

THE INFLUENCE OF THE SPANISH INFLUENZA UPON U.S. FLEET OPERATIONS IN EUROPEAN WATERS

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In the popular mind (and probably most academic thought as well), the main American contribution to the Allied victory in World War I lies in the 2,000,000 doughboys who helped slug it out with Central Powers armies. As historian Stephen Howarth put it, “Today, imagining Americans in World War I, the doughboys spring at once to mind – young soldiers in their tens of thousands, singing and fighting through the muddy fields of France. Sailors serving under the Stars and Stripes seem scarcely to figure at all.”¹ E. B. Potter, in his authoritative one volume textbook on naval history devotes just two paragraphs of “U.S. [naval] Contributions” in World War I, which briefly describe our convoy operations.²

Introduction

Yet the story is more dramatic than the usual depictions would have it. Rear Admiral William Sims arrived in London on 9 April 1917 to study the naval war. While he was in transit, the United States declared war on Germany. As a result, Sims transitioned from naval observer to commander, as Vice Admiral, of the American naval effort. Immediately upon his arrival, Sims discovered that the British situation was precarious. German unrestricted submarine warfare was sinking 600,000 to 800,000 tons of merchant shipping every month. The British Admiralty predicted that if a solution to the submarine threat weren't found, and quickly, Britain, facing starvation, would have to sue for peace by November. The solution, arrived at, despite stout Admiralty resistance, turned out to be the convoy system. This called for destroyers (lots of them), cruisers and aircraft (both heavier than air and lighter than air) to

¹ Howarth, Stephen: *To Shining Sea – A History of the United States Navy* (New York: Random House, 1991)

² Potter, E.B., ed.: *Sea Power – A Naval History* (Annapolis: Naval Institute Press, 1981)

provide antisubmarine escort for groups of ships – merchant transports, hospital ships and troopships - traversing submarine-infested waters in the Atlantic and the approaches to Britain, and in the Mediterranean. American destroyers played a significant role in that part of the anti-submarine effort by seeking out U-boats as they approached to attack convoys and bombarding them with depth charges.

Other anti-submarine activities undertaken by American naval elements included:

- Laying 50,000 of a 70,000-mine barrage in the North Sea to interfere with U boat passage from their pens along the Belgian coast to the North Sea and the Atlantic;
- “Chasing” submarines with about 140 quickly produced wooden submarine chasers. These 120 foot boats, officered largely by naval reservists from colleges and universities and armed with depth charges, gradually developed successful tactics in using hydrophones to identify, locate and attack the enemy submerged in the Atlantic and the Mediterranean;
- Identifying and attacking submarines from the air. Naval and marine aviators, based on the French and Irish coasts, hunted submarines, then bombed them or marked them with smoke bombs so destroyers or subchasers could attack with depth charges;
- Pursuing U boats from under the surface. American submarines based on the Irish coast performed both escort and submarine hunting missions.

In addition, four battleships were sent to join the British Grand Fleet as the Sixth Battle Squadron to strengthen the Grand Fleet in event of another Mahanian grand battle against the German High Seas Fleet.³ Later on, another Battleship division was sent to supplement convoy operations.⁴

³ The grand battle of the war, Jutland, was a Mahanian “disaster” in that neither fleet won what Mahan defined as the necessary decisive large-fleet victory. But the British, if fact, had won a strategic victory, because the *Hochseeflotte* remained bottled up in port until the end of the war.

⁴ Most of this is discussed in Sims’s history of the Naval war cited above. The Sixth Battle Squadron was commanded by RADM Hugh Rodman. Battleship operations are detailed in Jones, Jerry W.: *U. S. Battleship Operations in World War I* (Annapolis, Naval Institute Press, 1998.)

Finally, and very importantly American navy and commercial ships carried about 46%⁵ of those 2,000,000 doughboys, and vast amounts of food, supplies and war materiel to Britain and to the war effort in Europe itself.

