall within the realm of intelligence. This was a hard working lot. While the GHQ staff's office

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[115] Dorwart, *The Office of Naval Intelligence*, pp. 123-126. Still, *Crisis at Sea*, p. 40.
[116] James J. Cooke, *Pershing and His Generals: Command and Staff in the AEF*, (Westport, 1997), pp. 92-93.

hours were 9AM to 12:30PM and then 2PM to 7PM, the intelligence section worked these hours and then returned again to the office after dinner, staying until 11PM, in part to prepare the daily summaries and reports.[117]

Pershing was not a captive of grandiose visions of intelligence and his memoirs of World War One scarcely mention the topic, though in part that may be because of the secrecy surrounding the field. However, during the Punitive Expedition he had allowed a great deal of intelligence innovation to flourish, in aerial reconnaissance, signals intelligence, clandestine collection, and even in lethal covert action. He brought this same sensibility to the AEF. Though Nolan was never part of Pershing's inner circle, the commander paid attention to him, and he never threw up artificial roadblocks to innovation in intelligence. Pershing, his first chief of staff, General James Harbord, and Nolan shared a considerable past acquaintance and there was a great deal of mutual respect among them. Nolan had been Pershing's adjutant general in the Philippines and had also served under Harbord in the Philippines. It was Harbord who had pressed Pershing to put Nolan on the original AEF staff and specifically to make him the chief of intelligence.[118]

Pershing eschewed big staff meetings and preferred to meet with his senior staff officers individually. Every morning at the GHQ, Harbord would chair a thirty to sixty minute staff meeting. Nolan typically spoke first at these meetings, providing a ten minute intelligence briefing. After the meeting was over, Nolan would meet personally with Pershing, and brief him on the most important intelligence highlights. Nolan would also leave highlighted copies of the G-2's daily intelligence summary and its press review for Pershing's perusal later. Furthermore, Harbord established

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[117] Van Deman, *The Final Memoranda*, p. 47.
[118] Cooke, *Pershing and His Generals*, pp. 92-93.

the rule that Nolan, unusually among staff officers, could have immediate access to Pershing whenever he felt that the situation demanded.[119]

At the lower levels, of course, intelligence staffs were smaller and they had less access to and need for large amounts of detailed technical data. Nonetheless, information, at least in theory, flowed not only uphill to GHQ G-2, but also downhill to subordinate units. In order to make this happen, the AEF's intelligence structure penetrated virtually every level of the force. The combat units below GHQ (the armies, corps, divisions, regiments, and battalions, as well as their aviation equivalents), each had an intelligence component.[120] The 'Service of Supply', as Pershing called the organization in charge of the rear area, also had a G-2 office which reported to Nolan. The G-2 SOS focused chiefly on security and counterespionage.

When they came into existence, the army and corps level G-2 sections were still substantial bureaucracies. Though smaller and less high-technology-oriented than the GHQ's G-2, they were substantially removed from the battle. At the division level and below, however, the intelligence personnel found themselves very much caught up in combat. (Nevertheless, even here modern science was brought into play. The Psychology Committee of the National Research Council formed a group during the war to help military intelligence develop 'methods of selecting and training scouts and observers'. Two of its members received commissions and were assigned to intelligence schoolhouses.)[121] This was dangerous work, scarcely different in its risks and day to day nature from that of an infantryman. Intelligence personnel might find themselves guiding infantry into battle, marking lanes through the enemy's barbed

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[119] Ibid, p. 95.
[120] See Chapter 2 for a discussion of the system of 'Branch Intelligence Officers' in aviation units.
[121] Robert M. Yerkes, 'Report of the Psychology Committee of the National Research Council', *Psychology Review*, 26:2, (March 1919), pp. 85 and 138-141.

wire or sitting for hours or days in dangerously exposed observation posts.[122] For instance, 26 men served in the G-2 of the 79th Division. The division spent 47 days in action. During that time, twelve of the 26 men were wounded and three won the Distinguished Service Cross, two of them for staying in a château that they were using as an observation post even when the château itself was being struck by artillery fire. On 4 November 1918, the division G-2 section came under a gas attack which incapacitated all the officers present and many of the men.[123] Similarly, Marine Lieutenant William A. Eddy, the intelligence officer of the 3rd Battalion, 6th Marine Regiment (attached to an Army division) was wounded in the foot at Belleau Wood. Only a few days before Eddy had won a Navy Cross, a Distinguished Service Cross, and a Silver Star for his heroic reconnaissance forays into the wood.[124]

In the division and below, everything had to be done quickly, despite the fact that information was always fragmentary and confused. The AEF's Intelligence Summary provided the daily big picture and often had useful information about German equipment or a new tactic to watch for. Sometimes information would come from the corps level or from artillery observation posts or even from aviation but the divisional G-2 could merely expect 'crumbs' from these sources. Most of the information he would use had to come from those below but even this was no simple matter to 'establish or enforce'. The 'man in the front line who is being subjected to heavy fire and all the intensely wearying pressure of active combat has small patience

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[122] Frederick Louis Huidekoper, *The History of the 33rd Division A.E.F.*, (Springfield: Illinois State Historical Library, 1921), pp. 148, 183.
[123] 'G2 in PC and OP, Intelligence Section, Seventy Ninth Division 1918-1919', n.d. [1919], Joseph E. Kuhn Papers, Box 5, no folder, USMA
[124] Thomas W. Lippman, *Arabian Knight: Colonel Bill Eddy USMC and the Rise of American Power in the Middle East,* (Vista, 2008), pp. 20, 26. During World War II, Eddy served in the OSS where he played a critical role in collecting the intelligence necessary to support Operation TORCH, the 1942 Allied landings in North Africa. He later served as the first American minister to Saudi Arabia and as head of the State Department's intelligence organization under Secretary George C. Marshall.

with a demand from higher authority that he concern himself with' reporting apparently mundane information up the chain. The divisions also played a critical role in gathering intelligence from prisoners. Within the 42nd Division, for instance, capturing units were to get prisoners to the divisional prisoner collecting station within two hours. There, officers, specialists, and a randomly chosen sixty percent of all NCOs and enlisted men were segregated off from the others who were deemed of little intelligence value. The officers and others were quickly dispatched to Corps for interrogation. Division-level G-2 personnel confiscated documents from all the prisoners and read them before sending them on to Corps, as well. At the division level, soldiers' letters were often published in G-2 summaries to illustrate the enemy's morale along with other small pieces of information.[125]

The Brigade S-2's were the key players in ensuring that reporting actually flowed up to the Division G-2. The concept was that they should:

> be used as the coercive element in the collection system. They should be the ones to furnish the impetus and constant pressure required to keep up the search for information uninterrupted and insure its prompt transmission rearwards. Information is not received automatically and the very best of men quickly lose interest and initiative under the pressure of hardship and weariness. It is the overcoming of this natural battle attrition that is the primary duty of the Brigade Intelligence Officer.[126]

Once the information was wrung out of every possible source, the division G-2 had very little time to figure out what it all meant, typically only hours. 'There is no room for tentative hypotheses and we must have no doubts—for if we have them we "awake the drumming guns that have no doubts"'.[127] Therefore, he had to have an

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[125] C. H. Mason, 'Divisional Intelligence in Action', 6 February 1920, NARA, RG 165, Entry 65, 10560-328/165. James J. Cooke, *The Rainbow Division in the Great War, 1917-1919*, (Westport, 1994), pp. 82-84.

[126] C. H. Mason, 'Divisional Intelligence in Action', 6 February 1920, NARA, RG 165, Entry 65, 10560-328/165.

[127] A reference to Rudyard Kipling's poem 'An American' which contains the lines, 'Till, dazed by many doubts he wakes/the drumming guns that—have no doubts'. C. H. Mason,

'exceedingly rapid method whereby if an item of information is obtained it is checked, fitted into the Intelligence mosaic, and the attention of all concerned called to it' in a timely fashion. This last step was critical. Intelligence, after all, was not analyzed for its own sake:

> In the division, Intelligence has but one purpose—that of smashing the enemy and after he is smashed of tramping on him until he is utterly ground into the earth and disappears therein. There is nothing pretty or amiable about the process.[128]

At the lower levels, infantry regiments and battalions, the intelligence function was largely one of reconnaissance, including manning observation posts. Another important function at this level was the conduct of combat patrols, the primary purpose of which was to capture prisoners who could be interrogated, though they would also acquire documents and unit insignia from dead enemy soldiers.

Tactical intelligence, even intelligence of use to Army commanders, was a highly perishable commodity and so it was important that intelligence data be transmitted as rapidly as possible to the commanders who could use it. The fact that the Germans used modern telecommunications means to transmit orders from commanders to subordinates meant that the Americans had to use comparably fast means to transmit their intelligence findings from collectors and analysts up to commanders, lest they fall behind the pace of developments.[129] Thus, Major Joseph Stilwell, the IV Corps G-2, ordered before the St. Mihiel Offensive that a direct cable line connect his corps G-2 office with airfields so that important information from aerial observers could get to him and his staff without delay. If an observation aircraft observed something so urgent that it could not wait until landing, the observer could

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'Divisional Intelligence in Action', 6 February 1920, NARA, RG 165, Entry 65, 10560-328/165.

[128] Ibid.

[129] Sweeney, *Military Intelligence*, p. 45.

write the information down and then drop it in a special 'dropping ground' close to the G-2 office. Stilwell also decreed, that 'at the Aviation Field, preliminary interpretation of photos will be done by the B.I.O.... Anything very important in the interpretation will be phoned at once [to the G-2]'.[130] For their part, during active operations army and corps G-2s were responsible for keeping BIOs informed on a daily or hourly basis as to what information was required. Anything urgent from the corps G-2 would be cabled to the Army G-2 and also lateralled, as necessary to other corps.[131]

In theory, this web of intelligence personnel provided unprecedented assistance to tactical commanders and not just General Pershing, or so the intelligence officers wanted to believe. When the MID interviewed several regimental commanders about the intelligence support they had received, one opined that the intelligence officer was the most important member of his staff. The MID happily disseminated his remarks. This officer said that he viewed the regimental intelligence officer as being in 'command' of the enemy forces and once the intelligence officer told him about the enemy's strength, dispositions, and actions, 'it is a simple matter to make the proper disposition to meet every requirement of the situation'. The intelligence officer had, he thought, taken over the reconnaissance role of the cavalry and the security role of outposts. He was able to provide the commander with a sound estimate of the situation without which the commander 'will inevitably wear out his command in useless vigils and exertions and fail in readiness at the critical moment'.[132]

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[130] IV Corps G-2 to Chief of Staff, 7 September 1918, Joseph Stilwell Papers, Box 8, Folder 5, HIA.
[131] Second Section, G.S. GHQ AEF, 'Intelligence and its Relation to the Air Service', 1 June 1918, NARA, RG 165, Entry 65, 10560-529/58.
[132] United States War Department, Military Intelligence Division, 'An Appreciation of Regimental Intelligence Service', *Information Bulletin,* Washington, DC, No. 4, 15

In fact, however, there was a good deal of befuddlement among less savvy commanders and staff officers as to what the 'intelligence officer' was really for. One officer recalled receiving his assignment from his commander as follows: 'Young man, you are "Regimental Intelligence Officer", whatever the hell that is'.[133] Not surprisingly, then, too many commanding officers were slow to recognize that their intelligence officers had any value at all. When the US First Army was established, it soon became clear that this problem existed within its corps and divisions. Pershing himself acted to get the problem under control, sending Colonel Arthur Conger, Nolan's right-hand man, to inspect the corps and division G-2s that would take part in the St. Mihiel offensive. Conger found:

> a lack of...co-ordination of the second and third sections of the General Staff and the lack of utilization by a number of the divisions and corps commanders and the chiefs of staffs of the information and facilities for obtaining information afforded them by their Intelligence Sections. These defects were remedied in some cases by suggestions to the officers concerned and in other cases by changes in personnel, so that upon the conclusion of hostilities the general staff sections were generally working efficiently and in harmony.[134]

To field officers, intelligence personnel were a highly secretive lot who often seemed to be working only for the benefit of their own organization or else were some sort of exotic creature and certainly not proper military types. Just as the MID came to be regarded in some circles as 'a sort of militarized Sherlock Holmes', intelligence officers in the field found themselves mistaken for military policemen, assigned to investigate robbery, murder, rape, and other criminal doings. Alternately, intelligence

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November 1918, USAMHI. Note the same idea enunciated by Arthur Wagner years before: Wagner, *The Service of Security and Information*, p. 16.

[133] Shipley Thomas, *S-2 in Action*, (Harrisburg, 1940), p. 1.

[134] Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74,Box 6199, Folder 'Report of G.2-A'.

personnel were often mistaken for morals police, or else simply used for 'liaison', i.e. message passing.[135]

Though a few intelligence officers did succumb to the temptation to play Sherlock Holmes, by and large they knew why they existed. Indeed, if anything, intelligence officers at the higher levels sometimes had an inflated sense of their own importance and of the possibilities of intelligence, perhaps a remnant from the days when intelligence personnel were key players in the development of war plans. Following in the footsteps of those aviation advocates who had thought that aerial reconnaissance would lay open the battlefield for inspection, making self-evident the proper next move, some intelligence officers chafed at the short shrift that commanders often gave their reports. They were chagrined when their careful analytic conclusions were outweighed by the commander's hunch which so often proved disastrous.[136] As Walter Sweeney, a veteran of the AEF G-2 and also the former chief of staff of the 28th Division wrote shortly after the war: 'the Intelligence officer does not fulfil his mission if he is content merely to gather the information, go to the work of evaluating it, and then leave it to the G-3 to accept, reject, or ignore as he pleases.' In Sweeney's view, either the G-3 should listen to the G-2 of his own

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[135] G-2 S.O.S., 'History & Critical Analysis of Functions and Operations of G-2 S.O.S.', 15 May 1919, NARA, RG 120, Entry 74, Box 6200, Folder 'Final Report of G-2, S.O.S.'. Sweeney, *Military Intelligence*, pp. 5-7, 138-139. United States War Department, Military Intelligence Division, 'Notes on Divisional Intelligence in the Attack (By a Divisional Intelligence Officer)', *Information Bulletin,* Washington, DC, No. 2, 16 September 1918, p. 23, USAMHI. Thomas, *S-2 in Action*, p. 1. *MID History*, pp. 483-486. Sweeney, *Military Intelligence*, pp. 5-6. C. H. Mason, 'The Collection and Use of Military Information', 20 July 1920, p. 9, RG 8, XING, Accession 1920/125, NHC. Marlborough Churchill, 'The Military Intelligence Division General Staff', *Journal of the United States Artillery,* 52:4, (April 1920), p. 294. John R. Kelly, 'Military Intelligence', n.d. [1919?], Leroy Yarborough Papers, Box 2, Folder 'Lectures on Military Intelligence to the Leavenworth Schools, 1919-1921 and to War College Students 1919, 1924-25, and to AEF France, 1918', USAMHI.
A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161. 'Manual of Law and Procedure for Divisional Counter Espionage Officers', December 1917, War College Curricular Archives, Records Section, File 117-13, USAMHI.
[136] Van Cleve, *Observations and Experiences*, pp. 22, 41.

accord, or he should be forced by regulations to do so. In any event, the intelligence officer had 'the duty of protecting the commander against the issuance of combat orders based on wrong deductions'. If necessary, the G-2 must take the matter up with the commander's chief of staff.[137] Similarly, the G-2 pamphlet 'Intelligence and Its Relation to the Air Service' of June 1918 maintained that it should be a 'basic rule that no order should be issued for active operations until the chief intelligence office...has been acquainted with it'.[138] It was, after all, frustrating for G-2 to know precisely which targets should be bombed, such as a particular railway junction, and be unable to get anyone to actually do it.[139] Nor was the purported utility of intelligence to the commander understood simply in terms of the ability to report accurate information. One intelligence officer who specialized in offensive propaganda recalled after the war that 'entire eastern sectors were officially reported as "held by propaganda alone"'.[140]

Not all operations officers were stupid and not all intelligence personnel were overreaching. In fact, Nolan himself admitted that intelligence personnel deserved more than a little of the blame for this sort of problem as they often 'prided themselves on not knowing anything about their own Army and everything about the enemy'.[141] The solution was to reach out and educate the rest of the staff. A student

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[137] Sweeney, *Military Intelligence*, pp. 134-137. For similar viewpoint, including the idea that operations officers should be 'forced' to pay attention to the G-2, see General Headquarters, AEF[Major J. D. Galloway, Engineers], 'EXPLANATION AND COMMENT On Work in Subsection A-3, A-2, and in Studies of Bombing Objectives', 1 December 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-3 [Enemy Works] G-2, GHQ AEF'.
[138] Second Section, G.S. GHQ AEF, 'Intelligence and its Relation to the Air Service', 1 June 1918, NARA, RG 165, Entry 65, 10560-529/58.
[139] General Headquarters, AEF[Major J. D. Galloway], 'EXPLANATION AND COMMENT On Work in Subsection A-3, A-2, and in Studies of Bombing Objectives', 1 December 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-3 [Enemy Works] G-2, GHQ AEF'.
[140] Heber Blankenhorn, 'The War of Morale: How America "Shelled" the German Lines with Paper', *Harper's Magazine*, September 1919, pp. 510-512.
[141] Nolan, 'History', pp. 333-334.

at the intelligence school wrote in his notebook that 'the first duty of the [Regimental Intelligence Officer] is education propaganda. He must educate the others into knowing what intelligence is'.[142] One document, probably written by Joseph Stilwell, complained that G-2 ranked lowest among the staff sections and was often given inappropriate tasks which the relatively junior officers assigned to the section were in no position to refuse. It urged intelligence officers to take every opportunity to educate their commanders and peers about their proper function:

> It sometimes happens that the other G sections, the chief of staff, and the commanding general have an erroneous idea of just what intelligence is. You must take advantage of every opportunity to set them right on this. Once they understand that the Intelligence concerns itself only with the enemy, your section will be saved all kinds of work that does not properly belong to it.[143]

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Despite the air of novelty that surrounded much of what the G-2 did, many of its functions were very traditional. Nowhere was this more true than in G-2-C, the Topography sub-division, led by Colonel Roger Alexander. This group was responsible for supervising and coordinating topographic surveying; preparing, producing and distributing maps; printing intelligence reports; preparing artillery firing data; and overseeing sound and flash ranging.[144] So wide-ranging were General Pershing's strategic interests that G-2-C not only had to maintain a stock of maps of France, but of many other countries, as well, so that 'military operations on widely

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[142] Undated notebook entry, Robert J. Fischer Papers, Box 1, Folder 1 'Fischer Notebook and Pad', ML. Emphasis in original.
[143] Blind memorandum, 'What is the Matter with G-2?', n.d., Joseph Stilwell Papers, Box 15, Folder 2, HIA. See also in the same collection blind memorandum, 'Notes on Practical Operation of Division G-2 Section', n.d. Box 8, Folder 6. Stilwell, later renowned as 'Vinegar Joe', rose to four star rank and during World War II served as the American commander in the China-India-Burma theatre and then as Deputy Supreme Allied Commander South East Asia Command under Lord Louis Mountbatten.
[144] Sweeney, *Military Intelligence*, p. 115.

