

4-2024

## "Agent Orange is our Nemesis": The Blue Water Navy Veterans' Battle for Dioxin Compensation Amidst the Ongoing Vietnam War

Molly Parks  
*William & Mary*

Follow this and additional works at: <https://scholarworks.wm.edu/honorsthesis>



Part of the [History Commons](#)

---

### Recommended Citation

Parks, Molly, "'Agent Orange is our Nemesis": The Blue Water Navy Veterans' Battle for Dioxin Compensation Amidst the Ongoing Vietnam War" (2024). *Undergraduate Honors Theses*. William & Mary. Paper 2121.

<https://scholarworks.wm.edu/honorsthesis/2121>

This Honors Thesis -- Open Access is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of W&M ScholarWorks. For more information, please contact [scholarworks@wm.edu](mailto:scholarworks@wm.edu).

“Agent Orange is our Nemesis”: The Blue Water Navy Veterans’ Battle for Dioxin  
Compensation Amidst the Ongoing Vietnam War

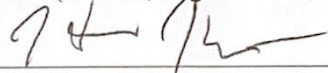
A thesis presented in Candidacy for Departmental Honors in History  
from  
The College of William and Mary

by

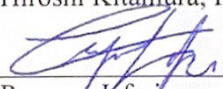
Molly Parks

April 29, 2024

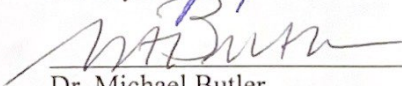
Accepted for High Honors  
(Honors, High Honors, Highest Honors)



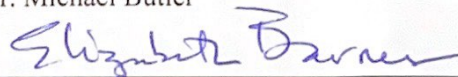
Dr. Hiroshi Kitamura, Honors Advisor



Dr. Peyman Jafari



Dr. Michael Butler



Dr. Elizabeth Barnes

## Table of Contents

Acknowledgements .....	3
Introduction .....	4
Chapter I: America’s Ongoing War: The History, Consequences, and Persistence of Agent Orange .....	8
Imperial Resistance: Background on the Vietnam War up to 1961 .....	9
The American Turn to Chemical Herbicides .....	16
Victims of Agent Orange Exposure .....	24
Chapter II: Benefit of the Doubt: A Legislative History of the Blue Water Navy Vietnam Veterans’ Battle for Presumptive Service Connection to Agent Orange Exposure .....	28
Chapter III: On the Periphery: An Oral History of the Veteran and Survivor Voices Behind the Battle for Agent Orange Presumptive Exposure .....	53
Joseph Foster, Drinking Water and Intergenerational Worries .....	54
Frances Hendrickson, A Loss of Hope and Transgenerational Fears .....	58
Robert E. McNulty, Sr., “That wasn’t part of the deal” .....	61
Conclusion .....	67
Bibliography .....	76

## **Acknowledgements**

I would like to extend my sincerest appreciation to my advisor, Professor Hiroshi Kitamura, for all of his guidance and support throughout this thesis writing process. Without his encouragement, advice, and edits, this project would not have come to fruition. I would also like to thank Professors Peyman Jafari, Michael Butler, and Elizabeth Barnes for their enthusiasm and flexibility while serving on my thesis committee. I also extend my gratitude to Professor Fabricio Prado, the Harrison Ruffin Tyler Department of History, and Craig and Nancy Canning for funding my research with the Canning Award.

This project would not have been possible without the help of several other individuals. First, I would like to earnestly thank Rick Amsterdam for all of his help and communication throughout my project from the first time I stepped foot in the New Jersey Vietnam Veterans' Memorial and Vietnam Era Museum to the completion of my thesis. Secondly, I would like to thank Joseph Foster, Bob McNulty, Frances Hendrickson, and Joe Rosato for their bravery, candor, and willingness to share their stories with me. Last, but not least, I would like to thank my family and friends, especially my parents John and Susan Parks, for their unwavering support and uplifting presence throughout this process.

## Introduction

On January 21, 2023, I drove with my dad to Holmdel, New Jersey to visit the New Jersey Vietnam Veterans' Memorial and Vietnam Era Museum for the first time. Eager to learn more about the Vietnam War, I walked into the museum and encountered a smaller, older man working at the museum. After my father and I introduced ourselves to him, I told the gentleman that I was curious to learn more about Agent Orange, a chemical defoliant used during the Vietnam War. "Well, you came in on the perfect day," said the man, whose name was Rick Amsterdam. Over the next two hours, I spoke with Rick, a participant in the original 1984 Agent Orange class action lawsuit out of the United States District Court – Eastern District of New York, about the history of Agent Orange and how the use of the herbicides in Vietnam completely altered his life. After witnessing the sheer emotion of a Vietnam veteran as passionate about Agent Orange awareness as Mr. Amsterdam, I decided to work on a thesis project to document the voices of the victims of this chemical herbicide. "Agent Orange is our nemesis. It will kill all of us. All Vietnam veterans will die of Agent Orange," Rick Amsterdam said.<sup>1</sup>

This thesis aims to add original insight on the Vietnam War. Entitled "'Agent Orange is our Nemesis': The Blue Water Navy Veterans' Battle for Dioxin Compensation amidst the Ongoing Vietnam War," it offers a history of this war and the use of Agent Orange. More importantly, I will investigate the political and human costs of the war by casting a spotlight on US veterans who were affected by this toxic defoliant. In chapter one, I will offer a survey of the war and its transformation into a chemical battlefield. In chapter two, I will examine the

---

<sup>1</sup> Rick Amsterdam (Vietnam Army Veteran), interview by Molly Parks (author), January 21, 2023, Holmdel, NJ.

congressional, legislative, and legal debates that concern American victims of Agent Orange. In chapter three, I present three oral histories of US veterans to chronicle the struggles of the victims while legislative discussions were under way.

The contributions of my study are multifaceted. First, I introduce a political and social history of US veterans to a literature that largely revolves around military and diplomatic history. Historians have traditionally analyzed the conflict by focusing on military strategy and international diplomacy concerning the US, Vietnam, and the wider international community. For example, George C. Herring's *America's Longest War: The United States and Vietnam, 1950–1975* intertwines the international political affairs of the conflict, the transnational diplomacy surrounding the conflict's implications on the Cold War, and the military strategy within the Indochina peninsula. Fredrik Logevall's *Embers of War: The Fall of an Empire and the Making of America's Vietnam* sets up the history of Vietnamese resistance of the French before American direct involvement in the conflict between North and South Vietnam. In particular, Logevall's comprehensive section on Dien Bien Phu shows his skillful analysis of military movements and its relationship with political and diplomatic thought. Paul Thomas Chamberlin's *The Cold War's Killing Fields: Rethinking the Long Peace* is a broad international history of Cold War battlefields that narrows in on Vietnam to demonstrate his argument that the Cold War was not peaceful, and was, in fact, a deadly ideological war.

These important books are part of a larger body of scholarly works that study military and diplomatic history. This thesis project differs from such works as it dives deeper into the often overlooked history of American veterans and their political, economic, and medical struggles. This project homes in on the use of Agent Orange, questioning how a nation's government sent its own soldiers in the face of dioxin without protecting them from the risk of exposure or providing them with just compensation. Within a small body of literature that does

discuss veterans' compensation and Agent Orange, Blue Water Navy veterans – the sector of offshore naval veterans who did not receive presumptive Agent Orange exposure benefits until 2020 – are largely excluded. Edwin A. Martini, a renowned scholar on chemical warfare and the Vietnam War, discusses a detailed history of the American decision to employ Agent Orange in the Vietnam War and discusses veteran compensation in several of his books. Specifically, Martini's *Agent Orange: History, Science, and the Politics of Uncertainty* offers a thorough analysis on the chemical herbicide and its effects on soldiers, civilians, and politics. However, his book only devotes four out of over 200 pages to the Blue Water Navy story. A nearly similar small ratio is expended on the Blue Water Navy in historian Peter Sills's political and industrial deep dive into Agent Orange, titled *Toxic War: The Story of Agent Orange*. This project seeks to understand why and how Blue Water Navy veterans were overlooked and aims to document their voices. I hope this thesis offers a microphone to Blue Water Navy veterans so their stories can be justly heard.

As I sought to use the platform of this project to give a voice to neglected victims of the Vietnam War and the American decision to use Agent Orange, I had difficulty amplifying the stories of Vietnamese victims of Agent Orange because I do not understand or speak the Vietnamese language. This linguistic barrier as a researcher made me unable to understand primary sources written in Vietnamese, as I struggled feeling like I was unable to justly highlight the voices of one of the most glaringly, historically neglected groups when it comes to those affected by Agent Orange. As I discuss more thoroughly in the end of chapter one and the conclusion, Vietnamese soldiers and civilians both used to and still do live in, farm, and drink, the villages and forests, lands, and waters sprayed directly with Agent Orange. Because of my language barrier to understanding Vietnamese, I ultimately decided to focus the majority of this

paper on highlighting the voices of a group I was able to more justly feature – Blue Water Navy veterans. However, I discuss the story of Vietnamese Agent Orange victims in the conclusion of this project, as I argue the US government needs to learn from its failure to justly compensate its own Vietnam veterans and more proactively provide care and compensation for others affected by Agent Orange and toxic herbicides.

By examining the intertwined history of Blue Water Navy veterans and Agent Orange in this project, I hope to show that the Vietnam War did not end with the fall of Saigon in 1975, but still continues today. One of the main tragedies of Agent Orange is that it has persisted in the natural landscape, political debates, and the physical bodies and mental state of all veterans and civilians involved or exposed. Veterans and Vietnamese citizens are still fighting for just compensation for their exposure. Government officials are still drafting legislation to face the consequences of the Agent Orange decision. The natural environment in Vietnam is still ravaged by dioxin. The children and grandchildren of the exposed are now grappling with the health effects passed down to them through the persistence of dioxin in the human body. The Vietnam War is far from over. The goal of this thesis paper is to bring light to the lasting impact of the Vietnam War in 2024 with the instance of Blue Water Navy compensation, in hopes of encouraging more research into this ongoing conflict.



## America's Ongoing War: The History, Consequences, and Persistence of Agent Orange

Herbicidal warfare was simply one more failed attempt among many to impose control over a nation, a people, and a landscape—indeed, over nature itself—all of which refused to accept the dictates of American power just as stubbornly as American policymakers refused to accept the limitations of that power.<sup>2</sup>

– Edwin A. Martini, in *Agent Orange: History, Science, and the Politics of Uncertainty*

On January 20, 1961, President John F. Kennedy stood before his inaugural address crowd on Capitol Hill and promised that “the torch has been passed to a new generation of Americans.”<sup>3</sup> From the first day of his presidency, Kennedy ensured the American public that his administration would mark a new dawn of domestic and foreign policy strategy. Determined to shift away from Eisenhower’s nuclear-weapon-centered “New Look” strategy, Kennedy worked with military adviser and chairman of the Joint Chiefs of Staff Maxwell Taylor to craft his policy of “flexible response.” In this strategy, the US would enhance a wide array of tools to fight against the Soviet Union, by “modernizing” conventional forces and nuclear weapons, while making active use of covert and counter-terrorist operations led by the CIA and the US Army’s Special Forces known as the “Green Berets.” In addition, the urge to “meet a more diverse series of threats,” as noted by historian Edwin A. Martini, also “included an emphasis on chemical and biological alternatives to nuclear weapons.”<sup>4</sup> This would lead the Kennedy administration to introduce chemical herbicides into a vital Cold War battlefield: Vietnam.

This chapter is an attempt to offer a general overview of the Vietnamese Cold War battlefield and this deadly chemical warfare. Originally envisioned as an innovative and

---

<sup>2</sup> Edwin A. Martini, *Agent Orange: History, Science, and the Politics of Uncertainty* (Amherst: University of Massachusetts Press, 2012), 6.

<sup>3</sup> John F. Kennedy, “Inaugural Address, Kennedy,” (Inaugural Address, United States Capitol, Washington D.C., January 20, 1961).

<sup>4</sup> Martini, *Agent Orange*, 21.

contemporary strategy that did not rely as heavily on nuclear weapons, Kennedy's flexible response turned to chemical herbicides in 1961 as the administration desperately attempted to regain control in Vietnam. The Kennedy administration envisioned flexible response as part of its broader passing of the torch to a new American generation. The administration intended to leave behind the tedious, nuclear-focused foreign policy of Eisenhower, in favor of a more nuanced, technological strategy representative of the dawn of a new age. Yet as the flexible response strategy evolved into a reliance on herbicidal warfare in Vietnam, the Kennedy administration's "new" foreign policy strategy proved just as tedious and dangerous as that of Eisenhower, one that would torch a new generation of American soldiers—to say nothing of Vietnamese civilians—whom he intended to protect.

*Imperial Resistance: Background on the Vietnam War up to 1961*

Much of the history of the Vietnamese people is characterized by emboldened resistance fighters working against colonial infringement on their land. From the inspiring, yet tragic stories of early freedom fighters like the Trung sisters, who committed suicide after losing their battle for independence against the Chinese in the first century A.D., to the successes of Vietnamese forces against the Chinese in the tenth century, a cardinal story of Vietnam is the story of rebellion against imperial encroachment.<sup>5</sup> Through early guerilla warfare tactics in the thirteenth century, resistance fighter Tran Hung Dao led the Vietnamese to defeat Kublai Khan and the Mongolian Empire three times.<sup>6</sup> Vietnamese resistance characterized most of the French colonial period – during which the French renamed Vietnam French Indochina – from when the first

---

<sup>5</sup> George C. Herring, *America's Longest War: The United States and Vietnam, 1950-1975* (New York: McGraw-Hill Higher Education, 2002), 4.

<sup>6</sup> Herring, *America's Longest War*, 4.