Methods and Materials

In preparing to write this paper, I was struck by the absence of any mention of the influenza in any of the broad naval histories I consulted. Lisle A Rose, in his one volume history “America’s Sailors in the Great War”⁶ writes only about individual sailors’ afflictions with the disease. Vice Admiral Sims similarly ignored the flu as did Hugh Rodman, the battleship commander.⁷ I attributed this lack of information to the usual bias of military figures and historians to emphasize military operations to the exclusion of such “peripheral” - though often decisive - matters as logistics or contagion. Even writers about the epidemic give short shrift to naval operations: Gina Kolata only briefly mentions the Navy in her book on the flu, and John M Barry ignores impact of the influenza upon sailors entirely.^{8,9}

In order to correct this oversight, I consulted relevant naval histories and actual operational correspondence for U.S. Naval Forces Operating in European Waters for this paper.¹⁰ I will review each aspect of the naval antisubmarine effort in the order laid out above.

Data

Destroyers. As for the Destroyers performing convoy escort duties, just one mention of influenza appears, on 22 October 1918: “The Influenza situation is the occasion for some worry, but, really,

⁵ Rose, Lisle A.: *America’s Sailors in the Great War – Seas, Skies, and Submarines* (Columbia, Missouri, University of Missouri Press, 2017.), p 100.

⁶ Rose, op. cit.

⁷ Sims, William Sowden and Burton J Hendrick: *The Victory at Sea* (ebook version, Madison & Adams Press, 2017.) Rodman, Rear Admiral Hugh: *Yarns of a Kentucky Admiral* (Indianapolis, Bobbs-Merrill, 1928.)

⁸ Kolata, Gina: *Flu – The Story of the Great Influenza Pandemic of 1918* (New York, Farrar, Straus and Giroux, 1999.)

⁹ Barry, John M.: *The Great Influenza – The Epic Story of the Deadliest Plague in History* (New York, Viking/Penguin, 2004.)

¹⁰ National Archives and Records Administration (hereafter “NARA”), RG 45, Records Collection of the Office of Naval Records and Library, File 1911-1927.

compared to other organizations, I think we have been rather fortunate. I have found it necessary to use the hotel temporarily for our influenza cases...”¹¹

Minelayers. Scant mention of the epidemic is found in reports from the Minelaying Squadron¹².

Commander Mine Force, in his Weekly Report of Operations for the week ending November 2 1918 wrote, “Very few cases of this disease have occurred... among the ships of the Mine Force. In fact the Naval Forces in this section have been remarkably free from this disease, considering the fact that it is prevalent among the civil population in this vicinity.” A week later, he wrote, “The epidemic of influenza among out [sic – “our”?] forces ... has apparently disappeared, there having been no cases since 8 November 1918. A total of 50 percent of this detachment have been ill with influenza and transferred to Base Hospital Number Two, in order that they might receive proper care, and in order to prevent the spread of this disease as much as possible.” He made no mention of impact on minelaying operations.¹³ Captain Reginald R Belknap, the Minelaying Squadron Commander mentioned the flu but once in his history of American World War I minelaying operations in which he indicated that 113 of the 427 man crew of the squadron flagship, USS *San Francisco* (C-5) fell ill as the ship prepared to leave British waters after the Armistice.¹⁴ In a report dated 1 November 1918, the Commander of the Sixth Minesweeper Squadron, based in Ireland, reported that one boat (of about 30 in the squadron) was delayed in undertaking a mission because her crew had to transfer one of her officers to a local hospital, and that another did not leave for operations at all for three days “owing to sickness in the crew”.¹⁵

¹¹ NARA, CE-Destroyer Escorts 9/18 – 11/18, Entry 520 I-18 Box 34 of 1630 – Destroyer Escorts 9, File No 3-978-5 U.S. Naval Base 27, 22 October 1918, to Captain R. H. Leigh, U.S.N. in London.

¹² 10 ships, eight of which were purpose built minelayers, two (including the Flagship, USS *San Francisco* [C-5]) were nineteenth century protected cruisers converted to minelayers in 1910.
<https://www.history.navy.mil/research/histories/ship-histories/danfs/s/san-francisco-i.html>, accessed 2 March 2018.

