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General Ishii Shiro: His Legacy is that of Genius and Madman

A thesis
presented to
the faculty of the Department of History
East Tennessee State University

In partial fulfillment
of the requirements for the degree
Masters of Arts in History

by
Gregory Dean Byrd

May 2005

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Keywords: Japanese, Ishii, Biological, Warfare, Unit 731

ABSTRACT

General Ishii Shiro: His Legacy is that of Genius and Madman

by

Gregory Dean Byrd

This paper covers the development of the chemical weapons division founded by Ishii Shiro, and discusses the horrible experimentation that was done by the Japanese. These experiments have been a source of controversy. The Chinese feel the Japanese should acknowledge these as war crimes. When the Japanese left Manchuria, they left the world's largest chemical waste dump behind, and even to this day the government refuses to admit the actions of Unit 731. The information on biological warfare that the Japanese discovered during the experimentation in China later was used as a negotiation tool with the United States to secure their freedom and gain immunity from prosecution for General Ishii Shiro and his men. This paper will show the evolution of Japanese biological warfare during WWII using research obtained from a wide range of documents, books, newspapers, and journal articles, as well as documents found at the National Archives.

ACKNOWLEDGEMENTS

For My Wife, Family And

Especially My Father

To the Chinese People and POWS Who Suffered

At the Hands of General Ishii Shiro

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CHAPTER 1

BACKGROUND TO THE HISTORY OF JAPANESE MILITARY MEDICINE

During the course of the Sino-Japanese War from 1937-1945, the Japanese developed a biological and chemical weapons division of the army commanded by Ishii Shiro. The amount of suffering the Japanese army inflicted upon the Chinese population as well as prisoners of war has been the subject of controversy since the end of World War II in 1945. Chinese government officials have asked that restitution be paid to the victims' families of those who suffered horrible experimentation at the hands of their Japanese captors, while, until recently, the Japanese government denied these actions had occurred. The commanders of Japanese chemical weapons Unit 731 committed terrible war crimes, yet in Japan, they have shrines built in honor of war heroes, which includes some of the men of Unit 731 that are visited yearly by high ranking Japanese officials.

The subject of the Japanese chemical weapons division is one that has been ignored by the Western world for decades. Hal Gold's book *Unit 731: Testimony* has been applauded by reviewers as "another shot in the battle to set things right."¹ Gold's book gives a history of the Japanese atrocities carried out by General Ishii Shiro's Unit 731 in Manchuria during World War II. The book also has transcripts of testimonies given by former Japanese workers that were presented at an

¹ The Rev. 2001, *Unit 731: Testimony review* [on-line]. The Book Barn; available from <http://www.jp41.dial.pipex.com/R230.HTML> (accessed 28 October 2004).

exhibition that toured Japan in 1993, based on the activities of Unit 731.² The exhibition has opened the eyes of the Japanese people who attended the traveling history of Unit 731's activities in Manchuria. The exhibition has helped to allow former members of Japan's biological units to tell their story without public persecution. The testimonials in Gold's book prove that Japan is changing and the disclosure of these sixty-year-old secrets is a promising beginning. This exhibit helped to break the "code of silence", we can be grateful that the grave did not get all the truth.³

During the occupation of Manchuria and the years that have followed, information was scarce. One reason is since the crimes were committed in China, the communist government has not been willing to discuss the problem, and the Chinese prefer to handle their problems without foreign intervention. As the West uncovers the carnage that occurred in China, more pressure will be applied on Japan to acknowledge its responsibility in the thousands of deaths caused by Japanese biological and chemical weapons.

Using disease in wartime is nothing new. The Romans dumped infected animal carcasses in enemy drinking wells. In the fourteenth century, the Tartars tossed plague infested corpses over the walls of Genoa. The Mongols were also known to throw infected animals into towns under siege to cause outbreaks of disease. British and American soldiers gave American Indians gifts of blankets

²The Rev. 2001, *Unit 731 Testimony* review.

³ Hal Gold, *Unit 731 Testimony*, (Tokyo: Yen Books, 1996), 12.

infected with smallpox. From the beginning of time, military history is full of examples of disease taking a greater toll on fighting men than actual combat and, for this reason, the Japanese started to study the effects that diseases had upon their soldiers beginning with the Russo-Japanese War. The Japanese ratified the Hague Convention of 1899, which banned chemical weapons. Chemical weapons were commonly used during the First World War, the Europeans and Americans were using poison gases on a regular basis, yet the Japanese refrained from using these weapons. The facts show that the Japanese took great care of prisoners of war until after the First World War. Additionally, in the field of civilian medicine, the Japanese had established themselves as a leading country in the advancement of disease research and treatment, drug development, and patient care. Prior to the Russo-Japanese War, the loss of men due to the silent enemy of disease was a common occurrence for the Japanese military, but this was now seen as unacceptable to Japan. The Japanese resolved to learn from their mistake, the lack of preparation to handle the sick was apparent during the Russo-Japanese War. The recent war with China 1894-95 had shown the Japanese that casualties due to disease could be a determining factor in future conflicts; if Japan avoided the same problems in upcoming battles, they might be more assured of victory.

The first experiments were on preventing the Japanese soldiers from contracting battlefield diseases. By the beginning of the twentieth century, Japanese scientists were becoming famous throughout the world for their advances in the field of preventative medicine. “The Japanese scientists had discovered the

cause of beriberi and dysentery; one strain of bacteria, the Shiga bacillus, even carries the name of its Japanese discoverer, Dr. Shiga Kiyoshi.”⁴ Due to their hard and tireless work, the Japanese scientists were characterized as fanatics in the field of military medicine; the continuous ridicule by the Western world showed their lack of understanding of the importance of solving the battlefield disease problem. The Japanese dedication to their goals caused Japan to become the leader in the field of biological warfare. The military had the support of the Japanese government in developing this new division of the Army, but did Hirohito know about the actions of Ishii Shiro.

The question about Hirohito’s involvement with military planning and strategy during World War II has been a topic of debate by scholars since the surrender of Japan. His love of science became evident in the fourth year of his regency, in September of 1925; Hirohito had a small, well-equipped biological laboratory constructed within the Akasaka Palace. Three years later in 1928, during the second year of his reign, he had the Imperial Biological Research Institute built, within the Fukiage Gardens,⁵ indicating that the Emperor had an interest in science and was willing to make a commitment to what his doctors were working on at the time.

During the Russo-Japanese War, an American military doctor, Louis Livingston Seaman, was granted the privilege of observing the Japanese on the

⁴ Gold, *Unit 731 Testimony*, 17.

⁵ Herbert P. Bix, *Hirohito and the Making of Modern Japan*, (New York: Harper Collins Publishers Inc. 2000), 60.

battlefield and in their base hospitals. After the war, Livingston published a book on his time spent in Manchuria titled *The Real Triumph of Japan: The Conquest of the Silent Foe*.⁶ In the Russo-Japanese war, the Japanese soldiers suffered from scurvy. The percentage of men infected by the disease and other health problems in July was eight percent and grew steadily until in November 1904; twenty-two percent of their army was affected by disease.⁷ The Japanese were suffering from a shortage of supplies and hospital space for the sick. By the end of the siege of Port Arthur, the Japanese had transformed over thirty buildings into hospitals, but they were ill equipped to serve as medical facilities. This venture into modern warfare was the driving force for Japan to develop new ways of treating soldiers for wartime diseases.⁸

The Japanese developed a portable water testing kit; this was in response to the Russian soldiers' poisoning the wells in Manchuria with deadly germs, such as typhoid, dysentery, and cholera, as they retreated. The Japanese developed the Creosote pill as a way to deal with the soldiers' ingesting bacteria; this was formerly used as a treatment for bronchial problems. Seaman wrote in his report:

The American Army can never hope to emulate the Japanese until the time shall have arrived when, through the reorganization of its Medical Department, the surgeon shall have executive instead of merely advisory privileges. In the matters of hygiene and sanitation in barrack and field; and until the line officer shall display the same

⁶ Gold, *Unit 731 Testimony*, 18.

⁷ J.N. Westwood, *Russia Against Japan, 1904-05: A New Look at the Russo-Japanese War*, (Albany, New York: State University of New York Press, 1986), 103.

⁸ Westwood, *Russia Against Japan*, 103.

courtesy and respect to the medical expert as does his Japanese brother-in-arms.⁹

Japan passed the British and Americans in their knowledge of battlefield preventative medicine and soon became the world authority in this field.

During World War II, however, the goals shifted from the defensive to an offensive position for the use of chemical research. Ishii Shiro pressed for the development of a military branch whose activities would center around weapons based on biology. Dr. Al Parmet discusses how important Ishii Shiro was to the development of the Japanese program in his review of Hal Gold's book, *Unit 731: Testimony*. Parmet states that Gold points out how after World War I the Japanese were able to catch and surpass the other great powers of the world in their development of biological and chemical weapons. The leadership of General Ishii Shiro and their willingness to experiment on actual human subjects helped them to achieve this accomplishment. The Western powers learned from the suffering caused by these weapons, only Japan made use of biological weapons in World War II.¹⁰

The Japanese had become obsessed with the use of biological weapons after the ban imposed by the Geneva Protocol of 1925. The Geneva Protocol was in response to the horrendous suffering by soldiers during World War I, suffering caused by chemical weapons. The banning of such weapons was to help end the

⁹ Gold, *Unit 731 Testimony*, 21.

¹⁰ Al Parmet, 1996, *Unit 731 Testimony review* [on-line]. Book Report; available from [http://aeromedical.org/Books/Book_Reports/Unit 731_testimony.html](http://aeromedical.org/Books/Book_Reports/Unit_731_testimony.html) (accessed 28 October 2004).

possibility of another such terrible war. Ishii Shiro was able to convince the Japanese chain of command that these weapons must be devastating, if they had not been effective why were they banned? The Western world was well aware of the racial ideas of the Nazis in Germany; yet, it was largely uneducated on the racism that occurred in the Pacific. The Japanese had a slogan: Asia for the Asians. Japan wanted to remove all European colonies in Asia; it was their opinion that all white people in Asia were trespasser and needed to be removed. During World War II, the Japanese carried out war crimes, as well as cruelty to their captives and mass murder. The Japanese were brutal when dealing with people they felt were second-rate or disposable.¹¹ The Japanese felt they were destined to rule over the people of Asia; Japan had developed a system in which it was the nucleus of the Pacific area. The Japanese called themselves the Yamato Race, their theory of racial superiority was comprised of three levels of beings in Asia: “First the master race which was Japan, second was the kindred races such as China and Korea, and third was the guest races that were made up of the island people like the Samoans. All the non-Japanese races were seen as lower life forms and should be subservient to Japan.”¹²

Ishii and his subordinates followed these doctrines. Given their perspective, they progressed without restraint and passionately in biological warfare, experiments on humans were acceptable because they saw their victims as lower

¹¹ Gold, *Unit 731 Testimony*, 40.

¹² John W. Dower, *War Without Mercy: Race and Power in the Pacific War*, (New York: Pantheon Books, 1986), 8.

forms of life that were expendable, and these people were being sacrificed for a higher cause. “The superior Japanese race would benefit immeasurably from the sacrifices of people who were in general, of little value to mankind. The world would be a better place to live, they reasoned, without so many sub humans wasting the plant’s limited resources.”¹³

While the German acts of cruelty against the Jews in Europe have been well documented by historians, we may never truly realize the degree of brutality reached by the Japanese in Asia. The Japanese have never publicly acknowledged their participation in these gruesome crimes, and the Western world has let them deny the truth. Although the Allies forced Germany to accept responsibility for the attacks of the Nazis against the Jewish people, disclosure was not forced on the Japanese. As we are starting to uncover these Japanese war crimes, the opinions of the Western world are becoming those of shock and disbelief over the events that occurred in Asia. Eventually, Asians who suffered during the Japanese occupation will be able to feel vindicated when history acknowledges their ordeal and when Japan is punished for these war crimes.

¹³ Sheldon H. Harris, *Factories of Death: Japanese Biological Warfare, 1932-45, And the American Cover-up*, (New York: Routledge, 1994), 47.

CHAPTER 2

ISHII SHIRO



Figure 1. Ishii Shiro Commander of Unit 731, founder of Japanese Biological Warfare Division of the Army. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Ishii Shiro was born into a wealthy family on June 25, 1892, in the village of Chiyoda Mura, a farming village in the Kamo district, Chiba prefecture, and southeast of Tokyo. His family

was quite wealthy and was the community's largest landowner. Ishii's relatives exercised feudal dominance over the local people. His

childhood and early teens are a mystery; nevertheless, he grew to be a thin man with glasses and had a scholarly look that contradicted his powerful personality. He was the fourth son of an established family; it is assumed he attended primary and secondary school.

Ishii was blessed with a photographic memory, this allowed him to excel in his schoolwork to the point he would be labeled a potential genius. His love for Japan and his Emperor knew no bounds. Ishii's appearance commanded respect; he stood six feet tall, well above the height of an average Japanese male. He took pride in his appearance, well groomed with a commanding voice. He joined the military at an early age and it was during his service he began to realize his passion for medicine, his main goal was to develop a career as a doctor in the

Imperial Japanese Army. April 1916, Ishii Shiro would be admitted to the Medical Department of Kyoto Imperial University.¹⁴

Because of his ambition and the method of betrayal he used to impress his superiors, his fellow students despised Ishii Shiro. Ishii would work in the lab after the other students had cleaned up and would use their equipment for his experiments; when he was finished, Ishii would neglect to clean up after himself. This led to resentment among his fellow students. Ishii Shiro, at the age of thirty-five, received his Ph.D. in microbiology from Kyoto Imperial University, one of the top schools in the world, the equal of any Ivy League school in America.

