



## Introduction

Dr. Edward T. Wolf, sometimes known as E. Trowbridge, was going behind Japanese lines. The Army issued him a Colt .45 and a submachine gun. He wasn't looking to fight; he was hunting mosquitoes to know what diseases they spread. GEN Douglas MacArthur wanted intelligence on the diseases in Northern New Guinea, and men like Trowbridge had to establish the ground truth because, in September 1942, no medical intelligence organization existed to provide it. CPT Wolf boarded a 40-foot wooden fishing boat with five Filipinos as crew and traveled at night from the hastily built base at Milne Bay, on the eastern end of New Guinea, north and west along the coast up to Wanigela Bay and onward. The 32<sup>nd</sup> Infantry Division was shortly going to land somewhere on that remote jungle coast, and knowledge of endemic diseases and the insects that transmitted them would affect operations.<sup>1</sup>

Trowbridge's dangerous mission was necessary to gather the intelligence because nobody had thought ahead and had prewar medical intelligence.

## Starting Medical Intelligence

In April 1941, months before Pearl Harbor, the chief of preventive medicine in the Office of the Surgeon General knew he didn't know enough and got an officer assigned to do medical intelligence work.<sup>2</sup> But nobody was trained for that work, and there was a whole world to cover. Finding people was a challenge. Even with the draft to provide manpower, nobody had any experience. And which part of the world? Priorities were a problem because the enemy

had the initiative and the Allies repeatedly had to switch focus areas. They initially focused on the French colonies in the Caribbean because the Vichy French might give the Germans bases there. Next, the United States traded 50 old destroyers to the British in exchange for basing rights on various British islands, and it was necessary to identify the medical threats on those islands because American troops would be at risk. The first officers sent were sanitary engineers who provided detailed information about the water systems but very little about diseases. The Japanese attack on Pearl Harbor compounded these problems: now United States forces would be operating in the Pacific as well.

Despite the problems, the medical intelligence office (which had various titles during the war) contributed to 96 "Strategic Surveys" in 1942 alone, with only seven staff members. They knew the information was patchy, but it was something. They contributed it to the planners but had no idea how it affected operations. In 1943, the number of products dropped as the Allies gained the initiative and plans could be more deliberate instead of reactive. The staff grew, but unfamiliarity with languages remained an obstacle to understanding the worldwide operating environment. The Army worked with the Navy (the Air Force did not yet exist) on Joint Army-Navy Intelligence Studies and firmed up internal operating procedures. They developed a structure of collection, analysis, and dissemination, rather than a geographical one. The approach to sources became a bit more systematic: they combed through open-source medical literature; followed up personal contacts; and got information from the War Department G-2, Allies, prisoners, Office of

# The collection, analysis, and dissemination of medical information of importance to our troops operating in all and any parts of the world.

## —World War II definition of medical intelligence

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Strategic Services, and sometimes operational forces. Only limited information came from the theaters because the intelligence officers there had never worked with medical intelligence, and medical officers had trouble getting on the intelligence staffs or intelligence field teams. They also had to decide how to cover foreign medical developments. Was a new surgical procedure or a new medicine an intelligence matter or a clinical matter? The final decision was that medical intelligence was about disease prevalence, not about how it was treated. The exception was biological warfare, which had such serious implications that intelligence and medical intelligence both covered all aspects: overlap was better than gap.<sup>3</sup>

By 1944, the medical intelligence “product” had changed to Technical Bulletins, Medical, known as TB MEDs. These included a section of recommended ways to safeguard troops’ health. With the broad outlines of Allied strategy clear, it was easier to predict locations, and there was less wasted effort. Sometimes the TB MEDs were ready just before an operation (the report on France was printed in May 1944, only 34 days before D-Day), not allowing much time for review and intelligence to influence operations. Yet when the report was ready in time, it didn’t necessarily influence operations: TB MED 20, the survey of the Mariana Islands, was ready 90 days before the invasion, and it identified dengue fever as a major risk. But insect-control teams were not prioritized for shipping space, and the invasion forces suffered around 4,000 dengue cases on Saipan alone before the bug-sprayers arrived and promptly broke the epidemic.<sup>4</sup> Intelligence was accurate and timely but might not influence plans.