French, Catholic missionaries arrived in the seventeenth century to when communist revolutionary Ho Chi Minh led the Vietnamese to drive the French out of Dien Bien Phu in 1954.<sup>7</sup>

The history of what led to Ho Chi Minh's victory at Dien Bien Phu is vital to understanding the Vietnam War and how the United States entered the conflict. America's involvement began after the Japanese occupation weakened French control over Indochina and left a power vacuum for Ho Chi Minh to come to power. During the Second World War, imperial Japan occupied Indochina from 1940 to August 1945. Japanese forces arrested Vichy French officials in Saigon, while other French colonial leaders fled before seizure.<sup>8</sup> Stripped of their colonial offices and sovereign power, the French became vulnerable in Indochina, leaving an opening for the Vietnamese to strike when their long-standing colonizers were most weak. To add to the distress of two imperial powers competing over their land, the Vietnamese were further devastated by a famine that peaked in 1945. Professor Paul Thomas Chamberlin describes how the Viet Minh, the powerful Marxist rebel group led by Ho Chi Minh, provided relief and local organizational structure for the affected villagers.<sup>9</sup> Chamberlin also discusses the sheer irony of how during this period, before the Japanese fell to the Allied powers in the Second World War, the United States and the Viet Minh were allies: "Agents from the Office of Strategic Services worked with the Viet Minh to coordinate resistance activities and rescue downed American pilots. Ho, assigned the name OSS Agent 19, struck them as 'an awfully

---

<sup>7</sup> James Patrick Daughton, *An Empire Divided: Religion, Republicanism, and the Making of French Colonialism, 1880-1914* (Oxford: Oxford University Press, 2006), 30.

<sup>8</sup> Paul Thomas Chamberlin, *The Cold War's Killing Fields: Rethinking the Long Peace* (New York: HarperCollins Publishers, 2018), 159.

<sup>9</sup> Chamberlin, *The Cold War's Killing Fields*, 160-161.

sweet guy.”<sup>10</sup> This shows the fragility of American foreign policy, as this “awfully sweet guy” would turn into an enemy during the Cold War because of his affiliation with communism.

As the Japanese surrendered Indochina after the Axis defeat, the Viet Minh began its battle against the French to win its sovereignty. The Viet Minh entered Hanoi on August 29, 1945 and declared Independence four days later as an American plane flew overhead in support.<sup>11</sup> In what George C. Herring called “one of history’s most bitter ironies,” Ho officially began the independence movement of the Democratic Republic of Vietnam on September 2, 1945 with a comparison of the Vietnamese struggle against the French to that of the American colonists in 1776 against the British.<sup>12</sup> In front of a crowd of over 400,000 gathered in Ba Dinh Square in Hanoi, Ho began his speech reciting the words of Thomas Jefferson, “All men are created equal; they are endowed by their Creator with certain unalienable Rights; among these are Life, Liberty, and the pursuit of Happiness.”<sup>13,14</sup> He also charged that, “the French imperialists, abusing the standard of Liberty, Equality, and Fraternity, have violated our Fatherland and oppressed our fellow citizens. They have acted contrary to the ideals of humanity and justice.”<sup>15</sup> Though the Vietnamese independence movement was born from the same ideals as the American revolution, the US government chose to fight its fellow anti-colonialists, largely because the resistance was led by communists amidst the Cold War.

While Ho led his forces through successful guerilla campaigns that both physically and psychologically weakened French troops, the French relied on larger attacks and bombing

---

<sup>10</sup> Chamberlin, *The Cold War’s Killing Fields*, 160.

<sup>11</sup> Chamberlin, *The Cold War’s Killing Fields*, 162.

<sup>12</sup> Herring, *America’s Longest War*, 3.

<sup>13</sup> “Sept. 2, 1945: Vietnam Declared Independence from France,” This Day in History, Zinn Education Project, <https://www.zinnedproject.org/news/tdih/vietnam-declared-independence/>.

<sup>14</sup> Ho Chi Minh and Bernard B. Fall, *On Revolution: Selected Writings, 1920-66* (New York: Frederick A. Praeger, Publishers, 1967), 143.

<sup>15</sup> Ho and Fall, *On Revolution*, 143.

campaigns, supplemented by British aid. As the ideological battlefield became more clear, the United States swung more towards a cautious support of the French. According to Herring, “during the first three years of the Indochina war, the United States maintained a distinctly pro-French ‘neutrality,’” as Truman supported the French with indirect financial and military aid.<sup>16</sup> However, when the Viet Minh more closely allied themselves with the People’s Republic of China, the United States took a more firm pro-French stance. Herring notes that “by 1952, the United States was bearing roughly one-third of the cost of war,” while sending advisers to French Indochina.<sup>17</sup> As the war dragged along in a violent impasse between the French and Vietnamese by 1953, the French sought to take control of Dien Bien Phu as an air force base. This position would greatly jeopardize Viet Minh supply chains if they could not successfully lay siege to the base. Directed by military commander Vo Nguyen Giap, the Viet Minh laid a series of crushing attacks on the French at Dien Bien Phu and the surrounding mountainous outposts starting in March 1954. After a two-month siege, the Viet Minh forced a French surrender on May 7.

President Dwight D. Eisenhower had originally hoped to persuade the British to collectively intervene in Dien Bien Phu to halt the Viet Minh and prevent a further spread of communism in Southeast Asia. British Prime Minister Winston Churchill, however, pushed back against direct intervention in the siege, arguing that even if Vietnam fell into Marxist hands, it would not cause a domino effect in all of Southeast Asia.<sup>18</sup> As they watched Dien Bien Phu slip too far out of their control from the French grasp, Eisenhower and Churchill both decided to opt out of providing international aid for the French at the outpost. Chamberlin speculates that, given

---

<sup>16</sup> Herring, *America’s Longest War*, 14.

<sup>17</sup> Herring, *America’s Longest War*, 27.

<sup>18</sup> Herring, *America’s Longest War*, 42.

Eisenhower's "New Look" strategy, this decision likely prevented a nuclear blast as Eisenhower "pulled back from the brink of intervention at Dien Bien Phu, a move that might have included a tactical nuclear strike on Giap's forces."<sup>19</sup>

The world watched closely as an anti-colonialist, guerilla rebel group successfully toppled its longstanding imperial power at Dien Bien Phu. This battle represented a hallmark victory against twentieth century imperialism and forewarned western powers of the strength of communist guerilla warfare. To make matters more uncomfortable for the French, their surrender at Dien Bien Phu occurred during the Geneva Conference of 1954. Fredrik Logevall detailed the embarrassing, momentous occasion for the French delegation, "when the small and intense foreign minister, who had been at the center of Indochina policy for eight years," George Bidault, "arose slowly from his seat in the Palais des Nations in Geneva on the afternoon of May 8, walked to the lectern, and acknowledged before the delegates and the world the fall of Dien Bien Phu."<sup>20</sup>

At the Geneva Conference of 1954, the United States, the Soviet Union, the Viet Minh, France, the United Kingdom, and China met to discuss how to establish a lasting peace. After the Viet Minh won at Dien Bien Phu, the discussion of the conference focused heavily on Vietnam, as the major world powers sought to halt the expansion of the Viet Minh and the violence on the Indochina peninsula. Even Ho's Marxist comrades, the Soviet Union and China, worked with the western powers to find a peaceful two-state solution in Indochina. Chamberlin argues, "for Moscow and Beijing, the Geneva Conference had offered an opportunity to gain added recognition from the Western powers and to consolidate the significant achievements of the East

---

<sup>19</sup> Chamberlin, *The Cold War's Killing Fields*, 169.

<sup>20</sup> Fredrik Logevall, *Embers of War: The Fall of an Empire and the Making of America's Vietnam* (New York: Random House, 2012), 546.

Asian offensive in China, Korea, and Southeast Asia.”<sup>21</sup> These motives, combined with the Soviet’s “little interest in Indochina” and Mao’s fear of the long entanglement that would come with the Viet Minh’s attempts at consolidating all of Vietnam under communism, motivated the two world powers to settle for peace.<sup>22</sup> The terms of the arrangement – the Geneva Accords – established a “provisional military demarcation line” with the “forces of the People’s Army of Viet-Nam to the north of the line and the forces of the French Union to the South.”<sup>23</sup> This afforded a demilitarized zone of five kilometers from each side of the temporary demarcation line “to act as a buffer zone and avoid any incidents which might result in the resumption of hostilities.”<sup>24</sup> The Accords established a ceasefire and called for a “free expression of the national will” through a general election in July 1956, overseen by the International Supervisory Commission of Canada, India, and Poland, that would reunify the two sides of the demarcation line under the elected leadership.<sup>25</sup> Herring argues that for the United States, the Geneva Accords essentially were a way to toss aside the failed French from Indochina, deal with the Vietnamese directly moving forward, and prevent the spread of communism in Southeast Asia. Herring writes, “The Americans attributed France’s failure primarily to its misguided attempts to perpetuate colonialism in Indochina, and they were confident that without the problems posed by France, the United States could find a viable non-Communist alternative to the Viet Minh.”<sup>26</sup>

In a report on the United States-Vietnam relations, the Department of Defense gives a detailed, inside look at its policy perspectives after 1954. The paper not only highlights the

---

<sup>21</sup> Chamberlin, *The Cold War’s Killing Fields*, 170-171.

<sup>22</sup> Chamberlin, *The Cold War’s Killing Fields*, 171.

<sup>23</sup> “Agreement on the Cessation of Hostilities in Viet-Nam,” *Geneva Agreements*, July 20, 1954, 1, [https://peacemaker.un.org/sites/peacemaker.un.org/files/KH-LA-VN\\_540720\\_GenevaAgreements.pdf](https://peacemaker.un.org/sites/peacemaker.un.org/files/KH-LA-VN_540720_GenevaAgreements.pdf).

<sup>24</sup> “Agreement on the Cessation of Hostilities in Viet-Nam,” *Geneva Agreements*, 1.

<sup>25</sup> “Agreement on the Cessation of Hostilities in Viet-Nam,” *Geneva Agreements*, 41.

<sup>26</sup> Herring, *America’s Longest War*, 51.

United States' paranoid outlook on the presence of communist North Vietnam, but it shows its willingness to abandon democratic values for the sake of securing a non-communist national victory in Vietnam. The report states the DoD opinion that in the July 1956 elections laid out by the Geneva Accords, "the Viet Minh will almost certainly win."<sup>27</sup> In the post-Geneva "courses of action" section, the DoD writes that part of their political and covert action in Southeast Asia was to "exploit available means to make more difficult the control by the Viet Minh of North Vietnam."<sup>28</sup> It also advocates the policy of making "every possible effort... to maintain a friendly non-Communist South Vietnam, and to prevent a Communist victory through all-Vietnam elections."<sup>29</sup> By knowingly working against the powers they saw to be more democratically popular, the United States was placing a precedence on the preservation of capitalism and western Cold War influence over the integrity of democratic elections.

Arguably, the United States' most fatal flaw in its aims of securing a non-communist Vietnam amidst the Cold War era was its decision to support the unpopular Ngo Dinh Diem in South Vietnam. Diem's years as President of the South were marked by nepotistic appointments, religious discrimination against South Vietnam's non-Catholic citizens, the use of violence to crush political dissent, and dictatorial actions and tendencies.<sup>30</sup> According to Seth Jacobs, America's attempt was to "turn Ngo Dinh Diem into a popular leader capable of posing a noncommunist alternative to North Vietnam's Ho Chi Minh."<sup>31</sup> A notoriously corrupt leader, Diem assumed the role of Prime Minister in 1954 before becoming President in October 1955

---

<sup>27</sup> *United States-Vietnam Relations, 1945-1967, 1970*, prepared by the Department of Defense for the use of the House Committee on Armed Services, Book 10 (Washington, DC: U.S. Government Printing Office, 1971), 652.

<sup>28</sup> *United States-Vietnam Relations*, Department of Defense, 737.

<sup>29</sup> *United States-Vietnam Relations*, Department of Defense, 737.

<sup>30</sup> Seth Jacobs, *America's Miracle Man in Vietnam: Ngo Dinh Diem, Religion, Race and U.S. Intervention in Southeast Asia* (Durham: Duke University Press, 2004), 4.

<sup>31</sup> Seth Jacobs, *America's Miracle Man in Vietnam*, 2.



after South Vietnam became officially independent from France. He refused to hold the July 1956 reunification elections prescribed in the Geneva Accords, citing the fact that the South Vietnamese government never signed the accords.<sup>32</sup> The United States supported Diem's decision, arguing that North Vietnam had not complied with the Accords either; according to Herring, Ho "left between 10,000 and 15,000 operatives in the south to promote [Vietnamese reunification] by legal and extralegal means."<sup>33</sup> The ceasefire clauses of the Geneva Accords were also strained in 1955, as fighting between North and South Vietnam increased. Herring notes the American support for Diem starting in the Eisenhower administration and moving into the Kennedy administration, "From 1955 to 1961, the United States poured more than \$1 billion in economic and military assistance into South Vietnam, and by 1961, Diem's government ranked fifth among all recipients of American foreign aid," with over 1,500 Americans in South Vietnam by the late 1950s.<sup>34</sup> When Kennedy took office in 1961, he assumed an already-deep American entrenchment in the battle between North and South Vietnam.

### *The American Turn to Chemical Herbicides*

After a series of his advisers visited Saigon in 1961, Kennedy found himself facing the reality that the communist Viet Cong army of Ho Chi Minh's North Vietnam was defeating the Diem regime, and that its key strategy was guerilla warfare. While lacking overwhelming military force, the Viet Cong was successful in challenging Diem and the US as it employed small-scale, hit-and-run, and nighttime attacks, relying on a vast network of underground tunnels

---

<sup>32</sup> "Elections Balked," The New York Times, July 5, 1971, <https://timesmachine.nytimes.com/timesmachine/1971/07/05/79402538.html?pageNumber=14>.

<sup>33</sup> Herring, *America's Longest War*, 56, 66.

<sup>34</sup> Herring, *America's Longest War*, 69..

that meshed with the fertile natural landscape of Southeast Asia. The success of the North Vietnamese fighters forced the Kennedy administration to employ a new tactic: eliminate the trees and destroy their crop production with chemical herbicides. This plan would materialize thanks to Deputy National Security Adviser Walt Rostow and Taylor, who traveled to Saigon in late 1961 with James Brown of the United States Army Chemical Warfare Center. According to Martini, “Brown’s involvement with what would come to be known as the Taylor-Rostow report, which was instrumental in Kennedy’s decision to increase American financial and military commitments to Diem, helped ensure that Vietnam would become the test case for herbicidal warfare.”<sup>35</sup> The next year, starting on January 12, 1962, the first American planes carrying chemical herbicides flew over Vietnam.<sup>36</sup>

This chemical defoliation campaign was the centerpiece of Operation Ranch Hand, which lasted from January 1962 to May 1970. During this time, American Air Force planes sprayed nearly nineteen million gallons of rainbow herbicides over the Vietnam region.<sup>37</sup> The herbicides were developed and manufactured by a combination of 13 different chemical companies,<sup>38</sup> including Dow Chemical, Monsanto Chemical Company, Hercules Inc., Diamond Shamrock Corporation (previously Diamond Alkali), Hooker Chemical Company, Riverdale Chemical Company, Ansul Chemical Company, Uniroyal Inc., Occidental Chemical Company, N.A.