¹³ NARA, RG 45, TA-Force Commanders General Reports-Vice Admiral Sims Reports, Entry 520 I-18 Box 640 of 1630, Folder TA-Vice Adm. Sims’ General Reports Nov 1918 Folder 5 REPORTS FROM MINE BASE.

¹⁴ Belknap, Reginald Rowan: *The Yankee Mining Squadron or Laying the North Sea Mine Barrage* (Annapolis, U.S. Naval Institute, 1920, facsimile reprint London, Forgotten Books, 2015.), p 94.

¹⁵ NARA, RG 45. OD-U.S. Subchasers – Operations of 9-12/18 – 1919 Halifax Patrol: Flotilla Attached to Subchasers Entry 520 I-18 Box 388 of 1630 File OD U.S. Subchasers, Operations of November-December, 1918 Folder 3 (in pencil: Force

Subchasers. The most authoritative history of the subchaser war effort mentions “flu” but once, and this describes a preventative quarantine of one unit – after the Armistice.¹⁶ That said, some subchaser crews appear to have suffered heavily from the influenza. The squadron of 36 boats based on Corfu, in a message sent on 6 November, just five days before the Armistice, when the subchasers were trying desperately to bottle German and Austrian subs up in the Adriatic Sea after Austria’s departure from the war, wrote in answer to criticisms of one of their hunting missions, “As to discrepancies disclosed in signals, principally in the preambles, due to the epidemic of influenza in the Sub Chaser Detachment a large number of the radio operators with the hunt were substitute operators from the Base...”¹⁷ On 9 November, Commander Subchaser Detachment Three at Queenstown, Ireland reported that “[o]ne unit at Holyhead is reported as unable to operate on account of 35 men on the sick list from influenza. None of these cases is serious, however, and the medical officer states that all present cases should be returned to duty within a few days.”¹⁸ None of this illness, however, appears to have impacted the subchasers’ performance of their mission to any degree whatever.

Naval Aviation. Naval aviation was in its infancy when the U.S. declared war upon Germany. As a result, American aviators and the sailors who supported them and their aircraft found themselves integrated into French, British, and Italian aviation units where they were trained. Once qualified, the Yanks flew antisubmarine and convoy escort missions and bombed German submarine bases and other targets using mostly Allied equipment. It was only in the late stages of the war that wholly American units were stood up, with American-made aircraft.¹⁹ Neither Rose nor an official online history of naval

Comm S3466) U.S. NAVAL FORCES OPERATING IN EUROPEAN WATERS SUBCHASER DETACHMENT THREE U.S.S.C. 271, FLAGSHIP BASE SIX 1 November 1918

¹⁶ Woofenden, Todd A.: *Hunters of the Steel Sharks* (Bowdoinham, Maine, Signal Light Books, 2006.), p119.

¹⁷ See footnote 16, File No 8-255-1 6 November 1918.

¹⁸ See footnote 12, REPORT FROM QUEENSTOWN

¹⁹ Rose, op. cit., pp 234ff

aviation²⁰ mention the influenza in aviation units, nor did any of the intel briefings given to Sims preparatory to the daily Admiralty meetings in London.²¹ Geoffrey L Rossano, in his comprehensive history of naval aviation mentions influenza 12 times, 3 of them substantive. Of Naval Air Station Dunkirk, he notes that during the period 21 October to 5 November, “as much as 90 percent of the base complement [were] affected more or less seriously. The weakened men spent the period ... taking down hangars, cleaning the grounds, and loading trucks and a barge for possible repositioning northward along the coast” in response to the tactical retreat of German forces from coastal areas. The naval air station at St Trojan, on the French Atlantic coast suffered its epidemic at the end of August, “with 6 deaths and 210 men incapacitated to varying degrees. The sickness lasted about three weeks and ‘at times the station was completely unable to carry on operations.’” Naval Air Station Lake Bolsena, Italy experienced a flu outbreak in October, when “flying activities virtually ceased” for a week or two. This was a training base, so this lack of activity would had virtually no impact on the antisubmarine effort being prosecuted in the Mediterranean.²²