Getting information to theaters could be as much of a problem as getting information from them. No established channels existed for medical intelligence, either in intelligence staffs or in medical staffs. Potential users did not know about medical intelligence, so they did not know to ask, and even the communication channels were unclear. A TB MED was likely to get to a medical unit, but would it get to the G-2 staff? One novel distribution channel was open-source publishing: since much of the information was public domain, a three-volume set of books titled *A Geography of Disease and Sanitation* was published, which could have been useful if they reached theaters in time.<sup>5</sup>

### The Cold War

After World War II, sweeping changes occurred in U.S. defense and intelligence structures; however, the newly established Central Intelligence Agency did not receive the medical intelligence mission. Instead, it stayed with the Army, consolidated on behalf of all the services.<sup>6</sup> However, the office was downgraded: in 1946, the chief went from a lieutenant colonel to a major to a civilian.<sup>7</sup> (To be fair, that probably reflected the reduction in size of the military, and the position has since moved up to colonel.) On the plus side, a medical intelligence course was taught at the Army Medical Field Service School, and with the subject matter being intelligence, the student text was of course classified.<sup>8</sup>

Following World War II, a contingent of United States troops moved to Korea to disarm the Japanese occupation forces and began advising the fledgling Republic of Korea; therefore, the prevalent diseases were fairly well known by 1950 when the Korean War started and there was limited need for that part of medical intelligence. But some medical intelligence derring-do occurred during the Korean War. Communist troops were moving through Manchuria, where bubonic plague (i.e., the Black Death) was endemic. Reports from agents in North Korea of a plague-like outbreak alarmed American leaders because the disease could easily turn into a pneumonic form, spread by coughs and with nearly 100 percent mortality. In February 1951, a three-man team led by BG Crawford Sams, Medical Corps, went ashore behind Communist lines. On-site discussion with an agent cut through miscommunication. The disease was identified as hemorrhagic smallpox rather than bubonic plague, and therefore it was not necessary to get a blood sample from a Communist soldier (dead or alive).<sup>9</sup> Smallpox was bad, but the United States and United Nations forces had effective vaccines, so it would not be a problem.

After Korea, the medical intelligence office continued its desk-based work in Washington, DC. Through the Cold War, the name changed but the mission and manning stayed roughly constant, at around 30 military and civilian personnel, until the mid-1980s.<sup>10</sup> In March 1963, the bulk of personnel transferred to the Defense Intelligence Agency (DIA), with the Army retaining only some liaisons and special projects. Whatever their higher headquarters, the mission was



WRAIR-FEST entomologist performing field studies in Vietnam.

unchanged. For operations in Vietnam, only so much could be done from Washington. The literature about diseases in Southeast Asia was limited, and field studies (debriefing and blood samples from returning Special Forces personnel) were used during the period when U.S. forces were a limited number of advisors instead of line units engaged in heavy combat.<sup>11</sup> That was recognized as inadequate, and a medical research team was sent, but they were hospital-based and focused on clinical research. Because the counterinsurgency war would be fought in the countryside, a field capability was needed and a small unit with a long name was formed: U.S. Army Special Forces–Walter Reed Army Institute of Research Field Epidemiology Survey Team (Airborne), known as WRAIR-FEST. The Special Forces and

Airborne designations were not formalities, and a 17-week training program prepared personnel, which included practical exercises with plague in New Mexico and leptospirosis at Fort Bragg, North Carolina. Deploying in September 1966, they wore green berets and were attached to the 5<sup>th</sup> Special Forces Group (Airborne), which gave them credibility and ready access to the network of Special Forces camps around Vietnam. While most of their work was determining the causes and transmission routes of diseases, they developed operational intelligence as well. In April and May 1967, they identified a new strain of malaria arriving in the Mekong Delta region of South Vietnam. It was a strain from North Vietnam, and it showed North Vietnamese Army troops were arriving. This medical intelligence arrived before any other intelligence.<sup>12</sup>