scattered fronts or incidents of political significance' could be properly represented.[145] All of this work required the establishment of industrial-scale printing plants, not to mention mobile printing plants carried on tracks that could move with armies and corps.[146]

The French heavily influenced the development of G-2-C and its mapmaking. The Americans decided to use the metric system and the French coordinate system and to make maps of the same type and scale as the French, this before the Allies as a whole decided to adopt the French system. The Americans also acquired many maps directly from the French Geographic Service. In fact, the American demand on this service grew so great that the AEF was obliged to provide one officer and 36 soldiers to work at the French service. Nevertheless, the British were not without their influence; the AEF bought some maps from the British and it used British sound ranging equipment, as well.[147]

When the AEF started to put divisions and then later corps and armies into the line, G-2-C provided training for the topographic sections attached to their various headquarters. [148] Later, G-2-C became particularly important in preparing for the major offensives. In advance of the St. Mihiel Offensive, for instance, G-2-C had to oversee the production and distribution of some fifteen tons of maps (500,000 maps printed, 350,000 distributed) as well as some 2300 oblique aerial photographs. During the Meuse-Argonne Offensive, it was difficult to keep map production running ahead of the advance of the troops. G-2-C also played a role in preparing for possible German action, at one point helping the French map their rear area against

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[145] *United States Army in World War I*, Vol. 13, p. 52.
[146] Sweeney, *Military Intelligence*, p. 115.
[147] *United States Army in World War I*, Vol. 13, pp. 51-54.
[148] Ibid, pp. 53-54.

the expectation of a forthcoming German offensive that might force the loss of that ground.[149]

Despite the long heritage of many of G-2-C's fundamental tasks, advanced technology played a substantial role in the work. The section's official report observed at the end of the war that, 'as airplanes have revolutionized warfare, so the airplane photograph has revolutionized map making'. [150] But this was not high technology's only contribution. G-2-C undertook an early study of the novel arts of flash and sound ranging, the determining of the location of an artillery piece by triangulating on the flash or the sound it made when firing. Seven engineering soldiers were sent to the French school that taught this arcane art. Two graduated. A young American physicist also received a commission and came to France to work on the topic. Eventually flash and sound ranging became critical tools for the AEF in its counter-artillery efforts. [151] Though G-2-C was responsible for the organization, administration and technical supervision of flash and sound ranging troops, the actual tactical employment of these troops was under the control of the artillery units.[152] The sub-division drew heavily on personnel from the Army Engineers and other men with particular technical expertise. Especially important to G-2-C was Major, later Colonel, Glenn S. Smith an Army reservist who had made his career in the U.S. Geological Survey. Smith used his connections to bring in the right men with the right technical capabilities. [153]

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[149] Ibid, pp. 55-56, 78.
[150] Ibid, p. 65.
[151] Ibid, pp. 50-51. For a more detailed account of the birth of flash and sound ranging within G-2-C, see Daniel J. Kevles, *The Physicists: The History of a Scientific Community in Modern America*, (Cambridge, 1995), pp. 126-130.
[152] Sweeney, *Military Intelligence*, p. 116.
[153] *United States Army in World War I*, Vol. 13, pp. 50-51.

Certain parts of G-2-D's work were also longstanding endeavours for European and American militaries. Other parts were quite new. G-2-D, the formal organization of which began on 1 September 1917, was responsible for directing the censorship of the postal, telegraphic and telephonic systems on which the AEF communicated. It also accredited journalists and censored their work; published the AEF's newspaper, *The Stars and Stripes*; oversaw the work of official photographers and artists; and conducted propaganda operations behind German lines.[154]

Ever since the time of Arthur Wagner the U.S. military had understood the importance of controlling what the press reported both to prevent dangerous information from being made available to the enemy and also, on occasion, to provide misleading or otherwise helpful information to the enemy. Nevertheless, Marlborough Churchill, back in Washington, advised Nolan at one point to limit the zeal of his press censors. 'America', he wrote,

> will support the war only if she knows about it....A good correspondent who gets his stuff home quickly is worth a division to the morale over here. The usual military attitude toward these men doesn't help win the war....Censorship is the work of a well-informed, broad-minded man who knows a military secret when he sees it and who knows that the same thing which is a military secret to-day may be safely given out tomorrow. The value of the morale of the people over here cannot be overestimated....I advise sending your press censor man back here for a tour of duty to 'rediscover America'.[155]

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[154] Ibid, p. 81.

[155] Churchill to Nolan, 16 Sept 1918, NARA, RG 165, Entry 65, 10560-235/3. For a similar sentiment expressed by a well-known journalist of the day, see Heywood Broun, *The A.E.F.: with General Pershing and the American Forces*, (New York, 1918), pp. 122-123. It is interesting that Churchill was in quiet agreement with Broun who was known for his obstreperous behaviour toward the censors. The censors tried to make Broun rewrite his very first story that reported that the first American soldier to arrive in France reached the end of the gangplank and immediately asked 'do they allow enlisted men in the saloons in this town'? See Philip Knightley, *The First Casualty: The War Correspondent as Hero and Myth-Maker from the Crimea to Iraq*, (Baltimore: Johns Hopkins University Press, 2004), pp. 138-139.

In organizing its mail censorship, G-2-D drew heavily on advice and assistance 'most willingly and generously offered by British authorities'.[156] G-2-D's postal censorship efforts found, as the official report at the end of the war admitted, 'relatively few attempts at conveying military information for use of the enemy...but many attempts on the part of soldiers to convey forbidden information...[to] their friends and relatives at home." Often the soldier attempted to convey this information in some sort of 'easily detected code'. On 11 July, G-2-D went so far as to establish a chemical laboratory to examine mail for secret writing, duplicating in theatre one of the functions of Yardley's MI-8 back in Washington. Between late September 1918 and early February 1919 when the practice was stopped, the lab examined 53,658 letters for secret writing. Only two were found actually to contain such writing and those were from an Army private writing to his family in allied Italy.[157]

Rather more novel was G-2D's publication of an Army newspaper. This was a function of the new perception of war, in which the morale of the friendly forces was a vital factor and one which was subject to influence by informational means. This perception led to the creation of *Stars and Stripes*, a military newspaper which still exists today. Harold Ross, the founder of *The New Yorker*, and famed writer Alexander Woollcott were among the men who served as journalists for Pershing's *Stars and Stripes*.[158]

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[156] *United States Army in World War I*, Volume 13, p. 109.
[157] Ibid, pp. 111-112.
[158] Jennifer D. Keene, *Doughboys, the Great War and the Remaking of America*, pp. 77-78. For accounts of *The Stars and Stripes* during WWI, see Alfred E. Cornebise, *The Stars and Stripes: Doughboy Journalism in World War I*, (Westport: 1984) and Harry Lewis Katz, *A History of The Stars and Stripes, Official Newspaper of the American Expeditionary Forces in France, from February 8, 1918, to June 13, 1919*, (Washington: Columbia Publishing, 1921). Regarding Woolcott's entry into the propaganda business, see Campanole to Sweney, 'Private Alexander H. Woolcott, M.E.R.C., Base Hospital #8', 29 January 1918, NARA, RG 120, Entry 177, Box 5972, Folder 7.

There are two routes by which intelligence organizations, whose core duties are to observe, understand, and communicate, can find themselves driving or even conducting policy or operations. The first is by dint of greater access to the information that fuels policy and operations. Hence, before the creation of the general staffs in the War and Navy Departments, MID and ONI had played significant, often leading roles in such matters as war planning and the conduct of mobilization simply because they had the necessary data. Later, the flourishing of aerial photography seemed for a time to betoken the merging within modern armies of the command and intelligence functions, as the entire battlefield and the forces upon were to be made visible to the overhead eye.

The second route by which intelligence organizations can move into policy or military or even diplomatic operations is by having greater access to mechanisms that themselves can affect change. In this regard, the ability to conduct clandestine espionage operations, whose clandestinity entailed obscuring the fact that anything had happened, contributed to an important operational capability. First, it provided new opportunities for the conduct of clandestine diplomacy. Secondly, the predisposition toward secretiveness which was only enhanced by the intrinsic nature of clandestine operations and the ability of intelligence services to combat espionage, sabotage, and subversion made them logical tools to carry out other government functions. Furthermore, the inclination and ability to measure the enemy's morale, gave intelligence officers a comparative advantage in conducting propaganda operations. Thus, the war saw the first stirrings of a capability for the United States to

conduct covert action or covert influence campaigns, increasingly important offensive methods in the new type of warfare that had emerged.[159]

With its responsibility for propaganda, G-2-D was perceived to wield a major weapon. Before the US got into combat in a big way, 'it was known that the British and the French were beginning to make extensive military use of propaganda, and most of all it was known what terrific damage had been accomplished by German GQG propaganda among Russian soldiers and later among Italians at Caporetto'.[160] The United States hesitated somewhat in conducting active propaganda against the enemy. Some officers felt that the fact that the Germans were engaged in propaganda meant that the U.S. should not engage in an activity 'thus dishonored'. On the other hand, professional psychologists, operating under the rubric of the Psychology Committee of the National Research Council, leapt into action, forming a 'Committee on "Propaganda Behind the German Lines"' in December 1917, specifically to help the War Department.[161]

Initially the civilian-run Committee on Public Information (CPI), under George Creel, had responsibility for propaganda 'over the lines' from Washington. However, for nine months the CPI did nothing as the AEF steadily built up its

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[159] Mark Cornwall has made this argument with reference to the British and French. It is equally applicable to the Americans. See his *The Undermining of Austria-Hungary – The Battle for Hearts and Minds*, (London, 2000), p. 5.

[160] Heber Blankenhorn to A. L. James, Jr., 'Report on Propaganda Against the Enemy', 14 November 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report on Propaganda against the enemy (G-2-D). Pershing was also very concerned with the threat of propaganda given what he thought had happened at Caporetto. In approximately November 1917, he cabled to the War Department that MID and the Department of Justice should work together, 'supplemented by counterpropaganda through pulpit and press', should prevent propagandizing of American troops who were stateside. Pershing, *My Experiences*, Vol. 1, p. 221.

[161] This committee produced little useful on this subject but did do some work on the maintenance of American morale that led to a number of psychologists being commissioned into the War Department General Staff. Robert M. Yerkes, 'Report of the Psychology Committee of the National Research Council', *Psychology Review*, 26:2 (March 1919), pp. 85, 131-133.

strength and the War Department's disgruntlement grew. In February 1918, Major Charles H. Mason, the head of MI-2, the 'Foreign Intelligence' or monograph section of MID, recommended the 'utilization of the psychologic factor of the strategic situation' and directed Captain Heber Blankenhorn to organize a 'Psychologic subsection' in MID.[162] This subsection established liaison with the State Department, the CPI, and the Inquiry, an ad hoc policy planning apparatus that President Wilson established in 1917. Eventually, on 19 June, 1918 the Army succeeded in wresting responsibility for propaganda against German soldiers away from the CPI so that it could be placed under Pershing. The next day Secretary of War Newton Baker laid down the principle that AEF propaganda must be absolutely truthful. A month later, seven officers sailed for France to get the work under way. They went under the leadership of Captain Heber Blankenhorn who had been the MID's liaison officer to the CPI.[163] (A Psychologic Subsection of MID's MI-2 remained behind, but it focused on writing analyses of foreign government propaganda efforts and 'psychologic estimates' of various countries.)[164]

Among the officers sent to France with Blankenhorn was one Captain Walter Lippmann who later became one of the most influential American journalists and political commentators of the 20th Century.[165] The young Lippmann was already a prominent person and had served for some months as the Secretary of 'The Inquiry',

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[162] During World War II, William Donovan appointed Blankenhorn to lead the OSS' propaganda campaign against the Germans in North Africa, though he only held the position briefly. Jürgen Heideking and Christof Mauch, eds., *American Intelligence and the German Resistance to Hitler: A Documentary History*, (Boulder, 1996), p. 25fn.

[163] Heber Blankenhorn to A. L. James, Jr., 'Report on Propaganda Against the Enemy', 14 November 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report on Propaganda against the enemy (G-2-D).

[164] *MID History*, pp. 255, 258-261.

[165] Lippmann twice won the Pulitzer Prize and is credited with having popularized the term 'Cold War'.

in which capacity he reported directly to Colonel House.[166] In fact Nolan's unpublished memoirs read as if Lippmann had been the leader of the propaganda effort, not Blankenhorn. An occasional adviser to President Wilson, Lippmann liked to tell people that he was the personal representative of Secretary of War Newton Baker and of Colonel Edward House, the President's right hand man.[167] Also serving in the small G-2-D shop were future luminaries such as Arthur W. Page, already a vice president of Doubleday when he joined the service, and Charles Merz.[168]

Arriving in France, Blankenhorn and his group reported to Dennis Nolan who assigned them to G-2-D where they began their propaganda work in August, 1918.[169] The assignment of propaganda to G-2-D made a good deal of sense. The intelligence services were used to dealing in the ephemeral commodity of information and they were most in tune with the enemies' forces and how they might be demoralized, not least because they took the lead in assessing captured documents and interrogating prisoners and deserters. As was the norm for Americans, Blankenhorn and his men studied the French and British propaganda system before establishing their own. The French, they found, fought for tactical advantage, producing a great many different

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[166] In this capacity, Lippmann wrote the first draft of nine of Wilson's famous 'Fourteen Points'. Lippmann was recommended for his commission in the MID by Colonel House, Herbert Hoover, and Assistant Secretary of the Treasury F. H. Rowe. Matthew A. Wasniewski, 'Walter Lippmann, Strategic Internationalism, the Cold War and Vietnam, 1943-1967', (unpublished doctoral dissertation, University of Maryland), 2004, pp. 54-55.

[167] Churchill blind memorandum to accompany letter to Van Deman, 'Memorandum C "Propaganda: In Hostile Countries"', 16/18 September 1918, NARA, RG 165, Entry 65, 10560-235/1. Nolan, 'History', pp. 245-246.

[168] Arthur W. Page, a highly successful businessman, is widely renowned as the father of public relations in the United States. His father was the Ambassador to the United Kingdom during much of World War One. Arthur in December 1941 also did an unspecified one month assignment for William Donovan, then the head of the Office of the Coordinator of Information which was soon reorganized as the Office of Strategic Services. In 1949, he became a member of the board of directors of the National Committee for a Free Europe, a CIA front organization that, among other things, ran Radio Free Europe. See Noel L. Griese, *Arthur W. Page: Publisher, Public Relations Pioneer, Patriot*, (Tucker, 2001), pp. 60-63, 257, 355. Charles Merz later became the editor of the New York Times editorial page.

[169] Heber Blankenhorn, 'The War of Morale: How America "Shelled" the German Lines with Paper', *Harper's Magazine*, September 1919, pp. 510-512.

leaflets of varying types and degrees of 'unscrupulousness'. They were even known to distribute Bolshevik literature. The British, by contrast, played the long game. Having decided that the polyglot Austro-Hungarian Empire was the weak partner in the Central Powers, they had determined to knock it out of the war by inciting ethnic separatism within it. Working closely with the Italians, they then played back in leaflet form to the troops the results of their incitement. The Americans took a middle path, remaining strictly truthful but aiming at tactical objectives, specifically inducing the men of particular German units to surrender at the specific request of American tactical commanders. [170] In accordance with that tactical focus, Blankenhorn wrote later that 'the A.E.F. fought the German in two-fisted fashion: --in one hand, weapons to shatter his armies, soldiers, equipment and organization; in the other, paper weapons to assail his fighting spirit'. This entailed printing some 5 million leaflets and actually delivering 3 million of them.[171]

Though some American officers were suspicious of propaganda as being 'the resort of the failing' or 'tinged red, tainted with radicalism',[172] Blankenhorn came to France with grandiose visions of mounting a 'slow pervasive influence' campaign on political themes that would demoralize the German Army or even the Central Powers as an entirety. As he put it, 'what makes the good German soldier wobble is doubts about the war being worthwhile'.[173] However, he and his men arrived as the AEF was preparing for the St. Mihiel Offensive, the AEF's first big push. So, at the direction of senior commanders, he found himself forced to craft efforts to destroy specific

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[170] Heber Blankenhorn to A. L. James, Jr., 14 November 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report on Propaganda against the enemy (G-2-D)'.
[171] Ibid.
[172] Blankenhorn, 'The War of Morale,' p. 511.
[173] Quoted in Clayton D. Laurie, '"The Chanting of Crusaders": Captain Heber Blankenhorn and AEF Combat Propaganda in World War I', *Journal of Military History*, 59:3 (July, 1995), p. 470.

enemy units.[174] In these efforts Blankenhorn insisted that the leaflets be strictly truthful. At the same time, he realized that the content of the leaflets must be calibrated to the direct interests of enemy soldiers. Accordingly, he assigned Lippmann to interview POWs to find out what made them tick. Most importantly, Lippmann found that the typical German soldier was 'so tired and harassed that his mind...is unreceptive to ideas that involve complicated action rather than immediate personal relief.' With this information in hand, G-2-D produced a series of leaflets between late August and November 1918 appealing directly to enemy soldiers by the use of tactical themes.[175]

An early customer was Major Stilwell of the IV Corps. He was unconcerned about the theoretical left-wing resonances of propaganda and was focused, instead, on a more practical problem. He was upset that because of rumours that the Americans did not take prisoners, few German soldiers were surrendering. Prisoners of war were among the most important sources of tactical intelligence and if enemy troops would not surrender, then it was necessary to resort to extremely dangerous trench raids to snatch them, precisely the sort of operation that got intelligence personnel killed. In late August, Stillwell came to G-2-D seeking a solution to his problem. Blankenhorn recalled that the 'shop wasn't open yet' but that nevertheless, he soon began to sell 'propaganda over the counter like so much meat'. Blankenhorn offered a leaflet which reproduced part of AEF General Order 106 which outlined the proper treatment of prisoners. On the reverse side was a description of the daily ration that prisoners could expect to receive while in American custody. Two thousand copies of this leaflet were thrown into enemy trenches by patrols or dropped from aircraft. Stillwell found the results to be outstanding and wrote to Nolan to express his thanks. He

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[174] Ibid, p. 467.
[175] Ibid, pp. 468-469.

remained an enthusiastic fan of the AEF's propaganda capability. Unfortunately for him, however, the word of this success spread and the AEF on 6 September ordered the First Army to 'utilize all means...to distribute propaganda leaflets widely'. Demand increased, temporarily swamping G-2-D's ability to respond.[176]

During the waning weeks of the war, as the German positions began to collapse in November and as Germany itself sank into political chaos, Blankenhorn finally got his wish to try to subvert Germany itself. By late October, he found that he was simply 'publish[ing] to the Boche what the President says; he writes all our leaflets now.' G-2-D also started to focus on particular minority groups within the Central Powers' armies: trying to fan nationalist sentiments among Bavarians and natives of Alsace and Lorraine.[177]

The Americans found that leaflets could be most cheaply and accurately delivered by artillery shell for areas up to ten miles behind the front line. Patrols could also carry leaflets with them. For targets at greater distance, they put balloons and aeroplanes into service, though this was done over the objection of Billy Mitchell, the commander of the 1st Army Air Service. Despite Mitchell's hostility, Blankenhorn persisted, appealing directly to Mitchell's pilots, a move which led Mitchell to threaten him with court martial.[178] Back in Washington, the MID funded research into the best means of dispersing leaflets from balloons and at one point proposed to the Chief of Staff of the Army that 6500 balloons be procured to disseminate propaganda.[179] The Military Attaché in the Netherlands even used its

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[176] Ibid, pp. 466-467.
[177] Heber Blankenhorn, *Adventures in Propaganda: Letters from an Intelligence Officer in France*, (Boston, 1919), p. 122. Laurie, 'The Chanting of Crusaders', p. 470.
[178] Laurie, 'The Chanting of Crusaders', p. 475.
[179] Blankenhorn, 'The War of Morale', p. 513. *MID History*, pp. 262-264. For a brief discussion of the specifics of this research, see Robert A. Millikan, 'Some Scientific Aspects of the Meteorological Work of the United States Army', in Robert Mearns Yerkes, ed., *The New World of Science: Its Development During the War*, (New York: The Century Company,

'lines' of clandestine agents reaching into Germany to disseminate leaflets which were specially prepared in Washington.[180]

G-2-D also tried to gauge the success of its propaganda efforts. This of course, was difficult to do. Unfazed, Blankenhorn framed the problem with comparison to the combat arms:

> Who will venture, at this date, to calculate the part played in winning the war by a specified battery? Who will give the percentages of victory due to any arm of the service, the air service, for example, or the tanks...How much more difficult is it, then, to weigh imponderables, states of army morale, and the ideas which influenced them. As between the effects of leaflets and shells it must be noted that shell-fire worked in plainer view. It will be hard indeed to put a yardstick to results produced by leaflets picked up unobserved, pondered unobserved, and, even if acted on, probably denied by the German who surrendered.[181]

Though his colleague Arthur Page was sceptical, Blankenhorn noted that a remarkable 4% of leaflets dropped came back carried by deserters or prisoners.[182] In addition, he recalled after the war that 'Allied Intelligence reports were filled with letters written by German soldiers before capture or by their home-folks, whose expressions often paralleled the statements in our leaflets; often the letters referred directly to the [U.S.-produced] *Flugblaetter* as the authoritative source of information'.[183] Despite the inability to draw scientific conclusions, Blankenhorn and

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1920), pp. 55-58. The air delivery of leaflets into denied areas later became a staple of Cold War intelligence operations. See, for instance, Sarah-Jane Corke, *US Covert Operations and Cold War Strategy: Truman, Secret Warfare, and the CIA, 1945-1953*, (New York: Routledge, 2007), pp. 51, 79, 100-101; and Johanna Granville, '"Caught with Jam on Our Fingers": Radio Free Europe and the Hungarian Revolution of 1956,' *Diplomatic History*, 29:5 (November 2005), pp. 815, 818-819.

