

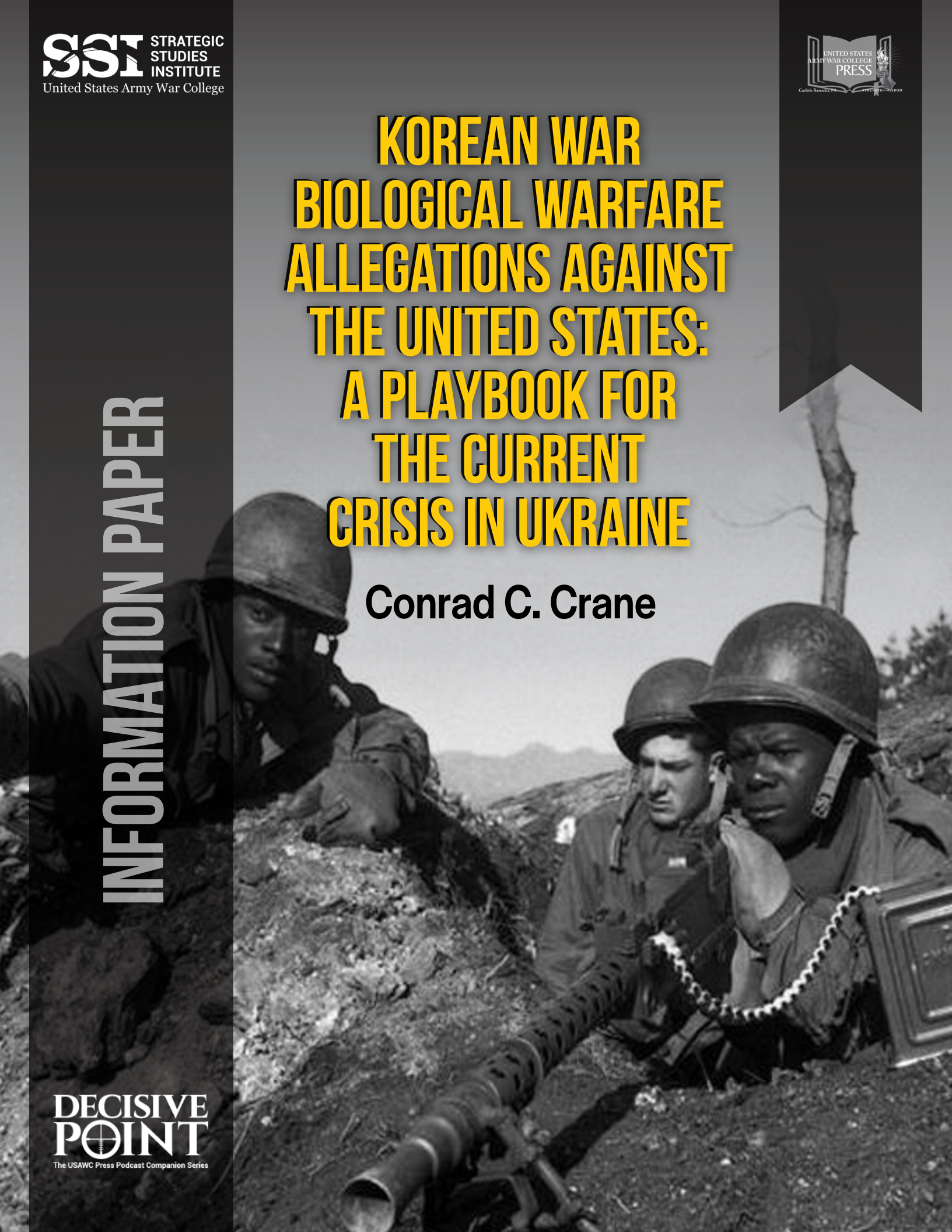
KOREAN WAR BIOLOGICAL WARFARE ALLEGATIONS AGAINST THE UNITED STATES: A PLAYBOOK FOR THE CURRENT CRISIS IN UKRAINE

Conrad C. Crane

INFORMATION PAPER

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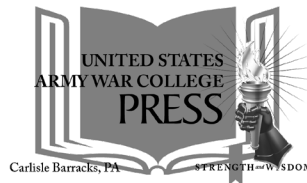
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Front Cover

Korean War PSYOP

3rd Military Information Support Battalion (Airborne)

In 1951, the Eighth Army authorized a unit with the innocuous name “G3 Miscellaneous Division.” G3 is the general staff title for operations. G3 Misc. was to be responsible for the planning, training, and support of unconventional operations. On Dec. 10, 1951, the 8240th Army Unit was activated under Eighth Army G3 Misc. The 8240th consisted largely of its “Guerilla Division”, which, as the obscurely named chain of command suggests, was largely a maverick operation engaged in a variety of clandestine activities. In January of 1952 the Combined Command Reconnaissance Activities, Korea (CCRACK) was activated. This was actually a cover name for the classified designation, “Covert, Clandestine, and Related Activities - Korea.” Most of the partisan warfare units came under the command or control of these two organizations. Within these units there were operational areas called wolf packs, unconventional warfare groups in sections, task forces, and even small groups called “donkeys,” “white tigers,” or “rabbits.”

Photo by Staff Sgt. Jason Ragucci, North Carolina, 01.02.1970

VIRIN: 151028-A-DL887-013

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Back Cover

Korean War

United Nations troops fight on the outskirts of Seoul, South Korea, Sept. 20, 1950.

Photo by Katie Lange, Seoul, South Korea, Sept. 20, 1950

VIRIN: 500920-A-ZZ999-906

Photo ID: 5836383

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This is a revised version of an article published in 2001 "Chemical and Biological Warfare During the Korean War: Rhetoric and Reality," *Asian Perspectives*, XXV, 3(2001): 61-83. Much of this material also appears in the author's *American Airpower Strategy in Korea, 1950-1953* (Lawrence: University Press of Kansas, 2000).

The recent accusations from Russia about American preparedness to launch biological warfare from Ukraine have an historical precedent from the Korean War, and can provide some insights about the intent of the allegations. Intense negotiations to end the Korean War began in mid 1951 as the front stalemated. With major ground offensives no longer an option, each side developed a different approach to coerce desired political outcomes at the peace table. The main sticking point became repatriation of prisoners of war. For UN forces, their primary coercive tool became American airpower, in an extensive bombing campaign that eventually laid waste to most of North Korea. The Communists resorted to information warfare, by fomenting riots in the POW camps at Koje-Do to try to highlight alleged prisoner abuses, and also with a campaign to show that American airmen were engaged in biological warfare against North Korea and China. The latter tactic was designed to embarrass the United States as well as discredit and perhaps restrain the application of its punishing airpower. The Russians supported the communist BW information campaign until determining it was based on falsified information in the spring of 1953 and deciding to support an armistice. To this day the Chinese still believe all the allegations, so it is not surprising they would support similar claims in Ukraine. The following account covers the whole campaign in more detail.