---

<sup>35</sup> Martini, *Agent Orange*, 21.

<sup>36</sup> Institute of Medicine (US) Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides, “The U.S. Military and the Herbicide Program in Vietnam.” In *Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam* (Washington DC: National Academies Press US, 1994), chap. 3, 84.

<sup>37</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 74.

<sup>38</sup> Kenneth R. Olson and David R. Speidel, “Agent Orange Chemical Plant Locations in the United States and Canada: Environmental and Human Health Impacts,” *Open Journal of Soil Science* 12 (2022): 366, <https://doi.org/10.4236/ojss.2022.128016>.

Phillips Chemical Company, Syntex, Thompson Chemical, and Thompson-Hayward Chemical Company.<sup>39</sup>

The major rainbow herbicides, which included Agents Purple, Pink, Green, Blue, Orange and White, were utilized in different and overlapping phases of the operation. The US military employed Agent Purple in 1962 as a general defoliant, spraying approximately 145,000 gallons before pulling the herbicide from Vietnam in 1964 because of its volatility.<sup>40</sup> Agent Orange replaced Purple in 1965; each had the formulation 2,4-D; 2,4,5-T.<sup>41</sup> Agents Pink and Green were also only used from 1962 to 1964, sprayed for defoliation and crop destruction purposes at 122,792 gallons and 8,208 gallons each, respectively.<sup>42</sup> The US military sprayed 1,124,307 gallons of Agent Blue, a liquid form of cacodylic acid often used “in situations requiring rapid defoliation” from 1962-1971.<sup>43</sup> Agent White was used from 1965-1971, with 5,246,502 gallons sprayed in Vietnam.<sup>44</sup> As the US government recognized the persistence of Agent White in soil, “it was not recommended for use on crops, but was most often used in areas where longer persistence rather than immediate defoliation was desired, such as inland forests. White was effective principally on broadleaf herbaceous and woody plants.”<sup>45</sup>

---

<sup>39</sup> Olson and Speidel, “Agent Orange Chemical Plant Locations,” 366.

<sup>40</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>41</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>42</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>43</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>44</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>45</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 90.



Figure 1. “USAF – PROJECT RANCH HAND... Dr. James W. Brown, second from left, and Air Force officers check the effects of arial defoliation. January 1962.”<sup>46</sup>

Out of the six major rainbow herbicides used in Operation Ranch Hand, the most widely used general defoliant was Agent Orange. From 1965 to 1970, its two variants – Agent Orange I and II – made up 11,261,429 of these gallons sprayed across Southeast Asia.<sup>47</sup> American-based chemical companies Dow and Monsanto were the main producers of the Agent.<sup>48</sup> Agent Orange

<sup>46</sup> USAF – PROJECT RANCH HAND... Dr. James W. Brown, second from left, and Air Force officers check the effects of arial defoliation, January 1962; Vietnam Crews Defoliation VN-068, Box 1652, Folder 342. B; Prints: U.S. Air Force Activities, Facilities and Personnel, Domestic and Foreign 1954 – 1980; Records of Air Force Commands, Activities, and Organizations, Record Group 342-B; National Archives, College Park, MD.

<sup>47</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 89.

<sup>48</sup> Martini, *Agent Orange*, 26.

contained the most toxic form of dioxin, 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).<sup>49</sup> According to a study “Serum dioxin and DNA methylation in the sperm of operation ranch hand veterans exposed to Agent Orange,” Dioxins, especially TCDD, “are extremely lipophilic and thus persistent in both the individual and the environment. The half-life of TCDD in the human body has been estimated to range from 7 to 11 years.”<sup>50</sup> The United States Air Force most heavily distributed the TCDD-contaminated herbicide Agent Orange in the third military region of Vietnam, located in the southern half of South Vietnam, surrounding Saigon.<sup>51</sup> Operation Ranch Hand planes distributed 5.31 million gallons of Agent Orange in military region three; 2.52 million gallons in region two, an area east of Cambodia which included the major city Pleiku; 2.25 million gallons in region one, the northernmost of the four regions, which was situated east of Laos and included the major cities Danang and Hue; and 1.23 million gallons in region four, the southernmost area of Vietnam.<sup>52</sup> Each of these military regions share a direct coastline with the South China Sea, while region four also shares a direct coastline with the Gulf of Thailand.

---

<sup>49</sup> Karl T. Kelsey, Matthew Rytel, Edward Dere, Rondi Butler, Melissa Eliot, Susan M. Huse, E Andres Houseman, Devin C. Koestler, and Kim Boekelheide, “Serum Dioxin and DNA Methylation in the Sperm of Operation Ranch Hand Veterans Exposed to Agent Orange,” *Environmental Health*, 18, no. 1 (2019): 91–11, 1.

<sup>50</sup> Kelsey, “Serum Dioxin and DNA Methylation in the Sperm of Operation Ranch Hand Veterans Exposed to Agent Orange,” 1-2.

<sup>51</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 104.

<sup>52</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 104.



Figure 2. “Three Air Force C-123’s spray defoliation chemicals over the A Shau Valley of South Vietnam. In the background cluster bomb units dropped by escorting F-4C’s explode in the jungle. 9 May 1967”<sup>53</sup>

Throughout the herbicidal warfare campaign, United States Air Force C-123 Ranch Hand plane operators sprayed Agent Orange over Vietnamese crops and forests with no definitive knowledge of the health effects to humans. The records of the United States Forces in Southeast

---

<sup>53</sup> Three Air Force C-123’s spray defoliation chemicals over the A Shau Valley of South Vietnam. In the background cluster bomb units dropped by escorting F-4C’s explode in the jungle. 9 May 1967; Vietnam Defoliation VN-034A, Box 1771, Folder 342. B; Prints: U.S. Air Force Activities, Facilities and Personnel, Domestic and Foreign 1954 – 1980; Records of Air Force Commands, Activities, and Organizations, Record Group 342-B; National Archives, College Park, MD.

Asia from 1950-1975, records of the Office of the Assistant Chief of Staff for Operations of the headquarters of the U.S. Military Assistance Command Vietnam (MACV) held in the National Archives in College Park, Maryland, which contain the Chemical Operations Division's herbicide operations plans, reveal that administrative operation officials, early on, did not recognize the gravity of the longstanding health effects of the herbicide operations. In a June 3, 1964 American Consulate letter to Robert T. Burke, Esquire, Second Secretary in the American Embassy in Saigon, American Consul John J. Helble discusses the defoliation and crop destruction missions of C-123 planes. Helble closes his letter in a flippant tone, writing, "I'll let you know later the final score on the present attack. Until then, happy spraying."<sup>54</sup> This flippant tone corroborates attorney Peter Sills's assertion that "the US government couldn't conceal the existence of Trail Dust, so it tried to make the program appear innocuous,"<sup>55</sup> referring to Operation Trail Dust, the overall herbicidal warfare program of which the Air Force's branch was Operation Ranch Hand. Furthermore, the MACV herbicide operation plans include a 1963 translated letter from the Republic of Vietnam, entitled "The Harmlessness of Defoliant Chemicals." The writer of the Vietnamese letter writes, "the purpose of the defoliant is to eliminate vegetation damaging to crops: such as weeds, climbing plants, etc, and renders no danger at all to human beings and animals."<sup>56</sup> For many years, both the United States and South

---

<sup>54</sup> John J. Helble, American Consul, to Robert T. Burke, Second Secretary, Hue, Vietnam, June 3, 1964; Entry A 170 MACV J3, Box 1, Folder 3, Crop Target #2-8, Quang Tri, Thua Thien, Quang Tin, I-1964; Military Assistance Command Vietnam (MACV), Assistant Chief of Staff for Operations (J3), Chemical Operations Division (MACJ3-09), Herbicide Operations Plans, 2-2 thru 2-20; Records of the United States Forces in Southeast Asia; Record Group 472; National Archives, College Park, MD.

<sup>55</sup> Peter Sills, *Toxic War: The Story of Agent Orange* (Nashville: Vanderbilt University Press, 2014), 33.

<sup>56</sup> The Harmlessness of Defoliant Chemicals; Entry A 170 MACV J3, Box 1, Folder 4, Crop Target #2-4, Phuoc Tuy – Completed, III-1965; Military Assistance Command Vietnam (MACV), Assistant Chief of Staff for Operations (J3), Chemical Operations Division (MACJ3-

Vietnamese governments publicly considered the herbicidal warfare program as non-dangerous to humans and animals.

However, the public's opinion surrounding herbicidal safety began to transform in the late 1960s, as the environmental movement crested in the United States, and as scientists increasingly pointed out the health risks of toxins in herbicides. In 1965, representatives, managers, and scientists from the major chemical companies involved in the production of Agent Orange – Dow, Diamond Alkali, Hooker Chemical, Hercules, and Monsanto – met to discuss the issue of the toxic health effects of 2,4,5-T.<sup>57</sup> Yet for years after the 1965 meeting, companies like Dow did nothing to alert the US government of the health hazards the companies discussed.<sup>58</sup> Julius Johnson, the then director of research at Dow, testified before the Senate in 1970, admitting that the company knew six years earlier in 1964 that dioxin was present in 2,4,5-T.<sup>59</sup>

By the late 1960s, however, the harmful effects of Agent Orange and other defoliants had become impossible to ignore. According to the Institute of Medicine, “the United States in October 1969 began limiting its use of herbicides in Vietnam; spraying ceased entirely in 1971.”<sup>60</sup> The dangers of 2,4,5-T, in particular, became a focal point in this move towards elimination. Martini details the Pentagon press conference that followed the White House's suspension of the domestic sale and transportation of products containing 2,4,5-T:

---

09), Herbicide Operations Plans, 2-2 thru 2-20; Records of the United States Forces in Southeast Asia; Record Group 472; National Archives, College Park, MD.

<sup>57</sup> Martini, *Agent Orange*, 147.

<sup>58</sup> Martini, *Agent Orange*, 148.

<sup>59</sup> Martini, *Agent Orange*, 148.

<sup>60</sup> Institute of Medicine, Board on the Health of Select Populations, and Committee on Blue Water Navy Vietnam Veterans and Agent Orange Exposure, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure* (Washington, D.C.: National Academies Press, 2011), 36.



Although known by few Americans at the time, 2,4,5-T was a common ingredient in many commercial grade and household weedkillers. It was also one-half of the chemical mixture constituting Agent Orange. In a separate press conference minutes later the Pentagon announced that it, too, despite the objections of military commanders, was suspending most uses of herbicides containing 2,4,5-T. Amid growing health concerns about the presence of dioxin in herbicides used in the United States as well as in South Vietnam, President Nixon overruled his military commanders, ordering them to phase out all herbicide operations in Vietnam by the end of 1970.<sup>61</sup>

Throughout the 1970s, many Vietnam veterans began to question whether the terminal cancers and other adverse health effects they had been diagnosed with since returning home from the war were related to their exposure to TCDD through Agent Orange.<sup>62</sup> In 1979, Vietnam veterans filed their first lawsuit against the chemical company herbicide manufacturers, according to the Institute of Medicine, “the case was settled out of court in 1984, and a settlement fund was established.”<sup>63</sup> This initial realization after the banning of 2,4,5-T ultimately led to a decades-long wave of litigation battles between Agent Orange exposed veterans, manufacturers of these herbicides, and the United States Department of Veterans Affairs.

### *Victims of Agent Orange Exposure*

Agent Orange affected every branch of American Vietnam veterans – Army, Marines, Air Force, Navy, and Coast Guard – and, if not directly, indirectly, nearly every Vietnamese citizen. The potent defoliants have affected all veterans who participated in Operation Ranch Hand. Army and Marines veterans stationed in direct combat with the Viet Cong in the forests

---

<sup>61</sup> Martini, *Agent Orange*, 97.

<sup>62</sup> Institute of Medicine (US) Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides, “History of the Controversy over the Use of Herbicides.” In *Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam* (Washington DC: National Academies Press US, 1994), chap. 2, 33.

<sup>63</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 38.

and dense brush of Vietnam were vulnerable to exposure as Agent Orange planes flew overhead or as they walked through Agent Orange residue. Air Force veterans who operated or came in contact with C-123 airplanes carrying or spraying Agent Orange were vulnerable to exposure. Navy and Coast Guard veterans who traveled to bases and through the inland waterways and offshore waters of Vietnam and Cambodia were vulnerable to exposure through arial contact, transport and residue, and drinking water.<sup>64</sup> Agent Orange did not discriminate between branches, positions, or rank – soldiers, boilermen, nurses, pilots, engineers, and officers were all vulnerable to exposure.

This is all to say nothing of the Vietnamese soldiers and civilians who lived in and still live in, farmed and still farm, drank and still drink, respectively, the villages and forests, lands, and water sprayed with Agent Orange. This thesis project focuses on highlighting the American Vietnam veterans who have struggled getting the VA to hear their voices, specifically the offshore or Blue Water Navy veterans who were not granted presumptive Agent Orange exposure until 2020. However, the conclusion of this project ties in the tragic story of the Vietnamese victims of Agent Orange, as I argue the US government needs to learn from its shortcomings with its own Vietnam veterans and more proactively provide care for others affected by Agent Orange and the toxic chemicals of American warfare – including the Vietnamese.

The US Department of Veterans Affairs currently recognizes nineteen diseases as the presumptive diseases associated with Agent Orange exposure. As of January 24, 2024, these presumptive disease are AL Amyloidosis, Bladder Cancer, Chronic B-cell Leukemias, Chloracne (or similar acneform disease), Diabetes Mellitus Type 2, Hypertension, Hodgkin's Disease,

---

<sup>64</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 133.