In Kyoto during 1927, Dr. Ishii Shiro had a decisive revelation. He was following his regular routine of looking through stacks of research journals in order to keep up with the latest discoveries in his field. While browsing through a medical journal, he found an article on the Geneva Convention of 1925, which Japan had signed but the Diet had not ratified. The treaty banned the use of biological warfare. The reason Japan had not ratified the treaty is it recognized the potential for this field in modern warfare. It was during his time at Kyoto University that both the Japanese army and navy became impressed with the theoretical concepts of biological warfare drawn up by Ishii Shiro. Ishii had designed this new division thoroughly; every detail was accounted for including the availability of test subject in Manchuria.

¹⁴ Harris, *Factories of Death*, 15.

Ishii saw prisoners as subhuman and expendable, a view shared by the Japanese military after World War I. One reason Japan refused to ratify the Geneva Convention was that it felt no Japanese soldier would allow himself to be captured; therefore, the code of death before dishonor was placed deep in the Japanese soldiers' minds. Japan was not willing to take the burden of caring for prisoners of war upon themselves, especially if its own men would not be in the same situation.

The Japanese considered the invasion of Manchuria an incident, and since they were not waging war; they did not need abide by international law regarding the treatment of Chinese prisoners of war.¹⁵ The Japanese Army, claiming Chinese forces had destroyed the railway at Lake Liu near Mukden invaded northeast China.¹⁶ Japanese soldiers poured across the border from Korea, the Chinese army had superior numbers of men, but due to the speed and tenacity of the Japanese forces, they were soon defeated. This started the Japanese occupation of Manchuria in 1931. This area of China would remain under the control of Japan for the next fourteen years. The Japanese themselves to provide a pretext for the invasion had actually staged this attack. Ishii used this situation to his advantage, pleading with top commanders to create a germ warfare research division. In 1928, Ishii Shiro left Japan for two years, traveling throughout Europe and the United States to see what other countries were doing in the field of biological warfare. He

¹⁵ Yuki Tanaka, *Hidden Horrors: Japanese War Crimes in World War II*, (Boulder: Westview Press, 1996), 73.

¹⁶ Tanaka, *Hidden Horrors*, 135.

used his discoveries from his travels to convince anyone who opposed his ideas of the need for Japan's national security.

The Japanese program was conducted with the approval of highly placed military and civilian members of the Japanese wartime government. It is apparent that Hirohito knew of the work that Unit 731 was doing in Manchuria. Bix writes that "detailed directives of the Imperial Headquarters that the Army chief of staff issued to the Kwantung Army command in charge of biological warfare were as a rule shown to the Emperor; and Army orders of the Army division of the Imperial Headquarters on which such directives were based; were always read by him."¹⁷ General Ishii Shiro had a virtually no restrictions and had no need or desire to work with others in the Japanese Army Medical Department. He acted as if he had



Figure 2. Japanese using prisoners to field test new gas masks. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

no fear of offending his superiors by his actions. Due to his egocentricities, he wanted to earn all the glory and advancement for himself, and he was not going to share with them.

One of the main supporters of Ishii and his work was Colonel Chikahiko Koizumi, in 1930 a

scientist at the Tokyo Army Medical College. During World War I Koizumi had distinguished himself as a military officer, physician, and biochemist. "During

¹⁷ Bix, *Hirohito*, 364.

World War I, Japan did not use chemical weapons but it did conduct research into chemical warfare and the design of gas masks beginning in 1915.”¹⁸ Koizumi had led this chemical warfare research beginning in May 1918. Unfortunately, he was involved in a laboratory accident that almost killed him when he was caught without a gas mask in a chlorine gas cloud. After his full recovery, he continued his work with a new enthusiasm. He headed up the chemical warfare program from 1918-1922. The Japanese were trying to build a first class navy, and money was in short supply. The problem he faced was the low priority that his superiors placed on chemical weapons at this time.

While at the Tokyo Army Medical College, Koizumi met Ishii Shiro and found him to be an extremely intelligent young man. “[Ishii’s] talents for biomedical research as proved through his published scientific papers, and his drive to make Japan the foremost nation in biological warfare, was the same vision shared by Koizumi.”¹⁹ Koizumi had influential friends that proved to be important in the rise of Ishii within the military, such as Hideki Tojo, future prime minister of Japan. Ishii and Koizumi used these contacts to gather support for their biological warfare project from within the scientific circles of academia and hospital research groups.

“By the mid-1930s, Japan was manufacturing enormous quantities of poison gas bombs, including shells of chlorine, phosgene, and mustard gas. Koizumi was made the Dean of the Tokyo Army Medical College, in 1934 he became the army

¹⁸ Daniel Barenblatt, *A Plague upon Humanity*, The Secret Genocide of Axis Japan’s Germ Warfare Operation, (New York: HarperCollins Publishers, 2004), 14.

¹⁹ Barenblatt, *A Plague upon Humanity*, 15.

surgeon general, and in 1936 he was appointed Japan's minister of health.”²⁰ As Koizumi moved up the ranks, he made sure Ishii Shiro was promoted along with him. After Ishii achieved the rank of major, at the age of thirty-seven, Ishii was appointed chair of the newly developed Department of Immunology at Tokyo Army Medical College. Immunology dealt with the fields of microbiology, pathology, and vaccine research, for this reason, it was the perfect scientific field for Ishii to study.

Koizumi quickly granted Ishii the resources he needed to initiate building a biological warfare program for the Japanese Army. The new appointment as chair of this department gave Ishii the power needed to become the head of the biological warfare unit that he had been requesting the Army to develop. Major Ishii had a full schedule that began with early morning lectures to students. In the afternoon he dealt with administrative matters, “while covertly researching biological warfare in the evening hours in the lab space of the immunology department that had been allotted to him.”²¹ Daniel Barenblatt, author of *A Plague upon Humanity* noted that, “Here Ishii and a small team of scientists and laboratory assistants worked to culture lethal bacteria and to develop chemical poisons.”²² Ishii was studying flea-transmitted bubonic plague, cholera, typhoid, as well as anthrax. These early experiments were for defense against diseases and did not involve human beings. Ishii's unit developed vaccines to protect the Japanese

²⁰ Barenblatt, *A Plague upon Humanity*, 15.

²¹ Barenblatt, *A Plague upon Humanity*, 16.

²² Barenblatt, *A Plague upon Humanity*, 16.

soldiers from disease outbreaks. They also felt that they were preparing for a possible attack from an enemy nation. Therefore, they were trying to prevent needless death from a germ warfare attack against Japan.



Figure 3. Prisoner being injected with pathogens from Unit 731 Exhibit. Hal Gold, *Unit of 731 Testimony*, 132.

Hal Gold lays out the development of the chemical and biological weapons by Japan in the World War I and parallels it to the other great Western powers. The main difference, during World War II, between the Japanese program and the Allies' program,

was the willingness of the Japanese to use the weapons and conduct experiments on live human beings.²³ The Allies refused to use human subjects on the grounds that it was not ethical. Gold's book is filled with the facts given by former Japanese military personnel and victims' testimonies.

Gold's book, *Unit 731: Testimony*, leads the reader to the conclusion that the United States, especially General MacArthur, was aware of the experimentation performed by Unit 731. By handing over documents and test results, the Japanese brokered a deal for immunity from prosecution by the war crimes board. "Among the numerous personal immunities from prosecution that MacArthur and the Allies granted for reasons of national interest were those to General Ishii Shiro and the

²³ Al Parmet, 1996, *Unit 731 Testimony review* [on-line]. Book Report; available from [http://aeromedical.org/Books/Book_Reports/Unit 731_testimony.html](http://aeromedical.org/Books/Book_Reports/Unit_731_testimony.html) (accessed 28 October 2004).

officers and men of Unit 731 who had been responsible for Japan's biological warfare in China. Access to the experimental data on the killings was considered by the Joint Chiefs of Staff and MacArthur to be more vital than justice.”²⁴

Bix is very critical of the Allies for ignoring the deaths caused by Unit 731 in China. The Allied war crimes tribunals in Yokohama, Japan, choose to bring only thirty people to trial for the slaughter committed in China. Of the thirty, only twenty- three were convicted of various charges; of those, only five were sentenced to be executed. “The attitude of the Americans changed in 1950 due to the start of the Korean War; the United States lost interest in punishing Japan, an enemy turned ally.”²⁵ In 1950 MacArthur, acting as supreme allied commander for Allied Forces, “reduced most of the sentences, and by 1958, all those convicted



Figure 4. Map of Harbin area in Manchuria. Available at Mapquest.com. Accessed 15 March 2005

were free. None of the death sentences was carried out.”²⁶ Furthermore, Gold implies that information passed on to the United States by Ishii Shiro, the commander of Japanese Unit 731, was used in a biological attack at

Pyongyang during the Korean War in 1950.

After the Manchurian Incident in September 1931, the Japanese soon had control of Manchuria. This control of Manchuria provided much needed research

²⁴ Bix, *Hirohito*, 617.

²⁵ Thomas Easton, *Japan Admits Dissecting WW II POWs*. The Baltimore Sun: available from <http://aiipowmia.com/731/vivisection.html> (accessed 7 October 2004), 3.

²⁶ Easton, *Japan Admits Dissecting WW II POWs*, 3.

material as people began to disappear, taken off the streets by force and used as lab rats. The Kenpeitai were the Japanese elite military police. The Kenpeitai served as a human materials' procurement branch for Unit 731 and its associated outfits. Ishii used men under the age of forty for the majority of his experiments. Ishii's operations started out in Harbin with a few hundred men and an annual budget of 200,000-yen with which to operate. Harbin was a large multinational city; besides Chinese, there were Russians, Japanese, Manchu, Mongolians, Jews, as well as a few Western European refugees gathered on the banks of the Sungari River.

During the summer of 1932, Japanese troops roared into Beiyinhe, a small village in Manchuria. Everyone was ordered to leave the village within three days. Those who refused the order were killed on evacuation day and their homes and belongings were burned. Chinese called the officer in charge of this operation Zhijiang Silang, but he is better known as Ishii Shiro. He was anxious to develop his new idea of warfare that was based on biological weapons. Ishii felt that Manchuria would be the best place to establish his laboratory and create his new modern warfare.

In 1932, Ishii was granted a two-story concrete building to use entirely for laboratory bio-war studies. Ishii called this building the Epidemic Prevention Laboratory. The growth of Ishii's germ weapons research was greatly aided by the renewal of Japan's chemical warfare unit, a holdover from World War I, directed

by Koizumi.²⁷ Promotions and endorsements by Ishii's superiors led to his becoming the golden boy of the Japanese scientific and military establishments. Ishii gave frequent lectures to public health officials. In his speech, he describes his approach to germ warfare. "He broke it down into two types of bacteriological warfare research, A and B, A was assault research and B was defense research. Vaccine research is of the B type, and could be done in Japan. Type A could be done abroad."²⁸ This was the type of biological warfare researched in Manchuria and throughout China.

"The biological warfare carried out by the Japanese during World War II was a case of systematic biological massacre against humanity, the worst in human history."²⁹ In the years that the Research Units 731, 100, and 516 were active, they carried out biological weapons testing in China for the duration of the Japanese occupation. The definite number of individuals affected by their tests has left an enormous gap between actual history and Japan's official stance on their crimes. At first, information on Unit 731 could not be found; it is as if the unit did not exist. Still, information on Japan's use of live human beings as biological test material has been surfacing bit by bit for many years now.³⁰ Several factors have conspired to keep Unit 731's activities from receiving the attention they deserve. Investigations have been impeded because there were no survivors among the

²⁷ Barenblatt, *A Plague upon Humanity*, 17.

²⁸ Barenblatt, *A Plague upon Humanity*, 17.

²⁹ "The Other Holocaust: Nanjing Massacre, Unit 731, Unit 100, Unit 516." Available from <http://www.skycitygallery.com/japan/japan.html> (accessed 29 February 2004). 2.

³⁰ Gold, *Unit 731 Testimony*, 9.

victims of Unit 731; all were eliminated before the end of the war. In addition, the Japanese strategically placed their “water purification” camps in remote areas helping them to conceal their activities. These camps were placed away from urban areas where their privacy could be maintained, for people in the countryside tended to keep to their own business. Then there was the combined order and threat by commanding General Ishii Shiro that former unit members were to “take the secrets to the grave.”³¹

Furthermore, the camps were located in an area of China that was loyal to the



Figure 5. Map of Yunnan area Southeast China. Available at Mapquest.com. Accessed 15 March 2005.