While the WRAIR-FEST was being organized, the Army also had a standardized Team QA, Medical Intelligence Detachment. This was only three personnel “for selective collection, initial examination, evaluation, and classification of technical and medico-military information and dissemination of intelligence derived therefrom.”<sup>13</sup> Supposedly, there would be five per army in the field, 15 personnel just to provide medical intelligence, but only one went to Vietnam. The 521<sup>st</sup> Medical Detachment (QA) deployed by 1966, interrogating prisoners, examining captured supplies and equipment, and contributing to reports such as *Medical Causes of Non-Effectiveness among Viet Cong Troops*.<sup>14</sup>

After Vietnam, medical intelligence again returned to Washington. DIA dropped medical intelligence, apparently to cut headcount, but the Army resumed the mission as the U.S. Army Medical Intelligence and Information Agency (USAMIIA). USAMIIA became solely responsible for Department of Defense medical intelligence, incorporating the general medical intelligence mission as well as the ongoing medical science and technology and medical materiel exploitation programs. DIA had begun keeping databases of medical facilities, which did not require medical expertise although evaluating capabilities did.<sup>15</sup> Another kind of field team was organized (again, at least on paper), the Team LP, Medical Technical Intelligence Team, as an intelligence unit rather than a medical one.<sup>16</sup>



Technical intelligence board of captured medical supplies, Vietnam.

### Moving to the Intelligence Community

In 1982, USAMIIA became a joint organization, the Armed Forces Medical Intelligence Center (AFMIC), with the Navy committing resources. (Previously, the Navy had relied mainly on its Naval Medical Research Units.)<sup>17</sup> It was not part of DIA but had a DIA representative on its interdepartmental advisory panel and certainly worked collegially. Products included traditional reviews of diseases and medical capabilities in geographic areas, the medical part of intelligence preparation of the battlefield.<sup>18</sup> More topical material was pushed out in a “weekly wire” of concise assessments. AFMIC developed considerable expertise on biological weapons and warfare, something that had been considered as far back as World War II but had not been a major topic.

changed, and unclassified information was made available on CD, while “Medical Environmental Disease Intelligence and Countermeasures” became a web-distributed product, currently available as an app through the Medical Communications for Combat Casualty Care program.<sup>20</sup> AFMIC supported the military, congressional, and White House staffs, but most support was to operational forces.<sup>21</sup> As deployments have increasingly been to immature theaters, knowledge of diseases and medical facilities has become more important.

AFMIC, since 2008 the National Center for Medical Intelligence, is the only organization in the world with this comprehensive medical intelligence mission. They continue to provide integrated, all-source intelligence for the

Department of Defense and other government and international organizations on foreign health threats and other medical issues to protect U.S. interests worldwide. ✨

#### Endnotes

1. Dr. Edward T. Wolf’s papers are at the John P. McGovern Historical Collections and Research Center, Houston Academy of Medicine–Texas Medical Center Library, Houston TX.
2. For World War II in general, see Gaylord W. Anderson, “Medical Intelligence,” in *Preventive Medicine in World War II, Vol. IX, Special Fields*, eds. Robert S. Anderson

W 3 V X		
Armed Forces Medical Intelligence Center U. S. Army Medical Intelligence and Information Agency		
STATIONS	FROM TO	REMARKS
Washington, D. C.	1 Apr 73 1 Dec 78	RELOCATED
Ft. Detrick, Md	1 Dec 78 1 Oct 82	REDESIGNATED
Ft Detrick, MD	1 Oct 82	

Despite redesignations and relocation, medical intelligence was an enduring requirement for the military.

and Ebbe C. Hoff (Washington, DC: U.S. Government Publishing Office [GPO], 1969), 251–340.

3. For a personal account, see Carlo Henze, “Recollections of a Medical Intelligence Officer in World War II,” *Bulletin of the New York Academy of Medicine* 49, no. 11 (November 1973): 960–973.

