

AN ESSAY

JAPANESE BIOLOGICAL WARFARE IN WORLD WAR II: THE AFTERMATH

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JAPANESE BIOLOGICAL WARFARE IN WORLD WAR II: THE AFTERMATH

INTRODUCTION

Close on the heels of the Allied victory in World War II there was a rush to reap the harvest of scientific knowledge from the fertile scientific minds in Germany and Japan. The war was over, yet peace remained elusive among the Allies. As the United States and Russia competed to gather once secret scientific knowledge from those defeated, distrust and animosity brewed—an evil brew that would soon evolve into a Cold War.

In Peenemünde, Germany, the United States moved to obtain rocket technology developed secretly at the *Heeresversuchsanstalt*. Once brought to the United States, the captured German rocket technology flourished to become a major commercial and military asset, but not so the Japanese technology of biological warfare.

The Japanese defeat spawned an altogether different quest than the Allies pursued in Germany. The ghoulish secrets of biological warfare held at Unit 731 and its sister units caused the United States government to take extraordinary and highly controversial steps that now reek of compromise. These steps have been cloaked in secrecy for nearly sixty years and just recently have the supporting documents been declassified.

It was not simply documents and experimental data that attracted attention, it was the scientists themselves. Just as American scientists were eager to secure the cooperation of Germany's Wernher von Braun, they eagerly sought the cooperation of Japan's Lieutenant General Ishii Shiro. In the decades

to follow the post-war investigations, the understanding of the terrible secrets held by Lieutenant General Ishii and his workers have shed doubt on the compromises that earned him a comfortable retirement rather than the end of an Allied hangman's noose.

This paper deals with the quest to obtain the Japanese biological warfare knowledge, the conception of Unit 731, the controversial investigation, the questionable amnesty, and the subsequent use of that knowledge at Fort Detrick. A consideration in the writing of this paper is the use of the various unit names. While there were many units spread over China and Manchuria (see table 1), this paper generally refers to them collectively –as history has done—as Unit 731. The Units were to be found in virtually every area Japan conquered in the period 1931-1945.

City	Unit	Specialty if known
Anda	Used by 731	Field dispersion tests
Beijing	1855	Cholera
Changchun	100	Plant and animal biological warfare
Guangdong/Canton	8604	Food and water deprivation
Hailar – Inner Mongolia	2646 and 80	Human experimentation
Hiroshima	None	Biological warfare weapons
Jilin Province	516	Chemical warfare
Manchuria (city unknown)	200	Plague
Manchuria (city unknown)	571	Assisted Unit 731
Nanking ¹	Ei-1644	Human experiments and vivisection
Shanghi	Unknown	Human experimentation
Singapore	9420	Malaria and plague

Table 1. Most notorious units other than Unit 731.²

¹ Nanking is spelled many times as Nanjing the Asian manner.

² Table derived from multiple sources by author.

BACKGROUND: JAPANESE BIOLOGICAL WARFARE

The initial Japanese interest in biological warfare goes back to the Russo-Japanese War (1904-1905).³ The Russians poured across the Manchurian border and occupied much of Manchuria including the City of Harbin and the suburb of Ping Fan⁴, later to become the location of Unit 731. The Japanese Army needed all the weapons it could muster to stem the tide of the Russian Bear.

The Japanese suffered high casualties in the Russo-Japanese war, but more from disease than from Russian bullets. Teams of Japanese scientists and doctors were sent to Manchuria to curb the disastrous losses from disease. They were determined to defeat the "silent enemy", disease, by curbing battlefield illnesses such as beriberi and dysentery. These early histories led to the subsequent formation of the Japanese Department of Field Disease Prevention whose concentration would morph from a defensive nature to the gruesome offensive nature of Unit 731.⁵

The 1925 Geneva Protocol banned the use of germ warfare. Rather than suppress Japanese experimentation in this deadly science, it merely enhanced it. Using a sadistic logic, the Japanese reasoned that if biological warfare was bad enough to be banned internationally, then it must have the potential to be an

³ Sheldon H. Harris, *Factories of Death: Japanese Biological Warfare, 1932-45, And the American Cover-up*. New York: Rutledge, 1994. 5.

⁴ The facility at Ping Fan is sometimes referred to as "Pingfang", however, most students of Japanese history prefer the spelling "Ping fan."

⁵ Hal Gold, *Unit 731 Testimony*, North Clarendon, VT: Tuttle Publishing, 2003, 5.

effective weapon. To design this forbidden weapons system, the Japanese required a secure facility—one with ready access to biological subjects—and a suitable commander. Unfortunately for the tens of thousands of future victims, they found both.

As the Japanese occupied immense areas of Manchuria, they evicted residents of eight villages adjacent to the city of Harbin. This was to become the headquarters of Unit 731 with over 3,000 workers. Harbin had distinct advantages as a research center. Located in Northern Manchuria, it was remote and it had a more than adequate supply of laboratory subjects – subjects that were human to the Japanese only in physical characteristics. The Japanese regard for their human subjects was so low that the ill-fated subjects were known as *Marutas*—logs.