It is worth speculating about possible reasons for the recent Russian accusations. Many have supposed it could be a pretext for Russian use of chemical or biological weapons in Ukraine. It is obviously an attempt to put the United States on the defensive, but it might also again be aimed at American airpower. Just as some authors described below try to explain the appearance of F-86 Sabrejets in the skies over Korea as a means to deliver biological weapons, the Russians might try to discredit the establishment of a no-fly zone as just a pretext for similar operations. But American leaders should be aware that we have seen this playbook before, and that audiences in Russia and China, and other parts of the world as well, have proven susceptible to it. We should expect outlandish claims, falsified evidence, and requests for international investigations.

Allegations and Response

During the Korean War, one communist tactic to blunt the impact of superior American technology was to direct propaganda against it. Bombing in general, and the threat of atomic weapons in particular, were portrayed as immoral attacks on civilians in violation of the laws of warfare. One additional aspect of communist propaganda that caused special concern for American leaders involved accusations of chemical and biological warfare, and even today some still wonder about the truth of the allegations. Chinese historians especially still argue that their government had valid evidence of germ warfare, and that relevant U.S. documents concealing the truth about biological warfare in Korea still need to be declassified. While most files dealing with nuclear issues during that period are, in fact, still classified, that is not generally the case with chemical and biological records. An examination of the pertinent documents is very revealing, not only about the sensitivity of the United States to charges of employing CW-BW, but also about its early efforts to develop non-nuclear weapons of mass destruction. Though the American military services, and especially the Air Force, tried to increase their abilities in the fields of chemical and biological warfare during the Korean conflict, they made little progress. While skillful communist propaganda kept American diplomats on the defensive, American

military forces in the Far East possessed neither the ability, nor the will, to apply CW-BW in the offensive fashion described in that propaganda.

Communist Accusations

Even at the time of the Korean War, communist bloc allegations about U.S. bacteriological warfare research and employment were nothing new, dating back at least to 1949. The first outright charges of BW use were made in 1950. The UN countered somewhat in November by telling the United Press about a “super-secret bacteriological laboratory” operated in Pyongyang under a Russian woman scientist since 1947 that had been overrun by advancing UN troops. Though only about 400 starved rats were found in the facility, a North Korean doctor revealed that over 5000 had been inoculated there with deadly diseases and then sprayed with a chemical that encouraged the multiplication of fleas. The Russian supervisor disappeared, supposedly leaving with other fleeing communist officials.

The enemy propaganda campaign expanded in 1951. In February North Korea claimed that retreating US troops had spread smallpox there in December 1950, and its foreign minister filed a protest about UN BW with the General Assembly in May. During the summer North Korean radio announced the undertaking of anti-epidemic measures because of the BW attacks. The first charges about chemical warfare came that same year when the Chinese Communists reported that poison gas bombs had been dropped along the Han River front on 23 February. Napalm was also included in a wave of accusations about UN CW that reached a peak in August.

This was all just a prelude to the most vehement, and effective, BW propaganda campaign that began in early 1952. On 22 February the North Korean Foreign Minister announced that the United States was carrying on biological warfare against his country. During the same time period the Chinese press and radio made repeated references to the fact that the United States had granted immunity to Lieutenant General Shiro Ishii and his captured subordinates of the notorious Unit 731 that had conducted BW experiments in China. This morally questionable decision in exchange for information derived from the Japanese program provided some benefit for American researchers working on biological agents and vaccines, but it also enhanced the credibility of future BW allegations. On 6 March Chinese newspapers reported that 448 American aircraft had flown BW missions over Manchuria during the preceding week. Two days later, the Department of State Monitoring Service and the Foreign Broadcasting Intelligence Survey picked up a radio broadcast by Chou En Lai, the Chinese Communist Foreign Minister, decrying the BW campaign as an attempt to wreck the armistice talks, and making it known “that members of the U.S. Air Force who invade Chinese territorial air and use biological weapons will be dealt with as war criminals.” At the same time the Central Intelligence Agency received an unconfirmed report that the communists were preparing fallacious documentation to justify punitive action against the next captured pilot. The Chinese and Soviet press followed by publishing pictures of insects and germ bombs supposedly dropped by American planes over North Korea, though scientists asked to examine the images by *The New York Times* easily refuted their credibility.

Reactions to the Charges

Chou En Lai’s statement caused a furor in Washington. The JCS and State Department advised General Matthew B. Ridgway, commander of all UN forces in Korea, to make a strong denial of the charges, and to warn the communists about their responsibility for the fair treatment of prisoners of war. After preparing a statement, Ridgway decided not to deliver it, since he believed he had already issued enough vigorous denials. In addition to this action, the State Department got the International Committee of the Red Cross to agree to conduct an investigation of the allegations, and accepted a similar offer from the World Health Organization. While Soviet representatives in the UN repeated the accusations and emphasized that the United States had not ratified the 1925 Geneva protocols against biological and chemical warfare, they also vetoed U.S. resolutions that would have permitted the ICRC and WHO inspections. The Chinese refused independent offers from those organizations, claiming

they were only interested in securing military intelligence for the Americans. The Chinese asserted that proper investigations were already being conducted by “friendly governments.” Soviet newspapers also expanded their accusations to blame the U.S. for hoof and mouth disease in Canada and a plague of locusts in the Near East. Secretary of the Air Force Thomas Finletter told the Secretary of Defense that his service believed the propaganda was designed either to discourage U.S. exploitation of the “great military potentialities of BW-CW weapons,” or to set the stage so the communists could use their own BW-CW capability in a “Pearl Harbor” surprise attack. Though the first assumption was most likely, the second was most dangerous, and Finletter had his Surgeon General inventory supplies of vaccines and antibiotics. U.S. Far East Command in Korea shared the USAF concerns, and expanded its BW detection and prevention programs while requesting biological and chemical munitions for retaliation. Those actions will be covered in more detail later in this essay.

The U.S. Psychological Strategy Board, with representatives from the Joint Chiefs of Staff, CIA, State and Defense Departments, considered the BW propaganda to be the keystone of a detailed “Soviet hate campaign against the United States” that had been going on since January 1951. For them propaganda of this type was a “horror-weapon,” directed “not only against the United States, but against the very structure of human civilization.” They realized that it presented special problems for the future. The accusations “might acquire a kind of retrospective credibility” if circumstances ever required the actual American employment of biological or chemical agents. The BW campaign “provided the Soviet Union with a means of harnessing the forces of nature to their propaganda advantage,” since they could now blame any epidemic or insect infestation anywhere on the United States. Also American attempts to help fight such problems could be turned against us. Doctors sent to fight a disease could be accused of spreading it, and planes spraying insecticides could be blamed for plagues. But the board also saw an opportunity to “indict the rulers of the USSR before the bar of world opinion for one of the most serious crimes against humanity they have yet committed.” In the process, the United States could gather on its side “the moral and cultural leaders of the whole world,” including those “most easily duped by communist peace-propaganda.” If properly handled, countering the “hate-America” campaign would provide a “chance to shoot down, once and for all, the Stockholm dove,” and achieve “more adequate recognition” from friendly nations and international organizations for disinterested U.S. efforts “to utilize our technological resources for the relief of human want and suffering throughout the world.”