Submarines. Seven American L boats were stationed on the south Irish coast to patrol for U-boats as they transited south and west of Ireland and later, along the British and western French coasts. Four older and smaller K boats and one E boat were homeported in the Azores. The machinery in these latter vessels proved to be so unreliable that the boats virtually never put to sea; they played no role in the anti-U boat effort, though Rose argues for a deterrent effect.²³ In about half a year of operations,

²⁰ <http://www.ibiblio.org/pha/USN/Navy/Naval%20Aviation%20in%20World%20War%20I.pdf>, accessed 8 March 2018.

²¹ NARA, RG 45 TC-Force Commander’s Letters and TD-Admiral Sims Personal File, Entry 510, I-18, Box 643 of 1630, TC-Admiralty Conferences 1918 Folder 1. These are daily “VERY SECRET” Memoranda prepared for Sims relating to daily staff meetings at the Admiralty.

²² Rossano, Geoffrey L.: *Stalking the U-Boat – U.S. Naval Aviation in Europe During World War I* (Copyright Geoffrey L Rossano; Published Gainesville, FL, University of Florida Press, 2010.), pp 78, 117, 295.

²³ Lisle, op. cit. P 197.

American boats, despite regular patrolling, made few contacts and no kills. No mention of influenza appears in the submariners' operational reports.²⁴

Cruiser and Transport Service. Undoubtedly the most significant American naval and maritime contribution to the Allied war effort was the convoy system. As many as twenty four cruisers, in addition to the destroyers reported above, escorted some 45 American troopships and innumerable Allied and neutral commercial vessels in their trips back and forth across the Atlantic. Vice Admiral Albert Gleaves, USN, Commander of the Cruiser and Transport Service mentions the influenza in his history of the Service, mainly to record the number of troops who got sick on the ships, but he makes no mention of any impact on operations.²⁵ Only once does influenza appear in operational reports from the Cruiser and Transport Service, and that was to transmit an instruction from the Commander, U.S. Navy Forces in France concerning the early transfer of influenza patients to nearby Naval Hospitals.²⁶ On the other hand, conditions aboard the troopships in seemed dire. On 2 October, Sims wrote to OpNav, "Thompson, Medical Aide, after consultation with General Winter, Chief Surgeon, London Headquarters US Army, reports to me that the health conditions on arrival transports during last week was serious. Over 200 deaths from Influenza-Pneumonia and about 3,000 sick reported. Medical sides [sic; *cites?*] opinion overcrowding of troops one important cause of spread of contagion."²⁷ The troops had caught the virus in training camps, where it spread readily among soldiers living crowded in barracks and being stressed by the rigors of military training. While an occasional transport experienced

²⁴ NARA, RG 45, ON-Submarines-Submarine divisions 3-6; Operation Reports. Entry 520 I-18, Box 420 of 1630.

²⁵ Gleaves, Vice Admiral Albert: *A History of the Transport Service – Adventures and Experiences of United States Transports and Cruisers in the World War* (New York, George H Doran Company, 1921), p190, 191), <https://archive.org/stream/historyoftranspo00glea#page/190/mode/2up>, accessed 15 March 2018.

²⁶ NARA, RG 45, CR-Cruiser & Transport Service 9/18-6/19, Entry 520 I-18 Box 88 of 1630, Folder CR-Cruiser and Transport Service October 1918 Folder 2, 4 October 1918

²⁷ NARA, RG 45, IL 6104, K-20 (in pencil, "October 2, 1918"), From: Sims To: OpNav 6104

delay in movement due to influenza amongst her crew²⁸, no mention is made of operational interruptions due to influenza among the cruisermen.