Many subjects of the research were Communist sympathizers or ordinary criminals, but most were hapless Chinese who had the ultimate misfortune to fall into the Japanese nets. The research population also had lesser numbers of Russian expatriates (White Russians), Americans taken from Bataan after the surrender, and smaller numbers of other Allied combatants.

The atrocities committed at Unit 731 in the name of science are almost impossible to imagine. In a recent interview, 71-year-old Takeo Wane, a former medical worker at Unit 731, stated that he saw six-foot-high glass jars with the body parts of three Western men floating inside, preserved by formaldehyde.

Other workers confirm Takeo's statement, adding that there were many such jars holding feet, heads, and internal organs –all labeled neatly.⁶



Figure 1. Prisoner being injected with pathogens from Unit 731 Hal Gold, *Unit 731 Testimony*, 132

Diseased prisoners were confined with healthy ones to test the ability of disease to spread. Prisoners were exposed to extreme pressure to determine how much pressure the body could withstand before their eyes would rupture and blood would pour from their skin pores.

The Japanese constantly tested their pathogen's potency and their ability to spread among humans—this with the goal of producing the ultimate biological weapon of mass destruction. It was the spreading of the pathogen that

⁶ Nicholas D Kristof, "Unlocking a Deadly Secret", *New York Times*: available from <http://www.aiipowmia.com/731/germwarfare.html>; Accessed June 23, 2006, 2.

controlled its ultimate effectiveness as a weapon. The fanatical scientists in Manchuria derived cruel and inhuman methods for doing so. The fields of Anda, Manchuria (a testing ground for Unit 731) were a gruesome example.



Figure 2. Japanese scientists perform vivisection on male victim.

To test methods of spreading a disease, victims were frequently tied to stakes at Anda. The stakes were arranged in alternate patterns to provide variations in the empirical data. When the arrangement was correct, planes would either spray the victims with plague strains or the planes would drop bombs filled with plague-infested fleas. The experimental goal was to measure the disease contraction rate as a function of the victim's exposure. Exposure was quantified by measuring the victim's respective distance from the center of the field.

Another frequent field study was one that caused its victims unimaginable pain and suffering—all in an effort to study the effects and treatment of frostbite. In below freezing temperatures, subjects were tied to stakes in a field. A limb,

usually an arm, was then repeatedly doused with water. The subject would then remain exposed until the limb was solidly frozen. To test the frozen state, technicians would strike the frozen limb with a club, listening for a distinctive "thud" sound. At this point, the subject was taken to a laboratory where various means of thawing were tried.⁷



Figure 3. Replica of experiments for frostbite from Unit 731 Exhibit. Hal Gold, *Unit 731 Testimony*, 132.

The most infamous crime attributed to Unit 731 was that of vivisection, often performed without any form of anesthesia so that the functioning organs would not be affected by drugs. This heinous procedure was carried out in the name of science rather than torture.

⁷ Harris, 89.

Victims were subjected to shrapnel, exposed to lethal doses of X-ray, burned with flamethrowers, spun to death in centrifuges, injected with air bubbles, injected with syphilis, injected with animal blood, had their limbs amputated then attached to the opposing side, and hundreds of other terrible experiments.

A course of study on a specific individual could easily last for six weeks. Then, at the end of the *Maruta's* usefulness, the victim was "sacrificed", a more palatable euphemism for the act of killing.⁸



Figure 4. Japanese scientist performs vivisection on infant victim.

At frequent intervals, the Japanese Army would conduct field trials against unknowing populations. These trials would test the validity of laboratory findings in the tactical environments of China. In one case, planes dropped plague-

⁸ Harris, 63-64, 100-125.

infested fleas over Ningbo in eastern China and over Changde in north-central China. When cases of plague outbreaks resulted, the Japanese recorded the results but made no attempt to help the inflicted population.

The army also contaminated wells and ponds, but these tactics often resulted in the spread of disease to friendly troops. The counterproductive nature of this action was never more pronounced than in an incident recorded in 1942 in Zhejiang Province, China where 1,700 Japanese soldiers became ill or died as a result of contaminated water supplies.⁹

The death factory at Ping Fan facility did not restrict its experiments to humans alone; it used enormous quantities of animals in the production of pathogens. General Ishii, at one time, ordered one million rats for laboratory use. Ordinary laboratory animals were not the only types used; exotic beasts such as camels, lions, tigers, water buffalo, and bears were also used. The laboratory animals caused a particular problem for locals when the units were finally closed at war's end. Thousands of infected animals were let loose in the countryside to spread their poison.¹⁰

Scholars vary widely in their estimates of the number of deaths that resulted from Japanese biological warfare experiments. With the large number of units and sub-units scattered over Manchuria, China, and elsewhere, an accurate count may never be possible. Dr. Sheldon Harris estimates that,

⁹ Kristof, 3.