[180] *MID History*, p. 264.

[181] Blankenhorn, 'The War of Morale', p. 523. For a similar assessment of the value of propaganda, comparing it to the value of artillery, see 'Conference of US Military Attaches at the Hague 16-19 July, 1919, inclusive. (Re. Organization and Administration of duties of Military Attache', RG 8, Accession 1991-372, File XINA, NHC.

[182] On Page's skepticism, see Griese, *Arthur W. Page*, p. 62.

[183] Laurie, 'The Chanting of Crusaders', p. 476. Blankenhorn, 'The War of Morale', p. 523.

his associates interviewed many German POWs to get some sense of the effects of the propaganda and they tried to apply a scientific method in doing so.

> The attitude taken by all these [American officers interviewing the prisoners] was not one of hopefully looking for decisive propaganda effects, but rather one of scepticism, especially over various prisoners' statements that they surrendered because of the leaflets, but such testimony was considered of secondary value compared with the testimony of prisoners who admitted they had read the leaflets, denied that the leaflets had anything to do with their surrender, but in giving their reasons for surrender dwelt heavily on the identical things the leaflets told. The Section's interrogators primarily concerned themselves with analysing the increasing demoralization evident in the German Army and only secondarily with proving the relation of these cases to the leaflets sent over. The leaflets were never the first topic of these interrogations, they came in incidentally."[184]

In any event, Blankenhorn felt sure that he and his men had made a useful contribution to the total war effort and at the end of the war he reported to his superiors that 'In sum, the evidence... justifies this statement: The A.E.F. leaflets contributed to that atmosphere of defeat which pervading the German Army and nation, brought the foe to book on Nov. 11th'. It was with a great sense of personal accomplishment that on 9 November 1918, with armistice negotiations already underway and revolution afoot in Germany, Blankenhorn wrote to the chief of G-2-D, to recommend that the propaganda campaign be stopped immediately: 'It has been too successful'.[185]

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G-2-B, responsible as it was for what was then called 'secret service work', an amalgamation of espionage and counter-intelligence (especially counter-espionage) work, had to overcome some distinctly unfavourable opinions held by other American military personnel. Dennis Nolan, though not disdainful of such work, found that G-

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[184] Heber Blankenhorn to A. L. James, Jr., 14 November 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report on Propaganda against the enemy (G-2-D)'.
[185] Blankenhorn to Chief, G-2-D, 9 November 1918, reproduced in ibid.

2-B was 'but a minor part' of the AEF's intelligence work.[186] The views of some other officers were more pointed. Joseph Stilwell, the G-2 of the IV Corps, alluded to these views when he welcomed a class of new battalion and regimental officers by admitting that the 'average general impression' held of intelligence officers was still based on outdated pre-war stereotypes.

> Another stage our intelligence service passed though was the gumshoe period, when the intelligence officer was visualized as a person who said 'Hush' and went around in civilian clothes and false whiskers. The net result of investigations was usually that there were some Mexicans playing Monte at La Paloma, or that war with Japan would break out the second Monday after Lent. Occasionally he would recommend the dragging of Manila Bay for mines.[187]

The responsibility for counterintelligence fell primarily to G-2-B, though it found important partners in this work in G-2 S.O.S. and in the office of the Naval Attaché in Paris. Another useful source of counter-intelligence information was the Inter-Allied Bureau in Paris. This was a liaison office, open to all the Allies. The AEF G-2 sent Captain Royall Tyler to be its representative there. Though political, economic, and other data was passed through the Bureau, it was most useful as a clearing house for counterintelligence information. Tyler would pass on counter-intelligence information and in return, received information on enemy intelligence personnel, methods, and organizations, not to mention information from French postal and telegraphic censorship. Perhaps most importantly, the Inter-Allied Bureau maintained a combined 'suspect list'.[188] Unhelpfully, the US Naval Attaché in Paris was denied membership in the Inter-Allied Bureau on the grounds that it was a strictly 'military' i.e. non-naval body. Nevertheless, the attaché received full cooperation from Royall Tyler whenever he requested information available at the Bureau and the

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[186] Nolan, 'History', p. 178.
[187] Untitled, unsigned, undated lecture for new battalion and regimental intelligence officers, Stilwell Papers, Box 15, Folder 2, HIA.
[188] Nolan, 'History', p. 202.

Attaché's office made great use of the suspect list in checking up on crew members of ships arriving in France.[189]

The counterespionage system within the AEF was considered very secret, just as counterespionage efforts in the units had been back in the United States. Originally, it had been intended that at the division level and below counterespionage personnel would not be witting of counterespionage elements above them except for the person to whom they reported. However, this proved impracticable. Many of the people engaged in counter-espionage work were not intelligence personnel in a formal sense. Rather, they were ordinary soldiers with other functions who had been co-opted without compensation to conduct this additional duty. There was, roughly speaking, one co-opted soldier for each platoon, perhaps some 40-50,000 overall.[190] Inevitably, some of these agents would die in combat, so a division's counter-espionage organization would always have to be overhauled when the unit came out of the line.[191]

This secrecy that surrounded the AEF's counter-espionage system may have held down the number of arrests and convictions. One officer recalled after the war that despite the mythology that there were no 'arrests [of AEF personnel] for treasonous acts', this was not true:

> There were a few arrests and, so far as I have been able to learn, just one conviction. However, there should have been more arrests and trials than we really did have. The fact is, we seldom could produce evidence sufficient to convict without revealing the existence of the Contre-Espionage System. Such revelation would have proved its undoing.[192]

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[189] 'History of Naval Attaché, Paris', pp. 90-91, FDRL.
A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.
[190] Johnson, *Our Secret War*, pp. 93-94.
[191] J. S. S. Richardson, 'Contre-Espionage in the AEF', 26 January 1920, NARA, RG 165, Entry 65 10560-328/162.
[192] Ibid.

In truth, none of these American organizations, like their counterparts in the United States, actually caught many spies but they saw 'contre-espionage' as fundamentally deterrent in nature, 'prophylactic as a tooth brush', so they did not deem this a failure. The official history of the Naval Attaché's office in Paris noted that 'the mere fact that one does not...actually succeed in arresting spies, and having them convicted and shot, must not be regarded in the slightest degree as discouraging'. The German spy service was very active, the Naval Attaché thought, so the 'greatest importance [of counter-espionage] lay in its negative consequences'.[193]

The American Army in France was an expeditionary force operating far from home in a foreign country. This fact conditioned the counter-intelligence problems facing the Americans in the rear area. Firstly, the ships bringing American troops and supplies to France had to be protected from the German navy. Of course, much of this burden fell on the U.S. Navy and the Royal Navy which were responsible for protecting transport ships from German U-boats. This involved much more than intelligence, notably the organization of a convoy system, and the provision of escorts. However, the Allies, which is to say the British, had a secret weapon that it used to great effect in the anti-submarine campaign. Twenty years before, the US Navy, trying to track Admiral Cervera's fleet, had been forced to rely on land-bound 'spies' and a two yachts rented by two enterprising ensigns who unsuccessfully tried to shadow the Spanish ships. Now, however, primarily through the courtesy of their British ally, the US Navy was able to bring to bear a potent mix of human and also

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[193] 'The IO in a Division: Lecture by Capt. Fisher', 5 November 1918, NARA, RG 165, Entry 65, 10560-328/127. *MID History*, p. 1639. 'History of Naval Attaché, Paris', p. 84, FDRL.
For a similar view about counterintelligence from the British perspective of this time, see Christopher Andrew, *Defend the Realm: The Authorized History of MI-5*, (New York, 2009), pp. 76-77.

technical resources to provide intelligence of a precision that would have been incomprehensible during the Spanish-American War. Typically German submarines would communicate daily by radio with their headquarters. Though these communications were encrypted and the British NID might or might not be able to read their content, the British could locate each submarine quite accurately by means of 'direction-finding' using a sophisticated system of radio receivers. Though the NID would supplement the information from direction-finding with other less comprehensive and less reliable sources such as agent reports, it was able to locate the majority of German submarines at sea every day.[194]

Counter-intelligence also played a role in helping ships get safely across the Atlantic. The intelligence authorities deemed it urgently important to prevent spies on the European side of the ocean from learning the sailing dates of ships. Back in Washington, ONI and the MID agreed that naval authorities would conduct all overseas work connected in any way with the sea and the Army would do the rest, so this function fell largely to the Navy, specifically the Naval Attaché's office in Paris.[195] Formally this office reported, of course, to ONI back in Washington, but it also reported *de facto* to Admiral Henry Wilson, the US Navy's senior commander in France, and Admiral Sims, the Commander-in-Chief of U.S. Naval Forces in Europe, whose headquarters was in London. Secondly, the rear area within France itself, with its long lines of rail and road communication, had to be secured against spies. This was primarily the work of the G-2 of the AEF's Service of Supply (S.O.S.). Where they came in proximity to each other, namely at the major French ports on the Bay of Biscay, the two services worked together admirably, in one city even working out of

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[194] John Langdon Leighton, *Simsadus: London: The American Navy in Europe*, (New York, 1920), pp. 102-108.
[195] 'History of Naval Attaché, Paris', p. 15, FDRL.

the same building.[196] Then, for counter-intelligence and counter-espionage within the forward forces themselves, G-2B had primacy, overseeing a web of officers and informants reaching all the way down into the tactical units.

The office of the U.S. Naval Attaché in Paris was responsible for maritime-related security issues in and to the rear of France. Its responsibilities included 'the protection of the transports coming overseas, enquiries into the naval activities of the enemy, submarines, shipbuilding, [and] docks'. They also included the 'inspection and surveillance of persons leaving France for America, and persons arriving from America in France naturally involved the thorough inspection of crew lists'. Finally, there was 'the surveillance of the west coast of France with a view to preventing communications between spies and enemy submarines.' This meant the establishment of intelligence posts at ports and maritime areas all over France and two major offices at Nantes and Bordeaux. [197]

The Navy employed a wide variety of personnel, ranging from uniformed officers to unpaid civilians, to do its counterintelligence work. Thus, in the spring of 1918, the attaché's office dispatched an unpaid civilian volunteer to Biarritz to help secure the west coast of France against the espionage threat. Another Navy civilian soon was sent to join him. These men found the situation alarming, with control of the nearby Spanish border (land and sea) so lax that spies could easily come and go, so they recommended the establishment of a naval intelligence office there. This was subsequently done and a lieutenant assigned there; however, he reported that as a singleton he could do little. Besides, the French asserted that they had authority over all people coming and going other than Allied servicemen. [198]

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[196] Ibid, pp. 128-137.
[197] Ibid, p. 137.
[198] Ibid, pp. 80-81.

The possibility that spies in France might be communicating with German submarines just off the coast of Brittany was a matter of particular concern to the U.S. Navy. On 13 December 1917 Admiral Sims reported that the last five convoys bound west had been attacked at approximately the same location in the ocean. 'It [was] believed possible that enemy agents used Belle Isle as a signal station to advise their submarines'. The telegram concluded, 'can you make secret investigation or will the French do it'.[199]

This particular request led to the dispatching of further personnel from the U.S. to be dedicated to the problem. Among other measures, the attaché established an office at Nantes to handle the matter. This office, under a man referred to in the official history as 'Z', employed three retired French detectives and was housed in the same building as a local French service so that the two organizations could work 'as closely as possible' together. The office even supplemented the budget of that French office for the first three months of 1918. 'Z' soon determined that two methods of communication were possible: radio and fishermen. The French were alive to the dangers of radio, but were doing little to deal with the problem of fishermen. 'Z', therefore, began to employ French fishermen as well as Argentine fisherman who operated off the French coast. In the end, his network (not just Argentines) included 34 leading fishermen who went to sea and 5 "supervisors who remained on shore." The fishermen operated out of 21 different ports and reported weekly on what they had seen during the course of their normal work. The supervisors were 'selected mostly from retired French Naval petty officers and pilots living on the coast'. They wrote reports when the fisherman were too uneducated to do so. 'Z' also

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[199] Ibid, p. 133. 'Blindfolding the Hun by a Lieutenant U.S.N.R.F', n.d., NARA, RG 38, Entry 98, File E-5-c, 10848. A handwritten annotation on the cover of this pamphlet indicates that the author was named 'Munn'.

experimented with various systems by which the fishermen could communicate with shore or patrol craft when they had information that should be reported immediately, for example when they had sighted a submarine. Alongside his network of fishermen, 'Z' employed two detectives whom he recruited from the *Police Judiciares* in Paris. These men investigated all reports that came from anywhere in the French 11th Army region within which Nantes fell. He also shared them with the *Bureau Centrale de Renseignement* (BCR), the office of the French internal service that covered the 11th Army Region, which was constrained by law from employing such agents for its own direct use.[200]

Despite its close cooperation with the French authorities, the Navy did not let them in on everything. As early as the summer of 1917 the Naval Attaché created a 'bureau' to investigate suspects. William Astor Chanler, a member of the famous and wealthy Astor family, took charge of this 'bureau', the existence of which was disclosed to no-one. The work of Chanler's bureau seems to have entailed a great deal of contact with hotel managers and employees, but none of Chanler's 'agents', let alone their sources of information, were told that they were ultimately working for the U.S. Naval Attaché.[201] The Naval Attaché also created a unilateral contre-espionage service in particularly important coastal areas run by several civilians who were referred to in the official history only as 'R', 'S', 'T', and 'U'. These personnel reported on conditions at the coast. For instance, at one point 'U' reported that 'loose talk' about convoys departing from Brest seemed to be getting to German ears. Security personnel soon zipped those lips.[202]

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[200] 'History of Naval Attaché, Paris', pp. 142-148, FDRL.
[201] Ibid, pp. 92-93. It is not clear what story the sources were told, but this sounds like an early American use of a recruitment technique known as the 'false flag', whereby a source is led to believe that he is spying for one entity when, in fact, he is spying for someone else.
[202] 'History of Naval Attaché, Paris', pp. 138-139, FDRL.

Within the Army context, overall responsibility for the rear area, which primarily meant for supply, logistics, and counter-intelligence, fell to the AEF's Service of Supply (S.O.S.). In December 1917 the G-2, S.O.S., was created, subordinate to General Nolan the AEF GHQ G-2 but residing within the S.O.S. The duties of G-2 S.O.S were 'contre-espionage' and the maintenance of a registry of all Americans in France. The G-2 S.O.S. himself, Major (later Lieutenant Colonel) Cabot Ward, viewed the organization as a 'protective screen' for the forces in France.[203] This meant finding spies and propagandists and investigating the background of every civilian whom the AEF proposed to employ. Also G-2 S.O.S. was to 'control' the movement of civilians in the rear area so as to keep them from moving about too freely and collecting sensitive information along the AEF's lines of communication. This meant checking papers on roads, establishing controls at railroad stations and ports, and censoring soldiers' letters and telegrams. Eventually, the G-2 SOS found it possible to keep a watch over all suspicious persons or undesirables who tried to circulate within areas of concern to US forces. The organization also placed secret agents at S.O.S. headquarters in Tours, in aviation centres, and other important units and organizations. From these vantage points they guarded against sabotage, and kept a close watch over morale and over foreign born American servicemen, some of whom it arranged to have sent home for internment.[204] It also maintained a presence on the Swiss border at Pontarlier and Bellegarde, not to mention stations in London, Southampton, Glasgow and Liverpool and one jointly

[203] G-2 S.O.S., 'History & Critical Analysis of Functions and Operations of G-2 S.O.S.', 15 May 1919, p. 5, NARA, RG 120, Entry 74, Box 6200, Folder 'Final Report of G-2, S.O.S.'.
[204] Ibid. See also Van Deman, *The Final Memoranda*, pp. 51-52.

with the French, British, and Belgians at Evian-les-Bains.[205] In its operations, G-2 S.O.S. often worked, usually cooperatively, with the Naval authorities.

Both the Army's and the Navy's work entailed very close dealings with the allied intelligence personnel. The G-2 S.O.S. described the benefit of learning from the British as 'impossible to overestimate', but, as a practical matter, cooperation was much closer with the French simply by virtue of geography. G-2 S.O.S.' dealings with the French security services after much work became 'close and cordial'. The Naval Attaché was even known to assign personnel to French intelligence organizations and supplement French intelligence budgets. The Navy also employed some French detectives. That said, both the G-2 S.O.S. and the Naval Attaché's office complained after the war about their French partners. The Army found the French inefficient whereas the Navy found the French all too often corrupt and politicized.[206] G-2 S.O.S. also found continuous contact with the civilian population to be very helpful, not only for gauging the general mood on the street but also because it occasionally provided useful counterespionage tips.[207]

From time to time the work did turn up spies or other malefactors. For instance, G-2 S.O.S. found that three Spaniards who were constructing a hospital camp at Beaune were also conducting a campaign of defeatist propaganda. The AEF succeeded in inserting one of its 'intelligence police' into their midst. Apparently the

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[205] A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.