The Psychological Strategy Board members were not the only ones considering active measures to counter the propaganda campaign. American actions in the UN were actually part of a carefully planned strategy developed by Assistant Secretary of State for UN Affairs John Hickerson to discredit the communist BW charges. He knew that Soviet representative Jacob Malik would assume the Security Council Presidency in June 1952, when the first report of the UN Disarmament Commission was due to come before the Council. Hickerson was also aware that Malik wanted to debate the question of bacteriological warfare, and expected the Soviet delegate to take advantage of the disarmament report to repeat the charges of BW use in Korea. Hickerson prepared two draft resolutions to introduce when Malik brought up the issue. The first proposed the creation of an impartial commission of inquiry. Hickerson expected that to be vetoed by the Russians, so his second subsequent resolution condemned them for frustrating the investigation. He knew that proposal would meet the same fate as its predecessor, but believed the vetoes would expose communist insincerity to all but the most biased observers and provide much positive publicity for the American position. The State Department liked the plan, and when Malik repeated the accusations on 18 June and submitted a draft resolution calling for all states to ratify the 1925 Geneva Convention prohibiting biological warfare, Deputy U.S. Representative to the UN Ernest Gross was ready to reply. He gave a lengthy explanation of American motives and innocence, condemned the Soviets for their own work on bacteriological warfare, and circulated a draft resolution to permit the ICRC to have free rein to conduct an impartial investigation of all the communist accusations. The Security Council rejected Malik’s resolution and his attempts to bring North Korea and Communist China into the debate, and

instead focused on the American proposal. When a vote was scheduled, Malik cast the lone dissent, as expected. Gross then introduced the second resolution recognizing the ICRC and WHO offers to help, condemning the Soviet veto, and concluding from their refusal to allow the impartial investigation that the communist charges “must be presumed to be without substance and false.” The Security Council vote on that resolution was 9-1-1, with Pakistan abstaining and the Soviet Union casting its 50th veto. Though the resolutions were defeated, the United States did gain in public relations. Press coverage emphasized the Soviet intransigence, and Gross was featured in newsreels condemning the “false and malicious” BW charges of the Red campaign.

The accusations of germ warfare were echoed in the Eastern European press and had some impact in Asia, especially in India and Pakistan. There the charges reinforced suspicions about American treatment of the “colored peoples of Asia” and the belief that the United States “by its actions and failure to act” was prolonging a war that might develop into World War III. Whether major communist leaders really believed that China and North Korea were the target of a bacteriological warfare campaign or not, they had little incentive to thoroughly investigate the accusations coming from field commanders while the propaganda campaign seemed to be garnering support at home and abroad. New revelations from Russian archives that have been discussed recently in this journal strongly support the argument, however, that mid-level Chinese and Russian operatives cooperating with the North Korean government had faked evidence. Their actions included creating false infestation maps, gathering cholera and plague bacillus from infected people in North Korea and China, injecting condemned prisoners with the diseases, and burying infected bodies that could be found to support the epidemic claims. The effort was used in mid-1952 to convince two carefully chosen groups of observers, the International Association of Democratic Lawyers and the International Scientific Commission for the Investigation of the Facts Concerning Bacteriological Warfare in Korea and China, that the United States was indeed using germ warfare. However, by April 1953 the post-Stalin government in Moscow found out about the fabrication of evidence, and determined that the claims concerning the use of chemical and biological weapons by US forces were false. Fearing that revelations of the deception could be embarrassing and cause “political damage,” Soviet representatives “recommended” to China and North Korea that they curtail their campaign, and the accusations promptly ceased.

The most significant effect of the germ warfare propaganda was on the North Korean and Chinese home fronts. The common people and soldiers took the BW charges very seriously, and were motivated to fight harder and support public health programs. Allegations that American aircraft were releasing smallpox and typhus germs could also cause Chinese troops to panic, however. The situation was worsened by outbreaks of cholera, plague, and meningitis which the men also assumed had been caused by the enemy, but were really just a part of the normal spring epidemic season. In March the Chinese government launched a “patriotic health and epidemic prevention campaign,” and asked citizens to kill insects and clean cities and roads. Millions of civilians were vaccinated, as were over 90percent of front line troops. Some American POWs also got some of the “monster shots,” and reported that “all of North Korea had fever and sore arms.” The result of the sanitation and health drives was a significant decrease in infectious diseases that allowed communist officials to declare victory over American BW technology while propaganda continued to keep the UN on the defensive in treaty negotiations. The campaign also inflamed the civil population in North Korea so much that they went out of their way to hunt downed airmen, insuring that they had virtually no chance to evade immediate capture. Attempts to “propagandize” American POWs about BW sometimes backfired. One group of enterprising non-commissioned officers gathered up a number of dead beetles and spiders around their prison camp and painted “U.S. Mark 7” on their backs! Reportedly “this counter activity threw the Commies into a spin.”

Prisoner Confessions

Besides additional accusations of the American use of gas bombs, a new ingredient was added to the “hate campaign” in early May 1952. Radio Peking and *Pravda* provided excerpts from the confessions of two American airmen, First Lieutenants John S. Quinn, a B-26 pilot, and Kenneth L. Enoch, his navigator, who admitted that they had been forced to drop “germ bombs” by the “warmongers of Wall Street” as part of an extensive BW effort against China and Korea. Eventually as many as thirty-eight flyers would confess to participation in biological warfare, though the American government was most concerned with eight of them who had been featured most in communist propaganda films and broadcasts. Besides Quinn and Enoch, these included four more Air Force officers, along with Colonel Frank Schwable and Major Roy Bley of the Marines. The State Department denied their claims, asserting the statements had been induced by torture and brainwashing, while the Air Force painstakingly investigated every aspect of the confessions. They found enough inconsistencies to believe that the officers concerned had not caved in completely, though the discrepancies could not be released immediately to discredit the statements because of fears the communists would then harm the officers or the information might help the enemy refine interrogation techniques. In March 1953 the Air Force and Marine Corps did furnish declassified information to the American UN delegation for use in “an aggressive countercharge” there.

Quinn and Enoch were suspected of being the most serious collaborators. Another pilot accused them of flying off course on purpose to defect. There were reports that Quinn went around to POW compounds lecturing on the evils of USAF germ warfare. Non-commissioned officers in one camp who came into possession of two pistols and ten rounds of ammunition reserved one bullet to use on him if he ever showed up to talk there. He also conducted interviews with foreign correspondents. The first visual evidence of their collaboration was Enoch’s appearance in a film confiscated on its way to South America in late 1952. By early the next year a second, better quality, film had been seized by US Customs from a woman returning from a “peace conference” abroad. This one featured confessions by Quinn, Enoch and two fighter pilots, First Lieutenant Paul Kniss and Second Lieutenant Floyd Neal. The USAF Psychological Operations Division dispatched a chaplain with a copy of the film to Los Angeles to view it with Quinn’s wife. She noted that he looked haggard and aged, and showed the chaplain letters revealing her husband’s “ultra-patriotic spirit.” She asked if he would be court-martialed upon his return, but the chaplain assured her that the Air Force planned only to rehabilitate those subjected to brainwashing.