¹⁰ Edmund D. Pellegrino, and Anthony E. Hartle, Edmund Howe, and Walter Reed Army Medical Center Borden Institute, *Military Medical Ethics, Volume 2*, Washington, DC:TMM Publications, 2004, 483.

throughout the war years (1939-1945), over 200,000 died from Japanese biological warfare experiments. The figure of 3,000 is generally accepted for the Ping Fan Unit 731. Even after the war, outbreaks of plague resulted in thousands of deaths in China.¹¹



Figure 5. Japanese place infected prisoners alongside healthy prisoners to test reaction time of their new viruses

"There could be over 700,000 or even 1,000,000 lives lost to Japan's bio-warfare program", said David Barenblatt, in his book, *A Plague Upon Humanity: The Secret Genocide of Axis Japan's Germ Warfare Operation.*¹²

UNITED STATES HOMELAND TARGETED BY BIOLOGICAL WARFARE

By 1944, the certainty of defeat could no longer be ignored by Japanese military leadership. They not only conceived desperate and futile measures, but

¹¹ Harris, 77-78.

¹² Daniel Barenblatt, *A Plague Upon Humanity: The Secret Genocide of Axis Japan's Germ Warfare Operation*, New York: Harper Collins, 2004, p 288

also, they executed several as last-ditch thrusts against the American homeland. While these plans may have been cumbersome and costly, they were considered in meticulous detail. The balloon attacks on the American west coast were the only schemes to actually be employed.

Over 9,000 large, hot-air balloons were launched at the United States between November 1944 and April 1945, riding the prevailing Pacific winds on their way to the Western states. Fortunately for the United States, only 200 made landfall in the States. Originally designed to carry plague-infested fleas and anthrax, the balloons carried high explosive bombs in the hopes of setting forest fires and of demoralizing the American populace. Although the existence of the bombs was suppressed by the government until 1945, the subsequent death of a woman in Montana and six people in Oregon—a woman and five children—forced the truth to the front.

It would have been much worse if the plans of the Japanese had been fully implemented. Other proposals were to infect United States beef with cattle plague and destroy the vast crops of the grain growing states with grain smut. General Tojo Hideki, who was later hanged as a war criminal, rejected the proposal by the army as being too likely to produce in-kind retaliatory measures by the United States. The proposal and Tojo's rejection of it were highly contested.¹³

¹³ Kristof, 5.

THE TRIAL

At the Cairo Conference, November 1943, the three major Allies engaged against Japan—the United States, Britain, and China—spelled out that "...the purpose of this war is to stop and punish Japanese aggression." The Potsdam Declaration of July 1945 stated that "...stern justice shall be meted out to all war criminals including those who have visited cruelties upon our prisoners." Under these guidelines, and as a result of its preeminent role in the defeat of Japan, the United States State Department adopted the "Policy of Arrest and Punishment of War Criminals in the Far East." In this document, it notified the Supreme Command of the Allied Powers (SCAP), the United States government and eight nations (Australia, Britain, Canada, China, France, Netherlands, New Zealand, and the Soviet Union) to organize the tribunal. In January 1946, General Douglas MacArthur approved the charter to formally convene the Tribunal. The Tokyo Trials started on May 3, 1946 with the indictment of twenty-eight Class "A" defendants.

The United States, as a result of her dominance in the war with Japan, virtually dominated the conduct of the trials, placing her post-war Japan policies in precedence over any other country's desires. It is here that the still-brewing controversy of the cover-up began. Under the stern guidance of Gen. MacArthur, the trials dragged on for two and one-half years, finally pronouncing sentences for the twenty-eight Class A defendants. Many more went free to enjoy the fruits of an emerging post-war Japan.

Of the many mistakes that the tribunal and the MacArthur occupation made, none are more serious than the dropping of all charges levied against Lt. Gen. Ishii Shiro and the staff of Unit 731. This was no casual error, but a calculated policy designed to gain for the United States the benefits of the human experimental data from Japanese biological warfare activities.

The treatment of the Japanese doctors was without precedent, certainly in the context of the Second World War. At Nuremberg, there were thirty-one war criminals tried for having conducted human experimentation. Twenty-two of them were sentenced to death. The first article of the Nuremberg Code reads: "The voluntary consent of the human subject is absolutely essential"; article 4: "The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury"; article 9: "During the course of the experiment, the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him to be impossible." It became clear that the officers of Unit 731 had violated not only the Nuremberg code but also the 1925 Geneva Protocol which outlawed the use of chemical and biological warfare and to which Japan was a signatory country.¹⁴

Because of the enforced leniency applied to the Japanese medical criminals, hundreds went free and are still practicing or living in comfortable

¹⁴ Wu Tienwei, "A Preliminary Review of Studies of Japanese Biological Warfare Unit 731 in the United States", Accessed June 5, 2006, www.users.cs.umn.edu/~dyue/wiihist/germwar/731rev.htm, 6.

retirement in Japan. Lt. Gen. Ishii, perhaps the most notable, was one of those set free.

LT. GEN. ISHII SHIRO AND THE CREATION OF UNIT 731

One single figure stands out in the formative years of Japanese biological warfare research and development as well as during the war years. This young army doctor, Ishii Shiro, delivered biological warfare as a meaningful weapon embraced by the Japanese military, and he instituted and administered the practice of human experimentation, building a vast network of "Units" throughout Mongolia and China. Unlike Germany's Angel of Death, Dr. Josef Mengele, who was content to merely practice his deadly medicine at the Nazi death camp, Auschwitz, Ishii Shiro was an innovator and a leader determined to build an empire.