Communists. Manchuria and the northern part of China had been a Communist stronghold before the war, and it was the Chinese Communists who resisted the Japanese. Rumors of the atrocities that were occurring in

Manchuria reached the capital, but Chiang Kai Shek chose to ignore them. Chiang felt the Japanese were doing him a service by killing Communist traitors. The more Communists killed by the Japanese, the fewer there would be left to resist his army after the war was over. The Japanese with germ bombs attacked hundreds

³¹ Gold, *Unit 731 Testimony*, 11.

of heavily populated communities and remote regions. In the Yunnan Province, on the border of Burma, there appears to have been a massive germ war campaign waged against a communist stronghold by the Japanese.³² Also the Japanese seemed to be killing ethnic minorities in a jungle campaign.

After leaving Harbin, Unit 731 soon found another place to the south, Zhongma Fortress. “The ever-dependable and expanding South Manchuria Railway provided a means of transporting equipment and, more importantly, human lab materials.”³³ By 1936, Zhongma Fortress was well known among the Chinese, not as a prison, but as a production facility for bacteria and as a death shop. The Chinese said, “The life expectancy of prisoners at the fortress was a maximum of one month.”³⁴

During World War II, the experiments carried out by the Japanese Unit 731 were of a broad range in which the victims were treated like laboratory animals. To justify the actions taken by Unit 731 they accused their human guinea pigs of being spies or enemies of the state. The Japanese were able to dehumanize their victims. Much like the Germans referred to the Jews as vermin or rats, the Japanese called their victims *maruta* or logs. In the crematorium, the bodies were burned as wood. As the smoke filled the countryside, the people must have wondered where all the wood came from in an area that had few trees. This helped the killers deal with their emotions as they are carried out these brutal acts.

³² Barenblatt, *A Plague Upon Humanity*, 164

³³ Gold, *Unit 731 Testimony*, 33.

³⁴ Gold, *Unit 731 Testimony*, 36.

In their minds, they justified these acts by not thinking of the victims as human beings; therefore, what they were doing was not wrong. Throughout China and Manchuria, the Japanese carried out both field and lab experiments, these tests resulted in the deaths of over 10,000 to 12,000 human beings. In 1936, there was an escape from Zhongma fortress, although the escapees were recaptured, the Japanese felt the risk of exposure too great and closed the fortress.

Ralph Blumenthal of the *New York Times* writes about Frank James, who survived the brutal Bataan Death March only to be sent to Manchuria and end up a prisoner of the Japanese camp Mukden. James told how the prisoners were treated, “I became a seventy pound living skeleton. They gave us shots, and sprays in the face.”³⁵ Blumenthal discussed James’ duties, “One of his jobs at Mukden was to retrieve for dissection frozen corpses that he was certain were American.”³⁶ Tony Emerson of *Newsweek* published an article about an interview with Dr. Ken Yuasa in the *Washington Times* on September 30, 1994. Dr. Ken Yuasa, in the interview, told how he drilled holes in skulls to collect brain tissue for study. He also talked about how he began bullet removal demonstrations by shooting prisoners in the stomach.³⁷

Walter Middleton was one of 300 prisoners who had been able to walk the five miles from Mukden POW camp to the facility at Ping Fan. He was

³⁵ Ralph Blumenthal with Judith Miller, “Japan Rebuffs Request for Information About its Germ-Warfare,” *The New York Times*, 4 March 1999. P. A10.

³⁶ Blumenthal, “Japan Rebuffs Request,” *New York Times*, 4 March 1999. P. A10.

³⁷ Emerson, Tony. “Surgeon Tries to Unmask Japan’s Medical Horrors: Government Still Silent About Secret World War II Unit,” *Washington Times*, 30 September 1994.

interviewed in August 2002. Middleton stated: “At the time of the medical team’s visit, none of us had dysentery. They gave us all an injection, which they said was vitamin shots, and within 72 hours, all of us had dysentery. Most of those who died were in this group.” Middleton said most of them died of pneumonia, having been weakened from the dysentery.³⁸

No medical visit to prisoners occurred during daylight hours. Some of the most frightening accounts from Mukden are from POWs who were startled at night by Japanese medical staff with whom they were not familiar. The men had a real fear that the Japanese would do something to them in their sleep. Wilson Bridges told his wife “Three of us put our cots together, so the blanket would help more of us stay warm. Many nights, some Japs would come and give shots to the outside person. I was in the middle, and when I woke up, the two on the outside were dead.”³⁹

Wesley Davis, another POW at Mukden, tells of his sleep being interrupted by an unfamiliar face. He recalls:

I was asleep on a straw mat on a platform in our barracks. At about 4 a.m., I was awakened by a tickling sensation. I awoke with a start to see the face of Japanese unfamiliar to me, holding a feather under my nose. When I awoke, he quickly said excuse me and moved away, before I could ask what he was doing. Later the men compared notes and we found similar experiences had happened to others. Sometimes it was a feather or at other times tying a tag with a number on it on a man’s toe.⁴⁰

³⁸ Linda Goetz Holmes, “Unit 731 and Experiments on American Prisoners of War,” Report to the Nazi War Crimes and Japanese Imperial Government Records Interagency Working Group, 27 September 2002, RG 226, National Archives and Records Administration College Park, MD.

³⁹ Holmes, “Unit 731 and Experiments on American Prisoners of War”. RG 226, NARA.

⁴⁰ Holmes, “Unit 731 and Experiments on American Prisoners of War”. RG 226, NARA.

Norbert Fell, a biological warfare expert at Fort Detrick, Md., learned through extensive interviews in 1947, that the scientists of Unit 731 conducted experiments that included rubbing a bacteria coated feather under a prisoner's nose and spraying prisoners with Flit guns. Pappy Whelchel, another POW from Mukden, stated "All the POWs were sprayed on the face by some kind of spray from a spray instrument similar to our Flit spray guns."⁴¹ Major Peaty had written in his diary on more than one occasion that the Japanese were falsifying the medical records of the men. POW doctors told him that the weight, length of stay,



Figure 6. Japanese scientists perform vivisection on male victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

and cause of death of prisoners were being changed.

The victims were exposed to massive doses of plague, anthrax, and smallpox germs. The Japanese also killed victims by other grotesque means, such as

poisoning by radiation or pumping victims full of horse blood. To study the success of their manufactured diseases and dehydration the Japanese withheld water while they removed organs and blood from their victims. They collected valuable data on how the human body was able to cope with these conditions they were forcing upon the victims.

⁴¹ Holmes, "Unit 731 and Experiments on American Prisoners of War". RG 226, NARA.

Planes sprayed a proving ground called Anda, with their manufactured plague culture, they also dropped bombs with plague-infected fleas to see how many casualties would occur. Prisoners were chained to stakes as the researchers detonated bombs filled with deadly anthrax, plague, and gas gangrene in order to track the spread of disease through their bodies; sometimes the researchers dissected them while the victims were still alive. The former medical assistant of a Japanese Army Unit in China during World War II recalled how “The prisoner knew that it was over for him, and so he did not struggle. However, when he



Figure 7. Japanese scientists perform vivisection on female victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

picked up the scalpel that's when he began screaming, I cut him open from chest to the stomach, and he screamed terribly, and his face was all twisted in agony.”⁴²

The cruelty that the Japanese displayed during these field tests

became the worst form of barbaric torture imaginable. The medical staff performed dissections on live prisoners without any form of anesthetic. Dr. Kurumizawa Masakuni testified to one of the procedures, “The Chinese woman victim had regained her consciousness while being vivisected. She opened her eyes and then she hollered. She said it was alright to kill me, but please spare my

⁴² The Other Holocaust, 1.

child's life.”⁴³ The Japanese doctors did not wait for death because they felt the results would not be as conclusive after the blood stopped flowing. This is only one story of the terrible procedures performed to see the effects of their manufactured diseases on the human internal organs.

“When the prisoners were liberated in August 1945, they were debriefed repeatedly on their way home, and after arrival in the United States. Most were strictly ordered not to discuss or write about their treatment in captivity, and many were ordered to sign the so-called gag order to this effect. But all of them have stated that no military or intelligence personnel ever questioned them about whether they thought the Japanese might have conducted medical experiments on any of them while they were in Mukden.”⁴⁴

In 1940, Aizawa Yoshi was a teacher at the Harbin Higher School for Japanese women. In that same year, an epidemic of typhoid engulfed the area. Yoshi lost twenty-two students to the disease. Yoshi stated that “at first she felt the disease occurred due to lack of hygiene in China; however, she now believes the typhoid was caused by bacilli spread by Unit 731.”⁴⁵ This belief has been hard for Yoshi to express because of the public denials of her government. The twenty-two Japanese students killed by their own army were only a small percentage of the hundreds killed in Harbin by this epidemic. After the incident, Ishii Shiro felt the

⁴³ The Other Holocaust, 2.

⁴⁴ Holmes, “Unit 731 and Experiments on American Prisoners of War”. RG 226, NARA.

⁴⁵ Mariko Asano Tamanoi, “War Responsibility and Japanese Civilian Victims of Japanese Biological Warfare in China”. Bulletin of Concerned Asian Scholars. Vol. 32, Issue 3 Available from www.questia.com (accessed 28 October 2004).

need to move his facility, for too many eyes in an urban center were not what he and his confederates wanted. This epidemic was his way of saying farewell to the area. Yoshi's story helps to confirm many of the testimonies in Gold's book about Unit 731.

Another story tells of the process used by the Japanese military for thawing out frostbitten extremities. The Japanese exposed prisoners to extreme cold and sprayed them with salt water, and then, as gangrene started to form, they would start amputating limbs to keep the victim alive. "To determine the treatment of



Figure 8. Replica of experiments for frostbite from Unit 731 Exhibit. Hal Gold, *Unit 731 Testimony*, 132.

frostbite, prisoners were taken outside in freezing weather and left with exposed arms, periodically drenched with water until frozen solid. The arm was later amputated; the doctor would repeat the

process on the victim's upper arm to the shoulder. After both arms were gone, the doctors moved on to the legs until only a head and torso remained. The victim was then used for plague and pathogens experiments."⁴⁶ Showing little or no remorse, the Japanese would proceed to dissect the prisoner, claiming that this gave them the most information from each victim. "Unit 731 proved that the best treatment for frostbite was not rubbing the limb, which had been the traditional method, but

⁴⁶ The Other Holocaust, 3.

immersion in water a bit warmer than 100 degrees, but never more than 122 degrees.”⁴⁷

The ghastly treatment by the Japanese also included burning victims with



Figure 9. Japanese scientist perform vivisection on infant victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

flamethrowers, exploding bombs to study the effect of shrapnel, bombarding them with lethal doses of x-rays; they were also spun to death in centrifuges. They were injected with animal blood, air bubbles, and exposed to syphilis. The victims

suffered through surgical removal of their stomachs with the esophagus then attached to the intestines, had limbs amputated and then reattached to the opposite side, and were gassed to death.⁴⁸ These barbaric acts were carried out for the so-called advancement of scientific knowledge and were performed without consideration for the people being butchered. “[Japanese] scholars say that the research was not contrived by mad scientists and that it was intelligently designed and carried out. The medical findings saved many Japanese lives.”⁴⁹ The experiments by Units 731, 100, and others under this division of biological warfare would be enough to show the savage side of the Japanese military, but this was only the beginning of the criminal acts that occurred at the hands of the Japanese.

⁴⁷Nicholas Kristof, “Unlocking A Deadly Secret,” *New York Times*: available from <http://www.aiipowmia.com/731/germwarfare.html> (accessed 7 October 2004).

⁴⁸The Other Holocaust, 4.

⁴⁹Kristof, “Unlocking a Deadly Secret”.

The Japanese would bury victims while they were still alive; they also castrated the males, removed internal organs to practice surgical procedures, and



Figure 10. Japanese bury prisoners alive. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

set some of the people on fire. These actions became routine in Japanese occupied areas of China. According to Brackman, a reporter at the Tokyo war trials, “the manner in which these people met their death was extremely

cruel and diverse, so ghastly, in fact, that it made Auschwitz gas chambers appear humane.”⁵⁰

Medical researchers locked up diseased prisoners with healthy ones to see how quickly various diseases spread. To study the effects of pressure on the human body, researchers put some prisoners inside a pressure chamber; the



Figure 11. Japanese place infected prisoners alongside healthy prisoners to test reaction time of their new viruses. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

victims suffered horrible agony before their eyes popped out of their sockets. To determine how long the average human could last without nutrition prisoners were denied food, or they were mummified alive in dehydration experiments. Some were placed into hot

water and then the temperature was steadily increased to study the degree of burns and the relationship between temperature and survival.

⁵⁰ The Other Holocaust, 12.

According to the testimony at the Tokyo War Crimes Tribunal, “there were 132,134 allied P.O.W.s held by the Japanese during World War II. Of these, 35,756 died producing a death rate of 27 percent. By way of contrast, the German and Italian forces held 235,473 allied P.O.W.s and 9,348 of them died a death rate of 4 percent.”⁵¹ Clearly, this shows the lack of importance that the Japanese attached to the Geneva Convention.

During World War II, the handling of other Asians by the occupying forces of the Japanese military, at times, seemed barbaric. “The Japanese were responsible for 20-30 million Chinese casualties during their 14-year occupation, not to mention the 9 million Koreans, 4 million Indonesians, 2 million Vietnamese, 1.5 million Indians, 1 million people from the Philippines, and the other Asian



Figure 12. Stacks of victims awaiting disposal at the crematorium. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

countries such as Burma, Thailand, Malaysia, and Singapore.”⁵² The use of live Chinese people as bayonet targets or for the testing of chemical weapons shows the lack of sympathy the Japanese had for other Asian people.