Hypothyroidism, Ischemic Heart Disease, Monoclonal gammopathy of undetermined significance (MGUS), Multiple Myeloma, Non-Hodgkin's Lymphoma, Parkinsonism, Parkinson's Disease, Early-Onset Peripheral Neuropathy, Porphyria Cutanea Tarda, Prostate Cancer, Respiratory Cancers (includes lung cancer), and Soft Tissue Sarcomas (other than osteosarcoma, chondrosarcoma, Kaposi's sarcoma, or mesothelioma).<sup>65</sup> Hypertension and MGUS were added to the list after President Biden signed Public Law No: 117-168, or the PACT Act, in August 2022.<sup>66,67</sup> In addition to these Agent Orange specific diseases, the VA presumes Amyotrophic Lateral Sclerosis, or ALS, for all US veterans who have served more than 90 continuous active days in the military.<sup>68</sup>

The VA recognizes specific locations in which if a US veteran served, he or she is automatically presumed to be exposed to Agent Orange. Currently, if within the time period of January 9, 1962 to May 7, 1975, a US veteran served either (a) on land in the Republic of Vietnam, (b) on a C-123 airplane or came in contact with one, (c) aboard a ship that operated in the inland or Brown Waters of Vietnam, or (d) aboard a ship that operated up to twelve miles off the coast in the Blue Waters of Vietnam and Cambodia, he or she is presumed to have been exposed to Agent Orange. The VA also guarantees presumption of exposure to several American veterans who were not serving directly in Vietnam, but were still exposed to Agent Orange through their service. This group includes veterans who served in the Korean Demilitarized Zone

---

<sup>65</sup> “Veterans’ Diseases Associated with Agent Orange,” Public Health, U.S. Department of Veterans Affairs, last updated January 24, 2024, <https://www.publichealth.va.gov/exposures/agentorange/conditions/>.

<sup>66</sup> “The PACT Act and your VA benefits,” Resources, U.S. Department of Veterans Affairs, last updated March 5, 2024, <https://www.va.gov/resources/the-pact-act-and-your-va-benefits/>.

<sup>67</sup> The PACT Act, which stands for “Honoring our Promise to Address Comprehensive Toxics Act,” expands the presumptive service connections, health care, compensation, research, and conversations for and surrounding veterans who were exposed to Agent Orange in Vietnam, Burn Pit substances in Iraq and Afghanistan, and other toxic substances during service.

<sup>68</sup> U.S. Department of Veterans Affairs, “Veterans’ Diseases Associated with Agent Orange.”

anytime from September 1, 1967, to August 31, 1971; came in frequent contact with Agent-Orange-carrying C-123 planes; worked with Agent Orange for testing, transport or other purposes; or who served in the one of three American reserve air bases during certain times. After the PACT Act this group was expanded to include veterans who served in Laos, military bases in Thailand, certain areas of Cambodia, Guam or the American Samoa, and Johnston Atoll during the VA specified time frames.<sup>69</sup>

In addition to the groups recently added by the PACT Act in 2022, the VA only recently presumed Agent Orange exposure to Blue Water Navy veterans in 2020, after Congress passed the Blue Water Navy Vietnam Veterans Act of 2019. Between fifty-eight to forty-five years after their initial exposure, Blue Water Navy veterans finally became eligible to receive presumptive care and compensation from the VA. The following chapter, “Benefit of the Doubt,” is a policy history of the Blue Water Navy battle for presumptive Agent Orange exposure, sharing the long and strenuous legislative and legal journey of Blue Water Navy veterans in their quest to obtain presumptive care and compensation for the conditions they contracted in service. This project seeks to understand why the Blue Water Navy was placed on the periphery of importance to the VA and how the country can prevent repeating this failure of compensation and care for other groups in the future.

---

<sup>69</sup> “Agent Orange exposure and VA disability compensation,” Disability Benefits, U.S. Department of Veterans Affairs, last updated August 10, 2023, <https://www.va.gov/disability/eligibility/hazardous-materials-exposure/agent-orange/#full-eligibility-requirements>.

## **Benefit of the Doubt: A Legislative History of the Blue Water Navy Vietnam Veterans’ Battle for Presumptive Service Connection to Agent Orange Exposure**

Because there was so many people that may have been exposed, the price was going to go right off the maps. Because they weren't going to just make compensation an issue, they were going to give people health care based on their exposure. That got expensive. I ended up with cancer. That's a quarter million dollar bill. That, fortunately, taxpayers picked up. I didn't have the extra quarter million dollars to spend on that. Not by a long shot.<sup>70</sup>

– Bob McNulty, Boiler Technician on the USS America (CVA 66), 1970-1973

For over 50 years, the United States federal government has discovered the consequences of its decision to use herbicidal warfare in the Vietnam War. As citizens, scientists, and government officials came to terms with the fact that herbicides such as Agent Orange had drastically negative human health effects, Congress began to grapple how to handle the care and cost of compensation for these health effects. Congress and the Department of Veterans’ Affairs explored two main avenues of assisting Agent Orange affected veterans: granting them health care eligibility and providing them disability compensation.<sup>71</sup> Because the Department of Veterans’ Affairs has its own healthcare system including preventative care, inpatient hospital care, and urgent and emergency care services, it has the ability to provide active health care to affected veterans who file for eligibility.<sup>72</sup> Disability compensation, on the other hand, is a financial, more retroactive assistance, for which veterans will file if they believe a personal disability, injury, or disease is directly related to their time in service of the US military. As the

---

<sup>70</sup> Robert McNulty (Vietnam veteran of the USS America), interview by Molly Parks (author), August 14, 2023, Egg Harbor Township, NJ.

<sup>71</sup> Sidath Viranga Panangala and Daniel T. Shedd, “Veterans Exposed to Agent Orange: Legislative History, Litigation, and Current Issues,” *Congressional Research Service*, November 18, 2014, 3.

<sup>72</sup> “About VA Health Benefits,” Health Care, U.S. Department of Veterans’ Affairs, last modified November 15, 2023, <https://www.va.gov/health-care/about-va-health-benefits/>.

US government determined its ability and willingness to grant both health care eligibility and disability compensation to Agent Orange affected veterans, it needed to decide *to whom* and *for what* to grant said eligibility and compensation. Vietnam veterans afflicted by these Agent Orange diseases desperately needed the Department of Veterans Affairs and the US Congress to set guidelines on *which veterans* were given a presumptive service connection to dioxin exposure and for *which diseases* they were then covered for. To decide the answers to these questions, congressional legislators have held numerous hearings, conducted research, and directed the VA to complete independent studies on Agent Orange.

This chapter focuses on the journey of the US Congress to answer the question of *which veterans* to provide a presumptive service connection to, or, in other words, which Vietnam veterans were deemed eligible for presumptive health care and disability compensation. In tracing this journey, this chapter will also seek to answer how and why Blue Water Navy veterans were excluded from a presumptive service connection until 2020. This chapter largely examines the congressional acts that focus on directing the VA to complete independent studies on Agent Orange, providing health care coverage to Agent Orange affected veterans, and providing financial compensation for those veterans with disabilities or diseases that stem from Agent Orange exposure. Namely, this includes the following acts: the Veterans Health Programs Extension and Improvement Act of 1979; the Veterans' Health Care, Training and Small Business Loan Act of 1981; the Veterans' Dioxin and Radiation Exposure Compensation Standards Act of 1984; the Agent Orange Act of 1991; and the Blue Water Navy Vietnam Veterans Act of 2019. As no congressional actions occur in a vacuum, this chapter will also examine several judicial decisions and court cases that impacted the granting of a presumptive service connection to the Blue Water Navy. These include a 1997 VA General Counsel decision

holding that the Blue Water Navy did not qualify for presumptive exposure, the *Haas vs. Nicholson* and *Haas vs. Peake* decisions of the 2000s, and the *Procopio vs. Wilkie* decision of 2019. In analyzing the congressional and judicial journeys of the battle for Agent Orange health care and compensation, this chapter will examine why the Blue Water Navy was excluded from a presumptive service connection for so many years. This overall thesis will look at the history of the Blue Water Navy to seek to answer how the US government can more proactively provide care and compensation in the future.

On May 5, 1979, bill sponsor David E. Satterfield introduced H.R. 3892, or the Veterans Health Programs Extension and Improvement Act of 1979, to the house floor as one of the first bills addressing the health effects of Agent Orange exposure.<sup>73</sup> Approved on December 20, 1979 and adopted as Public Law 96-151, the legislation required the Veterans' Administration to conduct a study on Vietnam veterans' exposure to Agent Orange. The act calls for the Administrator of the VA to "design a protocol for and conduct an epidemiological study of persons who... were exposed to any of the class of chemicals known as 'the dioxins' produced during the manufacture of the various phenoxy herbicides" while serving for the US Armed Forces during the Vietnam War<sup>74</sup>. The act also goes a step further and calls for the Administrator to "conduct a comprehensive review and scientific analysis of the literature covering other studies relating to whether there may be long-term adverse health effects in humans from exposure to such dioxins or other dioxins."<sup>75</sup> This latter aspect shows that as early as 1979,

---

<sup>73</sup> "H.R.3892 - 96th Congress (1979-1980): Veterans Health Programs Extension and Improvement Act of 1979," Bill, Congress.gov, December 20, 1979, <https://www.congress.gov/bill/96th-congress/house-bill/3892>.

<sup>74</sup>Veterans Health Programs Extension and Improvement Act of 1979, Pub. L. No. 96-151, 93 Stat. 1092.

<sup>75</sup>Veterans Health Programs Extension and Improvement Act of 1979, Pub. L. No. 96-151, 93 Stat. 1092.

Congress was aware of at least the potential of adverse health effects of Agent Orange exposure. This also demonstrates that, from the beginning, it was the House and Senate that were holding the VA accountable with the Agent Orange issue. This initial act calling for the epidemiological study set the groundwork for further legislation calling for more direct action in terms of care and compensation.

Senator Alan Cranston, a Democrat from California who served as the Chair of the Senate Veterans' Affairs Committee from 1977 to 1981 and again from 1987-1993, played a major role in the initial congressional advocacy for Agent Orange health care and compensation. According to a Senate archive document titled "Synopsis of Congressional Initiatives Under Senator Alan Cranston's Leadership to Help Vietnam-Era Veterans, 1969-1981" in the Center for Legislative Archives of the D.C. National Archives, Cranston played a major role in securing this epidemiological study as part of Public Law 96-151. Senator Cranston originally called for a provision "to mandate the Secretary of Health, Education, and Welfare to conduct an epidemiological study of various human population, including Vietnam veterans, to determine if there may be long-term adverse effects in humans of exposure to dioxin."<sup>76</sup> The final version of the law included Cranston's suggested study of dioxin and how it impacted exposed Vietnam veterans, only the study was to be directed instead by the Administrator of Veterans' Affairs. Throughout his years in the Senate Veterans' Affairs Committee, Cranston stood as a staunch advocate for Vietnam veterans on the issue of Agent Orange. This especially shines through in the archived letters of the committee, such as his January 11, 1980 letter to Administrator of the

---

<sup>76</sup> "Synopsis of Congressional Initiatives Under Senator Alan Cranston's Leadership to Help Vietnam-Era Veterans, 1969-1981"; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.



VA Max Cleland. In this letter, Cranston takes an aggressive stance, noting his anger at the slow pace of progress in the executive branch when it came to Agent Orange issues. Cranston writes:

This viewpoint has been reinforced in many ways by the inadequacy of the Executive branch action to date, by the Air Force's inability to get its 'Operation Ranch Hand' study underway and questions as to whether it is appropriate for the Air Force to conduct that study, and, most recently, by the November 6, 1979, General Accounting Office report that indicated that the Department of Defense had provided inaccurate information on the close proximity of combat troops in Vietnam to the sites of Agent Orange spraying missions. Consequently, both H.R. 3892 and S. 2096 required the Director of OTA to approve the protocol for the VA and HEW studies before they could be initiated and to monitor the conduct of the studies to assure compliance with the approved protocols.<sup>77</sup>

This letter not only displays Cranston's uncompromising rhetoric, it also shows that congressional leaders have largely been at the root of inner-governmental advocacy for Vietnam veterans when compared to the VA and executive branch leadership. Over these 50 years, much of the action that has spurred health care and compensation progress for Agent Orange exposed veterans came from congressional representatives, many of whom were directly inspired by Vietnam veterans, through congressional testimonies or direct interactions, or were veterans themselves.

Congressional hearings on the health effects of Agent Orange have given veterans organizations, scientists, veterans' lawyers and Vietnam veterans themselves a platform to voice their concerns and frustrations over the health effects of Agent Orange. Furthermore, these hearings have often put the Veterans' Administration directly under the spotlight, holding it accountable for its actions on Agent Orange compensation and health care coverage. In a March

---

<sup>77</sup> Alan Cranston letter to Max Cleland, January 11, 1980; Correspondence Files Relating to Radiation and Agent Orange of the Committee on Veterans' Affairs from the 96th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC

20, 1980 letter to Chief Medical Director of the VA Dr. Donald L. Custis, Cranston demonstrates how the testimonies in these congressional hearings had the power to influence lawmakers on the Agent Orange issue. Cranston uses the testimony of attorney Victor Yannacone, who represented several veterans in their lawsuits against manufacturers of Agent Orange, to persuade the VA to take further action. Cranston writes:

I believe that, in light of the many veterans who may be suffering from serious skin disorders, including chloracne, and of Mr. Yannacone's contention that many may not have been properly diagnosed and treated properly, the VA must take immediate action to develop a mechanism to assure that Vietnam veterans who come to the VA with complaints of any type of skin disorder are properly diagnosed and treated.<sup>78</sup>

These congressional hearings began as early as 1970 in the Senate Committee on Commerce Subcommittee on Energy, Natural Resources, and the Environment and have taken place at least 10 congressional committees since then.<sup>79</sup> The following chart from the Institute of Medicine Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides's 1994 report titled "Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam" shows information on several congressional hearings on Agent Orange and dioxin from 1970 to publication in 1994:

---

<sup>78</sup> Alan Cranston letter to Donald L. Custis, March 20, 1980; Correspondence Files Relating to Radiation and Agent Orange of the Committee on Veterans' Affairs from the 96th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC

<sup>79</sup> Institute of Medicine, "History of the Controversy Over the Use of Herbicides," 47.