Figure 6. Lt. Gen Ishii Shiro. Commander of Unit 731, founder of Japanese Biological Warfare Division of the Army.

Ishii's personality did not fit the mold of the conventional Japanese officer. He was brilliant, charismatic, flamboyant, mercurial, and was a spell-binding advocate for causes he supported.¹⁵ In the manner of the militant faction that had led Japan into a world war, Ishii was an ultranationalist, striving to secure for Japan an uncontested leadership role in Asia.

He graduated from Kyoto Imperial University in 1920 as a doctor of medicine. His strong personality and political leanings served him well after joining the army as a Surgeon Lieutenant; he rose quickly through the ranks. By 1926, Major Ishii had earned a doctorate in microbiology and had joined several of the power *fulhimitsu kessha* (secret societies) such as the *Kempei Tai* that influenced the military.

Due to his brilliance and extreme devotion to duty, he continued to earn promotions and expand his sphere of influence. With promotions coming every three years, he had attained the rank of Lieutenant General by 1934.

While serving as Professor of Immunology at the Tokyo Army Medical College, Japan's most prestigious military medical school, he secretly began his experiments on humans. Ishii had no remorse in conducting his experiments on humans, thinking it pure science.

He once stated succinctly the then-current philosophy. In a speech to new recruits at Ping Fan, Ishii declared, "Our god-given mission as doctors is to challenge all varieties of disease-causing microorganisms...to block all roads of intrusion into the human body; to annihilate all foreign matter resident in our

¹⁵ Pelegrino, 476

bodies; and to devise the most expeditious treatment possible." But, Ishii urged his fellow researchers to, "...put aside all feelings of compassion for their patients. The new approach to research in medicine must be based upon the dual thrill of 1), a scientist to exert efforts...probing for the truth in natural science and research into, and discovery of, the unknown world and 2), as a military person, to successfully build a powerful military weapon against the enemy."¹⁶

Ishii's staff grew along with the scope of his experimentation. He soon realized that his laboratories in Tokyo were far too visible for his work. He needed seclusion and room to expand his medical empire.¹⁷

In 1932, Ishii began operations in the city of Harbin, near the Soviet border with Manchuria. His superiors moved quickly to provide Ishii with the money he needed to build and operate the complex in Harbin, including the latest in medical equipment and a staff of 300. He quickly found that even Harbin was too visible; he constructed a massive complex in the secluded hamlet of Beiyinghe, 41 miles east of Harbin...

¹⁶ Ibid, 483

¹⁷ Ibid, 477



Figure 7. Map of China and Mongolia.
Available from www.Mapquest.com

The Beiyinhe site included a prison where Ishii housed subjects who were political prisoners and prisoners from the general populations of local jails. These hapless men became the first victims of Ishii's experiments, including vivisection. The experiments were, at first, crude in nature, but Ishii was learning and he continued to hold strong support at the highest levels as he gained sophistication.

Even as Beiyinhe grew too small for the ambitious Ishii, he convinced the Kwantung commanders that his work was of great strategic value. At this point, he received a helping hand from Emperor Hirohito himself. Scholars have long debated the Emperor's knowledge of the terrors of Unit 731, but the facts are clear on his actions regarding the future of Ishii's empire.

Dr. Sheldon Harris, in *Factories of Death*, quotes Lt. Gen. Kajitsuka Ryuji, Lt. General in the Medical Service and former Chief of the Medical Administration of the Kwantung Army, as saying that he saw an imperial decree giving Ishii permission to start the initial BW operation in Manchuria in 1936, "by Command of the Emperor", and that later on Emperor Hirohito also issued a decree authorizing creation of Unit 731. Prince Mikasa, the emperor's brother, also reportedly inspected the work at Ping Fan in 1943.¹⁸

By Imperial decree on August 1, 1936, Ishii formed a new army unit, the *Boeki Kyusui Bu* (the Anti-Epidemic Water Supply and Purification Bureau). This innocent sounding organization provided the perfect cover for Ishii's crimes since he was empowered to set up "purification" plants wherever and however he wished. To maintain an even more obscure identity, he initiated the practice of calling the installations "Units", distinguished only by a number. The headquarters unit was given the number 731.

¹⁸ Harris, 40, 142.



Figure 8. Map of Yunnan area in Southeast China.
Available at www.Mapquest.com.

Ishii, who was always expanding, needed even more room. The buildings were not strong enough to serve as a prison; in fact, 16 captives revolted and escaped in September 1934.¹⁹ Twenty-four kilometers south of Harbin, Ishii developed a large complex spread over six square kilometers of land formerly occupied by a series of peasant villages. The complex of 150 buildings was completed in 1939 and occupied by Ishii until 1945. It became known by post-war scholars as the "Ping Fan Biological Warfare Death Factory."²⁰ The name "Death Factory" is appropriate for an entity that cultured all the vile pathogens and many more. A partial list of pathogens is presented in Table 2.

¹⁹ Takashi Tsuchiya, "Japanese Medical Atrocities 1932-45: What, Who, How and Why?" oral presentation at 22nd International Congress of History of Science, Beijing, July 29, 2005.

²⁰ Pelegrino, 477.