The Air Force had some public relations plans, as well, to supplement the theme of “forced false confessions” being promulgated by the State Department through their Voice of America and International Press facilities. When an American lawyer who had been interned in Shanghai for sixteen months returned with stories that he had been drugged with “truth medicine” to extract damaging statements, “it raised immediate speculation” that the airmen’s confessions had been obtained the same way. The Air Force prepared its own film, first called “Brainwashing” but then changed to “Confessions-The Communist Way,” to counter the germ warfare charges, but the Department of Defense did not approve its release. As the possibility for an armistice grew, so did Air Force hopes they could recover the airmen to recant their confessions, though until the last minute there were fears that the communists would not return them for that very reason. General Mark Clark, who succeeded Ridgway as UN commander in Korea, received special instructions to demand accountability for the Marine and Air Force officers involved in the BW confessions if they were not repatriated, since “Recovery of a single individual would be of inestimable value for National propaganda purposes, and have a salutary effect upon conduct of American military personnel in contact with communist forces in future hostilities.” He was even authorized to initiate “clandestine and covert activities” to find them and get them back.

However, none of that was necessary. Five of the airmen arrived back in San Francisco in September 1953, and after sorting out a number of conflicting directives about USAF POWs

who had confessed to BW, a representative from the USAF Psychological Warfare Division gathered written statements and made film and tape recordings. All the returnees claimed they had been coerced by mental and physical torture including threats of death, and Quinn claimed to have been brainwashed so effectively as to have become one of the “living dead men, controlled human robots” who did the Communists’ bidding. Copies of the statements were given to the American UN delegation, while some film footage was provided to newsreels. Their coverage juxtaposed clips from the “so-called confessions” of the communist movies with Air Force footage of the repatriated POWs talking about torture and threats, to show how the “big lie technique spawned by Hitler was brought up to date by the Reds.”

At the United Nations in late October, the American delegation presented the sworn statements and mounted a spirited attack on the communist abuse of POWs while denying all the BW accusations. *The New York Times* even published the statement from Col. Walker Mahurin. He explained that Chinese interrogators began to maltreat him in October 1952 to force him to confess to BW crimes. He spent over a month sitting at attention on a stool for fifteen hours a day, and once did that for thirty-eight hours straight. After months of death threats and solitary confinement, he finally agreed to cooperate in May 1953. After two months of creating stories based on the suggestions of his interrogators, he signed and wire-recorded an acceptable confession on 8 August. He was then told the war had ended on 27 July and he would soon be repatriated. However, the Supreme Command still did not like his statement, and he had to repeat his performance on 2 September with a new confession mostly written by his captors before he was allowed to head south for freedom.

Actual American Capabilities

As another part of the effort to refute the communist charges, General O.P. Weyland, commander of Far East Air Forces in Korea, offered to let UN Ambassador Henry Cabot Lodge reveal that FEAF had no BW capability, though Weyland emphasized the security implications of the release of that sensitive information. Though there was a determined national effort to develop such a capacity, by the end of the Korean War little had been achieved. The CW situation was not much better. What capability the Air Force had to deliver chemicals had not changed much from World War II.

There was an increased U.S. emphasis to develop viable non-nuclear weapons of mass destruction in the early 1950s. The action that provided the impetus for American BW-CW programs was actually instigated before the Korean War began. The Secretary of Defense’s Ad Hoc Committee on Chemical, Biological, and Radiological Warfare, called the Stevenson Committee after its chairman, Earl P. Stevenson, delivered its final report on 30 June 1950, five days after the North Korean invasion. Similar studies by the Research and Development Board in 1948 and a previous Ad Hoc Committee in 1949 had just focused on biological warfare and the need for increased defensive measures, but the Stevenson Committee had a broader mandate and advocated bolder action. It made eight major recommendations. On 27 October the Secretary of Defense approved those directing steps to make the United States capable of employing toxic chemical agents, including new nerve gases, at the outbreak of war, and to research and test the offensive and defensive aspects of biological warfare. He did not approve the development of a radiological warfare program, and deferred a decision on the most controversial recommendation: to abandon the national policy that chemical, biological, and radiological weapons would be used “in retaliation only.” The committee believed these categories had been erroneously classified as “weapons of mass destruction” that were somehow more immoral than other types, thus leading to the current policy. As a result, “the use of certain weapons is subject to the permission of our enemies,” and the country was denying itself the use of weapons “which take advantage of the nation’s great technical and industrial potential.” The Air Force was strongly in favor of the change, but the Navy disagreed. The JCS finally recommended the deferment of any decision because the United States was not ready to employ CW or BW at the time, changing the policy would require coordination with the United Kingdom to change its position as well, and the existing standards still allowed increasing preparedness without

risking “unfavorable political ramifications.” The Air Force tried to change the policy again in late 1951, but eventually accepted the Army and Navy position that no alteration should be considered until a definite BW-CW capacity had been built up.

Building a BW-CW Program

That would prove to be a very difficult task. In 1951 the United States possessed only 15,000 tons of CW agents left over from World War II, and 580 tons of nerve gases captured from the Germans. Negligible quantities of biological agents were available in laboratories. Though responsibility for developing, producing, and storing agents belonged to the Army’s Chemical Corps, the Air Force was the service most interested in their application. In February the JCS directed the attainment of “an overwhelming retaliatory capability in CW and BW,” and in June USAF Vice Chief of Staff Nathan Twining ordered the Air Force “to attain a world-wide capability in these fields on a priority equal to that of the Atomic Energy Program.” By the middle of the year the service had put in orders for BW and CW delivery systems, made considerable progress with anti-crop agents, and established a Biological and Chemical Warfare Institute at the Air University. By the end of 1951, USAF had procured emergency funds to procure more Chemical and Biological air munitions, obtained a test range for them in Canada, and done much conceptual work on their application. Chemical weapons were seen as being primarily for tactical use, while the strategic potential of BW against crops and large numbers of people interested planners most.

However, the program expanded slowly in 1952. Even modest service goals proved difficult to achieve. The USAF Strategic Air Command planned to reach its directed one wing CW-BW operational capability for that year by just writing a standard operating procedure and briefing some key people, but the only BW mission in war plans was to strike Soviet cereal crops with TX-1, the causative agent of wheat stem rust. That was the only BW weapon available, though there was hope that AB-1, *Brucella Suis*, the cause of Undulant Fever, would be in production at Pine Bluff Arsenal, Arkansas as a personnel incapacitating agent by the end of the year. SAC preferred a killing agent, however. Commanding General Curtis LeMay remained unenthusiastic about BW, even to the point of refusing to assist with the production of BW-CW training films that might give away “operational concepts.” Though Air Force planners saw much promise for the future, delivery systems were old and in short supply, and atomic bombs still seemed more viable and efficient weapons to SAC than biological ones. LeMay’s staff did see some potential for using nerve gas against retardation targets and airbases. Even USAF Tactical Air Command, which seemed more positive about using BW-CW, could not meet its requirement to develop a light bomber capability unless deployed aircraft were returned from Korea. A RAND Report on the Air Force BW program was highly critical, and inspired a vigorous rebuttal by the Air Force Deputy Chief of Staff of Operations for Atomic Energy, who had overall responsibility for the BW-CW program. Among other criticisms, the report agreed with SAC’s preference for atomic weapons.