TABLE 2-1 Selected Congressional Hearings and Reports on Agent Orange and Dioxin

Committee/Subcommittee	Hearing Description	Date of Hearing
<b>U.S. Senate</b>		
Committee on Commerce Subcommittee on Energy, Natural Resources, and the Environment	Effects of 2,4,5-T on man and the environment	April 7 and 15, 1970
Committee on Veterans' Affairs	Appendix on Agent Orange activities; Readjustment of Vietnam era veterans with emphasis on Agent Orange; Status of Agent Orange-related activities; Issues related to Agent Orange (adverse health effects from potential exposure to herbicides used in Vietnam); Scientific knowledge and studies regarding the long-term health effects of exposure to Agent Orange; Scientific knowledge relating to Agent Orange exposure and the concerns of veterans who may have been exposed in Vietnam; Legislative hearing on S. 1153 and Agent Orange issues	April 10, 1979; January 25-26, 1980, and; February 21, 1980; September 10, 1980; November 18, 1981; June 15 and 22, 1983; May 12, 1988; June 22, 1989
<b>U.S. House of Representatives</b>		
Committee on Interstate and Foreign Commerce	Involuntary exposure to Agent Orange and other toxic spraying	June 26 and 27, 1979
Subcommittee on Oversight and Investigations	Vietnam veterans' exposure to Agent Orange	September 25, 1980
Committee on Veterans' Affairs Subcommittee on Medical Facilities and Benefits	Herbicide use in Vietnam with the focus on Agent Orange; Testimony on Agent Orange; Scientific Community Report on Agent Orange	October 11, 1978; February 25, 1980, and; July 22, 1980; September 16, 1980
Subcommittee on Oversight and Investigations	Status of Agent Orange studies; Status of federal Agent Orange activities; Status of federally conducted Agent Orange studies	May 6, 1981; September 15, 1982; May 3, 1983
Committee on Veterans' Affairs Subcommittee on Compensation, Pension, and Insurance	H.R. 1961, Vietnam Veterans Agent Orange Relief Act; Veterans Agent Orange Exposure and Vietnam Service Benefits Act of 1989	April 26-27, 1983, and; July 12, 1983; May 2, 1990
Committee on Veterans' Affairs Subcommittee on Hospitals and Health Care	Report on a mission to Vietnam; Centers for Disease Control's birth defects study; Agent Orange Studies; Scientific research on the health of Vietnam veterans; Review of the status of Agent Orange studies	January 31, 1984; October 3, 1984; July 31, 1986; June 8, 1988; July 10, 1989
Committee on Veterans' Affairs	CDC's Selected Cancers Study and the scientific reviews of the study	April 4, 1990
Committee on Government Operations Human Resources and Intergovernmental Relations Subcommittee	Review of CDC's Agent Orange study; Links between Agent Orange, herbicides, and rare diseases; Report on the Agent Orange cover-up: a case of flawed science and political manipulation Health risks of dioxin	July 11, 1989; June 26, 1990; August 2, 1990; June 10, 1992

80

These hearings supplemented discussion on Agent Orange legislation and were often timed with deliberation on significant Agent Orange pending bills.

On May 7, 1981, the United States House of Representatives introduced the first bill to directly tackle the issue of Agent Orange exposure health care for Vietnam veterans. Ohio Democrat Ronald M. Mottl sponsored and introduced The Veterans' Health Care, Training and Small Business Loan Act of 1981, H.R. 3499 of the 97th Congress. As introduced in the House, the act authorized "the Administrator [of the Department of Veterans' Affairs] to furnish hospital

<sup>80</sup> Institute of Medicine, "History of the Controversy Over the Use of Herbicides," 48-49.

care or nursing home care to a veteran of the Vietnam-era determined to be in need of such care for the treatment of a condition that may be associated with exposure to Agent Orange.”<sup>81</sup>

President Ronald Reagan signed the bill into Public Law No. 97-72 on November 3, 1981. The signed law clarifies that those eligible for medical treatment for “disabilities that may be related to exposure to Agent Orange” must have “served on active duty in the Republic of Vietnam during the Vietnam era.”<sup>82</sup> Since the scope of the phrase “in the Republic of Vietnam” is not clearly defined, the act gives agency to the Administrator of Veterans’ Affairs to select who ends up receiving care. Public Law No. 97-72 explicitly places the power to determine coverage in the hands of the Administrator of the VA, as it deems the veteran “who the Administrator finds may have been exposed during such service to dioxin or was exposed during such service to a toxic substance found in a herbicide or defoliant used in connection with military purposes during such era,” can be “furnished hospital care or nursing home care under subsection (a)(5) of this section for any disability, notwithstanding that there is insufficient medical evidence to conclude that such disability may be associated with such exposure.”<sup>83</sup> Although the scope of veterans potentially eligible for care after Agent Orange exposure in this law includes more than solely “boots on the ground” soldiers, this bill gives the power to the Administrator of the VA to specifically select who is eligible– it is not automatically presumptive for all veterans.

After passing Public Law No. 97-72 in 1981, leaving much agency in the hands of the VA to act on care for Agent Orange exposed veterans, the US Congress worked to establish

---

<sup>81</sup>“H.R.3499 - 97th Congress (1981-1982): Veterans’ Health Care, Training, and Small Business Loan Act of 1981,” Legislation, Congress.gov, November 3, 1981.

<https://www.congress.gov/bill/97th-congress/house-bill/3499/summary/00>.

<sup>82</sup> Veterans’ Health Care, Training, and Small Business Loan Act of 1981, Pub. L. No. 97-72, 75 Stat. 1047 (1981).

<sup>83</sup> Veterans’ Health Care, Training, and Small Business Loan Act of 1981, Pub. L. No. 97-72, 75 Stat. 1048 (1981).

more direct regulations around settling claims for benefits for these exposed veterans. The Veterans' Dioxin and Radiation Exposure Compensation Standards Act of 1984, passed as Public Law No. 98-542, was passed to bring more clarity surrounding presumptive exposure to both the dioxin of Vietnam herbicides and to nuclear radiation. As the statute reads, Public Law No. 98-542 requires the Administrator of the VA "to prescribe regulations regarding the determination of service connection of certain disabilities of veterans who were exposed to dioxin in the Republic of Vietnam while performing active military, naval, or air service... to provide interim benefits for certain disabilities and deaths, and for other purposes."<sup>84</sup> The language of the law includes "active military, naval, or air service" veterans and does not specify between offshore (Blue Water) or inland waterway (Brown Water) navy.<sup>85</sup> Although the bill follows the precedent at this point that it is up to the Administrator of the VA to determine exposure status on an individual basis, the scope of veterans potentially eligible for compensation at this point encompasses *all* naval veterans, including those of the Blue Water Navy. The bill also calls for more scientific research on the human health effects of dioxin, while specifying several diseases that the Administrator should consider while determining service connection. The bill states that there is "some evidence that chloracne, porphyria cutanea tarda, and soft tissue sarcoma are associated with exposure to certain levels of dioxin as found in some herbicides."<sup>86</sup> S. 1651, introduced in the Senate on July 20, 1983 and sponsored by Senator Cranston, listed and detailed these diseases.<sup>87</sup> The language of S.1651 was added as an

---

<sup>84</sup> Veterans' Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98-542, 98 Stat. 2725 (1984).

<sup>85</sup> Veterans' Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98-542, 98 Stat. 2725 (1984).

<sup>86</sup> Veterans' Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98-542, 98 Stat. 2725 (1984).

<sup>87</sup> Congressional Record – Senate, S 10477, July 20, 1983; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on

amendment to the final version of the Veterans' Dioxin and Radiation Exposure Compensation Standards Act of 1984 and passed as Public Law No. 98-542.<sup>88</sup> When this senate bill was introduced, Senator George J. Mitchell (D-Maine) noted a pattern of the US government's inability to deliver its promises on veterans affairs issues. On the senate floor on July 20, 1983 Mitchell stated:

And while the plight of Vietnam-era veterans exposed to agent orange is well known, the experience of America's atomic veterans, in their 30-year fight for recognition of their just claims stands as a tragic example of the inability of Government to recognize and respond to its responsibilities. It is now long past the time for this county to respond to these veterans' health concerns.<sup>89</sup>

Mitchell's statement reflects the idea that even after the withdrawal of troops from both WWII and Vietnam, the US government lost a broader war by failing to, as he puts it, "recognize and respond to its responsibilities."<sup>90</sup> The US government either drafted or enlisted these citizens to protect its values at war, yet when it came time to proactively compensate and protect the many who cried for help from their diseases and disabilities caused by the actions of the US at war, the US government failed to act.

One of the most interesting clauses of the Veterans' Dioxin and Radiation Exposure Compensation Standards Act of 1984 is buried in the 13th assertion of section two, and indirectly

---

Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.

<sup>88</sup> "S. 1651 - 98th Congress (1983-1984): Veterans' Dioxin and Radiation Exposure Compensation Standards Act," Legislation, Congress.gov, May 22, 1984, <https://www.congress.gov/bill/98th-congress/senate-bill/1651/all-actions>.

<sup>89</sup> Congressional Record – Senate, S 10477, July 20, 1983; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.

<sup>90</sup> Congressional Record – Senate, S 10477, July 20, 1983; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.

concerns this very inability of the US government to recognize and respond to the damage it has caused. In Section 2 (13) of Public Law No. 98-542, Congress claims it has made the finding that:

It has always been the policy of the Veterans' Administration and is the policy of the United States, with respect to individual claims for service connection of diseases and disabilities, that when, after consideration of all evidence and material of record, there is an approximate balance of positive and negative evidence regarding the merits of an issue material to the determination of a claim, the benefit of the doubt in resolving each such issue shall be given to the claimant.<sup>91</sup>

This section references the VA's §3.102 on reasonable doubt, or what is more commonly referred to as the benefit of the doubt doctrine. The rule states, "When, after careful consideration of all procurable and assembled data, a reasonable doubt arises regarding service origin, the degree of disability, or any other point, such doubt will be resolved in favor of the claimant."<sup>92</sup> Unfortunately, in terms of Vietnam veterans of the Blue Water Navy, the US government continually failed to grant them the *overall* "benefit of the doubt" for service connection. On February 6, 1991, President George H.W. Bush signed the Agent Orange Act of 1991 into law as Public Law No. 102-4.<sup>93</sup> This law, passed unanimously in both the US House and Senate, declared the presumption of exposure to dioxin to active military, naval, or air servicemen and women of the Vietnam war.<sup>94</sup> This meant that all military, naval, and air servicemen who served in the Republic of Vietnam during the period of US involvement in the war were automatically presumed to have been exposed to dioxin through herbicide agents,

---

<sup>91</sup> Veterans' Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98-542, 98 Stat. 2726 (1984).

<sup>92</sup> "Reasonable doubt," *Code of Federal Regulations*, title 38, chapter 1, part 3, subpart A §3.102.

<sup>93</sup> "H.R. 556 (1991-1992): Agent Orange Act of 1991," Legislation, Congress.gov, February 6, 1991, <https://www.congress.gov/bill/102nd-congress/house-bill/556/all-actions>.

<sup>94</sup> Agent Orange Act of 1991, Pub. L. No. 102-4, 105 Stat. 11 (1991).

unless there was specific evidence to prove otherwise. It seemed as if the US government had finally lived up to its “benefit of the doubt” doctrine, until it back-tracked in 1997. In a July 23, 1997 letter to the Director of Compensation and Pension Service, the VA General Counsel declared they “do not believe that the language of section 101(29)(A) conclusively resolves whether service in the waters off the shore of Vietnam is included in the statutory reference to service in the Republic of Vietnam.”<sup>95</sup> This VA interpretation that off-shore veterans were not included in those who served “in the Republic of Vietnam” ultimately led to their presumptive connection being stripped away.<sup>96</sup> In conjunction with *Haas vs. Peake*, the VA interpretation essentially stripped the “benefit of the doubt” away from Blue Water Navy Vietnam veterans, forcing them to establish exposure evidence on an individual basis in order to be granted disability compensation or health care eligibility for the diseases of Agent Orange exposure. This continued until the Blue Water Navy Vietnam Veterans Act of 2019, in which offshore Vietnam veterans were finally explicitly granted presumption of service connection for the diseases of Agent Orange exposure, and the *overall* benefit of the doubt in their case for presumptive exposure.

The Agent Orange Act of 1991, H.R. 556, was the most crucial piece of legislation in terms of overall benefit progress for Vietnam veterans affected by herbicides. The act addresses the health care and treatment eligibility for Agent Orange exposed veterans, the financial compensation for exposed veterans, and further research into the scope of herbicide health effects. The enacted law specifically codifies VA policy creating a service connection to Non-Hodgkins lymphoma, soft-tissue sarcoma, and chloracne, while transferring the independent

---

<sup>95</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

<sup>96</sup> Panangala and Shedd, “Veterans Exposed to Agent Orange,” 9.



research studies on connections between exposure to herbicide dioxins and health effects to the National Academy of Sciences.<sup>97</sup> In the House debate on this bill from January 29, 1991, democratic representative Lane Evans of Illinois explained the transfer of Agent Orange disease research to the National Academy of Sciences. “Congress had to take the responsibility of studying this issue away from what was perceived an unsympathetic Veterans Administration in 1979 when we transferred that responsibility to the Center for Disease Control,” Evans told the chamber.<sup>98</sup> He continued, noting that the Weiss Hearings of the Government Operations, human resources and intergovernmental relations subcommittee uncovered that the CDC also failed in its mission, “They spent eight years and \$63 million of taxpayers’ money to say in effect that they couldn’t come up with the proper methodology.”<sup>99,100</sup> The Agent Orange Act of 1991 thus transferred these Agent Orange studies – on which diseases to presume service connection to and which veterans were exposed and how – to the National Academy of Sciences. The Act then directed the Secretary of the VA to use the findings of these studies to make any further changes to presumptive service connected diseases and disabilities.

In relation to the Blue Water Navy presumptive service connection, the most important clause of this act is (a)(2)C(3), which describes which veterans are presumed to have been exposed to Agent Orange. The clause states,

For the purposes of this subsection, a veteran who, during active military, naval, or air service, served in the Republic of Vietnam during the Vietnam era and has a disease referred to in paragraph (I)(B) of this subsection shall be presumed to have been exposed

---

<sup>97</sup> Agent Orange Act of 1991, Pub. L. No. 102-4, 105 Stat. 11 (1991).

<sup>98</sup> “House Session,” C-SPAN, January 29, 1991, <https://www.c-span.org/video/?16064-1/house-session&start=1505>.

<sup>99</sup> Paula Yost, “Agent Orange Study Called Botched or Rigged,” *The Washington Post*, July 11, 1989, <https://www.washingtonpost.com/archive/politics/1989/07/12/agent-orange-study-called-botched-or-rigged/6e34800b-0901-4b70-ad89-5468df4332af/>.

<sup>100</sup> “House Session,” C-SPAN, January 29, 1991, <https://www.c-span.org/video/?16064-1/house-session&start=1505>.

during such service to an herbicide agent containing dioxin or 2,4-dichlorophenoxyacetic acid, and may be presumed to have been exposed during such service to any other chemical compound in an herbicide agent, unless there is affirmative evidence to establish that the veteran was not exposed to any such agent during that service.<sup>101</sup>

This determination of what constitutes a veteran eligible for care and compensation specifically includes *active naval veterans*, without excluding offshore naval veterans or explicitly defining the geographical limits of serving “in the Republic of Vietnam.” If Blue Water Navy veterans were not explicitly excluded from this sector of eligible veterans according to the Agent Orange Act of 1991, how and why were they subsequently explicitly excluded from presumptive service connection until 2019?