Plague	Anthrax (including inhalation, skin and gastrointestinal types)
Smallpox	Typhoid
Paratyphoid A and B	Tularemia
Cholera	Epidemic Hemorrhagic Fever
Syphilis	Epidemic Cerebrospinal Meningitis
Botulism	Brucellosis
Dysentery	Tetanus
Glanders	Tuberculosis
Yellow fever	Typhus
Tick Encephalitis	Gas Gangrene
Scarlet Fever	Songo
Diphtheria	Brysielas
Salmonella	Venereal Diseases
Infectious Jaundice	Undulant Fever

Table 2. Pathogens at Ping Fan

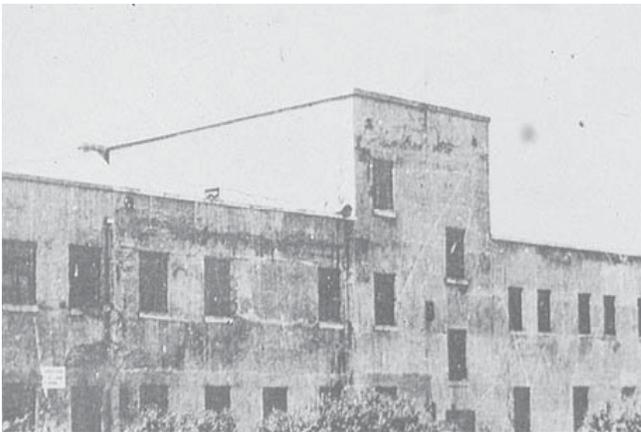
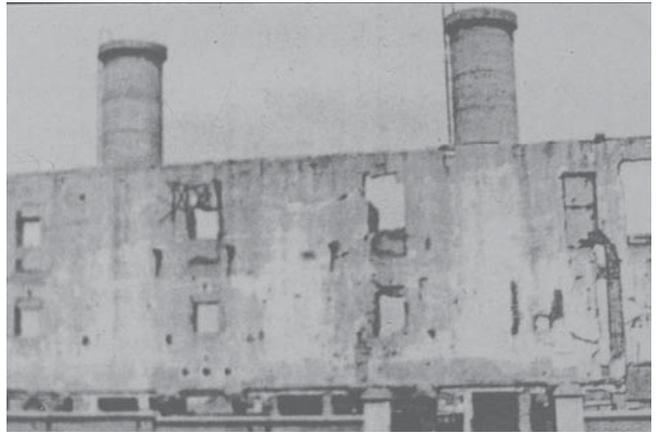
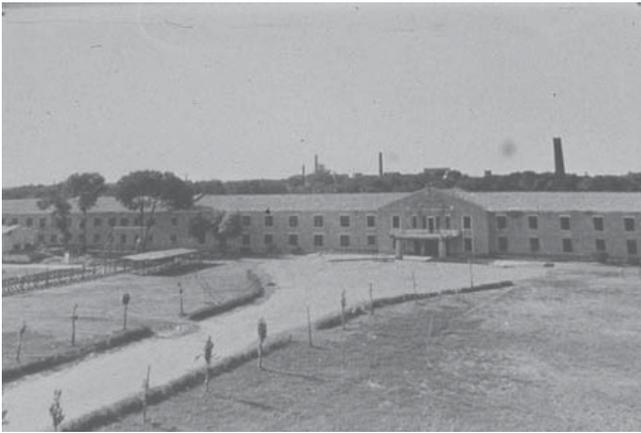


Figure 9-14. Ping Fan. Unit 731 was the largest of the many Bio-medical research facilities established by the Japanese in Manchuria. (Top left) building used as the selection point for individuals destined for the “factory.” (Top Right) an aerial view of the complex, does not show the entire facility but gives a sense of its size, as do the remaining four photographs.

THE INVESTIGATION AND COVER-UP

Even before the end of the war, American scientists were vitally interested in biological warfare techniques. They had conducted extensive experiments at Camp Detrick—located at Fredrick, Maryland—on animals and had made remarkable progress, but strict ethical codes of American medicine coupled with legal restrictions forbade the use of humans in experiments except in highly controlled situations. The Japanese had no such morals to hinder them and were also free of the legal restrictions against such experiments. In a society that did not value the lives of "*marutas*", doctors like Ishii Shiro had a free rein.

As early as 1943, the United States had some idea that the Japanese were conducting experiments on human beings,²¹ however, they did not yet realize the scope of the Japanese experiments. The idea was that, with the advantage of being able to work on humans, the Japanese must be well ahead of the scientists at Camp Detrick. Since there was no firm intelligence on which to base comparisons, it fell to post-war investigations to unearth the truth.

The Allies demanded the capture and trial of those Japanese citizens and servicemen whose activities in the war were deemed criminal. Under normal circumstances, the perpetrators of biological warfare would have been eagerly arrested, tried, and possibly hanged as war criminals, but there was a difference in Japan. The government of the United States was so anxious to obtain the results of Japanese biological warfare experiments that it was willing to make otherwise unthinkable compromises. This unusual treatment of war criminals resulted in controversies that have endured to this day. The question that is

²¹ Pelegrino, 491.

repeatedly asked is, "Did the knowledge gained justify the means to obtain it?" According to many of the original participants, the answer is, sadly, no.