The Japanese treatment of prisoners of war was abusive and harsh. They were not prepared to care for prisoners, and the prisoners they allowed to surrender were

⁵¹ Tanaka, Hidden Horrors, 70.

⁵² The Other Holocaust, 24.

often worked or starved to death. The rules of war were of no concern to Japanese. The goal of the Japanese was to survive the war at all costs. The Allies looked upon the Nazis as racist for their crimes against the Jewish people. The Japanese did not single out any particular group to mistreat, they were cruel to anyone they felt was against the Empire. The more we learn as additional documents are released the more barbaric the Japanese appear. Despite what we learn, the Japanese, still deny to this day the majority of the crimes they committed.

During the occupation of Manchuria in 1938, Japan had established the headquarters of Unit 731 in Pingfang near Harbin, in China, to develop plague bombs for use in war. “Japan expected to crush the Chinese quickly, enjoying overwhelming ground, naval, and air superiority. The Japanese offensive of 1938 triumphed in virtually every encounter. However, the Chinese resistance was also stiffening, forcing Japanese troops to rely increasingly on chemical weapons.”⁵³

The delivery system developed by Unit 731 used clay pots instead of the usual

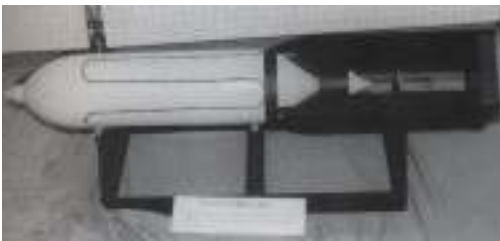


Figure 13. UJI-50 Bomb developed by Ishii Shiro during World War II. Hal Gold, *Unit 731 Testimony*, 131.

metal containers, because that they needed less explosive to release the plague. They also were able to detonate the munitions at higher altitudes to increase the infected area.

In March 1939, Imperial Headquarters granted General Okamura Yasuji permission to use more than fifteen thousand canisters of gas in the largest biological and chemical weapons attack of the war.

⁵³ Bix, *Hirohito*, 362.

“Okamura justified his request by saying that the gas canisters were needed to restore the reputation of the troops and give them the feeling of victory.

On April 11, the Emperor approved Directive Number 11, issued by his army chief of staff, authorizing further use of poison gas by the North China Area Army and its Garrison Force in Inner Mongolia.”⁵⁴ This directive allowed the Japanese to use chemical weapons whenever they felt it was needed to turn the tide of battle. “Imperial Headquarters Army Order Number 301, sealed by Hirohito on May 15, 1939, authorized the carrying out of field studies of chemical warfare along the Manchukuo-Soviet border.”⁵⁵ These orders, giving the Japanese a free hand in Manchuria, show that the Emperor had to know and approve of the work of General Ishii Shiro.

Ishii built a self-sufficient installation with intricate germ and insect breeding facilities, there was a prison for his human subjects, testing grounds, an arsenal for



Fig. 14. Aerial view of Ping Fan facility created by Ishii Shiro.
<http://www.myonlineimages.com/Members/karina/Images/unit731_1.jpg> Accessed 18 Apr 2005.

making germ bombs, an airfield with its own special air force, and a crematorium to dispose of the human remains from his experiments. There were sixty-seven water supply units in the Japanese Army, and Ishii Shiro

⁵⁴ Bix, *Hirohito*, 362.

⁵⁵ Bix, *Hirohito*, 362.

was the head of these units' operations. Five of those water supply units were operating in Manchuria. The main unit was located in Ping Fan. This was the headquarters of operations for General Ishii Shiro. From 1942-1945, Masaji Kitano headed this main unit. Manchurian water wells were infected with typhoid germs that were astonishingly effective killers. It is estimated that more than 1,000 wells in and around Harbin were contaminated with typhoid bacilli in 1939 and 1940. Casualties ranged from single deaths to limited outbreaks of typhoid, which devastated entire villages.⁵⁶

Ishii and his Changchun counterpart caused a cholera outbreak in the Manchukuo capital. Ishii entered the city in 1940, informed local authorities that cholera was moving in on their community, and that the general population needed to be inoculated. Ishii did not tell them the vaccine they were taking was filled with cholera germs. Innocent people lined up, were given an injection, and possibly some liquid to drink or some contaminated food to eat. In any event, a cholera epidemic spread through metropolitan Changchun shortly after.⁵⁷

Following the success of the experiment in Changchun, Ishii decided on his next target Nanking. In July 1942, Ishii traveled to Nanking, where he joined the local personnel to distribute typhoid and paratyphoid germs from metal flasks into wells, marshes, and houses of ordinary citizens. Shortly afterwards epidemics broke out in the region. Ishii also visited a local Chinese POW camp. He gave 3,000 prisoners a special holiday favor, dumplings that had been injected with typhoid or paratyphoid germs. The prisoners were then released and allowed to

⁵⁶ Harris, *Factories of Death*, 77.

⁵⁷ Harris, *Factories of Death*, 77.

return home acting as agents in spreading the disease. Ishii passed out chocolate filled with anthrax bacteria to the local children.⁵⁸ The use of food to distribute Ishii's diseases was very effective, the people in China were starving so they often would not question what they thought was an act of kindness.

Ishii also filled sweet cakes with typhoid and paratyphoid bacteria; Japanese soldiers were given 300-400 of the cakes to leave around fences and by trees in Nanking. They hoped to trick the local population into thinking the soldiers had accidentally left food behind. The people were starving and needed the food to survive. An outbreak of disease occurred shortly after the sweet cakes were distributed. After all the experiments in Nanking, researchers concluded that paratyphoid had been the most effective of the pathogens tested.⁵⁹

The Japanese used other methods besides food to spread their manufactured plague. In another test the Japanese introduced plague infested rats into an area hoping they would breed with the local rats causing a massive breakout of the disease. Unit 731 men would leave fountain pens and walking sticks, which carried the plague, along the road or in the street. People would find them and take them home, causing other outbreaks of the disease.

Ishii would show his gratitude for a job well done and he considered the experiments in Manchuria a success. Ishii was known occasionally to be a generous and a concerned commander. He would spend freely in order to see that his men were content with their surroundings, thinking that they could then concentrate on achieving his objectives. His men were given as many of the

⁵⁸ Harris, *Factories of Death*, 77.

⁵⁹ Harris, *Factories of Death*, 78.

comforts of home as the bleak Manchurian landscape could provide.⁶⁰ The house Ishii and his family shared in Harbin was immaculate. They enjoyed all the creature comforts available. “Ishii’s Harbin residence was a sequestered Russian mansion. The mansion was home to Ishii, his wife, and their seven children. His eldest daughter compared the mansion to something out of *Gone with the Wind*. He commuted to Ping Fan in an armor-plated limousine. While at the compound Ishii stayed in a special suite with all the luxuries the era could provide.”⁶¹

To make Ping Fan bearable for the Japanese scientists, workers, and armed guards,

Ishii had constructed within his model research camp twenty-two state of the art dormitories for the Japanese residents. In addition, provided for entertainment was a 1,000-seat auditorium complete with library and bar. There were swimming pools, gardens, small bars and restaurants, bathrooms, warehouses to store fish and vegetables, athletic fields, and a brothel to service Japanese personnel. He equipped four bungalows with the latest medical instruments and medicines to care for their medical needs. A large Shinto temple was built to provide for their spiritual needs and primary and secondary schools were constructed for their children.⁶²

Ishii had a small air force at his disposal and he used the planes often, “An experienced pilot, Ishii handled the controls of several planes placed at his disposal in Ping Fan by the Kwantung Army. He piloted his personal plane to the various Water Purification Units for on site inspections, and for pep talk performances to maintain troop morale. Ishii also flew missions during biological

⁶⁰ Harris, *Factories of Death*, 47.

⁶¹ Harris, *Factories of Death*, 53.

⁶² Harris, *Factories of Death*, 47.

weapons field tests in China. Ishii commuted regularly to a test facility in Anda.”⁶³

The Japanese disguised the base as an Epidemic Prevention and Water Supply Unit. “The Ping Fan facility alone could manufacture as much as 300 kilograms of plague bacteria monthly, in addition to 500-600 kilograms of anthrax germs, 800-900 kilograms of typhoid, paratyphoid, or dysentery germs, or as much as 1000 kilograms of cholera germs. More than 10,000 Chinese, Korean and Russian P.O.W.s were killed in biological experiments.”⁶⁴

In 1982, the *Japan Times* printed an article by Masanori Tabata. It was an interview with Harumi Ishii, the daughter of General Ishii Shiro. Harumi viewed her father as a genius. She said, “Were it not for the war and his chosen career, his genius might have flourished in a field other than medical science, possibly politics.”⁶⁵ Harumi defends her father but does not deny the horrible actions of Unit 731. She says that it was all in the line of duty to the Emperor and Japan. “She admits that by any moral standards his human experimentation would be denounced, and then says it all happened in extremely abnormal circumstances.”⁶⁶ Her father’s actions have been linked to the most barbaric episodes of World War II. “These actions had been buried in the minds of his followers and the Archives of the United States”⁶⁷ until recently. The Devil’s Brigade was a name given to Unit 731 with Ishii seen as the devil. His human experimentation was to help bring

⁶³ Harris, *Factories of Death*, 58.

⁶⁴ The Other Holocaust, 11.

⁶⁵ Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

⁶⁶ Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

⁶⁷ Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

about the ultimate biological weapon and biological agents that were cheap to produce, yet effective when used against the enemy. Harumi tells how her father saw the ultimate showdown with Russia and the Red Chinese that was going to occur soon in Manchuria, and he was going to be ready.⁶⁸

Harumi Ishii talks of how her father told a group of men about a uranium weapon possessed by the Americans and how he had a weapon to use in response. Her father was talking about the bacilli bomb. He had devised this weapon plan to use against the Americans. The general was developing a delivery system for balloon bombs that would reach the western coast of America. The balloons would be filled with germs to cause disease up and down the coast as well as panic in the United States. The Japanese also used the balloon bombs to also attack the mainland of America. It was one such attack that caused a forest fire on the west coast of the United States. During the middle of the war, it was well known in the Pacific theater that several balloons had been released. “The combination of the Balloon bombs and the bacilli charged ceramic bombs developed by Unit 731 might have caused a nightmarish disaster.”⁶⁹ After consideration, the Emperor opposed the plan out of fear of retaliation from the United States.

Japan attacked the U.S. by sending about 200 balloon bombs, not germ bombs, to the west coast in December of 1944; each balloon was thirty feet in diameter and 91 feet long. After seven people were killed, the person who took

⁶⁸ Tabata, “Daughter’s-Eye View,” *Japan Times*, 29 August 1982.

⁶⁹ Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

charge of the investigation of the balloons was Murry Sanders, he was the first man sent to Japan to investigate Unit 731. Forty years later, Sanders recalled, “The only explanation I had, and still have, is that Ishii wasn’t ready to deliver what he was making in Ping Fan; that he hadn’t worked out the technology. If they had been, we were at Ishii’s mercy.”⁷⁰

Japan saw the war was ending and they were losing ground, they started dumping cholera and typhoid cultures into reservoirs, rivers, and wells, thus tainting the water supply and causing the deaths of Chinese people for years after the war ended. The Japanese released their plague-infested rats on the communities of Manchuria once they realized the war lost, the effects of this action would be felt for years after the war. “As the war ended these rats caused outbreaks of the plague that killed at least thirty thousand people in Harbin from 1946-1948.”⁷¹

Estimates place the number of chemical bombs left behind in China range between 700,000-2,000,000, most of them loaded with mustard gas. Many of them corroded and leaking has helped turn Manchuria into a huge chemical waste dump. China has become home to the world’s largest chemical weapons cleanup campaign.⁷² The Japanese have been held responsible for the problem, but they have refused to take any action to clean up the waste sites or to acknowledge there is a major problem.

⁷⁰ Tien-wei Wu, *A Preliminary Review of Studies of Japanese Biological Warfare Unit 731 in the United States*. RG 226, National Archives and Records Administration College Park, MD.

⁷¹ *The Other Holocaust*, 5.

⁷² *The Other Holocaust*, 9.

During July of 1940, Ning Bo, birthplace of Chiang Kai Shek and a holiday resort visited by the Shanghai elite became the target of another massive biological attack by Ishii Shiro.

For the next five months, the town was the target of a series of biological attacks. The methods of spreading disease varied, they dumped pathogens into water reservoirs, ponds, and individual residential wells. Aerial spraying in early October disseminated infected grains of wheat and millet. Later that month, Ishii personally directed scattering of contaminated wheat and cotton in and around Ning Bo. On November 26, specially equipped Unit 731 aircraft flew over nearby Jin Hua county, dropping bombs which, on impact, gave off smoke-like objects that later turned a light yellow color.⁷³

At the conclusion of the five-month campaign, cholera, typhus, and the plague were spread throughout Ning Bo and at least five surrounding counties. The diseases released in 1940 had long-term effects in Ning Bo, as the nearby communities had outbreaks of plague in 1940, 1946, and 1947. The diseases took a heavy toll on the area; and many people lost their lives after the war was over.