A major concern generated by the RAND report in USAF headquarters was that it might be used by the Army Chemical Corps to justify “a more leisurely approach to the solution of outstanding problems.” The Air Force was becoming very dissatisfied with the cooperation it was getting from the Army. Personnel shortages remained, stored munitions were deteriorating, and agent production was behind schedule. In April 1952 an interservice symposium was conducted to better coordinate the BW program. One of the attendees was Lieutenant General (retired) Jimmy Doolittle, USAF Chief of Staff General Hoyt Vandenberg’s special assistant for science and technology. Doolittle was a true hero of World War II and one of its most ethical commanders, and he tried to assuage the moral qualms of those present by remarking, “In my estimation, we have just one moral obligation — and that moral obligation is for us to develop at the earliest possible moment that agent which will kill enemy personnel most quickly and most cheaply.” The joint momentum of the symposium carried over to the formation of a BW-CW Inter-Service Coordinating Committee, established at the request of the Army in May. The Air Staff had high hopes that the ISCC would solve their problems with the Army, but

they were disappointed. In November, Secretary Finletter sent Army Secretary Frank Pace, Jr. a memorandum highlighting key issues that remained unresolved. These included what the real planned uses of BW-CW were and where the Navy fit in. For Finletter the most fundamental question to be answered was, "What is our philosophy about the use of these weapons — from the moral point of view and from the military point of view?" He wondered whether to accept the recommendation of the Stevenson Report to abandon the principle of retaliation only and treat germ bombs "like any other weapon." He mused, "It seems to me that we have to answer this question before we get into the military uses."

BW-CW Capabilities in Far East Command

By that time the issue of retaliation had also reared its head in Far East Command. Spurred by the enemy propaganda campaign and queries from the Department of the Army about requirements to attain the ability to employ CW, Clark requested that he be given some retaliatory capability against enemy CW or BW. He also thought the presence of U.S. chemical warfare munitions in the theater might deter the Soviets from employing theirs, and planned to increase deterrence with a news campaign emphasizing UN Chemical-Biological-Radiological defenses. Somehow the DA inquiries led Clark to believe that the JCS had "good available capabilities" in BW and CW, but when he briefed that to a visiting Doolittle, Vandenberg's BW consultant responded that "there were no practical capabilities in the field at this time." Ed Regis in his book *The Biology of Doom* has shown that the maximum capability of American biological warfare combat-readiness at that time was making "a mock attack with an incapacitating bacterium (*Brucella Suis*) against 3,000 boxed guinea pigs" on a practice bombing range. It is readily apparent from the comments of the Clark and his air commander that they had no BW capability in the theater. This also eliminates the possibility that the CIA could have been conducting such operations, because they still would have needed air assets from FEAF. Weyland added that his organization had no ability to deliver chemicals and any backup capability in the U.S. was "rather limited." Far East Command was prepared to store and deliver CW artillery shells and land mines, and even maintain bulk chemicals, but FEAF lacked trained personnel and air delivery systems. The Air Staff scrambled to provide FEAF with the service support to stock CW munitions along with plans to employ them, while taking the lead with the JCS in modifications to retaliatory and stockpiling policies. FEAF also had the added burden of a USAF requirement to train one light bomber wing and one fighter-bomber wing to deliver CW ordnance by the end of 1953.

Now aware of the lack of American BW capability, Far East Command bolstered its requests for chemical munitions by presenting them as the best retaliatory option if the enemy employed germ warfare. Additionally, Clark instituted a number of new defensive measures. These included setting up intelligence teams to look for signs of enemy use of BW-CW, increasing stocks of plague vaccine, having rodent control teams monitor flea indexes, and conducting Rinderpest research to protect livestock. By October 1952, the JCS had decided to allow the storage of CW in Far East Command, and 3600 tons of World War II mustard gas were to be allocated to FEAF from Army stocks to dispense from spray tanks. In addition, bombs filled with phosgene and cyanogen chloride gas were to be provided. The enemy in Korea was considered very vulnerable to such a mix of munitions. Intelligence estimates placed approximately 45,000 assorted gas masks in the possession of front line enemy troops. Captured U.S. and Japanese masks were supplemented by Chinese and Soviet models that were mostly old and poorly fitted. No more than 5percent of enemy soldiers had masks that gave much protection against cyanogen chloride, and even those that did would quickly have their charcoal contaminated. Planners recommended the initial use of that gas to force unmasking, and then follow-up attacks with the other agents to increase casualties. In June 1953, a conference on FEAF CW war plans decided to abandon the use of mustard gas from the spray tanks in favor of bombs with the other two agents. Against the primitive communist CW defenses, any of the old delivery systems looked good. No BW capacity was anticipated in the theater prior to 1955. However, no CW stocks had yet been shipped to the Far East yet, either. The shipment of such

a special cargo across the United States would be hard to hide, and Clark had informed the JCS, "It must be assumed that presence of chemical munitions in this theater will become known due to the use of Japanese indigenous labor in storage depots, by the presence and use of protective equipment, and by possible talk by military personnel." They were unwilling to risk having such movement discovered while truce talks were under way. With the retaliation policy still in effect, and a growing sense that atomic weapons would be the proper response if the enemy escalated the war at that late date, there seemed no point in stocking the agents in the Far East at that time.

When the war ended, American CW-BW stocks were not much more than when it began. Program progress had been so limited and use seemed so remote that the USAF Assistant for Atomic Energy under the Deputy Chief of Staff for Operations recommended that all procurement of agents and munitions be terminated except for testing. The Air Force possessed about 35,500 tons of phosgene and cyanogen chloride along with 400 tons of German nerve gas. The Chemical Corps owned 20,000 tons of mustard. American factories were making 4700 tons of mustard, 750 tons of phosgene, and 750 tons of cyanogen chloride each month. Some production of nerve gas was just beginning, but was still months away from significant output. Available BW agents consisted of only 2,500 units of anti-crop rust. In addition, the Air Force had 5,000 tons of anti-crop chemicals. Delivery systems included bombs and spray tanks, along with 24,000 BW anti-personnel and 63,000 CW nerve gas clusters waiting for fill. One of the new delivery means under development by General Mills Inc. was a balloon bomb similar to those launched against the United States by Japan in World War II. It was considered an especially effective way to dispense anti-crop agents over Russia. By the time it reached field testing in 1954, neither the balloons nor any other CW-BW system were needed any more in Korea. Conventional weapons had been good enough to achieve an armistice to end the fighting on the battlefield.