Immediately after the Allied victory in Japan, the United States initiated actions to secure the empirical data from the scientific activities of Unit 731. The primary motivation was to keep the results of Japanese research out of the hands of the Russians. The Cold War was in its infancy, but the unmistakable signs of the conflict to come between the two superpowers were more than apparent.

Lieutenant Colonel Murray Sanders, USA was the initial investigating officer. As Professor Harris writes, Sanders was consistently and skillfully misguided by the Japanese liaison officer, and the interrogations he held were staged by the Japanese. Sanders' subsequent reports to Camp Detrick (later Fort Detrick) were incomplete and amounted to a Japanese whitewash of the events of Unit 731.

The investigations were, of course, guided by the dictates of General Douglas MacArthur, Supreme Commander for the Allied Forces, and specifically by Major General Charles Willoughby, MacArthur's G-2. The Japanese biological warfare investigations were staffed primarily by scientific investigators from Camp Detrick in Maryland. It was at Camp Detrick that the data would be used to bolster United States progress in biological warfare and defensive techniques.

After Sanders' report, additional evidence of POW experimentation and brutality surfaced along with a growing implication of Lieutenant General Ishii Shiro. At the same time, the urgency of obtaining the laboratory results

dramatically increased due to growing Russian interest. With this urgency came the necessity to shield Ishii and his staff from prosecution. The United States State-War-Navy Coordinating Committee, (SWNCC), determined occupational policy in Japan. Prosecution of biological warfare crimes, the SWNCC argued, would "stop the flow of information."

When General Allen Waitt, Commander of U.S. Chemical Corps, sent bacteriologist Norbert Fell to assess the investigation's progress, Dr. Fell clearly reported that the top Japanese biological warfare scientists would not provide meaningful data without a written guarantee of immunity. On May 5, 1947, MacArthur sent a radio message to Washington making the following recommendation:

"Ishii states that if guaranteed immunity from "war crimes" in documentary form for himself, superiors and subordinates, he can describe the program in detail ... Complete story, to include plans and theories of Ishii and superiors, probably can be obtained by document immunity to Ishii and associates."²²

Even after the State-War-Navy Co-coordinating Committee (SWNCC) drew the obvious comparison to the prosecutions of Nazi scientists, they drew the following conclusion.

²² *Wu, 5.*

"The value to the U.S. of Japanese BW data is of such importance to national security as to far outweigh the value accruing from war crimes' prosecution."²³

The SWNCC accepted MacArthur's recommendation and decided that "the BW information obtained from Japanese sources should be retained in 'top secret' intelligence channels and not be employed as war crimes evidence."

On March 1947, the biological warfare war crimes investigations in Japan ended with the negotiated immunity intact. Ishii's main concern from that point was his comfortable retirement package.

THE PAYOFF

A later report from a Dr. Norbert Fell shed new light on the Sanders' investigations. Fell was a War Department biological warfare specialist who traveled to Japan to correct the inadequacies of the previous investigation by Sanders. In a Top Secret letter to General Willoughby, Fell encouraged General Willoughby not only to give amnesty to the Japanese but to pay them as much as Y200,000—approximately \$550.00 in 1947 dollars—for their information. Willoughby, in reply to Major General S. J. Chamberlain, Director of Intelligence, said that the money would be provided from "confidential" funds and that it was a "mere pittance."²⁴

²³ Ibid

²⁴ NARA Record Group 385, Top Secret Declassified., "Letter from Gen. Willoughby to Maj. Gen. Chamberlin, July 22, 1947" , See also: Fell appt: Record Group 999 Agency address: 032685 Transcribed from original file # 005.

Much of this new-found urgency resulted from the interest over the "human experiments." Experiments on humans had always been banned in the United States. Therefore, a treasure trove of data from Unit 731 seemed priceless to the scientists at Camp Detrick. A memo, dated July 1, 1947, from Dr. Edward Wetter and Mr. H. I. Stubblefield for distribution to State Department and military officials described 8,000 slides from human experimentation that were thought to be so valuable that, "it is of such importance to national security as to far outweigh the value accruing from war crimes prosecution."

Human experiments, they pointed out, were better than animal experiments: "This Japanese information is the only known source of data from scientifically controlled experiments showing the direct effect of BW agents on man. In the past it has been necessary to evaluate the effects of BW agents on man from data obtained through animal experimentation. Such evaluation is inconclusive and far less complete than results obtained from certain types of human experimentation."²⁵

With the emphasis on data collection so great, the aftermath of the war in Japan took a far different turn than that in Germany. The Tokyo War Crimes Trials were different than the Nuremberg Trials in their scope and there was no Simon Weisenthal to carry on the pursuit of Japanese war criminals in the ensuing years. In fact, almost all of the Unit 731 doctors saw their careers flourish in the postwar period. They rose to prominent positions in Japan

²⁵ Congressional Record: November 10, 1999 (Senate), "Statements On Introduced Bills And Joint Resolutions", Page S14533-S14571

including that of the Governor of Tokyo, the president of the Japan Medical Association, the heads of major pharmaceutical firms, and the head of the Japan Olympic Committee.