4. Mary Ellen Condon-Rall and Albert E. Cowdrey, *United States Army in World War II: The Technical Services: The Medical Department: Medical Service in the War Against Japan* (Washington, DC: U.S. Army Center of Military History, 1998), 234, 244. This is one book in a series of 79 volumes divided into multiple sub-series.

5. James Stevens Simmons, Tom F. Whayne, Gaylord W. Anderson, Harold MacLachlan Horack, and Ruth Alida Thomas, *Global Epidemiology: A Geography of Disease and Sanitation* (Philadelphia: J. B. Lippincott & Co., 1944, 1951, 1954).

6. Jonathan D. Clemente, “The Fate of an Orphan: The Hawley Board and the Debates over the Postwar Organization of Medical Intelligence,” *Intelligence and National Security* 20, no. 2 (2005): 264–287, DOI: 10.1080/02684520500133935.

7. “Chronology of Army Medical Intelligence, 1941–1973,” DigitalCommons@University of Nebraska–Lincoln, 1973, <https://digitalcommons.unl.edu/dodmilintel/105/>.

8. “Special Text, ST 8-30-1, Medical Intelligence, 1951,” DigitalCommons@University of Nebraska–Lincoln, 1951, <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1058&context=dodmilintel>.

9. This is from BG Sams’ biographical file, Army Medical Department Center of History and Heritage, Fort Sam Houston TX. BG Sams wrote about his activities with sufficient panache to receive a Distinguished Service Cross.

10. “Brief History of AFMIC (Total Manpower),” DigitalCommons@University of Nebraska–Lincoln, 1992, <https://digitalcommons.unl.edu/dodmilintel/106>.

11. Louis T. Dorogi, “Notes on the Establishment of the United States Army Special Warfare Center (Airborne) Surgeon’s Office,” *Journal of Special Operations Medicine* 10, no. 4 (Fall 2010): 58–63.

12. Louis T. Dorogi, “The United States Army Special Forces–Walter Reed Army Institute of Research Field Epidemiology Survey Team (Airborne),” *Journal of Special Operations Medicine* 9, no. 2 (Spring 2009): 54–71.

13. Department of the Army, Field Manual 101-10-2, *Staff Officers’ Field Manual, Organizational, Technical, and Logistical Data, Extracts of Tables of Organization and Equipment* (Washington, DC: U.S. GPO, 19 January 1965 [obsolete]).

14. Combined Intelligence Center Vietnam, Special Report 67-001, *Medical Causes of Non-Effectiveness among VC Troops* (7 July 1966).

15. Denis C. Kaufman, *Medical Intelligence: A Theater Engagement Tool* (Carlisle, PA: U.S. Army War College, 2001).

16. Department of the Army, Table of Organization and Equipment 30-600H, *Military Intelligence Organization* (Washington, DC: U.S. GPO, 15 July 1977).

17. This section draws heavily on Kaufman, *Medical Intelligence*.

18. Armed Forces Medical Intelligence Center, *Medical Capabilities Study: The Caribbean Area* (Washington, DC: Defense Intelligence Agency [DIA], 1990).

19. Armed Forces Medical Intelligence Center, *Operation Restore Hope: Health Risks and Countermeasures in Somalia* (Washington, DC: DIA, 1992).

20. “About the MC4 App,” Army Medical Communications for Combat Casualty Care Resources, U.S. Army, <https://www.mc4.army.mil/Mc4System/Apps.aspx>.

21. Gerard Schumeyer, “Medical Intelligence...Making a Difference,” *American Intelligence Journal* 17, no. 1/2 (1996): 11–15.

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## U.S. ARMY MEDICAL DEPARTMENT MUSEUM



### Located at Historic Fort Sam Houston in San Antonio, Texas



The mission of the U.S. Army Medical Department Museum is to collect, preserve, exhibit, and interpret historically significant property related to the history of the Army Medical Department from 1775 to the present. As an educational institution, the museum will support training and education for military and civilian personnel.