During the Senate debate period for the Agent Orange Act on January 30, 1991, democratic Senator Thomas A. Daschle of South Dakota – who sponsored S. 238, essentially the Senate version of H.R. 556 – tied the legislation to the idea of the VA benefit of the doubt doctrine. Daschle noted he saw the premise of the act as “simple”, stating:

Veterans’ suffering diseases that may be associated with exposure to Agent Orange, or any other factors related to their military service, deserve the benefit of the doubt with respect to their disability claims. We’re not seeking to give Vietnam veterans any special status, only to give them the same status afforded all other veterans before them. A sizable and growing body of scientific evidence suggests that exposure to Agent Orange is associated with the development of various diseases of Vietnam veterans. S. 238 is intended to make clear that in cases where evidence for such association is equal to or outweighs evidence against those associations the benefit of the doubt will be given to the veteran, and he or she will be compensated.<sup>102</sup>

Daschle emphasizes that those who put their life on the line for the American government deserve the benefit of the doubt when they claim health care compensation for diseases and disabilities they acquired in their service. Daschle’s speech does not specify a difference between

---

<sup>101</sup> Agent Orange Act of 1991, Pub. L. No. 102-4, 105 Stat. 12 (1991).

<sup>102</sup> “Senate Session,” C-SPAN, January 30, 1991, <https://www.c-span.org/video/?16087-1/senate-session>.

naval or “boots on the ground” servicemen when it comes to this benefit of the doubt. In fact, essentially no Representative or Senator in these legislative debates discussed the matter of geographical location when it came to which Vietnam veterans should be protected by the Agent Orange Act of 1991. Back to the question of: If Blue Water Navy veterans were not explicitly excluded from this sector of eligible veterans according to the Agent Orange Act of 1991, how and why were they subsequently explicitly excluded from presumptive service connection until 2019? This answer lies in a 1997 VA General Counsel decision holding that Blue Water Veterans were not included as veterans who “served in the Republic of Vietnam,” because they served in offshore waters.<sup>103</sup>

On July 23, 1997, the Department of Veterans Affairs Office of the General Counsel issued precedent opinion VAOPGCPREC 27-97 regarding the question of whether Vietnam veterans who served on offshore naval ships were technically considered Vietnam era veterans. According to the United States code, title 38 U.S.C. 101(29)(A), the “Vietnam era” is “the period beginning on November 1, 1955, and ending on May 7, 1975, in the case of a veteran who served in the Republic of Vietnam during that period.”<sup>104</sup> VA General Counsel at the time Mary Lou Keener held that “service on a deep-water naval vessel in waters off the shore of the Republic of Vietnam does not constitute service in the Republic of Vietnam.”<sup>105</sup> This upheld a 1993 VA regulation 38 C.F.R. § 3.307(a)(6) which stated that “‘Service in the Republic of Vietnam’ includes service in the waters offshore and service in other locations if the conditions of service

---

<sup>103</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

<sup>104</sup> “Definitions,” *US House Code*, Title 38 § 101 (29) (A), <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title38-section101&num=0&edition=prelim>.

<sup>105</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, 6, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

involved duty or visitation in the Republic of Vietnam.”<sup>106</sup> Keener’s decision officially revoked presumptive service connection to Agent Orange from Blue Water Navy veterans. The written decision uses two instances of legislative history that mention the scope of the geographical range of US involvement in Vietnam – a Senate report and a quote from Senator Alan K. Simpson. However, none of these instances directly mention offshore naval veterans. Keener writes:

The report of the Senate Committee on Veterans’ Affairs on the VBIA explains that “United States military personnel were, in fact, serving within the borders of the Republic of Vietnam prior to August 5, 1964, principally as advisors to the armed forces of the Republic of South Vietnam.” S. Rep. No. 371, 104th Cong., 2d Sess. 21 (1996), reprinted in 1996 U.S.C.C.A.N. 3762, 3772. The report indicates an intention to amend the definition of the Vietnam era to reflect “the date U.S. forces generally began to accompany their Vietnamese counterparts on combat operations.” *Id.* The report states that the amendment to section 101(29) would apply the expanded period “only with respect to those veterans who actually served within the borders of the Republic of Vietnam during that time frame.” *Id.* (Emphasis added.) In addition, Senate Committee on Veterans’ Affairs Chairman Alan K. Simpson, in discussing the provision on the Senate floor, stated that “U.S. troops were subjected to the real perils of ground combat at least as early as February 28, 1961. This bill would recognize that fact . . .” 142 Cong. Rec. S11,779 (daily ed. Sept. 28, 1996).<sup>107</sup>

Both of these instances only indicate that the veterans who served on the ground in Vietnam *should* be included in the scope of veterans eligible for compensation and health care, they *do not* say specifically that offshore naval veterans should not be eligible. The VA decision uses one external definition example to compare the situation. VAOPGCPREC 27-97 cites that the US Code defines the “Mexican border period” as “the period beginning on May 9, 1916, and ending

---

<sup>106</sup> “Presumptive service connection for chronic, tropical, or prisoner-of-war related disease, disease associated with exposure to certain herbicide agents, or disease associated with exposure to contaminants in the water supply at Camp Lejeune; wartime and service on or after January 1, 1947,” 38 C.F.R. § 3.307(a)(6).

<sup>107</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, 4, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

on April 5, 1917, ‘in the case of a veteran who during such period served in Mexico, on the borders thereof, or in the waters adjacent thereto.’”<sup>108</sup> Keener subsequently argues either the term “in Mexico” did not include the adjacent waters or that congress felt the term “in Mexico” ambiguous enough to include the adjacent waters clause – which, comparatively, the definition of the “Vietnam era” does not include.<sup>109</sup> Though this wording comparison does make surface level sense, the actual situations being defined are incredibly different. The offshore navy in the adjacent waters of the Vietnam War were crucial to the war as a whole – providing invaluable military support, aircraft transport, and supply movement. The 1997 VA decision to extricate the Blue Water Navy from the definition of Vietnam era veterans was largely based on indirect reasoning. Considering VAOPGCPREC 27-97 was the initial blow that made tens of thousands of Blue Water Navy veterans ineligible for presumptive health care and compensation for Agent Orange exposure, there should have been concrete reasoning that offshore vessels were not exposed to herbicides in order to make this decision. After this decision was finalized, the Haas decision in the 2000s deepened the wounds for the offshore veterans, imprinting a “no” at the federal court level on their hopes for a presumptive service connection.

In July 2001, Jonathan L. Haas, a Blue Water Navy veteran stationed on the *USS Mount Katmai* in the late 1960s during the Vietnam War, filed a disability compensation claim for type 2 diabetes from Agent Orange exposure with the Phoenix, Arizona VA office.<sup>110,111</sup> Haas maintained that at one point the USS Mount Katmai sailed 100 ft from the coast of Vietnam

---

<sup>108</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, 2, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

<sup>109</sup> VA General Counsel (022), “VAOPGCPREC 27-97,” July 23, 1997, 2-3, <https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.

<sup>110</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 39.

<sup>111</sup> Theodore B Olson et al., “Brief for the Respondent in Opposition,” No 03-439, U.S. Supreme Court (2003), 3.

when it was exposed to a cloud of Agent Orange.<sup>112</sup> The Arizona regional office denied Haas's claim in May 2002 and again in December 2002, after he submitted additional evidence, based on the reasoning that he did not step foot in Vietnam and there was no direct evidence of exposure.<sup>113</sup> Haas then appealed to the Board of Veterans Appeals, questioning the requirement of physical presence on land in Vietnam for a presumptive service connection to Agent Orange exposure.<sup>114</sup> The Board denied his appeal in 2004 for the same two reasons as the regional office.<sup>115</sup> In the subsequent 2006 *Haas v. Nicholson* appeal, the US Court of Appeals for Veterans Claims reversed the precedent opinions and ruled in favor of Haas that the VA's 1997 boots on the ground interpretation of what service in the Vietnam Era meant was too restrictive. In the written *Haas v. Nicholson* decision, the court called the 1997 VA interpretation of the Vietnam Era definition "plainly erroneous and underinclusive,"<sup>116</sup> arguing:

given the spraying of Agent Orange along the coastline and the wind borne effects of such spraying, it appears that these veterans serving on vessels in close proximity to land would have the same risk of exposure to the herbicide Agent Orange as veterans serving on adjacent land, or an even greater risk than that borne by those veterans who may have visited and set foot on the land of the Republic of Vietnam only briefly.<sup>117,118</sup>

However, the VA then appealed this decision to the higher US Court of Appeals for the Federal Circuit, which again reversed in favor of the VA with the *Haas v. Peake* decision of 2008.<sup>119</sup> In the written decision of *Haas v. Peake*, the court established that Blue Water Navy veterans were "not barred from obtaining benefits or otherwise subject to disfavored treatment, but are simply

---

<sup>112</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 39.

<sup>113</sup> Theodore B Olson et al., "Brief for the Respondent in Opposition," 4.

<sup>114</sup> Theodore B. Olson et al., "Brief for the Respondent in Opposition," 4.

<sup>115</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 40.

<sup>116</sup> *Haas v. Nicholson*, 2006 (Ct. Vet. App.), 21-22.

<sup>117</sup> *Haas v. Nicholson*, 2006 (Ct. Vet. App.), 21.

<sup>118</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 40.

<sup>119</sup> Institute of Medicine, *Blue Water Navy Vietnam Veterans and Agent Orange Exposure*, 41.

required to establish that their disabilities are service connected under the same rules that apply to disabled veterans generally.”<sup>120</sup> As the final decision in Blue Water Navy veteran Jonathan Haas’s court battle, *Haas v. Peake* stunted the possibility of a presumptive service connection to Agent Orange veterans for offshore naval veterans.

Amidst the legal battles of the Jonathan Haas, another Blue Water Navy veteran began the undertaking of advocating for his own service connection to Agent Orange exposure. Alfred Procopio Jr. filed for service connection for diabetes mellitus and prostate cancer in October of 2006 and 2007, respectively.<sup>121</sup> Procopio served in the offshore navy of the Vietnam War, stationed on the U.S.S. *Intrepid* from November 1964 to July 1967.<sup>122</sup> The VA denied his initial request for service connection in April 2009, causing Procopio to appeal to the Board of Veterans’ Appeals, which again denied his service connection in March 2011 and July 2015 because he did not set foot in Vietnam.<sup>123</sup> Procopio subsequently appealed his case to the US Court of Appeals for the Federal Circuit. On January 29, 2019, the court handed the Vietnam Blue Water Naval veterans their first overall victory. The decision of *Procopio v. Wilkie* conclusively overturned the Haas decision, concluding, “Congress has spoken directly to the question of whether those who served in the 12 nautical mile territorial sea of the ‘Republic of Vietnam’ are entitled to § 1116’s presumption if they meet the section’s other requirements. They are.”<sup>124</sup> This court decision was the ultimate domino that led to the US Congress being able to pass the Blue Water Navy Vietnam Veterans Act of 2019, which codified a presumptive service connection to Agent Orange for offshore veterans.

---

<sup>120</sup> Gregory G. Garre et al., “Brief for the Respondent in Opposition,” No 08-525, U.S. Supreme Court (2008), 18.

<sup>121</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 6.

<sup>122</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 5.

<sup>123</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 6.

<sup>124</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 19.

One of the most interesting threads throughout the written Procopio decision is the brief mentions of the financial impact of granting presumptive service connection to the Blue Water Navy. On page 18, footnote 8, the court wrote:

The dissent criticizes our interpretation of § 1116 as a ‘policy choice [that] should be left to Congress,’ noting the ‘cost of expanding the presumption of service connection.’ Dissent at 16. Respectfully, we are interpreting a statute, not making a policy judgment. Moreover, the dissent’s criticism seems out of place where it has not concluded that the agency’s determination is reasonable or that Mr. Procopio should be denied his benefits.<sup>125</sup>

This footnote brings up an incredibly important point, circling back to the question of: If Blue Water Navy veterans were not explicitly excluded from this sector of eligible veterans according to the Agent Orange Act of 1991, *why* were they subsequently explicitly excluded from presumptive service connection until 2019? The unspoken, or rarely spoken, answer to this question lies in the fact that it was simply an expense that frugal policymakers of the US government saw as non-essential. The Procopio decision plainly states that cost was a foundational concern of the 2018 version of the Blue Water Navy Vietnam Veterans Act, “The bill passed the House unanimously in 2018 but failed to pass the Senate before the end of the 2018 session, due, in part, to concerns over the cost of expanding the presumption of service connection.”<sup>126</sup> As the hook quote at the beginning of this chapter implies, money was always the issue.

Bob McNulty, whose story will be told further in the following chapter, was a Boiler Technician on the offshore aircraft carrier the USS America (CVA 66) from 1970-1973. Since his term in the Vietnam War ended, McNulty has been diagnosed with hypertension, type two

---

<sup>125</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 18-19.

<sup>126</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.), 16.



diabetes, and prostate cancer. “It's a slow process when you're dealing with the government, with the bean counters,” McNulty said. “I didn't join the Navy to be exposed to all these various things. I've got diabetes, nobody in my family had that. I've got hypertension, nobody in my family had that. The Agent Orange of course with prostate cancer, nobody in my family had that.”<sup>127</sup> Though many Blue Water Navy Vietnam veterans saw their lack of familial ties to diseases incurred after the war as a glaring sign pointing towards Agent Orange exposure, until 2019, the US government held steadfastly in its opinion that Agent Orange exposure presumption remained exclusive to land and inland water troops. As the Procopio decision and the rhetoric of recent 21st century lawmakers shows, the US government was fully aware that cost of health care and compensation added a major complication to granting a presumptive service connection to the Blue Water Navy. McNulty shared his thoughts on the price thread:

Because there was so many people that may have been exposed, the price was going to go right off the maps. Because they weren't going to just make compensation an issue, they were going to give people health care based on their exposure. That got expensive. I ended up with cancer. That's a quarter million dollar bill. That, fortunately, taxpayers picked up. I didn't have the extra quarter million dollars to spend on that. Not by a long shot.<sup>128</sup>

In the debate for the Blue Water Navy Vietnam Veterans Act of 2019, the tragic idea became apparent that frugality was the reason why the government continually refused presumptive health care and compensation for many offshore Vietnam veterans.

On May 14, 2019, the United States House of Representatives opened a deliberation on the Blue Water Navy Vietnam Veterans Act of 2019 (H.R. 299), a law that New York

---

<sup>127</sup> McNulty, Interview.