Final Thoughts

As with most persistent conspiracy theories, there is some basis in truth. The regrettable deal with General Ishii at the end of World War II provided that foundation for the Korean War allegations. There were a number of reasons for the action at the time, but even the American researchers who eventually received the material were too ashamed to take much advantage of it. But just like the recently referenced agreement with Ukrainian biological research facilities, it does not take much to fuel suspicions of evil intent, and once accusations of actual biological warfare attacks are made, they are difficult to refute.

While most knowledgeable Western scholars discount the communist claims from Korea, there are some who agree with the Chinese. Interest in the controversy about biological warfare in Korea was heightened by the release of Stephen Endicott's and Edward Hagerman's book, *The United States and Biological Warfare: Secrets from the Early Cold War and Korea in 1998*. They compiled a tangled web of circumstantial evidence that indicted the U.S. Air Force, U.S. Army, Far East Command, Far East Air Forces, Joint Chiefs of Staff, and the Central Intelligence Agency, among others. The authors admitted that they have not yet found "clear and identifiable direct evidence that the United States experimented with biological weapons in the Korean War," but they are convinced it occurred. Their argument was considerably weakened by their surprising unfamiliarity with the course of the Korean air war or the conduct of military operations, and their rush to judge any missions seemingly out of the ordinary as attacks with biological weapons. These include the routine use of leaflet bombs to dispense millions of propaganda pamphlets, radar mapping and electronic eavesdropping flights such as the one that just sparked the recent confrontation between the United States and China, and even the hurried dispatch of F-86 Sabre jets to Korea to counter the Soviet employment of MiG-15 fighters. The end result was a misleading impression of the level of development of U.S. biological warfare. Though there were Americans working to achieve the very capabilities Endicott and Hagerman describe, that goal was not reached before the armistice in July 1953. I have also recently been contacted by Jeffrey Kaye, a scholar who has delved into recently

declassified CIA reports. Some of those sources believed from their observations that some sort of biological warfare might be happening in China, and he tends to go along with them. But I myself have still seen no credible evidence the United States had the capability to do it, let alone the intent.

It is worth speculating about possible reasons for the recent Russian accusations. Many have supposed it could be a pretext for Russian use of chemical or biological weapons in Ukraine. It is obviously an attempt to put the United States on the defensive, but it might also again be aimed at American airpower. Just as Endicott and Hagerman try to explain the appearance of F-86s in the skies over Korea as a means to deliver biological weapons, the Russians might try to discredit the establishment of a no-fly zone as just a pretext for similar operations. But American leaders should be aware that we have seen this playbook before, and that audiences in Russia and China, and other parts of the world as well, have proven susceptible to it.

ENDNOTES

1. Zhang, Shu Guang, *Mao's Military Romanticism: China and the Korean War, 1950-1953* (Lawrence: University Press of Kansas, 1995), p. 186.
2. Summary of Communist Bacteriological and Chemical Warfare Charges, in *Fifth Air Force Intelligence Summary*, 16-30 June 1952, p. 65, File K730.607, Air Force Historical Research Agency (AFHRA), Maxwell AFB, AL; "Germ-Carrying Rats Bred in North Korea," *The New York Times*, 6 Nov 50, p. 3.
3. Summary of Communist Bacteriological and Chemical Warfare Charges, in *Fifth Air Force Intelligence Summary*, 16-30 June 1952, pp. 65-66, File K730.607, AFHRA.
4. Summary of Communist Bacteriological and Chemical Warfare Charges; Psychological Strategy Board Staff Study D-25b, "Preliminary Analysis of the Communist BW Propaganda Campaign, with Recommendations," 7 Aug 52 and Memo, MG Robert Lee to GEN Vandenberg, SUBJECT: Chinese Communist Threat, 14 Mar 52, File OPD 383.6 Korea (12 Jul 51), Sec. 3, Box 903, Record Group 341, Records of Headquarters, USAF, National Archives II (NA II), College Park, Maryland; Milton Leitenberg, *The Korean War Biological Warfare Allegations Resolved*, Occasional Paper 36, (Stockholm: Center for Pacific Asia Studies at Stockholm University, May 1998), pp. 5-6, 27-28; Regis, 98-111, 126-130, 143-150; Rosenthal, A.M., "Reds' Photographs on Germ Warfare Exposed as Fakes," *The New York Times*, April 3, 1952, p. 1, 18.
5. Psychological Strategy Board Staff Study D-25b; JCS 1776/282 and JCS 1776/283, 12 Mar 52, both with enclosures, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341; JCS 1776/293, 12 Jun 52, with enclosures, File 383.21 Korea, Geographic Files 1951-53, Sec. 103, Box 39; Msgs, JCS 903457, JCS to CINCFE, 14 Mar 52 and JCS 903780, 17 Mar 52, Outgoing Messages, Mar 2, 1952 - July 21, 1953, Box 10; Msg, C 69794, CINCFE to DEPTAR, 7 Jun 52, Incoming Messages, Apr 26, 1952 - Jun 30, 1952, Box 5, Record Group 218, Records of the Joint Chiefs of Staff, NA II; "U.S. Proposes Investigation of Bacteriological Warfare Charges," *Department of State Bulletin*, vol. 27, (July 7, 1952), pp. 32-37, and (July 28, 1952), p. 159; Memorandum for the Secretary of Defense from the Secretary of the Air Force, 23 Apr 52, BW-CW General Decimal Files, 1952, Box 2, RG 341.
6. Memo, George Morgan to David K.E. Bruce, et al, SUBJECT: Staff Study - Preliminary Analysis of the Communist BW Propaganda Campaign with Recommendations, 25 Jul 52, with attached Psychological Strategy Board Staff Study D-25b, File OPD 383.6 Korea (12 Jul 51), Sec. 3, Box 903, RG 341. The Psychological Strategy Board had been established by Presidential directive on 4 April 51 "to accomplish nationally consistent and cumulative results from coordinated psychological operations." Memorandum for the Joint Chiefs of Staff, SUBJECT: Establishment of the Psychological Strategy Board, 9 Apr 51, in microfilm, *Records of the Joint Chiefs of Staff, Part 2: 1946-53, Meetings of the Joint Chiefs of Staff* (Washington, D.C.: University Publications of America, 1980), Reel 2.
7. Memorandum by the Asst Secy of State for UN Affairs to the Deputy Under Secy of State, 20 May 52, pp. 210-212 and Editorial Note, pp. 343-344, in US Department of State, *Foreign Relations of the United States, 1952-1954, Volume XV, Korea* (Washington, D.C.: USGPO, 1984), Part 1; "U.S. Proposes Investigation of Bacteriological Warfare Charges," *Department of State Bulletin*, vol. 27 (July 7, 1952), pp. 32-37, and "Security Council Statement of July 3," (July 28, 1952), p. 159; Thomas J. Hamilton, "Malik Blocks U.N. Vote on Inquiry Into Red Charges of Germ Warfare," *The New York Times*, 24 Jun 52, p. 1; Lead story, *Universal International Newsreels*, Vol. 25, No. 571, 19 Jun 52, Record Group 200, NA II.
8. State Department Intelligence Reports, "The Effect of the Bacteriological Warfare Campaign," 7 Oct and 7 Nov 52, on Reel 5 of microfilm collection, *OSS/State Department Intelligence and Research Reports, Vol. VIII, Japan, Korea, Southeast Asia, and the Far East Generally: 1950-1961 Supplement* (Washington, D.C.: University Publications of America, 1979); Zhang, pp. 182-183, 186. The new revelations are covered in Kathryn Weathersby, "Deceiving the Deceivers: Moscow, Beijing, Pyongyang, and the Allegations of Bacteriological Weapons Use in Korea" and Milton Leitenberg, "New Russian Evidence on the Korean War Biological Warfare Allegations: Background and Analysis," *The Cold War International History Project Bulletin* (Winter 1998), pp. 176-199. Not surprisingly, Endicott and Hagerman dispute the importance of these documents. For more on the communist manipulation of the BW investigations, see Regis, 147-151.
9. Zhang, pp. 181-186; Maj. Gen. William F. Dean, *General Dean's Story* (New York: The Viking Press, 1954), pp. 275-278; Entry for 28 Apr 53, *Weyland Memoranda for Record, Vol. IV*, 53/01/01 - 53/07/31, File 168.7104-7, AFHRA.
10. Msg, 59755, HQ USAF to CG FEAF, 16 May 52 and JCS 1776/293, 12 Jun 52, p. 1562 and Memo, BG Charles Banfill to Chief of Staff, USAF, SUBJECT: Investigation of Allegations Regarding a Use of Bacteriological Warfare by UN, 26 Jun 52, Sec. 2; Memo, Psychological Warfare Division to Directorate of Intelligence, USAF, SUBJECT: Bacteriological Warfare Charges by Communists, 5 Nov 52, with 6 Nov 52 indorsement from Directorate of Intelligence, Sec. 3; Memo from HQ USAF, SUBJECT: Investigation into Communist Allegations of USAF Participation in Biological Warfare in Korea, 27 Mar 1953, Sec. 5; Memorandum for the Secretary of Defense by the Secretary of the Air Force, 18 Mar 53, Sec. 4; Memo, Secretary of Defense to Secretary of the Air Force