Figure 15. Map of Shanghai/Ning Bo area. Available at Mapquest.com. Accessed 15 March 2005.

The Chinese Nationalists claimed that, on October 27, 1940, a plague was spread on the city of Ning Bo. In the next few years, the Chinese claimed a number of Japanese biological warfare attacks. Witnesses claim

⁷³ Harris, *Factories of Death*, 78.

a Japanese plane circled the town of Chang de in the Hunan province. It released grains of wheat and rice, pieces of paper and cotton wadding, which fell in two streets in the city's East Gate District. Over the next three weeks, six people died of plague-like symptoms. Dr. Chen Wen-kwei a former League of Nations plague expert in India investigated this attack, with autopsies of people and inspections of the local rat population. The local rats did not carry the fleas with the plague virus.⁷⁴ This meant the virus was introduced another way, confirming the local peoples' story of the Japanese planes. Later, the disclosure of the Japanese techniques of spreading diseases would support Chen's findings. The Japanese had hoped their diseased rats would infect the local rats and cause a natural epidemic.

“Colonel Ota Kiyoshi, one of Ishii's most loyal and trusted aides, mounted a major biological offensive against Chinese resistance in central China. Ota began the new campaign on April 11, 1941, distributing by airplane, plague infected wheat and millet.”⁷⁵ The attack was centered on the town of Chang teh; where the residents started to die of the plague eight days later. “Later that summer the attack was resumed; they began spraying plague-infected fleas on the surrounding countryside. In November, Ota ordered an airdrop of a mixture of wheat and rice balls, strips of colored paper, cotton fibers, and other fabric cuttings. By December, many residents of Chang teh had died, a conservative estimate of 400

⁷⁴ Barenblatt, *A Plague upon Humanity*, 144.

⁷⁵ Harris, *Factories of Death*, 79.

to 500 died in Hunan province from Ota's experiments."⁷⁶ These field experiments continued throughout 1942.

In a 1943 statement, President Franklin D. Roosevelt addressed the actions of the Japanese in China with regard to their use of chemical weapons on the Chinese. Roosevelt stated: "I desire to make it unmistakably clear that if Japan persists in this inhuman form of warfare against China or against any other of the United Nations, such action will be regarded by this government as though taken against the United States and retaliation in kind and in full measure will be meted out." Roosevelt ended his statement by saying, "We shall be prepared to enforce complete retribution. Upon Japan will rest the responsibility."⁷⁷

Harris says, "Edward Behr, a late twentieth century British journalist turned biographer, portrays Hirohito in a dark light. Behr claims to have found so many tangential ties between the Emperor and biological warfare that he concluded Hirohito knew something about Unit 731."⁷⁸ Other British historians have agreed that Hirohito was an integral part of the Japanese war machine: "Hirohito had a secret Imperial fund earmarked for special weapons research, which may have been used in Manchuria and China for biological warfare research. The Emperor was an avid student of science and it is believed he personally monitored the progress of Unit 731's research."⁷⁹ The fact that Ishii's and Wakamatsu's units were created by an Imperial edict is not enough to implicate Hirohito because

⁷⁶ Harris, *Factories of Death*, 79.

⁷⁷ Harris, *Factories of Death*, 74.

⁷⁸ Harris, *Factories of Death*, 144.

⁷⁹ Harris, *Factories of Death*, 145.

thousands of documents, which his subordinates had issued, were sent out with the seal of the Emperor. Wakamatsu was the commander of a smaller biological unit, its main purposes was combating animal diseases, and it was established at Xinjing. “One main reason for the belief that Hirohito knew of the activities in Manchuria was that both Ishii and Wakamatsu units were the only ones established by royal decree during Hirohito’s long reign.”⁸⁰ The Emperor knew Ishii personally. They had met on at least two occasions. One of the meetings occurred on a Japanese ship where Ishii was demonstrating his water purification system. Ishii had urinated into a bottle, and then he ran the urine through his filtration system. Upon the completion of this process, Ishii offered the Emperor a drink, but the Emperor refused. Ishii then proceeded to drink the water himself, which, needless to say, made a lasting impression on the Emperor.



Figure 16. Victim of biological weapons attack. Available at www.aiipowmia.com/731/731coveat.html
Accessed 15 March 2005.

It was estimated that the Japanese, during their fourteen years of conflict in China, carried out more than 2,000 battles where they used biological and chemical weapons, causing a great amount of casualties.⁸¹ Japanese and Chinese scholars believe that at least 270,000 Chinese soldiers and civilians were killed by germ warfare during the Japanese occupation.

⁸⁰ Harris, *Factories of Death*, 144.

⁸¹ The Other Holocaust, 8.

They estimate that the toll from Japanese-seeded cholera epidemics in the communist controlled area of Yunnan, may have reached 200,000. At the end of the war Japanese Units released all their plague-infected animals. The northeastern part of China (Manchuria) immediately became a disaster area; the resulting outbreaks of plague in the region killed another 30,000 people from 1946-1948.⁸² The numbers of deaths at the hands of the Japanese has been an area of disagreement, we may never know the actually tally due to the lack of records and witnesses and the debate will never end.

The men who served under Ishii were extremely loyal; they loved him because of his enthusiastic personality, daring, and carefree attitude. His intelligence and intense loyalty to Japan and the Emperor were obvious. Like most men in command Ishii had some vices such as heavy drinking, brazen womanizing, and noticeable embezzlements from the funds allocated for his unit. Either his men overlooked these flaws or his supporters applauded them. His men condoned Ishii's peculiar work habits of a late night in the lab after a night on the town as an eccentricity of an extraordinary man.⁸³ His bad habits did nothing to spoil the image of Ishii in his men's eyes; many would idolize him. Ishii gathered a group of outstanding medical specialist and scientists, despite his "bouts of exhibitionism, embezzlement, and unrestrained drinking and geisha house crawling."⁸⁴

⁸² The Other Holocaust, 5.

⁸³ Harris, *Factories of Death*, 58.

⁸⁴ Harris, *Factories of Death*, 53.

“Ishii retained his position at the Tokyo Army Medical College while he was stationed in Manchuria. He spent nine months with the Kwantung Army in Ping Fan and the other three months lecturing, recruiting personnel for Biological warfare work, and doing research in Japan. His Epidemic Prevention Research Laboratory established with the help of Dean Koizumi at the Army Medical College remained a key component in his vast biological warfare enterprise.”⁸⁵

In October 1941, Tojo, the Prime Minister of Japan, had a picture taken with Ishii while presenting him with an award for his contributions to developing biological weapons. This picture appeared in all the major Japanese newspapers. One month before the end of the war, reports circulated of an attempt to launch airplanes from the deck of a submarine, these kamikaze planes would be carrying plague bombs to attack San Diego, California. Tojo had been opposed to using biological assault weapons on American soldiers because of his fear of American reprisals against Japan.

On August 8, 1945, Russian tanks crossed the Siberian- Manchuria border. Japan would surrender in less than a week to the allies, it was during this brief grace period, that the Japanese began to destroy the biological warfare installations in China, and kill their remaining prisoners trying to erase any evidence of the atrocities that had occurred. They began to ship out most of their personnel with some of the more valuable equipment to South Korea. In less than thirty hours the

⁸⁵ Harris, *Factories of Death*, 58.

installations were turned to piles of ashes. However, the Japanese unable to collect everything left some of their research behind in the hasty retreat.

When the Russians finally took control of the biological warfare units in September of 1945, most of the top officials had left to turn themselves in to the Americans. The Soviet troops captured what was left of Unit 731 in Manchuria. Rumors had circulated in Russia since the late 1930s about the experiments carried out in the camp. The final details emerged through captured documents and the testimonies of Japanese P.O.W.s. The captured documents included blueprints of biological warfare assembly plants far larger and more complex than any Russia currently operated. Japan had organized this plant like a small industry with a central production facility fed by continuous research and development.⁸⁶ The documents were sent to Moscow, Joseph Stalin, the leader of Communist Russia, tasked Lavrenty Beria, the head of the KGB, to build new facilities and to match and surpass the Japanese biological warfare output. In 1946, a new Army Biological Research complex was established at Sverdlovsk.⁸⁷ This was the beginning of a more proficient Biological Unit for the Soviet Union. The research in the documents found in Manchuria, as well as Ishii Shiro's research, made this new unit possible. The United States also took advantage of the new information provided by Ishii Shiro and the other captured officers to improve its Biological

⁸⁶ Ken Alibek, and Stephen Handleman, *Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program in the World – Told from Inside by the Man Who Ran It*, New York: Dell Publishing, 1999. 36.

⁸⁷ Alibek and Handleman. *Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program*, 37.

Weapons Division of the Army. Both of the major superpowers of post World War II can trace their improved biological weaponry to the information provided by Ishii Shiro.

The news of Japan's surrender devastated Ishii. He could not accept the idea that an inferior people defeated Japan. When Emperor Hirohito was heard on the radio asking the Japanese people to end the war, Ishii had a nervous breakdown. Once he was assured that Ping Fan had been destroyed, Ishii boarded a military aircraft to return home. Members of his family along with data and equipment from Ping Fan were sent by railroad to Pusan, Korea. It was from Korea that some



Figure 17. Diagram of Japanese anti-disease suit. Scope, Biological Warfare Activities and Capabilities of Foreign Nations, RG 226, National Archives and Record Administration, College Park MD.

of his close family members continued their journey back to Japan by boat.

Despite the horrific experiments, there were many medical benefits discovered by the Japanese research carried out in Manchuria. The Japanese anti-disease suit was developed to allow the scientists access to contaminated areas without fear of contracting the disease themselves. "The suit was among the captured equipment found after the war, it was made of lightweight rubberized silk it was a coverall type outfit with a zipper front and neck draw strings. Boots, gloves and a hood were made of the

same material. Because of the impermeable material, the suit was worn for short periods of time. The suit was not very durable, so rough work was avoided, but it was easy to move about in. The Japanese apparently used this suit for autopsy and decontamination work, but with slight modifications the suit could have been used for protection against biological warfare agents.”⁸⁸ Ishii’s water purification system was the envy of the world, many American soldiers were impressed with the fact the Japanese had clean water to drink through out the Asian Theatre. The developments of vaccines to treat the diseases, cultivated within the labs of Unit 731, were a medical breakthrough. Under the rubric of the Defensive Research Unit, technicians produced vaccines for eighteen diseases. At least 20 million doses of vaccine were produced at Ping Fan annually, and untold millions more were made at the other unit compounds.

The research in the treatment of frostbite provided a successful way to thaw out limbs without having to amputate them due to gangrene. The new ways to treat soldiers who had suffered from the effects of a biological weapons attack were all important medical discoveries. These new medical advances were made due to use of human guinea pigs. The people exposed to the terrible treatment in the camps of the Japanese biological warfare units suffered extremely gruesome deaths. The price of a human life has been debated since the beginning of time. During World War II, the monetary price for the individuals of some races was cheap, but the discoveries were priceless.

⁸⁸ Scope, Biological Warfare Activities and Capabilities of Foreign Nations, 30 March 1946, RG 226, National Archives and Records Administration College Park, MD.

CHAPTER 3

THE COVER-UP AND LEGACY

The end of World War II was a time when people wanted justice for those scarred by the Axis powers. The trials of Nazi war criminals in Nuremberg brought a feeling of vindication for those in Europe who had suffered at the hands of German soldiers. The war crime trials in Tokyo were quite different, of the 5,570 Japanese prosecuted by the allies, none stood trial for biological warfare. In the case of eight captured American fliers, nine Japanese medical school professionals were convicted, for the crime of vivisection and some were executed. The crimes committed by the biological units of the Japanese Army were topics left unaddressed by the American government. The War Trials Board did not prosecute any Japanese soldiers for anything that had to do with biological weapons. The Russians however, did convict twelve men of crimes against the Chinese citizens and prisoners of war who had been used as test subjects in the Japanese tests.

When comparing the European and Asian Holocaust, historians need to look at the current situation in the two countries. After the war, the two countries were treated differently. Germany was forced to acknowledge the crimes against the Jews and other Europeans, while, even today, Japan denies its crimes and worships many of those who carried out these atrocities. Germany has offered a formal apology to its victims. Japan's Prime Minister, on the other hand, has

offered only vague, indirect, and personal apologies; neither their Emperor nor Parliament has offered an apology. “German leaders consistently apologize for their past aggressions in the clearest possible terms. Former Chancellor Willy Brandt once even fell to his knees at the site of the Warsaw Ghetto, with the utmost sincerity in tribute to those who died there at Nazi hands.”⁸⁹ Since 1951 Germany has been paying restitution to the victims of the European Holocaust. Germany is still paying 1.25 billion marks to 106,000 pensioners in Israel, Canada, the U.S and other countries who were living in Eastern Europe during World War II. From 1951 until 1998, Jewish Holocaust victims have collected 102 billion marks in compensations and reparations from Germany, and by 2005, Germany will spend an additional 20 billion marks for their crimes. Japan continues to maintain innocence for its wartime crimes, and has paid only a small amount to the victims of their crimes.⁹⁰

Furthermore, Germany has allowed investigators to search their wartime archives, and they have chosen to examine history in detail and admit its guilt for the crimes committed during the war. Even today, Japan declines to allow access to its archives, while denying the existence of certain files and records related to wartime military and biochemical warfare experiments, as well as the practice of Comfort Women (sexual slavery). Denial of the Holocaust in Germany has been outlawed by legislation. It is against the law to tell what is called the Auschwitz

⁸⁹ The Other Holocaust, 221.