Battleships. In early December 1917, RADM Hugh Rodman, USN in Command of Battleship Division Nine arrived in British waters with his coal burning dreadnoughts *Delaware*, *Florida*, *Wyoming* and *New York*. While intended to supplement the British Grand Fleet (as the 6th Battle Squadron) at Scapa Flow in a hoped for decisive battle with the German *Hochseeflotte*. their crews in actuality spent most of their time engaged in gunnery drills and convoy escort duty. Three more Battleships – *Oklahoma*, *Nevada* and a bit later, *Utah* – Battleship Division Six - arrived at Berehaven on the Irish coast in August 1918. Their job was to protect iron ore convoys between Scandinavia and Britain against German surface raiders. The first reports of influenza from both American Divisions are dated 26 October. From Battleship Division Six, “During the early part of the week the epidemic of influenza reached rather serious proportions. At the present time the situation is much improved. Deaths from pneumonia during the week have been as follows: UTAH 4, NEVADA 7, OKLAHOMA 4. Admissions to the sick list have been made freely and all practicable precautions taken to limit the spread of disease.” From Battleship Division Nine, “Influenza is epidemic in the GRAND FLEET; the ARKANSAS with over 230 cases, and the WYOMING with less than 10 are in strict quarantine. To date it is of a mild form. Every precaution is being taken to prevent and eradicate it. There is every reason to believe that the ARKANSAS became infected by quartering a draft of men on her, which came from the [*troopship*] LEVIATHAN, a badly infected ship. These men were ... were accommodated on the ARKANSAS, pending the departure of the vessel in which they were to take passage.”²⁹

²⁸ NARA, RG 45, Box 34 of 1630, File CE Destroyer Escorts 9, DUMMY Oct 24 1918, Class 3, Part 2 CE CO (pencil crossed out and “CU” entered), From Commanding Officer, S/S RE D’ITALIA To: Commander, Naval Forces, Brest, France, Subject: S.S. RE D’ITALIA unprotected in submarine waters; report on Ship unable to maintain position in convoy owing to so many of her crew having influenza

²⁹ NARA, RG 45, Box 632 pf 1630, Folder November 1918 4, REPORTS FROM BATTLESHIP DIVISION

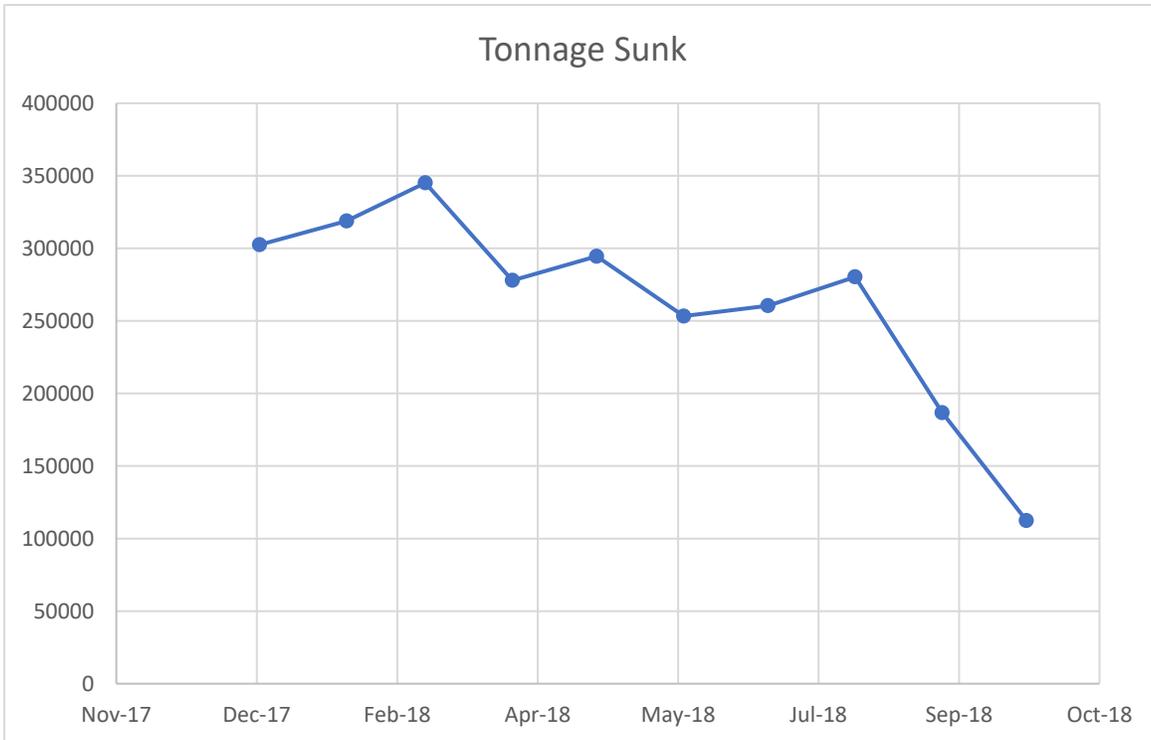
Jerry W. Jones, in his history of U.S. Battleship Operations in World War I³⁰ notes that the British Grand Fleet was severely affected by the epidemic. He quotes LT John McCrea, aboard the USS *New York*, "...had the German fleet come out to do battle during the epidemic, many ships of the Grand Fleet would not have been able to give an account of themselves." Certainly *Arkansas*, with nearly a quarter of her crew on the sick list at the peak of her epidemic, would have been hard pressed to contribute effectively to any large fleet operation. Fortunately, crewmembers in the German fleet were war tired, and German Vice Admiral Scheer's planned naval *Götterdämmerung* against the Grand Fleet was aborted by mutiny among his crewmembers in late October.