[206] 'History of Naval Attaché, Paris', pp. 37, 128. FDRL. G-2 S.O.S., 'History & Critical Analysis of Functions and Operations of G-2 S.O.S.', 15 May 1919, pp. 38-40, 96, NARA, RG 120, Entry 74, Box 6200, Folder 'Final Report of G-2, S.O.S.'.

[207] G-2 S.O.S., 'History & Critical Analysis of Functions and Operations of G-2 S.O.S.', 15 May 1919, pp. 38-40, 96, NARA, RG 120, Entry 74, Box 6200, Folder 'Final Report of G-2, S.O.S.'.

Spaniards enlisted their undercover *compadre* to convey 'important military information' back to their masters in Spain.[208]

Then there was G-2-B itself, which set counterintelligence policy for all of the AEF. This division of Pershing's staff performed counter-intelligence functions directly and also oversaw a web of counter-intelligence personnel reaching down into the tactical units. G-2-B indexed suspects or undesirables, disseminated counter-intelligence information, obstructed the return of refugees into areas near the front where they might hamper the troops, prevented leakage of information by interrupting 'civilian [traffic] circulation near the front during periods of great military activity', carried out some counter-espionage related censorship, ran the Corps of Intelligence Police, dealt with passes, worked with the State Department on passport control, and examined the bona fides of clerical assistants and labourers 'employed by the different departments'.[209]

G-2-B also published a 'G-2-B Bulletin' which was considered a sensitive document, but which nonetheless was written in a 'semi-humorous vein' in order to ensure that it would be read. Sometimes the Bulletin would include editorials in which the intelligence officers obliquely published 'hints' as to what types of 'corrective measures' might be useful to deal with this problem or that. G-2-B also connected directly with the counter-intelligence personnel in the armies, corps, and divisions. Each division and separate unit sent weekly reports about morale up to G-2-B which scrutinized them carefully for any signs of an unexplained 'lapse' in morale. From these reports, G-2-B prepared a digest for General Pershing. This, too, often included recommendations for remedial action. Pershing apparently read it

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[208] Ibid, pp. 29-30.
[209] A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.

diligently, and the G-2-B personnel felt that he was responsive in following at least their 'important' recommendations.[210]

In a fascinating reflection of the tensions that existed between 'the American way' and the security needs of a modern nation at war, one counter-intelligence officer told his MID colleagues after the war that:

> It is a fact not generally known that the secret of the conceded military efficiency of the Bolshevik Army today lies in the operation within its ranks of a Contre-Espionage System almost identical with the system which we had [in the AEF]. The only difference is that in the Soviets' system is vested an enormous measure of authority. The testimony of a Commissar, as the Contre-Espionage echelon heads are called, before a mobile and all-powerful court known as the 'Flying tribunal', requires no corroboration. Of course such extravagance of vested authority is only in keeping with the Bolshevik theory of utilizing all means possible to bend the masses to the fanatic will of the dictatorship....The success which has greeted the Russian arms I think demonstrates that the mechanism of the Contre-Espionage system is sound.[211]

Within the infantry divisions themselves, the division G-2 handled counter-espionage, using much the same system in France as was employed in the camps back in the United States.[212] The security issues within the divisions did not always involv enemy activity. For instance, Colonel Aristide Moreno, the G-2-B chief, recalled after the war that:

> It was through this divisional organization that discovery was made of the movement among negro troops to organize for the purpose of establishing equality between the negro and white races in the United States. This information hastened the return of negro troops and was immediately transmitted to MID, thus enabling the authorities at home to prepare for race riots which broke out later in Washington and Chicago.[213]

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[210] J. S. S. Richardson, 'Contre-Espionage in the AEF', 26 January 1920, NARA, RG 165, Entry 65 10560-328/162.
[211] Ibid.
[212] See Chapter 3. See also A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.
[213] A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.

After the war the function of G-2-B evolved. No longer was the maintenance of the secrecy of military plans and operations the priority. Now it was imperative to keep in touch with the morale and political leanings of the American troops to keep down the possibility for disturbances. Previously German artillery bombardment had kept the soldiers distracted, but now things like the weather and inadequate accommodation could cause unhappiness. Even more important was the need to 'combat the spread of Bolshevistic doctrine' and the influence of the IWW.[214] The *G-2-B Bulletin* of 16 November 1918, the first after the Armistice, set the tone:

> With the close of actual hostilities another phase of military activity commences, one in which the C[ounter].E[spionage]. officer must face new problems and new conditions no less difficult than those already met and overcome. The splendid morale of the American Army, which has been worthy of the nation and the flag, must be maintained and it is peculiarly the province of the Intelligence Service to keep its finger on the pulse of the Army in this regard and by reporting promptly on dangerous tendencies, make it possible to meet them in time....The definition of 'Suspect, Enemy Agent or Sympathizer' does not change with the suspension or cessation of hostilities. The only change wrought is in the source of enemy activity which becomes broadened....German militarism has capitulated, but German Bolshevism has gained many allies....It is the avowed intention of the fanatic leader of Bolshevism to contaminate the troops of the Allies....The madness which destroyed Russia and spreads rapidly Westward may constitute a serious menace to our own forces during the trying period of occupation and the no less trying period of demobilization. C.E. officers everywhere must realize this danger and lay their plans accordingly.[215]

In this immediate post-war period, G-2-B paid attention to French and German public opinions about the Armistice, helped arrested residual German agents in

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[214] Ibid.
J. S. S. Richardson, 'Contre-Espionage in the AEF', 26 January 1920, 10560-328/162.
[215] 'Bulletin for Intelligence Officers, AEF, G-2(b) General Headquarters, November 16, 1918', NARA, RG 120, Entry 181, Box 6388, Folder 'Bulletin for Intelligence Officers 9 Nov 1918-21 Apr 1919'.

France, and even penetrated the Spartacus League in Dusseldorf, in order to thwart its efforts to spread Bolshevism among the troops occupying Germany.[216]

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The core of the AEF G-2 was to be found in G-2-A and G-2-B where most of the AEF's intelligence collection and analysis took place. One veteran likened these to 'services of supply' such as the Quartermaster and the Ordnance Services. This officer elaborated the analogy further, noting that some services of supply received their commodity 'already manufactured and ready for issue' while others, such as the Ordnance and Chemical Services, acquired their own raw materials and constructed (or at least oversaw the construction of) the commodity themselves. The G-2 was more like these latter two services, but with one crucial difference that made its work particularly difficult. Whereas these other services could acquire their raw materials in the safe rear areas, typically in the United States itself, the G-2 had to acquire its raw materials from the enemy who, of course, was busily trying to thwart such efforts.[217]

Modern realities of war required a systematic approach to intelligence, both collection and analysis. The sheer volume of increasingly technical information available required large staffs.[218] It also led to the accumulation of numerous and sizeable card files. The AEF G-2 used card files for many purposes, including cross indexing things such as translated foreign documents; French and British periodicals; German symbols, proper names and place names appearing in intercepts; as well as to store data on German airfields; prominent German pilots; and Bolsheviks.

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[216] A. Moreno, 'G-2-B in the A.E.F.', 23 January 1920, NARA, RG 165, Entry 65, 10560-328/161.
J. S. S. Richardson, 'Contre-Espionage in the AEF', 26 January 1920, 10560-328/162.
[217] Sweeney, *Military Intelligence*, pp. 24-27.
[218] See Chapter 2.

As the existence of these card files suggested, an understanding of the enemy's situation and intentions could most often be acquired through the careful study of many small facts, not the acquisition of a few large and dramatic facts. Finally, modern means of communication made it possible to have this information in the hand of commanders in a timely fashion, much faster than a messenger could have run or galloped his horse in earlier times.[219]

Reflecting these ideas, Nolan thought G-2A not only the largest but also the 'most important of our divisions' in G-2.[220] He placed it in the hands of Colonel Arthur Conger. Conger had originally been assigned to the operations section, but the G-3 found him such a difficult personality that he was more than happy to give him up to Nolan, who saw great promise in this former instructor at Fort Leavenworth who had studied in Berlin—even attending lectures by the great military historian Hans Delbrück—and done intelligence work during the Philippines War.[221] Under Conger, G-2A was that section of G-2 that most immediately and directly served the needs of Pershing and his subordinate Army, Corps, Division and even regimental and battalion commanders.

The AEF's G-2-A was the central point at which the masses of information from G-2s and S-2s at the lower tactical levels, the espionage information from G-2-B, and the information acquired by G-2-A's own collection means, (particularly signals intelligence from G-2-A-6 and imagery intelligence from G-2-A-7), all came together.[222] Here analysts did battle with the forces of uncertainty. As Robert

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[219] *MID History*, p. 421. Sweeney, *Military Intelligence*, pp. 44-45.
[220] Nolan, 'History', p. 93
[221] Nolan, 'Comments', pp. 28-29. Arden Bucholz, 'Introduction: Delbrück's Life and Work', in Hans Delbrück, *Delbrück's Modern Military History* (Arden Bucholz, ed. and trans.), (Lincoln, 1997), p. 34. Mark Ethan Grotelhueschen, *The AEF Way of War: The American Army and Combat in the First World War*, (unpublished Ph.D. dissertation, Texas A&M University), 2003, p. 174.
[222] Sweeney, *Military Intelligence*, pp. 108-109.

Fischer, a student at the intelligence school at Langres, scribbled in his notebook, ''Absolute definite info is always lacking'. However, 'you don't need it'. There were little bits of data lying all about, particularly in 'open warfare', that could allow one to deduce the enemy's intentions.

> Don't forget that in open warfare everything he does means something; in open warfare everybody is tired, nobody does anything unless ordered & then there is always a good reason; then from his activity you can deduce what his intentions are. Therefore when you get info on enemy activity ask immediately why WHY WHY. Think from standpoint of commander of that oppos[ing] Division.[223]

It was not only helpful to consider why an opposing commander would have ordered such an action, but also to bring to bear multiple sources of information upon the question. An official AEF manual on intelligence and the Air Service phrased it this way:

> The details seen by a single observer may seem insignificant, but when considered in connection with the information from other intelligence sources may assume great importance. Evidence from more than one source is necessary in order to prove a conclusion, and upon correct conclusions rests lives and the success of armies.[224]

Doing this sort of work required bringing together many sources of information, ranging from the high technology of aerial photography and signals intelligence to the time-honoured methods of prisoner interrogation. One officer described the flood of information as a 'terrific jumble... concerning so many different subjects and objects, and...some sections of it are always contradictory'. Figuring out what it all meant (if anything) involved 'brain-wearing' labour.[225]

Of course, good intelligence officers realized that technical expertise could overcome this challenge. Nolan thought that the people responsible for 'sifting' facts

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[223] Undated notebook entry, Robert J. Fischer Papers, Box 1, Folder 1 'Fischer Notebook and Pad', ML. Emphasis in original.
[224] Second Section, G.S. GHQ AEF, 'Intelligence and its Relation to the Air Service', 1 June 1918, NARA, RG 165, Entry 65, 10560-529/58.
[225] Porter, *Aerial Observation*, p. 39.

from 'the mass of rumors, statements of prisoners, captured documents, broken codes, misleading propaganda, false reports sent by the enemy intelligence to mislead, etc., and so forth' should be 'the most skeptical in the army, accepting nothing without proof. A gullible mind has no place whatever in an Intelligence system and should be eliminated at once'. In particular, he thought that 'military men trained in historical research, newspaper men of long training who can spot propaganda, and generally the skeptically minded group, have good preliminary training for this work."[226] Others agreed that technical expertise was required.

> Such a large part of the information gathered is unreliable, inaccurate, trivial and unimportant, or without meaning until it has been compared with other known and determined facts, that it is necessary that experts and specialists qualified for the duty shall examine, test, and sift out all information received so as to be certain that the important and significant facts relating to the strength, location and movements of the enemy are duly classified and recorded.[227]

These specialists could be relied upon to provide the commander with insights into the enemy's strength and intentions such as no commander had had before.

> This war has been responsible for the development to a hitherto unknown degree of the science of military intelligence. Whereas previous generals have been content to learn of large enemy movements with questionable accuracy from their spies, and of a number of minor unrelated details from the occasional capture of prisoners or documents, it has become possible through the careful exploitation of all sources of information for Commanders in the present war to reconstruct the major part of the enemy's organization and intentions with dependable completeness.[228]

Not only was there an unprecedented amount of data to process, but an unprecedentedly wide range of questions needed to be answered with it. Certainly, positive intelligence personnel continued to answer such questions as 'where are the enemy forces?' and 'in what direction are they moving and in what strength?' But

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[226] Nolan, 'Comments', p. 136.
[227] Sweeney, *Military Intelligence,* p. 127.
[228] *Gorrell History*, Series M, Volume 2, Alfred R. Bellinger, 'Relations of the Air Service with G-2', n.d.

they now found themselves having to answer a whole range of additional questions that arose as a result of the broadened nature of war. One of the first substantive assignments that General Pershing gave to his intelligence officer, Brigadier General Dennis Nolan, was to estimate the French coal supply and determine whether a shortage of coal might force the French to sue for peace.[229] The difficulty answering this question led Nolan to the realization that 'previous to the World War...no General Staff had given sufficient attention to the economic and political factors involved in a correct estimate of the ability of a country to wage war'.[230] In the AEF bureaucracies arose studying economics and politics and developments on military fronts far from Europe and innumerable other topics. It was immediately clear that it was necessary to have this sort of information not just on the enemy but also on the Allies, especially on France 'the situation and future of which was so vitally connected with the success of our own army'. An early G-2 step was to establish a press section to study the French and British press. This information could then be augmented through 'personal investigations, interviews with well informed persons', and trips to the libraries and archives of Paris.[231] By the time the war was over, it sometimes seemed that there were few topics that were not of interest to the military.

Again following the British example, Nolan established G-2-A. The Americans found that it evolved in much the same way as its equivalent in the BEF, even when the two groups did not explicitly consult on organizational changes. Conger recalled that it was no easy matter for an officer to get into G-2-A.

> In the early days of the section it was the general rule that all officers upon joining were given a two weeks course on Intelligence and on the general work of the intelligence section at GHQ and in subordinate

[229] Nolan, 'History', pp. 97-98.
[230] D. E. Nolan, 'Intelligence Course', 7 September 1920, Army War College Curriculum Archives, File 183-29, USAMHI.
[231] Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

> units. This was followed by practical work in one or more of the sub-sections in which the officer's capacity was tried out and his fitness determined for his future work either at GHQ or in a subordinate unit. Officers found to be not up to the high standard required were not unloaded on other staffs at lower units, but summarily relieved from intelligence work.[232]

G-2-A divided itself into eight sections in an organizational scheme that in its disorder reflected the fact that these functions were not only new but evolving at a dizzying pace. Two sections had some role in technical collection. G-2-A-6 was oriented primarily on the oversight of signals intelligence collection and the technical processing of the resultant product while G-2-A-7 involved itself both in overseeing the collection of aerial imagery at the same time that it tackled analytic tasks pertaining to aviation. Finally, five sections focused almost exclusively on finished analysis.

G-2-A-6 performed most of the AEF's signals intelligence work.[233] Receiving intercepted German communications from Signal Corps units, it deciphered what it could to read their content. It also performed traffic analysis to determine the structure of the German forces, as well as working cooperatively with the Allies on cryptologic matters and exchanging substantive signals intelligence with them. All of this information G-2-A-6 shared with commanders and other elements of G-2-A. Communications intelligence played an important role in helping tactical commanders in France to understand their adversaries' intentions and force dispositions. Some staff officers outside the G-2 came to value SIGINT material above all others.[234]

The investment in G-2-A-6 paid off, of course. The Germans liked using radio and it proved a valuable source of intelligence. Communications intelligence

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[232] Ibid.
[233] See Chapter 3.
[234] For one such testimonial, see Lee West Sellers, untitled typescript, J. Rives Childs Collection, Box 'WWI Papers V. 1', RMC.

played an important role in helping tactical commanders in France to understand their adversary's intentions and force dispositions. Goniometry or direction-finding was similarly helpful, providing direct information on force dispositions and sometimes inferential information on intentions. At low tactical levels, the Germans primarily used codes and decryptions of these provided warning of raids, impending barrages, and other useful information. The few breaks that the Allies got into the difficult ADFGX cipher, which the Germans used to communicate between corps and their subordinate divisions, helped provide valuable intelligence about the Second Battle of the Marne. Decrypts of high-level ciphers also occasionally provided strategic information about military developments outside the Western Front.[235]

Of course, G-2-A-6 knew that if it were able to acquire useful intelligence from German communications, so, too, must the Germans be able to acquire such intelligence from them. Accordingly, G-2-A-6 also served commanders by monitoring American communications, letting commanders know when their subordinate units were inadvertently leaking information to the enemy that could endanger American forces or operations, though commanders often found themselves railing in vain against the transgressions of careless subordinates.

The Air Intelligence Section, G-2-A-7 had several functions.[236] First, it oversaw the training and work of the Branch Intelligence Officers (BIOs) whom it began sending out to the observation and bombing squadrons in May, 1918. In addition, every observation and bombing squadron got a BIO as did, eventually, the G-2 in every Army and Corps and their Army and Corps 'Observation Groups'. The information that the BIOs wrested from the Germans went up to G-2-A-7 where analysts combined it with data from other sources such as technical information

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[235] See Chapter 2.
[236] See chapter 2 for a fuller exposition.

obtained through the examination of crashed German aircraft, the interrogation of German pilots, and data provided by British and French air intelligence. G-2-A-7 was further responsible for estimating German aircraft production and understanding its aircraft. Its various findings it published in the daily 'Summary of Air Information', which reported on friendly and enemy air activity, enemy air order of battle and force dispositions, enemy airfields and technical information.[237] G-2-A-7 also played an important role in bombing, developing maps to and photographs of bombing targets (which also were selected in the GHQ and Army-level G-2s.) These were then passed to the bomber squadrons.[238]

Four sections, G-2-A-1, -2, -3, and -5 performed more purely analytic functions. G-2-A-1, the 'Battle Order' section appeared not only at AEF GHQ but was also mirrored at every headquarters below it down to through the division level. Each published daily maps and contributed information to weekly situation reports. The ideal for these sub-sections was to know the proper designation and location of every enemy combat unit. The First Army's Order of Battle shop claimed that:

> The complete list of all enemy units which were in existence was known at all times to nearly 100 per cent accuracy. The present location of every one of these units was known at all times on an average of 90 per cent accuracy. At times this percentage dropped, but the very fact that it did drop was highly significant. It dropped to 75 per cent in the weeks preceding the German offensive of March 31, 1918, when the Germans were training and concentrating their very best divisions. On the day of the armistice the location of German combat units was known to practically 100 per cent accuracy.[239]

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[237] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report', n.d., NARA, RG 120 Entry 113 Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'. *Gorrell History*, Series M, Volume 2, Alfred R. Bellinger, 'Relations of the Air Service with G-2', n.d.

[238] 'Report of Air Order of Battle Section Office of Air Intelligence, GHQ American E. F., Suggestion Chapter on Air Intelligence Work for Air Service Report',n.d., NARA, RG 120 Entry 113 Box 5772, Folder 'Suggestion Chapter on Air Intelligence Work for Air Service Report'.