<sup>128</sup> McNulty, Interview.

Republican representative Lee Zeldin deemed “decades overdue.”<sup>129</sup> H.R. 299 extended the presumption of Agent Orange exposure for Blue Water Navy veterans, who were stationed aboard naval vessels up to 12 miles off the coast of the Republic of Vietnam.

The four speakers of the debate – California Democrat, sponsor of the bill, and Chair of the House Committee on Veterans Affairs Mark A. Takano, Tennessee Republican and Ranking Member of the Committee Phil Roe, Virginia Democrat and Navy veteran Elaine Luria, and Zeldin – were all in agreement that this bill should have been passed years earlier. “Congress has failed our Blue Water Navy veterans, plain and simple,” Congressman Takano said in his opening remarks. Takano continued, reminding the house floor of the urgency behind the legislation:

Those who have advocated for and participated in the process to bring this legislation to the house floor, know this history is deeply tragic. By not granting the benefits these veterans earned more than 40 years ago, these veterans and their survivors continue to experience immeasurable pain, death, and grief caused by the spraying of 12.1 million gallons of highly toxic Agent Orange during the Vietnam war. It was unjust then, and it is unjust now. But today, we have an opportunity to right this wrong.<sup>130</sup>

Takano helped introduce this act immediately after he became Chair of the House Committee on Veterans’ Affairs.<sup>131</sup>

Decades of legislative marginalization of offshore Vietnam veterans corroborated the resounding feeling throughout the House Floor that the Blue Water Navy Vietnam Veterans’ Act was long overdue. Until 2019, the United States government had consistently ignored and stifled these Blue Water Veterans, arguing that their offshore geographical location made them

---

<sup>129</sup> House Session, Part 2,” C-SPAN, May 14, 2019, <https://www.c-span.org/video/?460682-4/house-session-part-2&start=106&transcriptSpeaker=2737>.

<sup>130</sup> “House Session, Part 2,” C-SPAN, May 14, 2019, <https://www.c-span.org/video/?460682-4/house-session-part-2&start=106&transcriptSpeaker=2737>.

<sup>131</sup> “Veterans’ Affairs,” Issues, Mark Takano, <https://takano.house.gov/issues/veterans-affairs>.

ineligible to receive compensation for the damages created by Agent Orange. Just one year before this historical legislation passed, a similar act had stalled on the Senate floor, treated as insignificant, and peripheral to the main priorities of Congress. Introduced in the House by California Republican David G. Valadao on January 5, 2017, the Blue Water Navy Vietnam Veterans Act of 2018 passed 382-0 in the House on June 25, 2018, but was held up and never voted on in the Senate.<sup>132</sup> As one of the first speakers of the House debate on June 25, 2018, Takano noted “Some thought this day would never come for the Blue Water Navy Veterans.” He further explained, “Finding over a billion dollars in the federal budget is not an easy task, but many people even said it was impossible. I thank the chairman for sitting down with the veterans’ service organizations, working with staff, and agreeing to find an alternative funding source to right this wrong.”<sup>133</sup> Ironically, the cost of the 2018 bill was the reason why that version never made it to the President’s desk. In the May 14, 2019 debate of the Blue Water Navy Vietnam Veterans Act of 2019, Takano noted the budgeting issues that had been fixed in the 2019 bill. Takano mentioned how the January 29, 2019 US Federal Court of Appeals decision in *Procopio vs. Wilkie* helped them ease the bill’s cost concerns:

I also want to mention the efforts we made to pay for this bill so it can pass the Senate this congress. Mr. Speaker, I would like to ask unanimous consent that the congressional budget office scores be included in the record. Now the decision in *Procopio* removed much of the cost issues both chambers struggled with in the last congress. Because we are covering more veterans than the *Procopio* decision, the ranking member and I included a mechanism in the bill to cover both the mandatory and discretionary costs.<sup>134,135</sup>

---

<sup>132</sup> “H.R. 299, Congressional Chronicle,” C-SPAN, <https://www.c-span.org/congress/bills/bill/?115/hr299>.

<sup>133</sup> “House Session, Part 2,” C-SPAN, June 25, 2018, <https://www.c-span.org/video/?447476-3/house-session-part-2&start=5394&transcriptSpeaker=2737>.

<sup>134</sup> *Procopio v. Wilkie*, 2019 (Fed. Cir.).

<sup>135</sup> “House Session, Part 2,” C-SPAN, June 25, 2018, <https://www.c-span.org/video/?447476-3/house-session-part-2&start=5394&transcriptSpeaker=2737>.

On October 8, 2020, the American Legion reported that after the passage of the Blue Water Navy Vietnam Veterans' Act of 2019, the VA approved the claims of more than 22,500 veterans and their survivors, totaling over \$640 million dollars in compensation payments.<sup>136</sup> It was largely because of this over \$640 million payout, the money that was required to compensate Blue Water Navy veterans, that the VA had dragged its feet for so long on this issue.

It wasn't until both congressional legislators and the federal courts threw their weight behind the Blue Water Navy veterans that the VA acted to compensate this marginalized group. The tragedy of the United States government's negligence to grant presumption of Agent Orange exposure to Blue Water Navy Vietnam veterans is a systemic example of the government's failure to protect its very own citizens that it throws into harm's way. The United States government did not only lose the war in Vietnam. It lost the chance to demonstrate its commitment to protecting its own soldiers whom it sends to protect the values and safety of the nation. For the American soldiers of the Vietnam war, the conflict did not end when the last troops were withdrawn in 1973. Warfare techniques that were implemented at the highest levels of government have been pervading past the artificial boundaries of the war timeline for over 50 years. The Blue Water Navy is not the only group who has historically been neglected a fair voice in the fight for presumption of Agent Orange exposure by the US government. Vietnamese citizens alive during US involvement in the war and their descendants, Vietnamese soldiers of the war and their descendants, and the generations of American Vietnam War soldiers' descendants are among those who still yearn for the US government to fully hear their voices crying out for justice. The Blue Water Navy Vietnam veterans and their fight for Agent Orange

---

<sup>136</sup> The American Legion, "VA approves claims for more than 22,500 Blue Water Navy veterans," American Legion, October 8, 2020, <https://www.legion.org/veteransbenefits/250665/va-approves-claims-more-22500-blue-water-navy-veterans>.

exposure presumption should serve as a domino, tipping the movement in favor of *proactive* guarantee of exposure presumption and compensation benefits for these historically marginalized groups. It should not take another fifty years for these groups to receive the benefits they deserve. The next chapter, *On the Periphery*, shares the personal, oral histories of American veterans and one survivor who understand the struggle for the presumption of Agent Orange exposure all too well. By humanizing the voices and microscopically detailing the stories of select American veterans and their survivors, the following chapter aims to use original, quality oral histories to advocate the need to more proactively provide care and compensation for future victims of toxic warfare strategies.

## **On the Periphery: An Oral History of the Veteran and Survivor Voices Behind the Battle for Agent Orange Presumptive Exposure**

“I just think that the VA should have been more open and honest about what was going on with the VA and with Agent Orange in particular. They should have warned us of all these side effects to look for in ourselves and in our children. And when people said that they were exposed, they should have believed them.”

– Frances Margaret Hendrickson, wife of the late Carlton Norman Hendrickson, a Blue Water Vietnam veteran of the USS Tortuga

The previous chapter, titled “Benefit of the Doubt,” examined the history of legislative and legal battles over the compensation for and care of Vietnam veterans who were exposed to Agent Orange. For the offshore naval veterans of the Vietnam War, these congressional efforts over the decades culminated in the passing of the Blue Water Navy Vietnam Veterans Act of 2019. Fifty-seven years after the first United States Air Force C-123 airplanes sprayed Agent Orange over Vietnam, the US Congress finally codified legislation granting the presumption of Agent Orange exposure to Blue Water Navy veterans. The Blue Water Navy Vietnam Veterans Act of 2019 came as a result of decades of fierce advocacy and congressional lobbying work from veterans and their survivors.

Yet while urging congressional members to prioritize this legislation, organizing through veterans’ groups to make their voices louder, and battling layers of administrative red tape, many Blue Water Veterans affected by Agent Orange also had to navigate the treatment of their health effects and the payment for said treatment. Blue Water Navy veterans not only suffered the negative impacts that Agent Orange had on their physical and mental health, they also suffered facing the reality that their own government – that they served to defend – was not giving them the benefit of the doubt when it came to overall presumption of Agent Orange exposure. Many of them tragically succumbed to illnesses before 2019, while their survivors were left to continue

their advocacy work and fight for compensation while grieving and mourning their loved ones.

In this chapter, I present three oral histories – two stories of Vietnam veterans who served in Blue Water territory and one story of a surviving widow of a Blue Water Navy veteran who died of Agent Orange complications. I aim to present quality over quantity, highlighting the raw, emotional, and often witty lived experiences of four people directly behind the battle for the presumption of Agent Orange exposure. The stories of Joe Foster, Frances Hendrickson, and Bob McNulty are four deeply moving, historically vital perspectives on how the Vietnam War did not end with the fall of Saigon, but rather still continues today.

### **Joseph Foster**

#### *Drinking Water and Intergenerational Worries*

Joseph Foster is a Coast Guard veteran of the Vietnam War who served from February 1969 to February 1973. He was a quartermaster on the USCGC Mellon and served in country from Cambodia to Da Nang, spending most of his time at the mouth of the Sông Ông Đốc River. As one of four quartermasters on the Mellon, Foster directed the ship's navigation and communications, while also keeping the ship's log. Foster served in the Blue Water territory of Vietnam while in transit and believes he was originally exposed to Agent Orange through drinking water in 1970. An Australian study of the early 2000s demonstrated that the distillation process *concentrates* TCDD, the dioxin found in Agent Orange, in drinking water.<sup>137</sup> This study confirmed the fears of many Naval veterans of the Vietnam War, that they could have ingested

---

<sup>137</sup> Jochen Müller, Caroline Gaus, Vincent Alberts, and Michael Moore, "Examination of the potential exposure of Royal Australian Navy (RAN) personnel to polychlorinated dibenzodioxins and polychlorinated dibenzofurans via drinking water," Department of Veterans' Affairs, (Canberra, Australia: January 2002).

dioxin by simply drinking their ship's available water.

After Foster returned from Vietnam, American veteran communities and advocates became more interested in and vocal about the consequences of Agent Orange exposure in the war. Foster began investigating the possibility of his own exposure: "When the stories first came out, I guess it was in the late 80s, they started talking about Agent Orange. And of course, doing exploratory, I was told, 'no, you're not covered, you weren't exposed.'"<sup>138</sup> After being diagnosed with diabetes, Foster became more concerned with the idea of his potential Agent Orange exposure, so he went back for more testing and was ultimately granted compensation in the late 1990s.

In addition to his type-two diabetes diagnosis, Foster has a heart condition and nerve neuropathy, and had a cancerous growth on his kidney and an unusual breathing difficulty that a doctor diagnosed as bronchitis. About five years ago, Foster received a total nephrectomy surgery because of the cancerous growth on his kidney. He noted how he was surprised to be in surgery for so long, needing a full operation:

I was diagnosed with a growth on the kidney. And when they went in, I was supposed to have a partial nephrectomy. But they ended up having to – I was on the table for eight hours, I don't know what they were doing – but they ended up taking the entire kidney, and the 2.5cm mass turned out to be cancerous.<sup>139</sup>

Foster receives direct care from the VA for his conditions and is 80% service disabled for Agent Orange. He said, "I'm treated for heart conditions, I have a nephrologist, I have a urologist. You name it, I've got em, we're on a first name with all of them."<sup>140</sup> Though in overall good spirits, Foster says he is still unsettled by the unusual breathing difficulty he experienced in the early

---

<sup>138</sup> Joseph Foster (Vietnam veteran of the USCGC Mellon), interview by Molly Parks (author), August 9, 2023, Holmdel, NJ.

<sup>139</sup> Foster, interview.

<sup>140</sup> Foster, interview.



2000s. He noted that one doctor originally thought it was inoperable lung cancer, as he lost 30% of his breathing abilities in both lungs. “I had the condition for about five years, and with all the tests, they couldn't find anything. So, then it cleared up because somebody gave me an inhaler,” Foster said. “Finally a doctor, out of all the specialists I was seeing, prescribed it for bronchitis, go figure.”<sup>141</sup> Foster is still unsure exactly what the actual condition was, further stating that “the other conditions that I don't understand, and not knowing for sure what the root causes were, that always sits in the back of your mind.”<sup>142</sup> The other aspect of Foster's Agent Orange exposure that worries him the most is the transgenerational effects of dioxin. “As long as I live and as long as my daughter lives, anything that happens to her, I'm always going to look at it and say, is there something that can be traced back to Agent Orange?”<sup>143</sup>

Currently, Spina Bifida is the only condition that the VA compensates a child for if his or her biological father served in the Vietnam Era.<sup>144</sup> However, if a child's biological mother served in Vietnam, that child is entitled to compensation for 18 different conditions.<sup>145</sup> The VA public health website reads, “VA recognizes a wide range of birth defects as associated with women Veterans' service in Vietnam. These diseases are not tied to herbicides, including Agent Orange, or dioxin exposure, but rather to the birth mother's service in Vietnam.”<sup>146</sup> These 18 conditions

---

<sup>141</sup> Foster, interview.

<sup>142</sup> Foster, interview.

<sup>143</sup> Foster, interview.

<sup>144</sup> “Birth Defects Linked to Agent Orange,” Disability Benefits, U.S. Department of Veterans' Affairs, last updated January 4, 2024, <https://www.va.gov/disability/eligibility/special-claims/birth-defects/>.

<sup>145</sup> “Birth Defects in Children of Women Vietnam Veterans,” Public Health, U.S. Department of Veterans' Affairs, last updated September 20, 2023, <https://www.publichealth.va.gov/exposures/agentorange/birth-defects/children-women-vietnam-vets.asp>.