⁹⁰ The Other Holocaust, 222.

lie, which is denial of the death camps. Japan tolerates government officials who deny the war crimes and openly recognize war criminals as war heroes.

The Japanese Yasukuni Shrine honors 1,068 war heroes; this number includes



Figure 18. Tokyo Memorial Tower for Unit 731. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

14 men thought by the most of the world to be Class A war criminals⁹¹. For the people of Asia, the shrine is a symbol of Japanese brutality and of its militaristic past. In Germany, teachers explain about the Holocaust and how the Nazi party should never be allowed to come to power again to their students. However, in Japan, wartime butchery is concealed from the textbooks because Japan's actions in China and throughout Asia would be

seen as an embarrassment.⁹² The German government has helped to capture exiled Nazi war criminals, bringing them to justice; at the request of the U.S. Department of Justice and other countries, they have identified thousands of war criminals. These criminals have been placed on a list banning their entry into the U.S. and other nations. Japan is the only country in the world that refuses to cooperate with the U.S. Department of Justice in war crime investigations, refusing to confirm the names of war criminals by simply disregarding request.⁹³

⁹¹ The Other Holocaust, 56.

⁹² The Other Holocaust, 24.

⁹³ The Other Holocaust, 114.

Ralph Blumenthal, a writer for the *New York Times*, points out that the cooperation of the Japanese government in bringing these war crimes to light has been nonexistent. The Japanese also refuse to help identify these criminals for the United States to watch as a threat to U.S. national security. Eli Rosenbaum, who was director of the Office of Special Investigations in the Justice Department, said, “The dispute between Japan and Washington over suspected war criminals has been quietly building for three years.”⁹⁴ The Justice Department has over 60,000 names of Germans and other Europeans who are suspected war criminals on file, whereas they have fewer than 100 Japanese listed this is due to a lack of cooperation from the Japanese government. Mr. Rosenbaum felt that it was astonishing that a friendly government would deny such us access. He said that the most outrageous thing of all is that the Japanese government will not provide the dates of birth of war crimes suspects identified by O.S.I., this is so that they can be barred from the United States. They refuse to even tell us if they will ever assist us.⁹⁵

In the matter of restitution for slave laborers, Germany coordinated an effort to reach a settlement with war time victims, companies that had engaged in forced labor practices paid 1.7 billion dollars in compensation to their victims. In contrast Japan paid 135 companies 450 million in compensation for coordinating contract laborers during the war. Japan has concealed records of wartime slavery conducted

⁹⁴ Blumenthal, “Japan Rebuffs Request,” *The New York Times*, 4 March 1999.

⁹⁵ Blumenthal, “Japan Rebuffs Request,” *The New York Times*, 4 March 1999.

by Japanese companies. It is estimated that China's direct economic loss due to 14 years of Japanese occupation is 63 billion dollars and its indirect loss on income is 500 billion dollars.⁹⁶ This is in China alone none of the other Asian countries were included in these totals.

Both Germany's government and society have punished and rejected their war criminals. Japan has placed war criminals into positions of authority. These key positions were in the government, business, and academic fields. In Berlin, the German government allocated money and materials to construct a National Holocaust Memorial Museum as a tribute to the victims. At the same time, Japan has built a War Memorial Museum, celebrating war heroes while ignoring all of the brutality committed by its soldiers during the war. When comparing the European and the Asian Holocausts, the extent of brutality performed by both countries is difficult to comprehend. The numbers of people killed at the hands of these two countries is staggering. Historians are just now starting to unravel the Asian side of this grim chapter in history. The evidence has been hidden for so many years that the Japanese have almost gotten away with the murder of 20-30 million people in China.⁹⁷ Unlike the occurrence in Europe where they demanded swift justice, in Japan the Western Allies have let the facts stayed buried. Could this equate to racism against the Asian victims? Did we trade our silence for the data collected by the Japanese in the field of chemical warfare as part of a dark

⁹⁶ The Other Holocaust, 62.

⁹⁷ The Other Holocaust, 24.

alliance between Japan and the Allies? These questions have yet to be answered with the certainty needed to condemn those responsible for this great travesty of justice.

In few other instances was Washington's double standard revealed so clearly. A sinister weapon in enemy hands, biological warfare was transformed into an acceptable and valuable military tool when added to the American arsenal. It became tolerable because it offered a short cut to victory, which it claimed, would save lives, particularly American lives.⁹⁸ The American government decided in the interest of National security to make a deal with some of the former officers of General Ishii Shiro's unit. The Americans felt the information they could receive from these men was invaluable. The Japanese data on the human subjects was especially important, American scientists would not have been able to carry out such experiments on the scale the Japanese had in Manchuria. Obtaining this information from the Japanese was also cost effective. The price of carrying out the extensive experimentation provided by these documents would have been excessive.

When the war ended, Unit 731 led by General Ishii Shiro was rounded up and questioned by General Douglas MacArthur's staff. When he was first approached and interrogated, Ishii was unwilling to provide more than cryptic answers to questions. According to Dr. Norbert E. Fell, who conducted the

⁹⁸ John W. Powell, "*Japan's Germ Warfare: The U.S. Cover-up of a War Crime*," RG 226, National Archives and Records Administration College Park, MD.

interviews, “the increasing interest of the Soviet Union in interrogating General Ishii helped to change his attitude.”⁹⁹ With Ishii’s new cooperation the Americans were convinced the materials were vital to national security: Records show that Lt. Col. Murray Sanders of MacArthur’s staff cut Ishii and his officers a deal on orders from MacArthur’s office. When Sanders offered a deal for immunity in return for his records, Ishii went to his flower garden and dug up all detailed data.¹⁰⁰ The Japanese had used biological and chemical weapons in China until 1942. The full consequences of this Japanese style of warfare would only become evident after World War II. The Truman administration made a large investment in biological and chemical warfare based partly on the data recovered from the Japanese. Truman lacked the foresight of Roosevelt; he did not see the danger of this style of warfare. That is why he ignored Roosevelt’s wartime policy, it was critical of poison gases as an illegal and appalling method of warfare.¹⁰¹ The United States was accused by the communist of using Japanese data and technology such as chemical weapons in a substantial way during the Vietnam War.

In response to the allegations that her father went to the Americans to make a deal for his life, Harumi Ishii denies the contact was initiated by Ishii Shiro: “As far as I know, it was true that a deal was made, but it was the U.S. side which

⁹⁹ Norman M. Covert, Memorandum For Record: Information on Japanese BW Program in World War II; 5 May 1982, Department of the Army, RG 226, National Archives and Records Administration College Park, MD.

¹⁰⁰ John Bull and Peter Kelley, “Many Nations Used People in Experiments,” *Saginaw News*, Michigan 1 Oct 1989.

¹⁰¹ Bix, *Hirohito*, 617.

approached my father.”¹⁰² She admitted her father brokered a deal to spare the lives of his men in exchange for his data on biological weapons, her attempt to save the honor of her father was impressive. Harumi tells of the U.S. officers at the bedside of her father questioning him about his unit’s activities. She says her father offered himself as a scapegoat and he took complete responsibility for everything that happened under his command in Manchuria. Because of her father’s illness, Harumi had been allowed to be with him while he was being interrogated. To make use of her typing skills, the U.S. officers asked her to transcribe the conversations. She tells how she was asked to be a courier of the notes; she delivered them to GHQ office at the Ichigaya garrison. Harumi recalls, the main interrogator was a man named Arvo T. Thompson who said he was an envoy for President Harry Truman. He exactly begged my father for top-secret data on germ weapons. He stressed that the data must not fall into the hands of the Russians.¹⁰³

After Washington had ignored several demands, the Russian ambassador was finally allowed to question Ishii Shiro and the other Unit 731 officers who were held in custody by the Americans. There are several memos on file in the U.S. National Archives that support the claims of the Russians that they were being denied the chance to question these men about the war crimes committed in China. Washington continually told MacArthur’s headquarters not to let the Russians

¹⁰² Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

¹⁰³ Tabata, “Daughter’s-Eye View,” *The Japan Times*, 29 August 1982.

question the prisoners until the Americans were finished with their own questions. Then, after the Americans found out what these men knew, they were determined not to let the Russians get the same information. Ishii Shiro and the men were told not to betray their secrets to the Russians and to act as if they did not recognize any of the Americans that would be accompanying the Russians.

In an article from the *Washington Post*, Phillip J. Hilts writes about a memo by two American officials, Dr. Edward Wetter and H.I. Stubblefield. The memo states that: “General Ishii Shiro was beginning to supply the desired materials, including selected samples of 8,000 slides of tissues from autopsies of humans and animals subjected to biological warfare experiments.”¹⁰⁴ Hilts points out that, if this information had been brought out in a war crimes trial, all nations would have had access to it. The United States decided that such publicity would compromise its national security. There was another memo from U.S. headquarters in Tokyo that read: The compensation for conceding the Japanese immunity from war crimes was, it would result in making use of General Ishii’s twenty years experience in this field, he could also assure complete cooperation of his former subordinates.¹⁰⁵

The information that the United States received from the Japanese had an enormous impact on the American biological weapons unit. A report in December 1947 from Edwin V. Hill, chief of basic sciences at Camp Detrick, Maryland,

¹⁰⁴ Phillip J. Hilts, “Pact with Japan Hid Results of Germ War Test on POWs,” *Washington Post* 31 October 1989.

¹⁰⁵ Hilts, “Pact with Japan Hid Results of Germ War Test on POWs,” *Washington Post*, 31 October 1989.

noted the great value of the results of the experiments. Hill said of the Japanese, “It is hoped that individuals who voluntarily contributed this information will be spared embarrassment because of it and that every effort will be taken to prevent this information from falling into other hands.”¹⁰⁶

The Joint Chiefs of Staff decided to keep any information about the Japanese Biological Warfare Program top secret. The information was to remain exclusively in U.S. hands; the Soviets were not to see any of the data and were not to interrogate the Japanese officers of Unit 731 without an American present. The U.S. could not allow Ishii or his men to testify in the war trials because they could not risk leaking of their information under the questioning of the tribunal. The second reason for the protection of Ishii and his associates was “the precondition established by the War Crimes Tribunal in Japan that no prosecutions would be pursued unless a specific incident could be identified and a single person established as the responsible party.”¹⁰⁷ It could not be established that General Ishii personally ordered the death of prisoners of war through experimentation on a particular date using a particular agent: It is not easy to establish the scope of either Unit 731 personnel’s or Ishii’s involvement in these episodes. What is certain is that Ishii did travel at length throughout the war zones during the period. Several of the reported incidents do bear his operational trademark, but no substantive evidence connects either Unit 731 or any of its scientists to the attacks.

¹⁰⁶ Hiltz, “Pact with Japan Hid Results of Germ War Test on POWs,” *Washington Post*, 31 October 1989.

¹⁰⁷ Covert, Memorandum For Record, 5 May 1982, Department of the Army, RG 226, NARA.

Still, the first wide-ranging field-test of biological warfare or chemical warfare that can be attributed to Unit 731 occurred in 1939.¹⁰⁸ The National Archives have declassified papers that deal with the question of immunity and the debate that occurred within the government over how to grant these men a deal. The US War Department was in favor of granting Ishii's demands for putting the immunity deal in writing. Due to fear over future embarrassment, the State Department warned against putting anything in writing. The Japanese were told their data would be secured and protected within the proper classified intelligence channels.

The information retrieved from the Japanese helped the United States to justify the experimentation being carried out during the war by our own scientists. Dr.

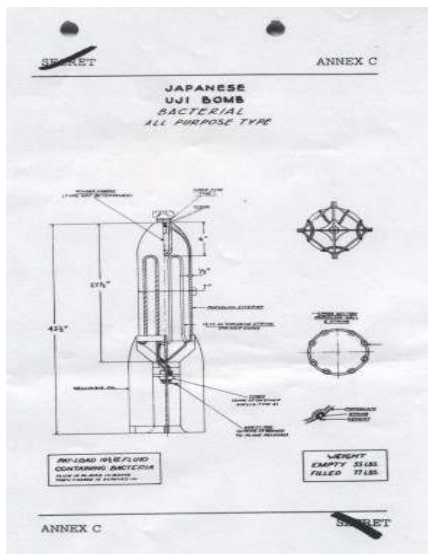


Figure 19. Diagram of UJI bomb designed by Ishii Shiro. Scope, Biological Warfare Activities and Capabilities of Foreign Nations, RG 226, National Archives and Record Administration, College Park MD.

Paul Hudson, who questioned the captured members of Unit 731, felt relief because of the testimony they were giving, it helped to relieve his conscience. The U.S. Army had given shots of experimental anthrax vaccines to 91 Japanese prisoners of war; this was a direct violation of the Geneva accords. The Army also had a wartime program to test presumably less harmful biological agents on American conscientious objectors.¹⁰⁹ The US Army used Project White Coat in the 1950-

¹⁰⁸ Harris, *Factories of Death*, 74.