Results

The most significant contribution of American naval forces to the Allied war effort was its participation in the anti-submarine campaign in its many iterations. Just what was the impact of the Spanish influenza on these activities? The answer is told in the tonnage sunk statistics for the time. Sims, in his history of the naval war effort lists the monthly tonnage sunk from February 1917 through October 1918. These show that sinkings began to decrease markedly in the last quarter of 1917, a decrease that continued into the next year. Most instructive to our consideration are the tons of shipping (British, Allied and neutral merchants and fishing vessels) sunk in 1918 (see graph 1).³¹

³⁰ Jones, Jerry, W.: *U.S. Battleship Operations in World War I* (Copyright Jerry W. Jones; Published, Annapolis, Naval Institute Press, 1968)

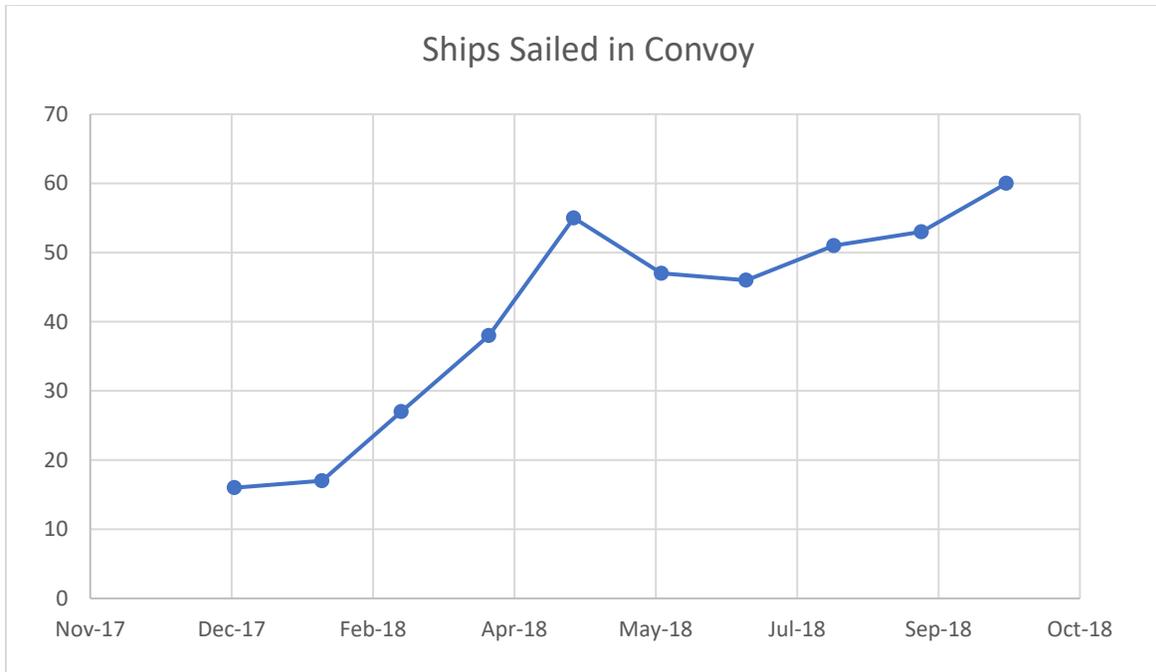
³¹ Sims, op. cit., Appendix VIII, Monthly Losses Since February 1917, From Enemy Action