- and Commandant, U.S. Marine Corps, SUBJECT: Statements Regarding Biological Warfare by Members of the US Air Force and the US Marine Corps, 15 Sep 53, Sec. 7, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341; Army Security Center, "U.S. Prisoners of War in the Korean Operation: A Study of Their Treatment and Handling by the North Korean Army and the Chinese Communist Forces," November 1954, copy furnished by Prof. Allan Millett, Ohio State University. Millett has found that some of the BW stories were concocted by airmen who possessed knowledge of atomic capabilities, and wanted to divert their interrogators from trying to extract that information.
11. Entry for 28 Apr 53, Weyland Memoranda for Record, Vol. IV, 53/01/01 - 53/07/31, File 168.7104-7; FBIB GRNC W171847, Transmission from Peking, 17 Jun 52, in HQ FEAF, History of the Far East Air Forces, 1 January - 30 June 1952, Vol. II, File K720.01, AFHRA; Memo, Directorate of Intelligence to Directorate of Plans, SUBJECT: Affidavit of 1st Lt V.E. Tharp - SPECIAL INQUIRY, 30 Jan 53 and Memo, Col. John Hutchison to MG Lee, SUBJECT: Germ Warfare Charges, 26 Jan 53 and Memo, Chaplain (Major) Harry McKnight, Jr. to COL. J.W. Anderson, SUBJECT: Report of Chaplain's Visit with Mrs. John S. Quinn, 20 Apr 53, Sec. 4, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341.
 12. Henry R. Lieberman, "Freed American Tells of Drugging With 'Truth Medicine' in China," *The New York Times*, 12 Jul 52, p. 1; Memo, MG Lee to LTG White, SUBJECT: Air Force Council Showing of Psychological Warfare Movie, 5 Nov 52, Sec. 3; Memo, Col. Hutchison to MG Lee, SUBJECT: Germ Warfare Charges, 26 Jan 53, Sec. 4; Msg, DA 945519, DA G2 to CINCFE J2, 6 Aug 53, Sec. 5, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341.
 13. Memorandum for Record by LTC Floyd Robinson, with attached memorandum from Gen. (ret) G.B. Erskine and statements of POWs, 12 Oct 1953, Sec. 7, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341; Universal International Newsreels, Vol. 26, No. 513, 29 Oct 53, Record Group 200, NA II. The actual film footage of the September POW interviews is available in Record Group 342 at the National Archives II, entries NWDNM(m)-342-USAF-34921 and NWDNM(m)-342-USAF-35833. Endicott and Hagerman argue that since, in their opinion, the airmen were not really subjected to much abuse in the POW camps, but were pressured strongly to deny the BW allegations when they were repatriated, the recantations are actually less believable than the original confessions!
 14. Sworn Statement by Col. Walker M. Mahurin, USAF, "Communist Way: Case History of a Confession," *The New York Times*, 1 Nov 53, p. E3.
 15. Msg, V0222 CG, Weyland to White, 26 Mar 53, Sec. 4, File OPD 383.6 Korea (12 Jul 51), Box 903, RG 341.
 16. JCS 1837/5, Note by the Joint Secretaries, "Special Biological Warfare Operations," with attachments, 9 Feb 49, and "Report of the Secretary of Defense's Ad Hoc Committee on Biological Warfare," 11 Jul 49, in microfilm, *Records of the JCS, Part 2: 1946-53, Strategic Issues, Section I, Atomic Weapons* (Frederick, MD: University Publications of America, 1980), Reel 4; Memo, MG McKee to Mr. Burden, SUBJECT: BW Policy, 19 Dec 51, BW Munitions Folder, BW-CW Decimal Files, 1951, Box 1; Memo, Col. Frank Seilor to MG Bunker, SUBJECT: Briefing for LTG Partridge, 24 Jun 53, with inclosure, and Resume of the USAF BW-CW Program from 1951 to Present, 7 Aug 53, BW-CW General Decimal Files, 1953, Box 2, RG 341.
 17. Discrepancies Noted in IG Six-Month Progress Report on BW-CW Program, Dated 16 May 1951, 7 Jun 51; Memorandum for Commanding General, Air University, SUBJECT: Biological and Chemical Warfare, 7 Jun 51; Staff Study, BW-CW Program in USAF, 11 Jun 51; Memo, MG D.L. Putt to Chairman of the Research and Development Board, SUBJECT: Request for Supplemental Funds for Air Force Biological and Chemical Munitions, 15 Nov 51; Memo, Col. W.M. Canterbury to DCS/Operations, SUBJECT: Memorandum for Secretary of the Air Force on BW and CW, 27 Nov 51, BW-CW Decimal Files, 1952, Box 1; Memorandum for Personal Files, LTG White to Secretary Finletter, 7 Nov 51 and Memorandum for Record by LTC Karl Retzer, SUBJECT: Informal RCAF-USAF Discussion on BW-CW Test Areas, 2 Nov 51, BW-CW General Decimal Files, 1951, Box 1, RG 341. At the time the Soviet Union was projected to possess 500,000 tons of WWII CW stocks and 16,000 tons of new nerve agents.
 18. Letter, LeMay to White, 17 Jun 52, File B-18635, Box B201, The Papers of Curtis LeMay, Manuscript Division, Library of Congress, Washington, D.C.; Memo, LTC Seth Mize to Col. James Totten, SUBJECT: Recent BW-CW Developments, 14 Apr 52 and Memo, Psychological Warfare Division to Director of Operations, SUBJECT: BW Plans for SAC Operations, 20 Mar 52, BW-CW General Decimal Files, 1952, Box 4; Briefings for Commanding General, Air Material Command, and Commanding General, Strategic Air Command, 21 May 52 and Letter, Col. Erlath Zuehl to USAF Chief of Staff, 14 Apr 52 and Memo, Col. Totten to MG Donald Yates, SUBJECT: Review of Advanced Copy of RAND Report on BW, 27 Jun 52, BW-CW General Decimal Files, 1952, Box 2, RG 341.
 19. Memo, Col. Totten to MG Donald Yates, SUBJECT: Review of Advanced Copy of RAND Report on BW, 27 Jun 52 and Memorandum for Record, SUBJECT: Interim Report on Symposium on BW Agents, 23 Apr 52, with inclosures, BW-CW General Decimal Files, 1952, Box 2; Memoranda for General Bunker, SUBJECT: Proposed Air Force Agenda for BW Inter-Service Coordinating Committee, 5 May 52 and SUBJECT: BW-CW Inter-Service Coordinating Committee, 29 May 52 and Memorandum for Secretary Pace from Finletter, 7 Nov 52, BW-CW General Decimal Files, 1952, Box 4, RG 341. For more on Doolittle, see Crane, *Bombs, Cities, and Civilians: American Airpower Strategy in World War II* (Lawrence: University Press of Kansas, 1993), pp. 39-40, 107-108.
 20. Entry for 31 May 52, Weyland Memoranda for Record, Vol. II, 51/12/01 - 52/05/31, File 168.7104-5, AFHRA; Memoranda for Record by LTC R.F. Garner, SUBJECT: FEAF Preparedness of BW-CW, 21 Jul 52 and SUBJECT: FEAF Chemical Warfare Capability, 29 Jul 52 and SUBJECT: FEAF Preparedness for BW-CW, 8 Aug 52 and SUBJECT: Typical Working Plan for Employment of CW in FEAF, 17 Nov 52; Msg CX 59022, CINCFE to DEPTAR, 19 Nov 52, BW-CW General Decimal Files, 1952, Box 4; Proposed Amendments to Memorandum of the Vice Chief of Staff, 15 January 1952 USAF Biological and Chemical Warfare Program, 18 Apr 52, with 3 Jul 52 approval, BW-CW General Decimal Files, 1952, Box 2, RG 341; Regis, 138-143.
 21. Memo for Record, Captain Robert Taylor, BW-CW Plan to CINCFE, 16 Sept 1952, BW-CW General Decimal Files, 1952, Box 4; Memo, MG Robert Burns to Deputy Chief of Staff for Plans and Research, SUBJECT: Army Requirements for Mustard, 2 Oct 52 and Memo, MG Howard Bunker to Chief Chemical Officer, DA, SUBJECT: Protective Equipment of Enemy Forces in North Korea, 30 Jan 53, with 1st Indorsement from MG E.F. Bullene, BW-CW General Decimal Files, 1953, Box 1; Memorandum for Record by LTC Karl Retzer, SUBJECT: Visit by FEAF Representatives, 21 May 53 and Memo, Col. Frank Seiler to MG Bunker, SUBJECT: Briefing for LTG Partridge, 24 Jun 53, with inclosure, and Memorandum for Record by LTC Francis Bodine, SUBJECT: FEAF Stockpiling of CW Munitions, 20 Aug 53, BW-CW General Decimal Files, 1953, Box 2, RG 341; JCS 1837/48, "Overseas Deployment of Toxic Chemicals," 16 Apr 53, in microfilm, *Records of the JCS, Part 2: 1946-53, Strategic Issues, Section I, Atomic Weapons* (Frederick, MD: University Publications of America, 1980), Reel 4. For more on plans to use atomic bombs in Korea, see Crane, "To Avert Impending Disaster: American Military Plans to Use Atomic Weapons During the Korean War," *The Journal of Strategic Studies*, vol. 23, No. 2 (June 2000), pp. 72-88.
 22. Memo, MG Howard Bunker to LTG T.D. White, SUBJECT: Air Force Program for Biological and Chemical Warfare, 22 Apr 53,