¹⁰⁹ Bull, "Many Nations Used People in Experiments," *Saginaw News*, 1 October 1989.

1973 eras; it received volunteers from the Seventh Day Adventist Church to carry out experiments. In 1955, the Army sent out a memo authorizing a cover-up of any deaths from testing biological warfare agents on humans. Death certificates were to be filled out in general terms.¹¹⁰

Before his death, Ishii Shiro presented 80% of his data to the United States. Harumi Ishii, points out this came after a number of requests and threats from the American government. Documents now available indicate the United States took the information to help develop its own bio-bacteriological warfare research center. This caused rumors that the United States took Ishii Shiro's findings and developed weapons used in the Korean War and Vietnam War: Ishii outlined for the interrogators plans for nine different types of porcelain bombs designed and manufactured by the unit for aerial germ warfare. The Unit had manufactured 3000 porcelain bombs, ceramic containers to be charged with germ infected fleas and other insects.

During the Korean War, the Chinese made accusations that American troops carried out germ warfare against the Chinese and North Korean armies along with the general population in North Korea. Masanori Tabata of the *Japan Times* reported on September 5, 1982, that these accusations had



Figure20. Bomb China claims was used by U.S. during Korean War. Hal Gold, *Unit 731*

¹¹⁰ Bull, "Many Nations Used People in Experiments," *Saginaw News*, 1 October 1989.

been reported by the state run New China News Agency in early 1952. They also claimed to have evidence that the U.S. military had “taken Ishii Shiro, Wajiro Wakamatsu, Masaji Kitano and other war criminals to Korea to wage germ warfare.”¹¹¹ Tabata also alleges that *The People’s Daily*, another Chinese paper, carried an article with photographs of germ bombs and bacteria-infested insects, which were dropped by U.S. bombers on populated targets in Northeast China and North Korea. The bombs had a strong resemblance to the UJI-type aerial bombs designed and manufactured by Unit 731 during World War II.

Testimony of Greg Rodriguez, Jr., the son of an American prisoner of war from Montana, states “His father was one of 4,000 former U.S. soldiers still alive today who spent time in Japanese P.O.W. camps during the Pacific War.”¹¹² American soldiers captured in the Philippines in 1942, were sent to a Japanese P.O.W. camp in Mukden. Here the Japanese subjected them to experiments according to testimony. Rodriguez also testified about his feelings of the deal for immunity made by MacArthur, “General Douglas A. MacArthur left his men in 1942 and sealed their fate in May 1946 by promising General Ishii immunity from prosecution if he would surrender the records of the 731st Unit.”¹¹³ He charged that this collaboration between MacArthur and Ishii was “unsavory to say the least,” and called it a “callous, culpable conspiracy, an American holocaust.”¹¹⁴

¹¹¹ Masanuri Tabata, “Legacy of Lt. Gen. Ishii Lives On-With American Help,” *The Japan Times*, 05 September 1982.

¹¹² Tabata, “Legacy of Lt. Gen. Ishii Lives On,” *The Japan Times*, 05 September 1982.

¹¹³ Tabata, “Legacy of Lt. Gen. Ishii Lives On,” *The Japan Times*, 05 September 1982.

¹¹⁴ Tabata, “Legacy of Lt. Gen. Ishii Lives On,” *The Japan Times*, 05 September 1982.

In their book, Unit 731: Japan's Biological Warfare In World War II, Peter Williams and David Wallace use a quote from a Strategic Air Command report to FBI director J. Edgar Hoover in March 1956. The references confirm that the United States knew of the experiments on prisoners of war almost as soon as the conflict was over. The authors also write: There is no question that the American government tainted the workings for the Tokyo Trial by submitting an immunity deal for the scientific data acquired by Unit 731.¹¹⁵

In an article in the Oklahoma City Press, Gregory Rodriguez, Jr. discussed a rescue mission to free American prisoners in China; the records show that for the first time American intelligence operatives in China knew Americans had been taken to Harbin, site of the headquarters for Unit 731, Japan's most notorious germ warfare unit.¹¹⁶ In the article, Rodriguez detailed the plans for the rescue and tells why they cancelled the effort. The operations code name was Flamingo. The preparations for the mission were to be completed by August 13, 1945; they were to be ready to deploy at a moments notice of V-J Day. Besides freeing the soldiers, they had orders to secure all Japanese documents, dossiers, and any other information that might be useful to the United States Government. The mission was cancelled, and the Americans abandoned the Harbin area when the Russians arrived.

¹¹⁵ Thomas Havens, Peter Williams, and David Wallace, Review of "Unit 731: Japan's Secret Biological Warfare in World War II," The American Historical Review, RG 226, National Archives and Record Administration, College Park MD.

¹¹⁶ Gregory Rodriguez Jr., "Rescue Mission Cancelled, American Left to Die," *Oklahoma City Press*. 10 February 1994.

Anyone with a sense of decency will be disgusted by the atrocities committed by the Japanese and the response of the U.S. Departments of War and State. The Japanese in their desire to create an effective weapon to neutralize the Allies advantage tortured and killed helpless prisoners. The Americans and British were the first to use firestorms, the dropping of incendiary bombs on cities to cause great fires. Taking advantage of their new weapon, the bombing of Hiroshima and Nagasaki was the only time the U.S. used the atomic bombs. After the devastation of the bombs, the general feeling of the Allies was that the Japanese had been punished and they decided to ignore the Japanese biological experiments, but it remained a gruesome act. Did the act of exchanging immunity from prosecution for the Japanese Biochemical data place the Allies on the same level as the Japanese scientists?¹¹⁷

By 1945, Japan had developed a vast stockpile of germs, and weapons to distribute them, which was more advanced than any other nation. It was because of their use of human experimentation that the Japanese had gained this huge lead. In Harbin alone, 3,000 people were killed in their experiments, under the direction of General Ishii and Unit 731. This number is an estimate, the actual number is not known. Those who lived through the experiment were executed when they were no longer strong enough for more germ tests. Two other units, Unit 100 near Changchun and Unit 516, performed similar human experiments. There is no

¹¹⁷ Robert Gomer, John W. Powell and Bert V.A. Roling, "Japan's Biological weapons: 1930-1945," *The Bulletin of Atomic Scientists*, (October 1981): 43, RG 226, National Archives and Record Administration, College Park MD.

estimate on causalities at these two bases.¹¹⁸ The data collected by the Japanese greatly added to the American biological warfare division. The data saved the United States millions of dollars and years of work. The information gained could not have been gained in an American laboratory due to ethics attached to human experiments. The information received from Ishii Shiro was secured for the price of 250,000 yen, “a mere pittance by comparison with the actual cost of the studies.”¹¹⁹ The pathological material, that was collected, makes up the only substantial verification of the method of Unit 731’s experimentation. Dr. Hill made this statement about the scientists under Ishii Shiro’s command, “It is hoped that individuals who voluntarily contributed this information will be spared embarrassment because of it and that every effort will be taken to prevent this information from falling into other hands.”¹²⁰ These records are the lone recognized documentation that shows the direct effects of biological weapons on humans. Prior to this, it was necessary to calculate the effects biological warfare would have on man from information compiled from animal testing. The Japanese scientists whom Dr. Hill hoped would be spared embarrassment not only used humans as guinea pigs in experiments to establish lethal dosages, also in their quest of accurate scientific information, made certain that the guinea pig did not survive.

¹¹⁸ Gomer, “Japan’s Biological Weapons,” *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

¹¹⁹ Gomer, “Japan’s Biological Weapons,” *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

¹²⁰ Gomer, “Japan’s Biological Weapons,” *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

Dr. Edward Wetter and Mr. H.I. Stubblefield distributed a memo dated July 1, 1947, to military and State Department officials. It summarized the nature and quantity of materials being supplied by Ishii Shiro; they expressed some concern about possible political issues involved with the data. The memo also made clear that the Russians were believed to possess only a small amount of the technical data left by Unit 731. Wetter and Stubblefield stressed that a war crimes trial would force all the data to be made available to all nations. In the interest of national security and defense, publicity on this matter was to be avoided.¹²¹

In response to Wetter and Stubblefield's memo, Cecil F. Hubbert, member of the State, War, and Navy Coordinating Committee sent a new memo on July 15, 1947. Hubbert agreed with the recommendations made in the earlier memo but warned



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Figure 21. Display of Unit 731 exhibit of scientists removing organs during dissection. Hal Gold, *Unit 731 Testimony*, 132.

of the possible complications that could arise due to the human experimentation. The International Military Tribunal in Germany had already condemned this action as a war crime. He also mentioned that "leading German scientists and medical doctors" had been prosecuted at Nuremberg for similar experiments.¹²² He was worried about the possibility of the Russian's producing evidence of

¹²¹ Gomer, "Japan's Biological Weapons," *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

¹²² Gomer, "Japan's Biological Weapons," *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

American POWs who were being used in the experiments which could lead to serious consequences in the United States. Hubbert “suggested some changes to the final position paper, including the following casuistry: ‘The data on hand... does not appear sufficient at this time to constitute a basis for sustaining a war crimes charge against Ishii and/or his associates.’”¹²³

Linda Holmes states “Associates of Ishii Shiro buried his data on the grounds of his estate, and he released selected documents to American personnel. But in 57 years, no one has suggested digging on the Ishii property to look for the data he withheld. So all the Japanese documentary information about Unit 731’s 1943 visits to the Mukden POW camp remains unavailable, and American ex-POWs who have battled recurring illness for the rest of their lives have lacked the hard data to help them obtain the treatment and disability compensation they needed all these years.”¹²⁴ If the additional data had been found and it contained evidence of experimentation on American POWs the U.S. citizens would have demanded this deal be withdrawn and the prosecution of Ishii and his men.

On August 27, 2002, the Tokyo District Court declared for the first time officially that the Imperial Japanese Army, including its infamous Unit 731 stationed near Harbin, Manchuria, had used bacteriological weapons and experimentation on Chinese, and that many victims died. However, the court ruled that the Chinese claimants could not sue the Japanese Government for damages

¹²³ Gomer, “Japan’s Biological Weapons,” *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

¹²⁴ Holmes, “Unit 731 and Experiments on American Prisoners of War,” 27 September 2002, RG 226, NARA.

caused by the suffering inflicted on its victims by the staff of Unit 731.¹²⁵ The methodical way the Japanese disposed of information pertaining to the victims has left it impossible to trace the victims' names. "Available documents do not reveal whether anyone knows the names of any of the thousands of Chinese, Mongolians, Russians, 'half-breeds,' and Americans whose lives were prematurely ended. By massive doses of plague, typhus, dysenteries, gas gangrene, typhoid, hemorrhagic fever, cholera, anthrax, tularemia, small pox, tsutsugamushi and glanders; or by such grotesqueries as being pumped full of horse blood; having their livers destroyed by prolonged exposure to X-rays or being subjected to vivisection."¹²⁶

¹²⁵ Holmes, "Unit 731 and Experiments on American Prisoners of War" 27 September 2002, RG 226, NARA.

¹²⁶ Gomer, "Japan's Biological Weapons," *The Bulletin of Atomic Scientists* (October 1981): 43, RG 226, NARA.

CHAPTER 4

CONCLUSION

Ping Fan, Changchun, Auschwitz, and Dachau are all names of places where extreme crimes against humanity were carried out, yet some are more familiar than others.¹²⁷ Simultaneously, Europe endured Nazi scientists were carrying out experiments on prisoners in concentration camps; while the Japanese were carrying out full-scale biological warfare, subjecting human beings to horrendous experiments in Manchuria. General Ishii Shiro was working on a far greater scale than his German counterpart Josef Mengele. Compared to Ishii Shiro, Josef Mengele would have been only one of hundreds of similar workers in Unit 731, following orders. An example of the hypocrisy of the Allies following World War II is that they hunted Mengele down in the jungle like the animal he was. Yet many of the researchers of Unit 731 were professors of Japanese Universities and directors of Japanese medical companies and Ishii Shiro died in American occupied Japan fourteen years after the war.

As more information about the Chemical Weapons Division is revealed, the world will understand the horrors that the Japanese subjected the Chinese peoples to throughout World War II. The people of China not only suffered during the Japanese occupation of Manchuria, but also suffered from the desolation of the

¹²⁷ Ralph Blumenthal, "Revisiting World War II Atrocities, Comparing the Unspeakable to the Unthinkable," RG 226, National Archives and Record Administration, College Park MD.

country that lingered for years due to the waste left by the Japanese chemical experiments. Japanese criminals escaped prosecution from World Courts by selling their secrets of chemical warfare to the West in exchange for their freedom. As for Ishii Shiro, the head of Unit 731 was allowed to live peacefully until his death from throat cancer in 1959. Many of his associates from Unit 731 saw their careers thrive in the postwar period, rising to positions that included Governor of Tokyo, president of the Japan Medical Association and head of the Japan Olympic Committee.¹²⁸ America has used these secrets to help build their own Chemical Weapons Department. Many of the weapons had been forbidden until the Japanese did the appalling work of human experimentation for American scientists. Furthermore, American soldiers used these weapons in Korea and Vietnam. In Iraq, American soldiers searched for weapons of mass destruction of the same type used in China sixty years ago, some have been found. President George W. Bush declared in his 2002 state of the union address, concern over the existence of such weapons would lead the United States and a coalition of countries to war with Iraq. This was followed by a United States Congressional resolution expressing the same view of the situation in the Middle East.