[239] William H. Dearden, 'Order of Battle', 11 Feb 1920, NARA, RG 165, Entry 65, 10560-328/167.

In principle, during peacetime information would have been gathered to provide a baseline for wartime analysis. The necessary peacetime information included information on military organizations, unit strengths and subordination, and the number of men available for military service while taking into account the needs of industry and the economy. Then it was critical to calculate how these ideal figures actually manifested themselves during mobilization and wartime. This entailed considering 'the relations between [sic] rifle, combat and ration strength' as well as the number of men necessary for rear services, all taking into account losses, replacements and the ineffable quality of morale. Obviously this latter set of data could change rapidly during combat and so regular updates were necessary. If the peacetime data was sound and well-researched, then the wartime estimates could be made with reasonable certainty, though that degree of certainty would inevitably erode over time. Hence, it was critically important, the members of G-2-A-1 found, that the laborious spadework be done during peacetime. Fortunately for them, it had been—by the Allies.[240] Of course, the Army could make no such comforting assumptions about the next war.

During hostilities a great deal of effort went into maintaining the currency of the order of battle estimates. First, every Allied Army whether in France or elsewhere, exchanged a daily telegram of all unit identifications. Second, the AEF did a great deal of work of its own, collecting and analyzing 'more or less disassociated items' of information to deal with this problem. Of course, order of battle data during wartime would always be fragmentary. Moreover, a high proportion of all reports were erroneous, particularly those from spies. Hence, it was

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[240] Chief G-2-A to G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

critical that every bit of data be checked in every possible way. The whole analytic edifice must be made to lean in on itself. Enemy pay books and letters were particularly useful sources of order of battle data. So, too, were prisoners and deserters. Clandestine reports could also be useful but they were highly variable in their value. The analysts found that 'in general they are more useful regarding morale and the broader aspects of man-power, such as the 'combing' of certain industries, the calling of certain classes, etc., than they are as to the specific strengths of certain classes'. That said, a certain type of human intelligence proved particularly important and generally reliable: reports from the train-watchers in Germany and occupied France. Their reports could give a sense of what parts of the front were being reinforced and some sense of the magnitude of that reinforcement. This information, then, could cue more detailed forms of OB analysis. Signals intelligence could help determine the subordination of these new units and the enemy's overall command structure. Signals intelligence was also an unparalleled source for determining the enemy's precise intentions.[241]

The French also provided a useful templated method of estimating enemy losses in the absence of specific data. The French had found that,

> by assuming a loss of 3,000 for each enemy division taken out of the line after or during active operations, a very dependable result was reached. Therefore, by multiplying the number of divisions withdrawn from line in any month by 3,000, and by allowing a normal wastage of 11 men per day for each division in quiet sectors of the line, they arrived at the gross enemy losses for the month.[242]

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[241] William H. Dearden, 'Order of Battle', 11 Feb 1920, NARA, RG 165, Entry 65, 10560-328/167. United States, War Department, *Histories of Two Hundred Fifty One Divisions of the German Army Which Participated in the War (1914-1918)*, (Washington, 1920), p. 7. Chief G-2-A to G-2, GHQ, AEF, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

[242] Chief G-2-A to G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

The French had also developed methods for taking into account the number of enemy prisoners taken, and estimating the ratio of dead to wounded and sick. The use of this method contributed to the French prediction in advance of the German offensive of March 1918, as well as the calling up of the class of 1920 and the German dissolution of its divisions which began in August 1918.[243]

G-2-A-2, which eventually became known as the 'Enemy Resources Section', did rather different work. It assessed enemy industrial and economic capacity, preparing reports such as 'Food Conditions in Enemy Countries', 'The Iron Ore Resources of Germany and of France, with particular reference to the Briey Basin', 'The Leather Shortage in Germany and Austria-Hungary', and 'The Allied Blockade and the German Army'.[244]

Captain Ogden Mills, the chief of G-2-A2, had a sophisticated understanding of the importance of economic intelligence in modern warfare.[245] He realized that because modern warfare required the mobilization of the state's entire adult population and all of its economic resources, general staffs require more information about their adversaries than merely strictly military information. Such things as the size of the enemy's force and his military intentions were 'themselves dependent upon a series of basic conditions, in the main economic'. For instance:

> The number of men called to the colors will be limited by the need of maintaining economic life at home; the huge quantity of guns and munitions can only be furnished and maintained by a country rich in raw materials and equipped with up-to-date industrial establishments, unless, of course, it has access to foreign markets; the all important question of supply and the strategic transfer of troops demands a

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[243] Ibid.
[244] Ogden L. Mills, 'History of Section G-2 A-2d, Enemy Resources', 1 December 1 1918,NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-2, G-2, GHQ AEF'.
[245] Ibid. Mills was a Harvard-educated lawyer from a wealthy business family. After the war he went on to serve in Congress and later become the Secretary of the Treasury under President Herbert Hoover. His first wife, whom he divorced in 1920, subsequently married Sir Paul Dukes, the British intelligence officer renowned for his exploits in revolutionary Russia.

> highly organized and efficiently maintained system of railways; and the morale of the civilian population which is so intimately connected with its physical well being, is a factor of military importance which cannot be neglected.[246]

To Mills, the Allied victory was:

> probably as much a civil and economic collapse as a military one; and its date and finality could certainly not have been foreseen by any General Staff which neglected the economic factors of the situation and the resulting effect on civilian and military morale as well as on necessary military supplies.'

Unfortunately, Mills lamented after the war that G-2-A-2 'cannot be considered to have been successful....If it has justified its existence it has only just done so'. Though, in fact, a good number of the section's reports were short, well-constructed and easy for consumers to digest, Mills lamented that many reports were started only to be abandoned.[247] Its problems were many: it had trouble finding qualified personnel and then keeping them. Mills tartly observed that 'contrary to a belief which has only been too prevalent in our country, any man cannot do any job, and willingness and adaptability are not, in the realm of serious and technical studies, substitutes for experience and knowledge'. G-2-A-2 also had trouble finding the necessary statistical data. Much of the pre-war baseline data it needed was available in any serious library in Paris, but that city was sufficiently distant that it was impractical to travel there from Chaumont, where GHQ G-2 was located.[248]

From this sorry wartime experience, Mills concluded that 'the history of the present section illustrates the difficulty of improvising an organization for war unless some preparatory foundation has been laid in times of peace'. Furthermore, 'one of

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[246] Ibid.

[247] For examples of well-constructed reports, see G-2-A-2d, GHQ AEF, 'Mineral Resources of the Central Powers', 27 April 1918 and AEF G-2 'The Copper Supply of the Central Powers: A Brief Review of Their Copper Production', 27 February 1918, both in NARA, RG 120, Entry 89, Box 5256, Folder 31, 'Mineral Supply and Resources of the Central Powers'.

[248] Ogden L. Mills, 'History of Section G-2 A-2d, Enemy Resources', 1 December 1 1918,NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-2, G-2, GHQ AEF'.

the most important of the functions of an Intelligence Section of the General Staff must be to make a comprehensive and continuous survey of the resources of the enemy'. In addition to receiving economic reporting from military attaches, the General Staff should, he recommended, receive inputs, but ultimately, only military personnel would be competent to assess the military implications of economic facts.[249]

G-2-A-3 was known as 'Enemy Works'. This group studied the physical geography of and military engineering efforts within the German-held area. This included keeping files on towns, roads, bridges, and waterways and ponds. It also meant tracking the development of German trench and fortification systems, particularly through the study of aerial photographs. The sub-section suffered from many problems. One of the key problems was the difficulty of finding and retaining men with the necessary specialized expertise in civil or military engineering. A post-war study suggested that much of the work mapping German trenches could more usefully be done at lower echelons. The subsection also suffered from the fact that most of its data other than the aerial photographs, came from the Allies and that was often late and seldom in a useful format. The section also faced serious problems disseminating its material to the American units who needed it and the latter often did not know that G-2-A had such reference materials available. For instance, the forces labouring to push through areas liberated in the course of the Meuse-Argonne offensive might have benefited from a study which was already on the shelf about the

[249] Ibid. J. D. Galloway, 'EXPLANATION AND COMMENT On Work in Subsection A-3, A-2, and in Studies of Bombing Objectives', 1 December 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-3 G-2, GHQ AEF'.

road network in that area. Finally, G-2-A-3's work often overlapped that of G-2-A-2 and G-2-A-7 when it came to developing bombing targets.[250]

G-2-A-5 studied and filed information concerning the enemy's artillery and published information on the topic that might be useful to friendly troops, such as changes in enemy artillery tactics, shortages of materiel, etc. This was the cause of the first of two controversies over the division of labor within G-2-A. G-2-A-1, the Order of Battle subsection, already concerned itself with the German heavy artillery. At the same time, both subsections tended to draw on the same sources of information regarding artillery. Moreover, Conger could never find a proper artillery expert to take charge of G-2-A-5. He eventually folded the section into G-2-A-1.[251]

A more complicated problem, if only because it involved more sections, was the issue of bombing targets. Ogden Mills, the chief of G-2-A-2, thought that there were a number of ways of efficiently and effectively inflicting militarily crippling economic harm upon the enemy. He could be deprived of 'certain prime necessities'. If these resources came from abroad, then the careful application of a blockade and other trade restrictions could be effective. If these were domestic products or resources, the territory which produced them could be captured. Alternatively:

> if the raw materials or their sources cannot be captured, the production of the finished articles may be impeded and interrupted. The best known example of this is the bombardment of factories and mines by aeroplane. To be effective the bombardment must be systematic and aimed at vital points. It is not sufficient to know that a factory exists at a certain place. We must know what it produces, whether the article is a necessity to the enemy and if so what relation the production of that factory bears to the total enemy production. To illustrate, if a given factory within the bombing radius produces but 3% of the total production, and the balance is turned out by factories without the

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[250] Ray S. Owen, 'G-2. A-3 G.H.Q. A.E.F. GENERAL REPORT', n.d., NARA, RG 120, Entry 74, Box 6199. J. D. Galloway, 'EXPLANATION AND COMMENT On Work in Subsection A-3, A-2, and in Studies of Bombing Objectives', 1 December 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-3 G-2, GHQ AEF'.

[251] *United States Army in World War I*, Volume 13, p. 42. Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

> bombing radius, it is a waste of lives and effort to seek its destruction.[252]

On the other hand, if a particular Germany factory made an intermediate part of an important finished article, the destruction of that factory might greatly affect the total production of the article in question. In such cases, Mills thought, 'we are justified in making a very great effort indeed' to bring about the destruction of that factory. Making these sorts of determinations was, he concluded, a matter for study by intelligence specialists who have been given access to the necessary data.[253]

AEF G-2A did belatedly attempt to operationalize Mills' thinking about German industrial vulnerabilities. In roughly August, 1918 it was discovered that G-2-A-2, G-2-A-3, and G-2-A-7 were performing overlapping work. This led to the detachment of one Major J.D. Galloway, a military engineer, to study bombing objectives. After doing some work on the most efficient ways of inhibiting German reinforcements should major combat ensue in various sectors, he turned his attention to the best ways of crippling German industry. This, he determined, in line with Mills' thinking need not entail destroying all German industry, but rather selecting the proper small percentage of it that could bring the rest to its knees. Eventually, he was assigned to G-2-A-2 in late October, where he was labouring to sort out the problem and its implications when the Armistice came.[254]

The two remaining sections performed mostly support functions. G-2-A-4, the Publications Section, was mostly though not entirely in a support role. It put out most of the finished publications of G-2A and many of the publications from the rest of G-2, as well. Its flagship products were the *Summary of Information* and the *Press*

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[252] Ogden L. Mills, 'History of Section G-2 A-2d, Enemy Resources', 1 December 1 1918,NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-2, G-2, GHQ AEF'.
[253] Ibid.
[254] J. D. Galloway, 'EXPLANATION AND COMMENT On Work in Subsection A-3, A-2, and in Studies of Bombing Objectives', 1 December 1918, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G-2-A-3 G-2, GHQ AEF'.

Review. The former was a daily product distributed every morning, which included translated documents of potential interest to the troops, order of battle updates, and various communiqués. The information was acquired from other offices of G-2-A, notably G-2-A-1 and G-2-A-3, situation reports from the various American armies, corps, and division, and similar inputs from the Allies. The *Press Review* was also a daily which summarized and explained the 'journalistic opinion' of Allied, enemy, and neutral nations. 'It attempted to furnish data...necessary for the proper estimation of political conditions and developments'. This included military, economic, social, and political data. However, the *Press Review* 'was not a mere patchwork clipped from editorial articles; it was on the contrary in the nature of a cold-blooded analysis'. Indeed, after the war, G-2-A-4 recommended that officers charged with preparing press reviews in the future should have language skills, and post-graduate training in law, history, or political science.[255] G-2-A-4 also produced a variety of other publications, including a *Summary of Air Information* which reported work done by G-2-A-7; and a range of other works, such as area handbooks, and 'water supply books' prepared by other parts of G-2-A.[256] Finally, G-2-A-8, maintaining a registry, disseminating finished products and did other similar tasks.

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The existence of an intelligence staff and its understanding of how the enemy conducted intelligence allowed the development of more sophisticated, intricate types of deception operations than had been previously possible. Particularly important was the fact that the enemy would use many different collection means and look for many

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[255] *United States Army in World War I*, Volume 13, p. 41.
[256] Ibid, pp. 38-39.

different indications in their efforts to understand American intentions.[257] That said, deception was not a major part of the American war effort.[258]

The Americans engaged in their first real experiment with deception during the run-up to the St. Mihiel Offensive. The deception had its genesis in French alarm that American plans for a major offensive in September were common knowledge in Paris, raising the grim possibility that the Germans had caught wind of them. General Henri Philippe Pétain took matters into his own hands and wrote personally to Pershing urging him to do something to throw the Germans off the scent and offering French assistance. Pershing responded on 23 August that he would be glad to accept French help and that he would get to work immediately on a deception plan that he would coordinate with his Ally.[259]

Together with his chief of staff Major General James W. McAndrew, G-3 Fox Conner, and Colonel Arthur Conger, the head of G-2-A, Pershing worked up a scheme to make the Germans fear an American offensive through the Belfort Gap, the area separating the Vosges and Jura Mountains. If the effort was successful, it would focus German attention about 125 miles away from where the Americans would actually strike.[260]

In order to carry off this deception against the Germans, Pershing inflicted one upon some of his own officers. He turned to Major General Omar Bundy, an old-style general whom he had found unable to adapt to modern day realities. He had relieved Bundy of command of the 2nd Division earlier in the year and given him

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[257] Nolan, 'Comments', p. 444.
[258] This was true for all the allies. Michael I. Handel, *War, Strategy and Intelligence*, (London: Frank Cass, 1989), p. 365.
[259] Rod Paschall, 'World War I: The Belfort Ruse', and originally published in Autumn 2002 edition of *MHQ: The Quarterly Journal of Military History*, reprinted at *Historynet.com*, http://www.historynet.com/world-war-i-the-belfort-ruse.htm. Nolan, 'Comments', pp. 445-446.
[260] Rod Paschall, 'World War I: The Belfort Ruse'.

command of the VI Corps, which handled reception and training, safely far away from combat. Now, in late August, Fox Conner ordered Bundy to Belfort with orders to prepare plans for an attack towards Mulhousen (today Mulhouse, France) and thence on to the Rhine. Bundy was instructed to send frequent telegraphic updates to higher authorities. On D-Day (which was planned to coincide with the real D-Day of the St. Mihiel offensive of which Bundy was unaware) the assault would supposedly be personally commanded by Pershing. Bundy was told that he should plan on an assault force of seven divisions and that Arthur Conger would soon arrive from GHQ to help with the planning.[261] A captain from First Army's G-2 also arrived at Belfort to help with the deception preparations.[262]

Bundy's staff officers were impossible to hide in Belfort and they set to working investigating road and rail capacities, inspecting hospitals, and the like. In addition, Conger, operating through intelligence channels laid on numerous reconnaissance flights over the German lines in the area. Meanwhile, borrowed French tanks laid tracks that would be readily visible from above and seemed to indicate armoured forces hiding in wooded areas. GHQ arranged for signal units to be made available and they, too, soon arrived, erecting radio antennas, making numerous telephone calls, and flooding the local telegraph stations with traffic. In addition, the Americans stepped up patrolling activity.[263] For his part, Nolan dispatched the chief of his press office to Belfort to arrange for journalists to visit to notice the leasing of buildings and the rush of business at the telegraph office.[264] Conger himself undertook one decidedly nineteenth century measure in support of the deception: in the hotel room where he was billeted, he typed up a description of the

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[261] Ibid.
[262] William H. Dearden, 'Order of Battle', 11 Feb 1920, NARA, RG 165, Entry 65, 10560-328/167.
[263] Nolan, 'Comments', pp. 441-442.
[264] Ibid, p. 446.

impending (phony) offensive and then purposely left the carbon paper he had used in the wastebasket for the domestic staff to find and hopefully pass to German intelligence.[265]

Nolan later speculated that the Americans may have been helped 'by the fact that a new army like ours would not be expected to know how to put over a thing of this kind and the German intelligence would have a right to feel that our revelations were entirely accidental and due to a new army and an imperfectly trained staff'.[266] Though there is some evidence that the Germans evacuated some records from Mulhouse and made plans for broader evacuations, it is not clear that the deception induced the German Army to do anything that made the St. Mihiel Offensive any easier. Nevertheless, Pershing thought that three German divisions had been drawn out of position.[267] Nolan, in private comments delivered to Pershing on the latter's draft memoirs, was far more sceptical.[268] Conger, for his part, was never enthusiastic about the operation, perhaps embarrassed by Allied ridicule at his crude attempt to plant a fake document on German intelligence.[269]

Whatever Conger thought of this operation, it seemed a sufficient success that he was given similar roles in subsequent deceptions.[270] Nolan recalled another deception launched in the waning days of the Meuse-Argonne offensive:

> I found the First Army working this on its own by establishing a wireless station that used a leaky code, the wireless station sending being that of a new army going in on the right of our First Army in the Meuse-Argonne battle. The young man in charge of the enemy radio section of the First Army was working it and the Germans could get about everything from that station in the line of orders to an army in

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[265] Pershing, *My Experiences*, Volume 2, pp. 238-239. Rod Paschall, 'World War I: The Belfort Ruse'.
[266] Nolan, 'Comments', pp. 445-446.
[267] Pershing, *My Experiences*, Vol. 2, p. 239.
[268] Nolan 'Comments', pp. 442-443.
[269] Rod Paschall, 'World War I: The Belfort Ruse'.
[270] Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA, RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.