Gen. Shiro Ishii was allowed to live peacefully until his death from throat cancer in 1959.

DAWNING PUBLIC AWARENESS

Until Iris Chang published her horrifying account, *The Rape of Nanking: The Forgotten Holocaust*, (New York, 1997), the world had little knowledge of the wanton brutality of the Japanese Army before and during World War II, and of their total disdain for human life. The book became a *New York Times* bestseller as the world read of the deliberate tragedy that befell the capital city of the Nationalist Chinese on December 13, 1937. As terrible as the actions of the Japanese were in Nanking, they were attributable to soldiers ravaging a conquered city, and soldiers have been guilty of rape and pillage since Alexander defeated the Persians in 331 BC. There was an even more horrifying story yet to be told, one that did not occur on a field of battle. A few years after Chang's book was published, people the world over would learn of Japanese horrors far worse than those of Nanking. They would learn of the atrocities of Unit 731 and of .Lieutenant General Ishii Shiro, the Dr. Joseph Mengele of Japan.

The seminal work on Unit 731 is, without a doubt, *Factories of Death: Japanese Biological Warfare, 1932-1945, and the American Cover-Up*²⁶ by Professor Sheldon H. Harris. Harris was not the first to publish an account of

²⁶ Harris, p. 1-361.

these activities; there were numerous newspaper and journal articles written in the years after the war. The facts were slow to surface because of the cloak of secrecy that covered the actual events during the war and especially the aftermath. The October 1981 issue of *The Bulletin of Atomic Scientists* included an article, "Japan's Biological Weapons, 1930-1945,"²⁷ by the respected journalist, John W. Powell, Jr. The first major book length work, *Unit 731: Japan's Secret Biological Warfare in World War II*,²⁸ was written by two British journalists: Peter Williams and David Wallace. This book is still widely cited today and provided the foundation for Harris' book.

Professor Harris spent ten years in the research of the first edition of *Factories of Death*, published in 1994. The five years between the publication of Williams and Wallace's book and the first Harris publication yielded a great deal of new source material, and the next seven years up to the revised edition (2001) yielded even more.

The evidence regarding the horrors of the Japanese experiments, the confusing actions of the Americans after the war, and the subsequent use of the empirical data from Unit 731 is in a perpetual state of change as long held Top Secret documents are declassified and documents from Russia and China find their way into the hands of researchers. Any serious study of the aftermath of

²⁷ Robert Gomer, John W. Powell, and Bert V.A. Rolland, "Japans Biological Weapons: 1930-1945", Bulletin of Atomic Scientists, October 1981, Volume 37 number 8.

²⁸ Peter Williams, David Wallace, *Unit 731: Japan's Secret Biological Warfare in World War II*, New York: Free Press, 1989.

Japanese biological warfare has to be a work in process, able to absorb and adapt to the steady flow of new data.

The sheer volume of documents, yet to be declassified, is staggering. In *An Interim Report to Congress* (January 8, 2005), the Nazi War Crimes and Japanese Imperial Government Records Interagency Working Group (IWG) estimated that over 200,000 document pages were subject to declassification. In addition to documents held in the United States, a considerable number of Russian and Chinese documents are becoming available.

WHAT BECAME OF THE LABORATORY DATA FROM UNIT 731?

Since the end of World War II, there have been questions raised concerning what became of the experimental data gathered from Unit 731. The majority of the documents were shipped to the United States to be stored at the National Archives, Camp Detrick, Dugway Proving Grounds, and the Library of Congress. The empirical data and the 8000 slides went to Camp Detrick where American biological warfare research was conducted. Tragically, the data that precipitated the amnesty and payoff of some of World War II's most infamous war criminals was less valuable than anticipated. The data that was thought to represent a twenty-year leap in technology was found to be of little value. In a personal telephone conversation (September, 2005) with Mr. Norman Covert, Public Information Officer (PIO) of Fort Detrick during the time of the Japanese studies, Mr. Covert said that, "...the results of human experimentation yielded little that had not been learned from animal studies." Not only that, but, according to Mr. Covert, the Japanese technology was found to be inferior to our own. It

was at this point that the government agreed to return the mountainous accumulation of documents to the new Japanese government. A contributing factor in the decision to return the documents was the extreme difficulty in the translation of the many different dialects – there just were not enough interpreters, time, and money available.²⁹

THE KOREAN WAR BIOLOGICAL WARFARE CONTROVERSY

During the Korean War, after the influx of Chinese troops across the Yalu, the Chinese accused the United States of dropping biological bombs on Chinese troops. Adamantly refuted by the United States, and discredited by top scholars, the allegations remain today and the issue is still one of great sensitivity in China.

In 1998, a group of Canadian academics, headed by Stephen Endicott and Edward Hagerman, published a book titled The United States and Biological Warfare: Secrets from the Early Cold War and Korea,³⁰ in which they claimed to have substantial evidence that the allegations were true. This highly criticized book is systematically dismantled by later publications such as that by Professor Milton Leitenburg of the Center for International and Security Studies at Maryland in his article *New Russian Evidence on the Korean War Biological Warfare Allegations: Background and Analysis*, Cold War International History Project, Woodrow Wilson International Center for Scholars, March 1999. Additional

²⁹ Covert, Norman, prior PIO Ft. Detrick, telephone conversation with author, August 30,2005.