BW-CW General Decimal Files, 1953, Box 1; Memo, Col. Frank Seiler to MG Bunker, SUBJECT: Briefing for LTG Partridge, 24 Jun 53, with inclosure, BW-CW General Decimal Files, 1953, Box 2; Memo, Col. Guthrie to BW-CW Division, Asst for Atomic Energy, SUBJECT: Military Characteristics for a Biological Bomb for Balloon Delivery, 29 Jan 53 and Letter, MG Yates to Commander, Air Research and Development Command, SUBJECT: Development of the Balloon System for Delivery of Anti-Crop BW Munitions, 13 Nov 53 and Memo, BG J.C. Jensen to Asst for Atomic Energy, SUBJECT: Requirements for Coordinated Staff Action on E77 (Biological Bomb for Balloon Delivery), 18 Dec 53, BW-CW General Decimal Files, 1953, Box 6, RG 341; JSPC 954/29, Joint Strategic Plans Committee, "Chemical (Toxic) and Biological Warfare Readiness," 13 Aug 53, in microfilm, *Records of the JCS, Part 2: 1946-53, Strategic Issues, Section I, Atomic Weapons*, Reel 4. On the Japanese use of balloon bombs in World War II, see Crane, Bombs, Cities, and Civilians, p. 122. Army Air Forces Commanding General "Hap" Arnold feared the enemy was going to use them for biological warfare.

23. Stephen Endicott and Edward Hagerman, *The United States and Biological Warfare: Secrets from the Early Cold War and Korea* (Bloomington: Indiana University Press, 1998), p. 188.
24. Another book worth noting that deals with American biological warfare developments during the 1950s is Ed Regis, *The Biology of Doom: The History of America's Secret Germ Warfare Project* (New York: Henry Holt, 1999). Though the book is not as well-documented as *The United States and Biological Warfare*, Regis is much more objective about the evidence. He is especially good in describing the content and flaws in the communist biological warfare allegations, and also in covering American research and development programs at Camp Detrick, Maryland.
25. See Jules "Jay" Hurst, "Small Unmanned Aerial Systems and Tactical Air Control," *Air & Space Power Journal* 33, no. 1 (2019): 19-33.

Korean War Biological Warfare Allegations against the United States: A Playbook for the Current Crisis in Ukraine

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