> this leaky code. After it had been working four or five days, I found this wireless section at Suilly very much depressed one morning when I came in and asking the reason for it, I was told the German turned their artillery on it the night before and succeeded in destroying our sending apparatus at this point completely and they were afraid that Army X would have to go out of business.[271]

Another capability which owed its existence to the intelligence services was covert action, though that term had yet to come into the parlance. In fact, there was little if any organized thinking about covert operations during this period. However, a number of American intelligence organizations seem to have engaged in it. One historian has concluded that Dmitri Kalamatiano, one of the State Department's agents, may have been involved in some sabotage operations in Bolshevik Russia.[272] MID, operating through the military attaché in Denmark, also dipped its oar in the water. A member of a revolutionary party in Germany had volunteered his services to the attaché. The asset was able to provide information about the operations of and conditions in the German navy. For his part, the attaché provided funding and unspecified organization help to the asset's party. After the war, the attaché assessed that his efforts had helped to bring about the Kiel and Wilhelmshaven naval mutinies of October and November 1918 as well as other incidents of unrest in Germany. The attaché was probably deluded about the degree to which this caused the mutinies.[273]

However, the best documented and most far-reaching covert actions were conducted by the AEF G-2 through Emmanuel Victor Voska.[274] Voska urged a variety of sabotage and subversion operations on the American authorities. Secretary of War Newton Baker was initially reluctant, but eventually he relented and allowed Voska to go to work. He carried out a wide variety of covert actions and sought and

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[271] Nolan, 'Comments', pp. 445-446.
[272] Brook-Shepherd, *Iron Maze*, pp. 87-88.
[273] *MID History*, pp. 451-452.
[274] See Chapter 4 for additional information on Voska.

appears to have received permission to provide financial support for selected revolutionaries.[275] In his 12 July 1918 'Report No. 1' to the G-2, Voska noted that 'it is very urgent to start immediate minor revolutionary acts throughout Turkey, Roumania [which had surrendered to the Central Powers], Hungary and Austria'. By stirring up national revolutions, Voska told his superiors, the Allies could impede the ability of the Central Powers to move troops from east to west or vice versa. They could also create an increased requirement for enemy troops in southern Europe, thus spreading the enemy's forces even thinner. He further thought it might be possible to block the Danube and sabotage defence industrial facilities on enemy soil. He also recommended Allied naval operations to destroy the Austro-Hungarian Navy which was largely manned by Slavs and to put increased Allied ground forces into Dalmatia, Albania, Salonika and Mesopotamia, all of which measures, he thought could encourage revolution. He concluded his report by noting that it was important to know the 'exact month' that the national revolutions would start—apparently so that Allied actions could be arranged to best exploit and support them—and that if the nationalities had not agreed on a month, they should be helped to do so. He said that he would try to gather this information as soon as he could.[276] In September, Nolan forwarded to Voska for his comments a proposal that had come over the transom from a concerned citizen, suggesting a campaign of sabotage in Roumania. Voska responded that he had already been preparing such a plan. It is not clear whether he ever actually launched this effort.[277]

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[275] Voska to Nolan [?], 23 July 1918, NARA, RG 120, Entry 194, Box 6035, Folder 'Secret Service Misc. Reports by LTS Ruditsky & Voska'. Van Deman, *Final Memoranda*, pp. 55, 57.

[276] 'Report No. 1', 12 July 1918, NARA, RG 120, Entry 194, Box 6035, Folder 'Secret Service Misc. Reports by LTS Ruditsky & Voska'.

[277] Arthur E. Voska, to AC of S, G-2 AEF, 26 September 1918, also Nolan to Voska, 17 September 1918 both in NARA, RG 120, Entry 194, Box 6035, Folder 'Secret Service LT. A. E. Voska Reports'.

Voska intended one of his major efforts to be the use of propaganda to encourage nationalist uprisings against Austro-Hungarian authorities. In fact, much of the information he sought from behind enemy lines was intended to identify leverage points for Allied propaganda. The Austrian Army was rife with revolutionaries: Czechs, Slovaks, South Slavs, Poles, and others. Furthermore, its army was organized into ethnically based units, so entire units were potentially vulnerable to revolutionary feelings. Voska soon found that there was no further need to distribute propaganda in the Austrian Army as it was rife with disloyal units, many of which freely allowed agents to cross the lines in their sector from the Italian side.[278] His group also helped the Italian Army to raise an ultimately corps-sized Czech Legion to operate as part of the Italian Army.[279]

In October 1918, Austria-Hungary started to come apart as its Emperor Karl appealed in vain to the Allies for a separate peace. A nationalist coup in Prague failed on 14 October, but on 16 October the Emperor, trying to contain the explosive centrifugal forces at work, issued an ambiguous decree that could be read as dissolving the empire. The result was that many Austrian soldiers started to leave the front-lines. On the 21st, the Czechs and Slovaks declared their independence anyway and a 'Yugoslav National Council' quickly followed suit. Nationalist governments started to form in Prague, Cracow, Ljubljana, Zagreb and even Vienna. On 22

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[278] Voska, *Spy and Counterspy*, pp. 271-278.

[279] Ibid, pp. 271-2 and 283-284. For additional background on the Czech Legion in Italy, see Rowan A. Williams, 'The Czech Legion in Italy During World War I', in Samuel R. Williamson, Jr., and Peter Pastor, eds., *Essays on World War I: Origin and Prisoners of War*, East European Monograph 136, (New York, 1983), pp. 199-214. Williams makes clear that this corps was not Voska's idea as Voska's memoirs might allow one to believe. Rather, it was a long-standing project of Edvard Beneš and Tomáš Masaryk. The Italians immediately recognized the potential of the Czech Legion for intelligence collection and special operations. See p. 204.

October, Hungary declared its independence and many Hungarian soldiers began to filter home.[280]

Clearly, tectonic forces were at work. In this context it was relatively easy for Voska to do his subversive work. He later claimed that by early October 1918 his organization in Italy had concluded that 'the Czechs and Slovaks in the Austrian ranks were almost all with us. The Slovenes had caught the infection. The Croats had held out longer; but now they were sizzling with revolution'. Officers among these revolutionary Slavs, probably after consultation with Voska's people, had arranged to get Czech, Slovak and Slovene officers 'of apparent loyalty' assigned to some Austrian and Hungarian regiments where they intended to start issuing orders to retreat or surrender as soon as the Italians launched a major offensive. In October also, Voska's organization managed to bring out an Austrian staff officer, sympathetic to the Slavic revolutionary cause, bearing the Austrian Army's battle plans. Voska took this information straight to the Italian Army and urged an offensive. The Italian commander Armando Diaz probably took Voska's information merely as confirmation of what he already knew: that the time had arrived to deal the death-blow to the Austro-Hungarian Army. On 24 October, the Italians, supported by various Allied forces, included on Czechoslovak division, launched an offensive. Almost immediately, Austro-Hungarian units of all nationalities began to collapse and desert, though the better led ones held together for a time.[281]

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The AEF never had a golden source of intelligence that laid bare the enemy's intentions and secrets. No legendary agents were recruited. Though propaganda

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[280] John R. Schindler, *Isonzo: The Forgotten Sacrifice of the Great War*, (Westport: Praeger, 2001), pp. 298-299.
[281] Voska, *Spy and Counterspy*, pp. 286-287. Schindler, *Isonzo*, pp. 300-301.

appears to have had some albeit unmeasurable effect, covert action (which did not even have that name yet) and deception were still in their infancy. Finally, though the German espionage threat was certainly not zero, neither does it appear to have been as robust as it seemed at the time, so American counterespionage efforts were ultimately of only modest utility.

That said, by dint of the careful, gradual accumulation of information and education of commanding officers, the intelligence efforts of the AEF, aided in no small part by the Allies, did in fact, make Pershing and his subordinate commanders by far the best informed commanders in American military history to that time. Given that the French and British forces and, for that matter, the German forces, were comparably well-informed, it is hard to imagine how the AEF could have contributed to the war effort to anything like the extent it did without this giant intelligence effort. It would have been an enormous force blundering about the battlefield—a reprise of Wagner's 'blind giant'—doing little damage to the enemy and suffering greater losses itself.[282] Moreover, the AEF would have been effectively under the control of the British and French through their services. Though there is no reason to think that Pershing gave the issue much thought at the time, the lack of an intelligence component to the AEF would have rendered moot his firm insistence on a fully autonomous American army.

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[282] Arthur L. Wagner, *Report of the Santiago Campaign*, pp. 140-141.

Conclusion

American intelligence did not spring full grown from the brow of World War I, though it may appear that way. In fact, it had been gestating since the late 1870s when Emory Upton issued his call for the War Department to have an intelligence organization. It was born not long thereafter when the Navy and then the War Department took his advice. ONI and the MID, and their respective services then entered a lengthy period of learning by doing and by studying from afar what the great powers of Europe were doing in the realm of intelligence. The foreign influences were predominantly German, British, and French. The German influence came in two ways. First, of course, was the nineteenth century influence as Americans read military journals and began haltingly to emulate Germany's development of military staffs. Sometimes this was by reading articles from Germany or Austria. Other times this was by reading British or French articles which were themselves influenced by the Germans. This reading set the stage for the development of specialists, trained in the handling of large amounts of technical information that could be used to enable military planning and operations.

There was another, less obvious, way in which the Germans—or more correctly, the American *image* of the Germans—influenced the development of American intelligence. It was an article of faith that the Germans, with their 'Prussian efficiency', were in a league of their own when it came to intelligence. In particular, the Americans, who appear to have read too many stories about Wilhelm Stieber, assumed the Germans to have spies everywhere and an unquestioned ability to assimilate the data they collected. These beliefs, albeit conditioned by the very real German espionage and sabotage campaign during the period of American neutrality,

would greatly influence the nature and extent of American counterintelligence when the United States entered the war.

World War I saw the first steps toward the inculcation of technophilia into the United State's practice of intelligence. The invention of aerial photography and the flourishing of the previously highly esoteric field of cryptology allowed military commanders from Pershing on down to have a greater understanding of what was happening on the battlefield than had ever before been possible. This understanding only grew when these technological sources were combined with information from other more traditional sources: reports from spies, interrogations of prisoners, etc. However, this advance came at a cost. Large numbers of experts were necessary to interpret the raw information acquired through these technological wonders. Additional resources were required to protect these important sources: code makers, fighter aircraft, and a counterespionage apparatus.

However, the forte of Ralph Van Deman, known as the father of American military intelligence (a moniker he should share with Arthur Wagner) was in domestic surveillance and 'secret service' work generally, a mission the military would keep returning to for many decades. In this new type of war, a highly ideological clash of whole nations and peoples, the opinions and actions of every American was of interest to the government. At the same time, there was great fear of German espionage. The War and Navy Departments, helped by other government agencies and vast swaths of the public, organized itself to deal with these issues. Though the extent of the actual threat was overblown to put it charitably, this period saw such forward-looking developments as background investigations of officers, special investigations of personnel holding particularly sensitive jobs, and, perhaps most importantly, the

recognition of counter-intelligence and counter-espionage as serious and regular types of intelligence work.

Counter-espionage was often known as 'secret service'. Also falling under this rubric was espionage conducted by or for the United States. Americans had always seen espionage as morally problematic, justified if at all only by the dire necessities of wartime. The War and Navy Departments and the State Department all conducted espionage operations abroad during World War I. While these operations—aside from the train watching efforts, and here the British and French did the bulk of the work—did little to help Pershing, they did gather some information about the German Navy and the situation in Russia that might have been useful to other American leaders. Perhaps more importantly, however, these wartime espionage activities were a training ground allowing experiments in such fields as personnel selection, cover, and agent-handling. The period also saw a redefinition of 'spying', one which allowed it to shed its connotation of scouting and moved it toward the stealing of secrets.

In the end, then, American intelligence underwent a growth spurt during the World War I period. Furthermore, it stretched itself to cover every issue that seemed germane to the conduct of the war. These included securing the home front; gathering and analyzing military, political, economic, and 'psychologic' information for military and political leaders; conducting propaganda operations and covert actions; and throwing a nearly seamless protective blanket over American forces all the way from the trenches through the rear area, across the Atlantic Ocean and back into the United States. Intelligence had truly changed to accord with the war being fought.

Another way in which intelligence adapted to the new circumstances was in the cooperation with foreign countries. The United States fought World War I as a

member—a sometimes resentful but decidedly junior member—of a coalition. (The country's post-Revolutionary experience with coalition warfare was limited to the struggle against the Barbary Pirates and the Boxer Rebellion.) As a result, for the first time American intelligence had to learn to operate alongside foreign intelligence agencies. Though the Allies tried to influence American intelligence activities, the U.S. retained ultimate national control over its own intelligence affairs. The greatest American autonomy, of course, was in domestic affairs where, for instance, the British could not force the Americans to investigate Irish revolutionary activities. The British and French did bring rather more pressure to bear on the Americans in trying to shape where and how American espionage would be conducted. Here too, however, the Americans ultimately did what they wanted. When it came to battlefield intelligence and naval intelligence the cooperation was quite intimate, albeit more so on the battlefield than in the naval realm. In fact, the Royal Navy's NID came out of the war with the sense that not much was to be gained from cooperation with ONI, not surprising given ONI's concentration on the collection of human intelligence compared with NID's across-the-board collection efforts, and the fact that Admiral Sims—the main point of connection between the US Navy and the Royal Navy—himself thought little of ONI.[1]

In other areas, intelligence cooperation was significant. The Interallied Bureau served as a venue, albeit a quite formal one, for sharing some intelligence, notably counterintelligence. More often sharing and cooperation depended on personal relationships. In Berne, the military attaché found that he got better cooperation from the British and the French than the representatives of those countries got from each

[1] Phyllis Soybel, p. 14.

other.[2] In some places, relations were so good and interests so aligned as to approach a local merger. For example, in Buenos Aires the Allies created the 'FABI agency' ('Franco-American-British Italian') combining the US military and naval attaches and representatives from the other nations. FABI's chief investigator was an Argentinean, the retired head of that country's investigative agency, who came recommended by the Italians. Something similar existed in Geneva where the Allies established a combined counterespionage center called the 'Geneva Inter-Allied Service' and late in the war an agreement was reached among the Americans, British, French, and Belgians to 'combine and cooperate in intelligence work' in the Netherlands. [3]

MI-1(c) (later to be known as MI-6) came to have sufficient respect for the United States' espionage capabilities that he saw merit in post-war cooperation. In 1919, Edward Bell reported that its head, Mansfield Smith-Cumming, had told him:

> that he hoped in a general way it might be possible to come to some understanding with our Secret Service in regard to cooperation after the war....He said frankly that if our interests clashed in any one particular country both Governments could maintain complete services there and 'cut each other's throats' quite happily, but that he thought in a good many countries some working arrangement could be made.[4]

Cooperation between the AEF's intelligence staff and its British and French counterparts was particularly intimate. The AEF's files full of British and French intelligence reports and the Americans sent students to British and French schools while accepting instructors from those nations in their own schoolhouses. In addition, however, there is an easy familiarity to be found in the surviving correspondence

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[2] Van Deman to Nolan AEF G-2, Subject, "Report on office and activities of military attaché at Berne," 12 August 1918, NARA, RG 165, Entry 65, 9944-R-44.
[3] Godson to Chief, Military Intelligence Branch, 15 October 1918, NARA, RG 165, Entry 65, 9944-R-56. , Slocum (Van Deman) to MID, 2 September 1918, 9944-54. Churchill to Military Attaché, London, 4 September 1918, 9944-55. RC [Military Attaché, Buenos Aires] to MID, No 1318, Aug 21, 1918, 9944-L-4.
[4] Edward Bell L[eland] H[arrison], 1 May, 1919, NARA, RG 319, Entry 350, Box 5, File 121 'Secret Service'.

between American intelligence officers and their British and French counterparts on the other. The British and French would share with the Americans their most intimate signals intelligence secrets, not just the substantive information derived from signals intelligence, but the cryptologic methods behind that information. The sides would correspond back and forth on how to solve new German cipher systems, the security of new American systems, and other matters. One scholar has even suggested that this may be the genesis of the famous Anglo-American 'special relationship' in intelligence lies in the cooperation between the intelligence components of the two countries' respective armies in France.[5]

What was the actual impact of America's intelligence operations during the war? There are five basic ways in which intelligence can contribute to the prosecution of a war or other form of struggle. Four of these relate to information. First, an intelligence service may provide specific detailed warning of an enemy action. Second, it may sensitize leaders to an increased possibility of enemy action. Third, it may provide leaders with information about a positive opportunity for friendly action. Fourth, it may simply educate leaders about the general situation, in the hope that the overall quality of the leaders' decisions can thereby be increased. The fifth way in which an intelligence service may contribute is by directly affecting the enemy's situation itself by subverting the enemy; thwarting his spies; or conducting sabotage against his forces, infrastructure, or economy.

With regard to the first three of these, as already mentioned, it is usually extremely difficult to draw a direct line between intelligence information and tangible, specific leadership or command decisions. Nevertheless, intelligence sometimes had a demonstrable effect. At the tactical level, signals intelligence sometimes could

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[5] Jim Beach, 'Origins of the Special Intelligence Relationship? Anglo-American Intelligence Cooperation', *Intelligence and National Security*, 22:2, (2007), p. 245.

provide timely and direct information about impending German raids and attacks. G-2-A-6 certainly liked to tell such stories. For example, on the afternoon of 24 April 1918, the Americans intercepted a German message stating that weather had forced the postponement of a planned raid in the St. Mihiel sector. Subsequent messages that afternoon indicated that the attack would still come sometime soon. The Americans were thus ready to receive the raid which came that night. Similarly at 9:05 PM on 28 April, the Americans intercepted a German signal. G-2-A-6 was able to decrypt it and they discovered that it ordered an attack to take place at 1 AM. Warning of this attack reached the affected American unit thirty minutes before the attack took place.[6]

At the strategic level, the train-watching system by itself was able to ensure that no significant transfer of forces from the east to the west could take place without the allied commanders being aware of it.[7] When train-watching, aerial reconnaissance, signals intelligence, and painstaking order of battle work all came together it was usually clear when a German offensive was in the offing, though sometimes the allies would differ among themselves on precisely where the blow would fall.[8] Intelligence, in particular goniometry, played a role in the launching of the St. Mihiel offensive. As the hour approached, there were increasing indications that the Germans had abandoned their positions and the U.S. First Army seriously considered launching the offensive without an artillery preparation. G-2-A-6 was able to show, however, that the entire German command and control system remained in place in the salient and so the artillery preparation was not cancelled.[9]

With regard to the fifth way in which intelligence can help a commander, by directly harming the enemy's cause, there is reason for some skepticism about the

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[6] 'Final Report, RIS', p. 20.
[7] Nolan, 'History', p. 188.
[8] Noland, 'History', pp. 225-227.
[9] 'RIS Final Report', p. 20. William A. Morgan, 'Invasion on the Ether: Radio Intelligence at the Battle of St. Mihiel, September 1918', *Military Affairs*, Vol. 51, No. 2 (Apr., 1987), p. 59.

contribution of American intelligence during the war. Certainly, commanders believed in subversion and propaganda as evidenced not only by their willingness to use it but their fears about the enemy's capabilities. However, the efficacy, let alone import, of American offensive propaganda, subversion, and sabotage efforts is far from clear. Blankenhorn was enthusiastic about the contributions which his propaganda made to the war effort by means of inducing German soldiers to surrender. However, even he was forced to admit that it was impossible to firmly demonstrate that the *flugblatter* had done their job; it was simply a matter of faith. Voska's subversion behind the Austro-Hungarian lines is similarly difficult to assess. However, even if they were fully as effective as Voska believed, it would be folly to attribute the fall of the Austro-Hungarian Empire to him. Much more powerful political forces were at work than those which Voska could bring to bear.