A limited amount of information about the germ warfare program has increased due to new research being done at all levels. Sixty years after the end of the war, a large amount of books, documentaries and exhibitions are unlocking the past and helping provoke interest in Japan. They are beginning to look into the

¹²⁸ Kristof, *Unlocking Deadly Secrets*.

atrocities committed by some of Japan's most distinguished doctors.¹²⁹ The legacy of cruelty, pain, and fear left behind by the Japanese Chemical Weapons Division under General Ishii Shiro still haunts the world today. There has been little effort to make restitution to the victims' families who suffered through his barbaric experiments. Ishii Shiro is gone, but the results of his work are a threat to disrupt the free world today.

¹²⁹ Kristof, *Unlocking Deadly Secrets*.

BIBLIOGRAPHY

Primary Sources:

- Blumenthal, Ralph. "Revisiting World War II Atrocities, Comparing the Unspeakable to the Unthinkable," RG 226, E134, National Archives and Record Administration, College Park MD.
- Covert, Norman M. Memorandum for Record: Information on Japanese BW Program in World War II; 5 May 1982, RG 226, E134, Department of the Army, National Archives and Record Administration, College Park MD.
- Gomer, Robert, John W. Powell and Bert V.A. Roling. "Japan's Biological Weapons: 1930-1945," *The Bulletin of Atomic Scientists*, (October 1981): 43. RG 226, National Archives and Record Administration, College Park MD.
- Havens, Thomas R. H. Review of "Unit 731: Japan's Secret Biological Warfare in World War II," by Peter Williams and David Wallace. *The American Historical Review*, 239. RG 226, National Archives and Record Administration, College Park MD.
- Holmes, Linda Goetz. Unit 731 and Experiments on American Prisoners of War, Report to the Nazi War Crimes and Japanese Imperial Government Records Interagency Working Group, 27 September 2002, RG 226, National Archives and Record Administration, College Park MD.
- Military Intelligence Service WDGS, Intelligence Research Project: Japanese Biological Warfare Project #2263, 26 July 1945, RG 226, E134, Box 142, National Archives and Record Administration, College Park MD.
- Powell, John, "Japan's Germ Warfare: The U.S. Cover-up of a War Crime," RG 226, National Archives and Record Administration, College Park MD.
- Scope, Biological Warfare Activities and Capabilities of Foreign Nations, 30 March 1946, RG 226, National Archives and Record Administration, College Park MD.
- Wu, Tein-Wei. "A Preliminary Review of Studies of Japanese Biological Warfare Unit 731 in the United States: Available from <http://aiipowmia.com/731/731/covert.html>; (Accessed 6 November 1998) RG 226, National Archives and Record Administration, College Park MD.

Secondary Sources:

- Alibek, Ken, and Stephen Handleman. *Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program in the World – Told from Inside by the Man Who Ran It*. New York: Dell Publishing, 1999.
- Barenblatt, Daniel. *A Plague Upon Humanity The Secret Genocide of Axis Japan's Germ Warfare Operation*. New York: HarperCollins Publishers, 2004.
- Bix, Herbert P. *Hirohito and the Making of Modern Japan*. New York: HarperCollins Publishers Inc., 2000.
- Blumenthal, Ralph with Judith Miller, "Japan Rebuffs Request for Information About its Germ-Warfare," *New York Times*, 4 March 1999.
- Bull, John and Peter Kelley, "Many Nations Used People in Experiments," *Saginaw Michigan News*, 1 Oct 1989.
- Cauch, Dick and John Boswell. *The U.S. Armed Forces Nuclear, Biological and Chemical Survival Manual*. New York: Basic Books, 2003.
- Chang, Iris. *The Rape of Nanking*. New York: Penguin Books, 1997.
- "China Finds Evidence of Japanese Germ Warfare During WWII" Available from <http://www.kimsoft.com/korea/jp-germ4.htm>; (Accessed 22 January 2004).
- Daws, Gavin. *Prisoners of the Japanese: POWs of World War II in the Pacific*. New York: William Morrow and Company Inc., 1994.
- Dower, John W. *War Without Mercy: Race and Power in the Pacific War*. New York: Pantheon Books, 1986.
- Drell, Sidney D., Abraham D. Sofaer, and George D. Wilson. *The New Terror: Facing the Threat of Biological and Chemical Weapons*. Hoover Institution: Press Publication, 1999.
- Easton, Thomas. "Japan Admits Dissecting WW II POWs." *The Baltimore Sun*: available from <http://aiipowmia.com/731/vivisection.html>; (Accessed 7 October 2004).
- Egan, Timothy. "Why the U.S. Covered up Japan's Deadly POW Tests," *Seattle Post Intelligencer*, 26 July 1983.

- Emerson, Tony. "Surgeon Tries to Unmask Japan's Medical Horrors: Government Still Silent About Secret World War II Unit," *Washington Times*, 30 September 1994.
- Endicott, Stephen and Edward Hagerman. *The United States and Biological Warfare: Secrets from the Early Cold War and Korea*. Bloomington Indiana: Indiana University Press, 1998.
- Finney, Patricia, "Hushed-up Horror of Unit 731," *The London Standard*, 9 August 1985.
- Forte, Robert S. "Factories of Death: Japanese Biological Warfare, 1932-45 and the American Cover Up review" [on-line]. *The Journal of Asian Studies* (1995) available from <http://www.jstor.org/exproxy.etsu.edu:2048/view/00219118/di973765/9>; (Accessed 26 October 2004).
- Frank, Richard. *Downfall The End of the Imperial Japanese Empire*. New York: Penguin Books, 1999.
- Goebel, Greg. "A History of Biological Warfare," available from <http://www.vectrosite.net/twgas3.html#ml>; (Accessed 16 November 2004).
- Gold, Hal. *Unit 731 Testimony*. Tokyo: Yen Books, 1996.
- Guillemin, Jeanne. *Anthrax: The Investigation of a Deadly Outbreak*. Berkeley and Los Angeles California: University of California Press, 1999.
- Hammond, Peter M. and Gradon Carter. *From Biological Warfare to Healthcare: Porton Down 1940-2000*. New York: Palgrave Publishers, 2002.
- Harris, Robert and Jeremy Paxman. *A Higher Form of Killing: The Secret History of Chemical and Biological Warfare*. New York: Random House, 1982.
- Harris, Sheldon H. *Factories of Death: Japanese Biological Warfare, 1932-45, And the American Cover-up*. New York: Routledge, 1994.
- Hilts, Phillip. "Pact with Japan Hid Results of Germ War Tests in POWs." *Washington Post*, 31 Oct 1981.

Home, R.W. and Morris F. Low. "Postwar Scientific Intelligence Missions to Japan" review [on-line]. *The History of Science Society*: The University of Chicago Press, (1993) available from:
<http://www.jstor.org.exproxy.etsu.edu:2048/view/00211753/ap010274>;
(Accessed 26 October 2004).

Johnston, Harold. *A Bridge Not Attacked: Chemical Warfare Civilian Research During World War II*. Singapore: World Scientific Publishing Company, 2003.

"Killing Games." Available from <http://www-users.cs.umn.edu/~dyue/wiihist/njmassac/killgame.htm>; (Accessed 2 March 2004).

Kristof, Nicholas. "Burying the Past: War Guilt Haunts Japan." *The New York Times*, 30 November 1998.

_____. "Unlocking A Deadly Secret." *New York Times*: available from <http://www.aiipowmia.com/731/germwarfare.html>; (Accessed 7 October 2004).

Langford, R. Everett. *Introduction to Weapons of Mass Destruction: Radiological, Chemical, and Biological*. Hoboken, New Jersey: John Wiley and Sons Inc., 2004.

Mangold, Tom and Jeff Goldberg. *Plague Wars: The Terrifying Reality of Biological Warfare*. New York: St. Martin's Press, 1999.

Mauroni, Albert J. *America's Struggle with Chemical Biological Warfare*. Westport Connecticut: Praeger Publishers, 2000.

Miller, Judith, Stephen Engelbery and William Broad. *Germs: Biological Weapons and America's Secret War*. New York: Touchstone, 2001.

Parmet, Al. 1996. "Unit 731 Testimony" review [on-line]. Book Report; available from http://aeromedical.org/Books/Book_Reports/Unit_731_testimony.html; (Accessed 28 October 2004).

Regis, Ed. *The Biology of Doom: The History of America's Secret Germ Warfare Project*. New York: Henry Holt and Company LLL, 1999.

Rodriquez, Gregory Jr. "Rescue Mission Cancelled, Americans Left To Die." *Oklahoma City Press*, 10 February 1994.

- Smythe, H. H. 1953. Note on Racial Ideas of the Japanese. Available from <http://www.jstor.org>; Yamaguchi National University, Japan. (Accessed 20 January 2005).
- Spence, Jonathan D. *The Gate of Heavenly Peace*. New York: Penguin Books, 1981.
- Tabata, Masanori, Daughter's-Eye View of Lt. Gen. Ishii, Chief of 'Devil's Brigade.' *The Japan Times*, 29 August 1982.
- _____. -Findings May Have Been Used in Korea, Vietnam- "Legacy of Lt. Gen Ishii' Lives on – With American Help." *The Japan Times*, 05 September 1982.
- Tamanoi, Mariko Asano. "War Responsibility and Japanese Civilian Victims of Japanese Biological Warfare in China." Bulletin of Concerned Asian Scholars. Vol. 32, Issue 3 Available from www.questia.com; (Accessed 28 October 2004).
- "The Other Holocaust: Nanjing Massacre, Unit 731, Unit 100, Unit 516." Available from <http://www.skycitygallery.com/japan/japan.html>; (Accessed 29 February 2004).
- "The Rape of Nanjing." Available from <http://www-users.cs.umn.edu/~dyue/wiihist/njmassac/rape.htm>; (Accessed 2 March 2004).
- The Rev. 2001. "Unit 731: Testimony review" [on-line]. The Book Barn; available from <http://www.jp41.dial.pipex.com/R230.HTML>; (Accessed 28 October 2004).
- Tanaka, Yuki. *Hidden Horrors: Japanese War Crimes in World War II*. Boulder: Westview Press, 1996.
- Tuchman, Barbara. *Stilwell and the American Experience in China, 1911-45*. New York: Grove Press, 1970.
- "Two Roads of Blood." Available from <http://www-users.cs.umn.edu/~dyue/wiihist/njmassac/bloodrds.htm>; (Accessed 2 March 2004).

Westwood, J.N. *Russia Against Japan, 1904-05: A New Look at the Russo-Japanese War*. Albany, New York: State University of New York Press, 1986.

LIST OF VISUAL CREDITS

Figure 4. Ishii Shiro Commander of Unit 731, founder of Japanese Biological Warfare Division of the Army. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 5. Japanese using prisoners to field test new gas masks. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 6. Prisoner being injected with pathogens from Unit 731 Exhibit. Hal Gold, *Unit of 731 Testimony*, 132.

Figure 4. Map of Harbin area in Manchuria. Available at Mapquest.com. Accessed 15 March 2005

Figure 5. Map of Yunnan area Southeast China. Available at Mapquest.com. Accessed 15 March 2005.

Figure 6. Japanese scientists perform vivisection on male victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 7. Japanese scientists perform vivisection on female victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 8. Replica of experiments for frostbite from Unit 731 Exhibit. Hal Gold, *Unit 731 Testimony*, 132.

Figure 9. Japanese scientist perform vivisection on infant victim. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 10. Japanese bury prisoners alive. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 11. Japanese place infected prisoners alongside healthy prisoners to test reaction time of their new viruses. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 12. Stacks of victims awaiting disposal at the crematorium. Available at www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 13. UJI-50 Bomb developed by Ishii Shiro during World War II. Hal Gold, *Unit 731 Testimony*, 131.

Figure 14. Ariel view of Ping Fan facility created by Ishii Shiro.
http://www.myonlineimages.com/Members/karina/Images/unit731_1.jpg Accessed 18 Apr 2005

Figure 15. Map of Shanghai/Ning Bo area. Available at Mapquest.com. Accessed 15 March 2005.

Figure 16. Victim of biological weapons attack. Available at
www.aiipowmia.com/731/731coveat.html Accessed 15 March 2005.

Figure 17. Diagram of Japanese anti-disease suit. Scope, Biological Warfare Activities and Capabilities of Foreign Nations, RG 226, National Archives and Record Administration, College Park MD.

Figure 18. Tokyo Memorial Tower for Unit 731. Available at
www.aiipowmia.com/731/731coveat.html. Accessed 15 March 2005.

Figure 19. Diagram of UJI bomb designed by Ishii Shiro. Scope, Biological Warfare Activities and Capabilities of Foreign Nations, RG 226, National Archives and Record Administration, College Park MD.

Figure 20. Bomb China claims was used by U.S. during Korean War. Hal Gold, *Unit 731*

Figure 21. Display of Unit 731 exhibit of scientists removing organs during dissection. Hal Gold, *Unit 731 Testimony*, 132.

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