³⁰ Stephen Endicott and Edward Hagerman, published a book titled The United States and Biological Warfare: Secrets from the Early Cold War and Korea, (Bloomington, Indiana, 1998).

evidence was presented by Professor Leitenburg in his article *The Korean War Biological Weapon Allegations: Additional Information and Disclosures*.³¹

In these articles, Professor Leitenburg produces evidence of Russian assistance to the Chinese in preparing the ruse. He also points out that the biological bomb on display in China is actually one left from Japanese bombings during World War II. During a personal telephone call with Professor Leitenburg (August, 2005), he indicated that the Chinese were, "...still quite sensitive, maybe embarrassed, by the incident and shy from any conversation on the subject."³²

POSTWAR JAPANESE ATTITUDE

The Japanese attitude toward the atrocities of Ishii Shiro is still one of official denial, mirroring the larger question of Japanese responsibility for WWII in the Pacific. Even now, Tojo Hideki is often portrayed as a gallant war hero. A Japanese motion picture, *Pride: A Fateful Moment*, depicts Tojo as a kindly grandfather figure who has been unfairly portrayed by a vengeful United States.³³ Whether through self-delusion or plan, the Japanese government consistently sees itself as the victim rather than the aggressor. As late as 1998, Japanese newspaper headlines ("Prefectural Assembly Seeks to Cut Description from

³¹ Milton Leitenburg, "The Korean War Biological Weapon Allegations: Additional Information and Disclosures", Paper prepared for the 7th International Symposium on Protection against Chemical and Biological Warfare, Stockholm, Sweden, June 2001.

³² Milton Leitenburg, Professor, Center for International and Security Studies at Maryland, School of Public Affairs, University of Maryland, telephone conversation with author September 4, 2005.

³³ Pelegrino, 492.

Texts”, “Koreans Lose Forced Labor Suit”, “Government Can’t Be Held Responsible, Court Rules”) have shouted her rejection of the West’s views.³⁴

History textbooks in Japan are careful not to stray from the government view of WWII, not acknowledging what the West sees as excesses. There is an influential group of Japanese right wing officials and educators that believe that the country’s textbooks should be unashamedly nationalistic.

The Japanese would have Asia see her as a liberator rather than an oppressor. This is not likely to happen as the Japanese would have it; the countries that suffered so much under Japanese occupation are not swayed in the least. There is still a strong animosity shown by the once oppressed that is only made worse by the failure of Japan to show remorse.

There is growing pressure on the Japanese government to admit the terrible crimes of Unit 731. In a telephone conversation with this author, Tokoro Mihoko, the Japanese interpreter who worked exclusively for Professor Harris in the writing of *Factories of Death*, told of the progress that she and Shoji Kondo were experiencing in their quest to expose the truth to the Japanese people. Mr. Kondo, a TV journalist who began to study Japanese germ warfare in 1976, testified in the Tokyo District Court on the link between Japan’s use of biological weapons and outbreaks of disease in China. He stated to the court, “Japanese leaders were desperate to cover up their use of germ warfare because they knew such a thing violated international law and that the late Emperor Hirohito would be charged with war crimes. It is high time that the Japanese Government and

³⁴ Ibid

leaders apologize to the Chinese for the atrocities committed by the Japanese Imperial Army in China. It should be done before all the victims and their relatives die."³⁵

Japan is sending mixed signals regarding its admission of past sins. One of the most visible symbols of Japan's hero worship of its past war criminals is their veneration of the Yasukuni Shrine in Tokyo. On August 9, 2006, Prime Minister Ryutaro Hashimoto broke with tradition to visit the shrine, breaking a decade-long taboo on Japanese leaders visiting the site. Hashimoto declared that the time had come for Japan to stop apologizing for honoring its war dead. He said, "Why should it matter any more?" Hashimoto told reporters, "Surely it's time to stop letting that sort of thing complicate our international relations."³⁶

CONCLUSION

The legacy of Unit 731 continues to evolve as new evidence is sought and found with increasing regularity due to continued international interest and to the declassification of documents. What is accepted as fact today can and surely will be altered as new data emerges to provide clarification to this gruesome chapter in world history. It is obvious that the actions of the United States in granting amnesty for crimes beyond the imagination of a civilized world are now an indictment against the government and to the excellent researchers at Fort Detrick. If blame is to be placed, one must remember that the science of biological warfare was in an emerging state and intelligence sources in Japan

³⁵ Tokoro Mihoko, telephone conversation with author December 12, 2005...

³⁶ Japanese Times, "News Watch", August, 3006.

provided less than a complete picture of the situation. The actions taken by General MacArthur and the scientists of Camp Detrick were certainly motivated only by a desire to do what they thought was in the best interest of the United States. It is only with hindsight that we now understand that the actions of the United States were ill-advised and ultimately resulted in the freedom of one of the world's most heinous mass murderers.

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_____ Congressional Record: November 10, 1999 (Senate), "Statements on Introduced Bills and Joint Resolutions", Page S14533-S14571.

_____ *Japanese Times*, "News Watch", August, 3006.