The greatest contribution of American intelligence to the war effort might have come within the United States itself, but it did not. Certainly, the greatest number of intelligence personnel operated on the home front. These included not only the formal employees of MID, ONI, and the Bureau of Investigation, but also the quarter million strong American Protective League, and an army of unpaid co-optees inside the military camps. In retrospect, these organizations were remarkably inefficient and yet stunningly effective in monitoring the population for the first sign of activities or beliefs that could aid the Germans, whether these were undertaken at Berlin's behest or not. It is unclear how much credit the intelligence services should receive for this, however. Walter Nicolai claimed in his inter-war memoirs that German intelligence was largely unable to operate in the United States after April, 1917 and the tiny number of actual 'spies' that the MID claimed to have found seems to bear out his contention. It may be that the stifling blanket of surveillance and

security that the intelligence services threw over the country prevented widespread outbreaks of espionage, subversion, and pro-German propaganda by German-Americans or the Lutheran Church but there is scant evidence to support such speculation.

It may have been in the fourth endeavor—the unglamorous, continuous informing and educating of commanding officers—that the greatest operational significance of American intelligence may be found. Not only were commanders better able to understand the war around them, but American intelligence provided a vital underpinning for the policy of Pershing and Wilson that the United States must have its own independent army in France. Occasionally, the immediate benefits of intelligence were evident. For instance, Pershing did not have to take special measures to deal with the consequences of a French collapse brought about by a lack of coal because his intelligence officers were able to assure him that France had enough coal to carry on the fight. More commonly, however, the everyday education of commanders by their intelligence staffs did not go commented upon, but this does not mean it was not important. An army that never interrogated prisoners, which did not translate captured documents, which did not use aircraft to see what the enemy was doing beyond the range of ground-based eyeballs, which did not use signals intelligence to pull the enemy's secrets out of the ether, which did not protect its own communications, and which did not try to understand the structure, tactics, and weapons of the forces it faced would have been an incompetent army. In fact, such an army would never have existed. Having gained three years of brutal experience, the allies would have recognized such an American army as a potentially fatal liability, a German breakout waiting to happen, and for their own protection would have provided intelligence and counterintelligence for it—thereby, strongly

influencing Pershing's decisionmaking and undercutting his autonomy—or would refused to have allowed the AEF into the line as an independent force.

Military commanders may have found intelligence useful, but they were not alone in this. President Wilson, though he never rid himself of his distaste for espionage came to value it, as well. As we have seen, he intervened to keep the embattled James McNally at his post in Switzerland. At the urging of Colonel House, he also established The Inquiry, a group of academics, to develop materials to support him in post-war negotiations. This group drew heavily on the data from the Military Intelligence Division in preparing their reports.[10]

In assessing the significance of the development of American intelligence during World War I, we are also aided by its immediate post-war history. The first and most salient fact here is that the nation's civilian leaders saw value in it so American intelligence actually *had* a post-war history. Throughout American history intelligence has developed in a discontinuous fashion and the country's greatest struggles have figured prominently in its development of intelligence. By the same token, interwar periods have often seen stagnation or retrogression in intelligence. General George Washington was an enthusiastic and capable practitioner of intelligence during the revolutionary period, but very little of this continued, none of it institutionalized in a bureaucracy or agency. Certainly also some of the military commanders fighting for the United States and the Confederate States thought seriously about intelligence and developed capabilities in this direction during the Civil War (1861-1865). However, these concepts and the *ad hoc* structures that instantiated them evaporated with the radical demobilization that followed the surrender at Appomattox. Similarly, the Philippine War saw important innovations in

[10] For a history of The Inquiry, see Lawrence Gelfand, *The Inquiry; American Preparations for Peace, 1917-1919*, (New Haven, 1963).

intelligence, but those lessons were never institutionalized, in fact, the Army appears to have tried to forget them.[11]

World War I was different. Though the United States military once again underwent a radical post-war demobilization, the intelligence function continued. There were several reasons for this remarkable development. First, by now intelligence was not just a matter for the military. The State and Justice Departments performed intelligence functions that were not justified merely by the fact of a shooting war. Second, almost every serious intelligence practitioner and many leaders and commanders had come to the conclusion that intelligence was indispensable in modern war. Furthermore, the intelligence professionals (for such they were now) had also realized that extensive peacetime preparation was a necessary precondition for effective wartime intelligence. This time the British and French had done a great deal of the wartime preparation for the Americans. They had written the intelligence regulations that the Americans had copied. They had prepared the baseline orders of battle that the Americans then kept up to date for their sectors. They had opened schools that welcomed American students. They had geared up their industry to produce the observation aircraft that the Americans flew. Who could say if such a situation would obtain in the future? Third, from the point of view of the intelligence personnel on the home front (and to some degree in the attachés' offices) there had been no cessation of war. True, the Germans had been defeated, but the Bolshevists were still threatening America with some of the same weapons the Germans had (allegedly) employed.

Accordingly, America's intelligence efforts did not simply come to a grinding halt with the signing of an Armistice as had happened after the Civil War and the

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[11] See Chapter 1.

Revolutionary War. The two new technological endeavors, signals intelligence and aerial photography, continued, albeit somewhat handicapped by the fact that there was no longer a definable enemy against which to collect. With regard to signals intelligence, the danger of unreadiness, particularly in terms of training, was the 'one big lesson' that impressed itself on the members of G-2-A-6.[12] No longer, they thought, could the United States make up for any disadvantage after the war started. The nature of the intelligence business had become so technical that Army intelligence must now be in permanent readiness, accepting the cost of peacetime expenditures as a necessary evil. Furthermore, given that the code and cipher business had become so complex and enemy codes were in service for so short a period of time 'the furnishing of an inadequate force to decode enemy messages is a total waste'.[13]

Training and preparedness were difficult in the world of signals intelligence, however. Only the rare person was suitable for the work and he or she was hard to find particularly given the secrecy surrounding the field; few potential candidates would ever became aware of the possibility of a career in the field. Moorman had some dramatic ideas for handling this problem. On 27 November 1918, he wrote to Nolan that 'the more publicity is given this work now the better position we will be in to handle the situation in the next war'. Accordingly, he recommended that officers be allowed to take home confidential documents pertaining to G-2-A-6—presumably with which to impress their friends and colleagues—and suggested the publication of a work on 'the general methods of handling codes and ciphers developed during the war' for use 'in military colleges and schools'. Nolan approved these measures

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[12] Chief G-2-A to AC of S G-2, GHQ, AEF, 8 June 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A'.
[13] Moorman to Chief, G-2-A, 2 January 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A.'

provided that the information be kept 'confidential'.[14] Moorman also requested permission from the British to use a secret pamphlet they had written, 'Enemy Codes and Their Solution', by as a textbook in Army service schools. This request caused some alarm in Britain and the British prevailed upon Nolan to forbid it.[15]

Further reflecting on the challenges of finding the right people, Moorman wrote in the G-2-A-6 final report that the officers, especially, in the section attacking enemy codes must be able to exercise 'independent thought' to a 'high degree' and that in future the code and cipher component of the War Department should be responsible for weeding out unsuitable candidates, erring on the side of rejection.[16] Moorman and his boss, Arthur Conger recommended that the Army maintain a radio intelligence unit 'which would serve as a training school for officers and men and permit of experiment for improvement of this service'.[17]

Similar considerations were at play back in Washington. During the war, Herbert Yardley's MI-8, the War Department's main signals intelligence service, had served not only the War Department but also the Navy and the State Department. It had proved sufficiently useful that long before the Armistice discussions were underway among senior officials on how to make the capability permanent. By late 1917, Secretary of State Robert Lansing was promising to help fund such an entity. The War Department needed no persuasion. Shortly after the war, Yardley urged that the staff should consist of well-paid civilians because it was difficult to find people with the right skills within the Army. Even the head of this organization, it was

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[14] Moorman to Nolan, November 27, 1918, NARA, RG 120, Entry 105, Box 5767, File 520-97

[15] E. S. Clive to General Nolan, 5 December 1918 NARA, RG 120, Entry 105, Box 5761, Folder 'Enemy codes and Their Solutions (British Document)'. Also Nolan to Clive, Chief of Intelligence, BEF, 30 December 1918, Box 5767, File 520-193. Further, see various documents in Box 5763, Folder 'Sellers Data'.

[16] *Final Report RIS*, p. 13.

[17] Frank Moorman to Chief, G-2-A, 2 January 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A.' In fact, the Army did not establish such a unit until 1933.

thought, should be a civilian. As one State Department official observed, 'it does not seem feasible to have a lot of civilians working under a [regular officer] who would know nothing about the work. No one who is any good or wants to make a reputation for himself would act as a figurehead, and anyone who really tried to run the job would put it on the blink'. Soon, the 'American Black Chamber', was running in New York along these lines with Yardley at its head, jointly funded by State and War but under War Department administration. For its part, the Navy, in mid-1919 still unable to get its own SIGINT effort going, agreed that American Black Chamber was the right place to consolidate the function.[18] This lasted until 1923 by which time Navy was growing frustrated with what it was getting from Yardley. The next year it established its own signals intelligence organization under the Director of Naval Communications, the famous OP-20-G.[19]

In the realm of communications security, intelligence personnel in the know realized that the Army had flirted with disaster. One needed only look at the Russian catastrophes early in the war to see what a well-prepared enemy could do to naïfs. The Army should never run that risk again.[20] Establishing a system for encouraging interest in cryptology and training people to do it would help, but Moorman observed in the pages of *Infantry Journal* in 1920 that it had been very difficult to teach even a 'few simple rules' to those responsible for coding messages. Against these ordinary men, Moorman warned, the enemy arrayed 'some of the best men in their country' to

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[18] Kahn, *Reader of Gentlemen's Mail*, pp. 50-53.
[19] Laurence Safford, 'A Brief History of Communications Intelligence in the United States', National Security Agency, SRH-149, 1952, http://fas.org/irp/nsa/safford.pdf. Frederick Parker, *Pearl Harbor Revisited: United States Navy Communications Intelligence 1924-1941*, National Security Agency, 1994, http://www.history.navy.mil/books/comint/index.html. Dorwart, *Naval Dilemma*, p. 11.
[20] Nolan, 'History', pp. 120, 130. See also Nolan 'Comments', p. 68. Compare Nolan's opinion of Tannenberg with that found in Military Intelligence Branch, Executive Division, General Staff, *Propaganda in its Military and Legal Aspects*. The latter views the Russian disaster as resulting from German subversive activities in St. Petersburg.

do code and cipher work. Unless the Army could do better next time, 'carelessness' would 'certainly mean loss of life and may determine the result of battles or of the war.'[21] In any event, the G-2-A-6 veterans felt, the Army should also regularly and frequently change its codes, as the AEF had done during the war.[22]

The Navy placed a great emphasis on communications security, as well. Though during the war the Navy's Code and Cipher Section had ceded the cryptanalytic field to Yardley's MI-8, they stayed in the cryptography business. During the war, lieutenant commander Russell Willson, the head of the Code and Cipher Section, designed a revolutionary new cipher machine, the 'Naval Cipher Box' or NCB Mark 1 which was followed soon thereafter by the NCB Mark 2. This was the most sophisticated cipher system in the world at the time and the Navy promptly deployed it to the wartime fleet. It also accompanied President Wilson to Versailles where naval personnel used it to encrypt the President's messages back to Washington. The NCB Mark 2 remained in service for some two decades.[23]

If Herbert O. Yardley played a central role in the post-war continuation of signals intelligence, Lieutenant George Goddard played a similar role in aerial reconnaissance. Unlike Yardley, who had been in an important intelligence position during the war, Goddard was very junior during the war but he rose to prominence immediately thereafter. In December 1917, he joined the Aviation Section of the Signal Corps as an enlisted man and after three months of training he became an instructor in photographic interpretation. Commissioned a lieutenant in August 1918, he was charged with organizing three new photographic sections. After the war

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[21] Frank Moorman, 'Code and Cipher in France', *IJ*, 16:12, (June, 1920), pp. 1039-1044.
[22] Moorman to Chief, G-2-A, 2 January 1919, NARA RG 120, Entry 74, Box 6199, Folder 'Report of G.2-A.'
[23] John Schindler, 'Securing the Airwaves at Sea: U.S. Navy Communications Security, 1917-1945', paper presented at 'Naval Networks: The Dominance of Communications in Maritime Operations', 2007 King-Hall Naval History Conference, Canberra, Australia, 26 July 2007.

ended, he trained as a pilot, but in mid-1919 he was then put in charge of aerial photography for the War Department, from which position he developed a number of new techniques for doing aerial photography and pioneered the use of aerial photography for mapping.[24] The surviving postwar observation squadrons busied themselves not only working worth Army ground units, but also doing photography in support of mapping efforts, helped in combating forest fires, and patrolling the U.S.-Mexican border.[25]

After the war, Army officers perceived the actual and potential value of airplanes to be so great that some air enthusiasts argued for the establishment of an independent air force with a corresponding cabinet-level department which they thought would be a bureaucratic and command environment that would allow the full potential of aircraft to flourish. Most of the supporters of such a course of action were looking to future combat roles for aircraft, others, including Pershing, most ground officers, and many aviators, thought that the value to the ground forces of the reconnaissance function was so great that the air forces should remain an integral part of the army.[26]

In any event, there was broad agreement that observation aircraft had been quite valuable, though their payoff came nowhere near some of the fanciful pre-war predictions. Even Billy Mitchell, the leading proponent of an independent air force and the combat use of aircraft, immediately after the war labeled air superiority and observation (in essence, counter-intelligence and intelligence) as the top two

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[24] 'Brigadier General George William Goddard', http://www.af.mil/information/bios/bio.asp?bioID=5563 Goddard's career stretched all the way into the Cold War when as a Brigadier General he reported to NATO in 1952 where he served as Director of Reconnaissance under Allied Air Forces, Central Europe.

[25] 91 Strategic Reconnaissance Squadron History Notes, http://www.rb-29.net/HTML/91stSRSHistory/02.01.91sthist.htm.

[26] An accessible account of this debate is found in Robert P. White, *Mason Patrick and the Fight for Air Service Independence*, (Washington, 2001). Though the terms of this debate would change over time, it would not end until 1947 with the formation of the US Air Force.

achievements of the AEF's Air Service.[27] Some prominent observers even argued that aviation had lengthened the war by making surprise attack impossible and thus strengthening the defence.[28] In any event, aviation had moved into the void left in tactical and strategic reconnaissance when the static front prevented cavalry from operating. Nevertheless, the debate about the relationship between aviation and the cavalry continued. The subtext of this debate, of course, was the future of horse cavalry. Some officers, while conceding that technological advances had changed the role of cavalry, still insisted that it could augment aerial reconnaissance and verify information from the aircraft, particularly negative information.[29] A few cavalry officers fought a rearguard action, promulgating views that are hard to distinguish from those of the pre-war period. A common rhetorical tactic was to find those rare campaigns of the Great War in which cavalry had been important, for instance Allenby's campaigns in Palestine. For such officers, the importance of cavalry was 'as great now as it has ever been'.[30] Others had even more grandiose visions. One officer maintained that if one could equip both aircraft and cavalry with radios, aviation would be a great aid to the cavalry, not the other way around.[31] Russian émigré general and military analyst N. N. Golovine wrote in *Cavalry Journal* in 1922 that the cavalry must now strengthen its combat power. Certainly aircraft and

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[27] White, *Mason Patrick*, p. 31.
[28] Porter, *Aerial Observation*, pp. 105-106. White, *Mason Patrick*, pp. 33-34.
[29] United States Army, General Staff School, *Cavalry Studies: The Cavalry Division*, (Fort Leavenworth, 1921-1922), pp. 3, 17, CARL.
[30] W. D. Forsyth, Cavalry, 'A Cavalry Study of the Palestine Campaign,' *Monographs [on the] World War [by the] Class [of] 1921*, Command and General Staff School, pp. 14-15, CARL. In the same volume, see also B. B. Hyer, 'Cavalry on the Western Front during the Operations Preceding the Battle of the Marne 1914'. Americans looked at Allenby's use of cavalry in the deserts of the Middle East and saw, in their mind's eye, the Mexican border. Matthew Darlington Morton, *Men on 'Iron Ponies,' The Death and Rebirth of the Modern U.S. Cavalry*, (unpublished Doctoral dissertation, Florida State University), 2004, pp. 8, 29. See also Brian McAllister Linn, *The Echo of Battle: The Army's Way of War*, (Cambridge, 2007), p. 135.
[31] A. J. Tittinger, 'The Future of Cavalry', *CJ*, Volume 29, No. 119 (April, 1920), pp. 68.

sometimes signals intelligence could help determine the direction in which the cavalry must 'feel the contour' of the enemy's forces, but that work must inevitably be done by 'rifle and gun'. Furthermore, technology could not bring in prisoners. Given the increased lethality of the modern battlefield, the only solution, Golovine thought, was for cavalry to abandon stealth and operate in sufficient force to defeat enemy cavalry screens and then survive the encounter with the enemy's main force.[32]

Air enthusiasts made their own enthusiastic counterclaims. One leading proponent of airpower held in 1921 that 'virtually the only use' for cavalry was protecting the flanks of an army, and 'charging against troops already exhausted'.[33] He even thought that having seen the enemy's strong and weak points, the Air Service could practically 'dictate' the plan of attack and even its timing.[34]

In a few short months, aerial reconnaissance had become such a valuable capability that it stimulated intellectual ferment about the future of the most prestigious branch of the Army and made ground officers ready to fight to maintain control over control of something they had never before had: a gods'-eye view of the enemy.

Many espionage operations just lapped over into peacetime, as well. Perceived necessity certainly played its part here. However, one cannot escape the suspicion that certain officers found espionage work fun and therefore created a constituency for its continuation. Foreign Service Officer Allen Dulles, who served in an intelligence capacity in Switzerland during the war, certainly enjoyed his war. It had given him the opportunity to be in the know and engage in the cut and thrust of

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[32] N. N. Golovine, 'Cavalry Reconnaissance', *CJ*, Vol. 31, No. 127 (April, 1922), pp. 184-191, *passim*.
[33] Harold E. Porter, *Aerial Observation*, (New York, 1921), p. 24.
[34] Harold E. Porter, 'The Unobserved Observer', *U.S. Air Service*, Vol. 1, No. 1, Feb, 1919, p. 10.

intelligence operations.[35] By the same token, the State Department's intelligence liaison officer at the Embassy in London wrote about an assistant military attaché there:

> The only fault I have to find with Dennis is that like a great many amateurs he gets a little excited when dealing with what such people are apt to call 'Sherlock Holmes stuff'. But this of course is a fault from which many excellent people suffer, and comes perhaps from over-keenness.[36]

The Dulles brothers, Allen and John Foster, both of whom served in intelligence during the war, illustrate certain moral aspects of the new business of espionage. They came from a famously Catholic family but their sister later observed that Allen seemed to be a believer largely because it allowed him to experience such a delicious sense of sin each time he broke a Commandment. By contrast, John Foster was an unwavering, ardent Catholic his entire life.[37] It is probably no coincidence that Allen gravitated overseas toward the world of espionage while John Foster's intelligence service was in the MID's office in Washington where he headed a team of economic analysts.