Notice the jump in August. It is virtually impossible to attribute this jump solely to the illness that paralyzed NAS St Trojan. In fact, Navy Surgeon General William C Braisted stated that the main onslaught of influenza among our Atlantic naval forces hit in mid-to-late September, that is, in the month following the surge in sinkings.³² In fact, the downward trend resumed during the month of highest contagion.

Convoy activity similarly shows that the epidemic in September and October did not result in a decrease in sailings. In fact, ship departures (displayed in Graph 2) showed a continuing increase through the period of contagion.

³² Secretary of the Navy: *Annual Reports of the Navy Department for the Fiscal Year 1919* (Bureau of Medicine and Surgery, report of), (Washington, Government Printing Office, 1920), p2438ff, <https://babel.hathitrust.org/cgi/pt?id=coo.31924065924502;view=1up;seq=2503>, accessed 13 March 2018.



Conclusion

This report really ends up looking like a scientific paper: I started with a **thesis** – the Spanish influenza had an adverse influence upon U.S. Navy operations in support of the Allied efforts against the Central Powers in World War I. I then did the “**experiment**” – a search of relevant historical works and official reports of operations in, under and over European waters. I collected and analyzed the **data**. Result: the Spanish influenza had no operationally significant adverse influence upon U.S. Navy operations in European waters during World War I. **My thesis is disproven.**

A Cautionary Afterthought

In some units, a significant proportion of U.S. Navy personnel fell ill at some point during the period of contagion (August through October 1918). That operations were not significantly impacted is at least partly because there was a large enough pool of manpower available to supplement crews where necessary and because larger ships were generously crewed. In addition, the war appeared to be winding down as victory in the land war was clearly in view. Moreover, the enemy’s forces were suffering the

same contagion – as Gina Kolata put it, “...the Germans were at least as devastated...” as were Allied armies³³, and the German Navy was in the throes of the mutinous impulses mentioned above.

But what of today? In an online survey of military and civilian writing on the risks of bioterrorism and biowarfare, I found that the entire conversation appears to be around ameliorization of risk (prevention / immunization), training of first responders, diagnosis and treatment. Other than for first responders and the provision of special medical expertise, manning issues are not mentioned at all. We know well that both simple and sophisticated biotechnologies and increasingly sophisticated weaponization techniques, as well as the knowledge to create and apply them, are readily available to both state and non-state actors. As a result, our military forces face potential exposure to “designer” agents carefully crafted to disable or kill large numbers. In the meanwhile, in an age of cost constraints and rising personnel costs, our military, and in particular our navy, seems to have instituted manning policies and equipment design based on a “minimum numbers necessary” approach. Given the increasing risk of the use of biological weapons in time of war, it would be wise to put an “epidemic manning surge” - that is, having more people than “mission-necessary” in place as back-ups - into our force planning, lest critical war fighting capability be paralyzed when epidemic strikes.

³³ Kolata, op. Cit., p50