Leland Harrison's intelligence service remained in place at the State Department, from 1919 under the name 'U-1', reflecting the fact that it reported to the Undersecretary of State, a position created immediately after the war.[38] ONI reorganized and downsized but kept an espionage function. Furthermore, the difficulties of setting up clandestine operations from scratch and on short notice convinced at least some in ONI that if there had to be a wide-scale demobilization of

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[35] James Srodes, *Allen Dulles: Master of Spies* (Washington, 1999), p. 73. See also Leonard Mosley, *Dulles: A Biography of Eleanor, Allen and John Foster Dulles and the Family Network* (New York, 1978), pp. 39-40. Allen Dulles would spend the next world war as an intelligence officer in Switzerland, too, this time as part of the Office of Strategic Services.
[36] Bell to Harrison, 9 April, 1919, Leland Harrison Papers, Box 102, Folder 'Dennis, Captain A. L. P.', LOC.
[37] Mosley, *Dulles*, p. 40-41.
[38] No satisfactory history of U-1 has been written though Rhodri Jeffreys-Jones devotes a chapter to it in his *Cloak and Dollar*, (New Haven: Yale University Press, 2002), pp. 60-80.

the Navy's human intelligence apparatus, then both attachés and former 'agents' should be kept on some sort of inactive reserve status, ready to be recalled as soon as they were needed. Better, would be to keep at least modest clandestine efforts going in such places as London, Paris, Holland, Switzerland, and Latin America all coordinated by an ONI 'Central Intelligence Section', perhaps even divorced from the attaché section as many attaches disliked being associated with 'secret service work'.[39]

The MID also faced massive budget cuts and reorganized itself, but kept the espionage function. The MID kept on collecting not just 'combat' but also political, economic and 'psychologic' intelligence. Germany continued to be of great interest, and the USSR and Bolshevism generally were also particular targets. At a conference of military attachés in 1919 to discuss lessons learned during the war and make recommendations for the conduct of intelligence during the post-war era, the assembled officers agreed that their need for paid agents would be less in peacetime but 'that agents, to a limited and legitimate degree, for the protection of our national interests will be employed'.[40]

In fact, clandestine collection continued to play a significant role in MID's efforts to satisfy its varied intelligence requirements. This was not just an era in which old operations continued. It was also a time in which new operations were launched. The Military Attaché in Copenhagen, for instance, ran a series of operations and proposed even more. As of May 1919, the Attaché had as sources 'AD 46', one Colonel Witt, 'the head of a centrum in Scandinavia for collecting information on Bolshevism' and 'AD 47', a man named Romanovitch, a 'paid agent',

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[39] N. L. R. Edgar, to DNI, 17 December 1918, NARA, RG 38, Entry 98 F-6-d, 11466-H,
[40] 'Conference of US Military Attaches at the Hague 16-19 July, 1919, inclusive. (Re. Organization and Administration of duties of Military Attache)', RG 8, Accession 1991-372, XINA, NHC.

head of '[a] system for obtaining information on political, military, and economic conditions in Germany and Russia'.[41] Back at the MID, though the elaborate plan of 1918 for exploiting the overseas presence of American companies had come to naught, something like it soon re-emerged. By 1920, MID's attaché office was secretly corresponding on 'commercial intelligence' with 46 American corporations as well as 44 other individuals.[42]

Marguerite Harrison was another example of the continuation of War Department espionage operations. During most of the war Harrison worked for the *Baltimore Sun* and the Committee on Public Information. Feeling that she could do more, she volunteered and received a commission as an Army captain in September 1918. The day after the Armistice was signed, she learned that MID would send her to Germany to collect political, social and cultural information under the credible cover (because it was real) of being a reporter and socialite. While in Germany, she did write newspaper columns and books about her experiences. In February 1920, the MID reassigned her to Bolshevik Russia under cover as an Associated Press reporter. There she got an interview with Feliks Dzerzhinskiy (whom she compared to Robespierre) and accosted Trotsky on the street, although she was unable to get him to answer any questions about the Red Army. She even used her connections to sneak into the 1920 annual meeting of the Communist Party. Harrison's career in intelligence ended when the Bolsheviks imprisoned her in the Lubyanka.[43]

There were even higher priority espionage efforts underway. Immediately after the war, espionage had friends at extremely high levels of the U.S. Government.

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[41] Military Attaché Copenhagen to Director fo Military Intelligence, 31 May 1919, RG 165, Entry 65, 9944-U-143,.
[42] Bidwell, *History of the Military Intelligence Division*, p. 264.
[43] Catherine M. Griggs, *Beyond Boundaries: The Adventurous Life of Marguerite Harrison*, (unpublished doctoral dissertation, George Washington University), 19 May 1996. Chapters 2 and 3 are largely devoted to Harrison's career in espionage.

When, during the last few days of combat, the idea was put forward to deploy a far-flung network of American 'secret agents' throughout central and eastern Europe and into the now-fractured Russian empire, it met with surprisingly little resistance, and the active endorsement of the Army and some officials within the State Department. Though President Wilson longed for a world free from espionage, three days before the armistice, Colonel Edward House, President Wilson's alter ego, cabled the president and Secretary of State Robert Lansing that there was no shortage of information about conditions in Central and Eastern Europe, but that virtually all of it was coming from the French, British and Italians, each of whom were, doubtless, shading it in an effort to serve their own ends. With peace talks likely to start in the immediate future, this was an unacceptable situation. House suggested that as an 'urgent' matter the United States should send 'agents' to the various countries to gather 'unbiased' information on which to base American policy. He even volunteered to get the project underway.[44] Wilson and Lansing agreed in principle. House suggested using Army and Navy personnel, as well as civilians. All were to be subordinate to a political intelligence section in the American delegation to the Paris Peace Conference. There would also be an administrative and communications center, perhaps in Bucharest.[45] Colonel Ralph Van Deman promptly offered a considerable number of military officers for this purpose and the MID offered Voska's services to collect information on the 'political, economic and military conditions in Poland, Bohemia, Ukraine, Austria, Hungary, Russia, and through Italy into Servia and Jugo-Slav[ia]'.[46] However, Secretary Lansing absolutely drew the line at using Foreign Service Officers in such a capacity. Herbert Hoover, who was in

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[44] *Papers Relating to the Foreign Relations of the United States: 1919, The Paris Peace Conference*, Vol. I, (Washington: GPO, 1942), 194. (Hereafter FRUS.)
[45] *FRUS*, 194-195.
[46] Churchill to Military Attaché Berne, 15 November 1918, NARA, RG 165, Entry 65, 9944-79.

charge of coordinating American relief efforts in Europe, was another critical player. His relief missions seemed the obvious vehicles in which to embed intelligence collectors, along with their code clerks, stenographers, and interpreters. Hoover, like Lansing, balked at the moral implications, but reluctantly agreed when informed that Lansing and the president wanted it done.[47]

The realm of domestic intelligence was more contentious. Operations did continue after World War I, though massively scaled back. Some scholars have long since drawn a direct connection between the domestic surveillance of the World War I period and that of World War II and even the Cold War.[48] It is important to note, however, that the record is replete with signs that intelligence personnel were uncomfortable with the mission. In early 1920 for instance, Brigadier General Marlborough Churchill, the head of the MID, wrote in the *Journal of the United States Artillery*:

> Secret service methods carried on by military agencies can not be justified in time of peace. MID has done none of this work since the armistice; and a very sincere effort is being made to comply with the spirit and letter of our laws as fully as is possible during the period of great industrial unrest which must necessarily be a source of concern to all law-abiding men.[49]

This was not just a question of publicly talking a good line. Such scepticism shows up repeatedly in the private records. When, in October 1919, a colonel recommended that MI-2 encourage the Census Bureau to include a question on party affiliation in the 1920 national census, the response from the chief of MI-2 was a curt

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[47] *FRUS*, 195-206. Peter Grose, *Gentleman Spy: The Life of Allen Dulles*, (New York: Houghton Mifflin, 1994), 39-41.
[48] See, for instance, Talbert, *Negative Intelligence*, Jensen, *Army Surveillance*. See also Alfred W. McCoy, *Policing America's Empire: The United States, Te Philippines, adn the Rise of the Surveillance State*, (Madison, 2009), chapter 9.
[49] Marlborough Churchill, 'The Military Intelligence Division General Staff', *Journal of the United States Artillery*, 52:4, (April 1920), p. 295.

'No'.[50] In the spring of 1920, requesting recruiting officers around the country to report to him on the strength of radicalism in their areas, the Director of Military Intelligence carefully instructed that they would acquire this information 'in an open and legal manner...you are not authorized to conduct investigations'. It concluded by suggesting a visit to the local Justice Department agent or chief of police.[51]

At the same time a massive demobilization of the Army and the Navy was beginning, a demobilization in which ONI and the MID fully participated. ONI closed its branch offices around the country in December 1918.[52] On 1 May 1919, a new DNI, Rear Admiral Alfred Niblack, took over ONI. He greatly preferred the pre-war, more innocent, style of intelligence and worked hard to get ONI out of domestic operations, espionage and anything that smacked of illegality or 'gumshoe' methods.[53] In fact, an enduring condition of ONI during the interwar years, what one historian has called the 'naval dilemma', was that despite a substantial desire to focus on foreign navies, ships, and technologies, the office kept getting dragged into domestic and political collection and analysis. Sometimes this was because a President directed them to act. Other times it was because military logic suggested that people within the borders of the United States could pose tangible threats to the Navy or the country as a whole.[54]

Even aside from Niblack, there was a general sense in ONI, as well, that the office had overreached during the war. They had done this with the best of intentions and largely due to inexperience, but they had overreached nonetheless, wasting their time on 'frivolous' cases and filling out—and worse yet, disseminating around the

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[50] Wm. B. Graham to Chief, Positive Branch, 15 October 1919, RG 165, Entry 65, 10560-303/9.
[51] A. B. Coxe, to recruiting officers, April 1920, NARA, RG 165, Entry 65, 10560-305/DN.
[52] Talbert, *Negative Intelligence*, pp. 135-137. Dorwart, *Office of Naval Intelligence*, p. 139.
[53] Dorwart, *Office of Naval Intelligence*, p. 140. Dorwart, *Conflict of Duty*, pp. 11-13.
[54] Dorwart, *Conflict of Duty*, pp. ix-x, 3-8, and *passim*.

country—too many suspect cards based on vague or anonymous information. All too often the result was 'ill-advised action' by ONI officials in the field, a euphemism for the destruction of a person's reputation. No, they thought, ONI continued to have a role to play in domestic affairs, but only with regard to investigating issues that unambiguously fell into the Navy's domain.[55]

If the domestic surveillance program was primarily intended to oppress minorities, the working class, and political minorities, these words and actions make little sense. There were no fewer Jews, African-Americans, or labour union members in December 1918 than there had been a month earlier; by that standard continued operations should have been in order. The fact was that, though the officer corps was no less anti-Semitic, racist, or elitist after the war ended than it had been before, most officers did not connect these matters in their mind with their military duty, which was to be able to fight and win the nation's wars.

While Niblack's opposition to domestic operations may have been a result of his generally old-fashioned tendencies, Churchill's were rooted more firmly in principle. He told the officers of the MID in a September 1919 lecture that pure military logic required the military services to be in charge of domestic counterintelligence. However, this logic must give way in the face of the requirements of democracy, not just in peacetime, but also in war.[56] When, during the Red Scare that came in 1919 and 1920, the MID's abandonment of domestic operations came in for political criticism, Churchill defended his decision. He said that his Army men were enthusiastic, energetic people who needed to be restrained

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[55] Raymond E. Horn to DNI, 31 January 1919, NARA, RG 38, Entry 98, F-6-d, 11466-D.
[56] Marlborough Churchill, 'The Military Intelligence Division War Department, General Staff', 4 September 1919, NARA RG 165, Entry 65, 10560-328/110.

lest their application of 'police methods' violate the law, and create a 'scandal and a menace to our form of government'.[57]

Certainly there were a few overenthusiastic officers who continued either performing or urging domestic operations in the immediate aftermath of the war. In large part, this was because of a concern about the Bolsheviks which had continued and even accelerated after the Armistice, spurred on by (among other things) the unsuccessful Spartacist putsch in Germany, and the short-lived Communist rule of Bela Kun in Hungary. ONI demonstrated the continued potency of wartime fears when in December 1919 it disseminated an analysis warning of a nationwide terrorist campaign led by anarchists, but also involving German and Russian Jews, Mexican bandits, a Japanese intelligence officer, and members of the IWW.[58] Needless to say no terrorist attack ensued.

The MID may have been slightly less sensationalistic, but it perceived fundamentally similar threats and, more to the point, perceived them as within its orbit of responsibility. In the fall of 1919, MID chief Churchill warned his opposite number in the War Plans Division that a Bolshevik revolution might start as early as 1 November with a coal miners' strike. This warning set in motion extensive planning and intelligence collection efforts not to mention other preparations across much of the U.S. Government. In 1920, therefore, the War Department drafted 'War Plan White' for handling such contingencies. It is true that this was just one of numerous war plans in the 'Rainbow' family of the 1920s and 1930s. That said, it was one of the better tended such documents; the Army considered a domestic uprising a

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[57] Talbert, *Negative Intelligence*, pp. 137-138.
[58] Dorwart, *Conflict of Duty*, pp. 12-13.

genuine, not a hypothetical threat.[59] Still, the domestic intelligence capabilities of the armed services were not what they had been just twelve or eighteen months before. In fact, in February, 1920, a senior official in MID expressed the fear that the art of being a 'city intelligence officer' would soon become a 'lost art'.[60]

This brief scare notwithstanding, both in their public and private statements the MID's officers sought to squelch most of their domestic activities and deny all of them. For instance, on 9 March 1920 the MID sent out an additional order abolishing its internal counter-espionage system and ordering the return to Washington of the counter-espionage manuals. The important task of keeping the ranks free of radicals would now informally fall on the shoulders of the vigilant non-commissioned officer, not on the desk of the intelligence officer. When that same year an officer in New York reported that he had heard a rumour that the MID was reporting to the President about domestic politics, the MID not only denied it but showed him copies of the materials it actually sent to the President in order to prove its case.[61] In the spring of 1920 a debate emerged in the MID. All agreed that the division should pay attention to domestic subversive movements which might threaten insurrection. Furthermore, there was a feeling that these questions should be approached with 'exactly the same scientific detachment as if the officer concerned were considering the domestic situation in England' and that *agents provocateurs* were not suitable peacetime tools. However, some officer believed that assessing the subversive threat required investigating individual agitators while others disagreed. Churchill's personal view was that the Department of Justice should investigate individuals and share with the

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[59] Clayton D. Laurie and Ronald H. Cole, *The Role of Federal Military Forces in Domestic Disorders, 1877-1945* (Washington, 1997), pp. 327-331. Talbert, *Negative Intelligence*, p. 138-143. See also Steven T. Ross, *American War Plans, 1890-1939* (London, 2002), pp. 122-126.

[60] RG Unsigned letter [Churchill?], to 'Nick' [Nicholas Biddle] 20 February 1920, NARA, RG 165, Entry 65, 10560-328/68,

[61] See correspondence filed under 10560-391 in RG 165, Entry 65.

War Department such general knowledge as emerged.[62] In any event, the suspicion that the military was spying on civilians was hard to eradicate. In 1929, the War Department G-2 told students of the Army War College that his office was still trying to 'live down the evil name' that had attached to it as a result of its domestic activities during the war.[63]

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The American intelligence effort during World War I was a significant accomplishment but upon closer examination, it goes from astounding to merely remarkable. The War and Navy Departments showed commendable flexibility in allowing novel functions and methods to intrude upon their otherwise conservative institutions. They showed even more commendable flexibility in allowing in a great many people who can only be described as quirky. Of course, the alternative was institutional shame, human tragedy, and national defeat. At the individual level the accomplishment is less surprising. Many people were brought into the intelligence services to perform functions that may have been novel to the military but which were not particularly novel to them. Scientists, engineers, businessmen, journalists, photographers, classicists, policemen, all found their natural places. In many cases, these men could then handpick their staffs. In the AEF, there was 'no excuse...for not having the cream of the newspaper men, the scientists, the engineers, such as you needed, in a great number, for organization in actual operation of the Intelligence'.[64]

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[62] Gardner L. Harding to Churchill, 13 March 1920, NARA, RG 165, Entry 65, 10560-705/7. (commenting on 705/3). Wrisley Brown to McCain, 25 March 1920, 10560-705/2; W.W. Hicks to Colonel McCain, 16 March 1920, 10560-705/3. Churchill to McCain head of Negative Branch, possibly 11 April 1920, 10560-705/3.

[63] 'Discussion following Lecture by Colonel Ford"', 29 November 1929, NARA, RG 165, Entry 65, 10560-817/7 (attachment).

[64] 'Dictation', 3 February 1936, Dennis Nolan Papers, Box 2, Folder 'Dictations, ca. 1936, on World War I', USAMHI.

Because there has been so little written about American intelligence during World War I, the rapidity and breadth of the American accomplishment has gone largely unremarked. Intelligence disciplines such as aerial photography, cryptanalysis, and goniometry that had either not existed before or had existed only in the most primordial form were now vigorous sub-communities in their own right. Intelligence personnel investigated political and economic topics nearly as much as military topics and they spent a great deal of effort combating undesirable ideologies both at home and abroad.

Is the American intelligence achievement during World War I a testament to a uniquely American emphasis on meritocracy and "can do spirit"? The answer must be no. The intelligence services of the British, French, and Germans were more sophisticated in 1914 than were those of the United States in 1917, but viewed retrospectively, the difference was not large. At the end of the war, the European services were still ahead of the Americans but again not by much.[65] The United States was In other words, the British, French, and German services advanced about the same distance as the Americans in a somewhat longer time period. However, they did not have the advantage that the Americans had of wiser, more experienced partners helping them along. Ultimately, then, the American achievement must be seen as a testament to the motivating power of war.

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[65] For a summary of the state of British intelligence in 1914, see the first parts of chapters 2-4 in Christopher Andrew, *Her Majesty's Secret Service: The Making of the British Intelligence Community*, (New York, 1987). For the French, see Douglas Porch, *The French Secret Services: From the Dreyfus Affair to the Gulf War*, (New York, 1995), chapter 4. For the Germans, see Markus Pöhlmann, 'German Intelligence at War, 1914-1918', *Journal of Intelligence History*, 5:2 (2005), pp. 24-54.

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Abbreviations

Journal and Institutions

CARL – Combined Arms Research Library, Ft. Leavenworth, Kansas

CJ – *Cavalry Journal*

FDRL – Franklin Delano Roosevelt Presidential Library, Hyde Park, NY

HIA – Hoover Institution Archives, Stanford, CA

IJ – *Infantry Journal*

JMSI – *Journal of the Military Service Institution of the United States*

JUSCA – *Journal of the United States Cavalry Association*

JUSA – *Journal of the United States Artillery*

LOC – Library of Congress, Manuscript Division, Washington, DC

ML – Marshall Foundation Library, Lexington, VA.

NHC – Navy Historical Collection, Naval War College, Newport, RI

RMC – Randolph Macon College Library Special Collections, Ashland, Virginia

USNIP – *Proceedings of the US Naval Institute*

USAMHI – United States Army Military History Institute, Carlisle, PA.

UCSC – University of Chicago, Special Collections

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