<sup>146</sup> “Birth Defects in Children of Women Vietnam Veterans,” Public Health, U.S. Department of Veterans' Affairs, last updated September 20, 2023, <https://www.publichealth.va.gov/exposures/agentorange/birth-defects/children-women-vietnam-vets.asp>.

include, “but are not limited to”: achondroplasia, cleft lip and cleft palate, congenital heart disease, congenital talipes equinovarus (clubfoot), esophageal and intestinal atresia, Hallerman-Streiff syndrome, hip dysplasia, Hirschprung's disease (congenital megacolon), hydrocephalus due to aqueductal stenosis, hypospadias, imperforate anus, neural tube defects, Poland syndrome, pyloric stenosis, syndactyly (fused digits), tracheoesophageal fistula, undescended testicle, and Williams syndrome.<sup>147</sup>

On July 31, 1996, Democratic Representative Lane Evans of Illinois’s 17th district introduced H.R. 3927, the Agent Orange Benefits Act of 1996.<sup>148</sup> The purpose of the bill was to “provide for the special needs of certain children of Vietnam veterans who were born with the birth defect spina bifida, possibly as the result of the exposure of one or both parents to herbicides during active service in the Republic of Vietnam during the Vietnam era, through the provision of health care, vocational training, and monetary benefits.”<sup>149</sup> Evans introduced the bill, referencing an Institute of Medicine report that “specifically found that there is limited suggestive evidence of an association between agent orange exposure to vets and the occurrence of spina bifida in their children.”<sup>150</sup> Evans’s Agent Orange Benefits bill was never fully passed by the House, but instead used to inspire an amendment to the larger H.R.3666 bill, the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act of 1997. The amendment, introduced by Democratic Senator

---

<sup>147</sup> “Birth Defects in Children of Women Vietnam Veterans,” Public Health, U.S. Department of Veterans Affairs, last updated September 20, 2023, <https://www.publichealth.va.gov/exposures/agentorange/birth-defects/children-women-vietnam-vets.asp>.

<sup>148</sup> “H.R.3927 - 104th Congress (1995-1996): Agent Orange Benefits Act of 1996,” Legislation, Congress.gov, September 26, 1996, <https://www.congress.gov/bill/104th-congress/house-bill/3927/all-actions>.

<sup>149</sup> Agent Orange Benefits Act of 1996, H.R.3927, 104th Cong., § 1801 (1996).

<sup>150</sup> Congressional Record, Extension of Remarks, E1428, August 1, 1996, <https://www.congress.gov/104/crec/1996/08/01/142/116/CREC-1996-08-01-pt1-PgE1428-3.pdf>.

Daschle of South Dakota on September 5, 1996, essentially serves the exact purpose of the Agent Orange Benefits Act.<sup>151</sup> Amendment 5190 to H.R. 3666 outlines the health care treatment, vocational training and rehabilitation, and monetary allowance available for children of Vietnam veterans with “all forms and manifestations of spina bifida except spina bifida occulta,” effective January 1, 1997.<sup>152</sup> Though the legislation marked a major victory for the descendants of Agent Orange exposed veterans, many speculate that a broader health care coverage and compensation is needed for descendants that covers more than just spina bifida.

### **Frances Hendrickson**

#### *A Loss of Hope and Transgenerational Fears*

Frances Margaret Hendrickson, 76, is the widow of the late Carlton Norman Hendrickson, who served aboard the Blue Water vessel the USS Tortuga in the Vietnam War from 1963 to 1964. She is also the mother of seven children, all of whom have medical conditions and disabilities. Carlton Hendrickson originally enlisted in the Marines in 1961 and served as a carpenter on the ship, never setting foot in Vietnam. Frances recalls her husband telling the story of the moment he believed he was exposed to Agent Orange while at sea: “He said that he slept on the deck one night when it was really hot and he woke up with all these orange spots all over himself and his clothing.”<sup>153</sup> Frances says her husband believed his exposure from the beginning, but did not start developing symptoms until the 1990s. Carlton

---

<sup>151</sup> Congressional Record, Senate, S9969-S9970, September 5, 1996, <https://www.congress.gov/104/crec/1996/09/05/142/120/CREC-1996-09-05-pt1-PgS9968-3.pdf>.

<sup>152</sup> Departments of Veterans’ Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1997, Pub. L. No. 104-204, 110 Stat. 2923-110 Stat. 2926 (1996).

<sup>153</sup> Frances Hendrickson (Widow of Vietnam veteran Carlton Hendrickson), telephone interview by Molly Parks (author), March 1, 2024.

Hendrickson suffered from diabetes, prostate cancer, various heart conditions, and COPD.

Frances estimates that between the various blood clot surgeries he endured, Carlton received about 18 operations.

Carlton filed a disability claim after he had a heart attack in 1998 and his doctors told him he could no longer work. Carlton's disability claim was denied, but he refiled again in the early 2000s. Frances said, "It took him ten years. He just argued with them for ten years. They told him that because he didn't leave the ship, he wasn't entitled to benefits."<sup>154</sup> Frances recalled feeling hopeless and frustrated after how long the compensation process took. She said that her husband's persistence ended up paying off: "He didn't get his compensation until around 2012. He fought all those years and I swore it would take a blessing because he ain't getting anything. And he said, 'I'm not going to give up, I'm not going to give up,' and he wound up getting it."<sup>155</sup>

In 2012, Carlton received what Frances described as "quite a lot of money" in disability claims, before he passed on April 26, 2013. She recalled how her husband "suffered terribly" in the years leading up to his death. "He developed COPD and that got really bad. Between his legs and his breath, he could only walk, maybe 100 feet at a time, then he'd have to sit down and rest. It's the pains in his legs and he couldn't breathe. And he had to go on oxygen until the end." Unfortunately, Frances's pain of seeing her loved ones suffer did not end as she grieved her husband's death.<sup>156</sup>

All seven of Frances and Carlton Hendrickson's children suffer from various conditions and disabilities. Frances says that she does harbor concerns about the transgenerational effects of Agent Orange exposure, but cannot medically determine whether her children's conditions come

---

<sup>154</sup> Hendrickson, interview.

<sup>155</sup> Hendrickson, interview.

<sup>156</sup> Hendrickson, interview.

as a cost of her husband's exposure. She summarized several of their conditions:

I can't say whether or not their physical problems have to do with Agent Orange. Most of them have diabetes. One of them has epilepsy and Crohn's disease. My other daughter had diverticulitis, she had to have part of her intestine removed. My other son has heart trouble, actually two of them. Whether or not it was caused by Agent Orange, I can't say.<sup>157</sup>

One of her sons also struggles with spina bifida, although she says, "it's not the kind that was covered by the VA."<sup>158</sup> Her son with spina bifida also deals with severe asthma and sinus complications. Frances shared that as far as she is aware, none of her children have ever filed a disability claim with the VA as a descendant of an Agent Orange exposed veteran. She voiced her frustration with the Marine Corps and VA for how they have left many families in the dark on the issue of transgenerational Agent Orange exposure and how they have denied veterans' claims. She commented:

I just think that the VA should have been more open and honest about what was going on with the VA and with Agent Orange in particular. They should have warned us of all these side effects to look for in ourselves and in our children. And when people said that they were exposed, they should have believed them.<sup>159</sup>

Arguably, the most basic request of a government who put its own citizens into harm's way by exposing them to herbicides would be, "when people said that they were exposed, they should have believed them." Yet, for so many Vietnam veterans securing this overall benefit of the doubt proved extremely difficult. Today, for the children of male Vietnam veterans who are disabled in ways other than Spina Bifida, securing this overall benefit of the doubt remains quite difficult. The Vietnam Veterans of America, in their 2023 "Self-Help Guide to Service-Connected Disability Compensation For Exposure To Agent Orange for Veterans and Their

---

<sup>157</sup> Hendrickson, interview.

<sup>158</sup> Hendrickson, interview.

<sup>159</sup> Hendrickson, interview.

Families,” offers advice to the children and grandchildren of Agent Orange exposed veterans. On page 15 of the brochure, the VVA advises these children and grandchildren who do not have Spina Bifida or any of the covered diseases for descendants of female veterans to “File a claim and attach a medical opinion, if possible. Though your condition is currently not recognized, it may be at a future date.”<sup>160</sup> Because of the lack of definitive studies on the concrete transgenerational effects of Agent Orange, the US government should be giving the benefit of the doubt to citizens who believe their conditions are related to their parent’s exposure. Unfortunately, Blue Water Veteran Bob McNulty’s assertion still applies to the penny-pinching US government. “It’s a slow process when you’re dealing with the government, with the bean counters,” he said.<sup>161</sup>

**Robert E. McNulty, Sr.**

*“That wasn’t part of the deal”*

Robert E. McNulty, Sr., or Bob McNulty, as he prefers, served as a boilerman, then boiler technician on the USS America. McNulty spent most of his time at work on the America in the machinery rooms, operating and maintaining the boilers that produce the steam to propel the ship and generate electricity. McNulty describes avenues of his potential exposure to Agent Orange while serving on the America, referencing the contamination of drinking water, as well:

We used sea water to cool much of the equipment in the Main Machinery Rooms and exposure to this equipment during maintenance and repair was frequent. When sea water was distilled to potable water, the concentration of Agent Orange contaminants were increased during the distillation process. This water was used for drinking, cooking,

---

<sup>160</sup> “The VVA Self-Help Guide to Service-Connected Disability Compensation for exposure to Agent Orange for Veterans and their Families,” Vietnam Veterans of America, June 2023, 15 [https://vva.org/wp-content/uploads/2023/06/AgentOrangeGuide2023\\_2.pdf](https://vva.org/wp-content/uploads/2023/06/AgentOrangeGuide2023_2.pdf).

<sup>161</sup> McNulty, interview.

washing, showering thus creating exposure potentials.<sup>162</sup>

McNulty says he was stationed on the America when it was deemed within 12 miles of the coast of Vietnam at Latitude: 16° 31.3' N, Longitude: 108° 13' E on December 26, 1972; at this point, the America was then placed on the list of ships presumed to be exposed to Agent Orange. He began developing conditions of potential Agent Orange exposure when he was first diagnosed with hypertension:

Initially when I was diagnosed with hypertension I wondered if it might be an early sign of Agent Orange exposure. Then when I was diagnosed as a Type II diabetic I again wondered if it was related to potential Agent Orange exposure. The icing on the cake so to speak came with the onset of prostate cancer. There was no family history of any of these ailments, so I had my suspicions.<sup>163</sup>

McNulty has been enrolled in the VA Health Care system since 1998 and says that he has constantly received excellent health care from VA facilities.

Though satisfied with the level of care he has received from the VA, McNulty continues to be angered about the handling of Agent Orange issues at an administrative level. He said: "I continue to be angered by the slow response to Agent Orange issues and the fact that much more needs to be done in regards to recognizing those individuals exposed and the great delays in affording treatment and compensation."<sup>164</sup> Though nearly, if not all, Agent-Orange-exposed veterans have received some sense of presumption from the VA, as McNulty states, there still is much ground work level to cover for the VA to treat and compensate those it delayed granting presumptive exposure to. He highlights that, in general, the VA has always moved slowly when it comes to Agent Orange coverage.

McNulty also discussed the issue of transgenerational exposure to Agent Orange.

---

<sup>162</sup> McNulty, interview.

<sup>163</sup> McNulty, interview.

<sup>164</sup> McNulty, interview.

McNulty has two children who each have two children. He says that he is grateful neither of his children nor any of his grandchildren have health conditions or disabilities that would be a result of his Agent Orange exposure. “You didn't join the service with the idea that – you're going to go into harm's way, you work in terrible environments and all that – but you didn't think 'and we'll catch something we can give to our kids, and they'll give it to their kids.' That wasn't part of the deal. We never expected any of that.”<sup>165</sup> Veterans enlist or are drafted into war with the understanding that they are putting their life on the line in combat. However, with the use of Agent Orange and chemical herbicides, the United States government changed this stipulation for Vietnam veterans. When Vietnam veterans approached up to 12 miles of the coast of Vietnam, they were no longer only putting their lives on the line, they were putting the health and safety of the children, grandchildren, and future generations on the line. However, these Veterans had no idea of this change in stipulation until largely after they had already returned home.

McNulty focused on the importance of education and advocacy when it comes to support for Veterans' issues. He noted that he originally became involved with Blue Water Navy and Agent Orange advocacy after a friend of his passed from health complications:

I had a real good friend who passed away, and I got involved with the Vietnam Veterans of America, I got involved with the VFW, I got involved with the American Legion, I got involved with the county veterans advisory group all because this guy died. We did a lot of things together. And as I got more involved, I saw there's a lot of things going on here that we're not aware of to the extent that we need to be. And we're not organized and taking the right amount of action.<sup>166</sup>

Since 1998, McNulty has served as the Government Affairs chairman for the Vietnam Veterans of America, New Jersey State Council. He previously served on the legislative committee of the

---

<sup>165</sup> McNulty, interview.

<sup>166</sup> McNulty, interview.



Veterans of Foreign Wars, Department of New Jersey. McNulty currently works with the American Legion Department of New Jersey legislative committee and chairs the legislative committee for the Fleet Reserve Association North East/New England Region. He also participates in regular local, state, and federal veterans' affairs advocacy.

McNulty further combined his passion for advocacy with his worries surrounding transgenerational exposure. He discussed the ideas of intergenerational advocacy for better coverage, better health care, and greater compensation for Agent Orange exposure. A concern he kept raising in our interview was, "I wonder who will be here to follow up and press the issues with the VA when the Vietnam veterans are no longer in a position to do so."<sup>167</sup> As the Vietnam veteran population continues to age, their concerns about the health of their children and grandchildren often spiral into asking the difficult question of "who will advocate for them when I am no longer here or capable of doing so?" McNulty echoed these fears surrounding intergenerational advocacy:

With Agent Orange, they say that you hand it off to your children and they hand down and it might run as far as seven different generations. Now, Vietnam vets won't exist another 15 years or so. So there's got to be some mechanism to follow up on those people. We're going to get it handed down to them and going to have problems with it. They need to own that at the national level and make sure that somebody is advocating for those people who are children, grandchildren and great grandchildren, and so it goes. And the concern is, if we're not here as Vietnam vets to raise our voices, who's going to do that on our behalf?<sup>168</sup>

\*\*\*

Joseph Foster noted the importance of intergenerational advocacy and education, specifically the importance of genuinely learning from the past to advocate for a better future.

---

<sup>167</sup> McNulty, interview.

<sup>168</sup> McNulty, interview.

Foster tells his story and teaches the history of the Vietnam War at the New Jersey Vietnam Veterans' Memorial and Vietnam Era Museum. During our interview, as his eyes traced the rounded walls of the museum, detailed with the timeline of the Vietnam War, Foster said:

The next set of soldiers, what are they going to have to be facing? What are the environmental things for Afghanistan and Iraq? The amount of nuclear materials that were spread, that's going to be causing long term, probably, health defects for the current crop of veterans. And what's it going to be if we get ourselves into another mess? I teach history. History is my interest, and making sure we don't make the same mistakes for the same reasons is my whole reason for being here.<sup>169</sup>

The story of the Vietnam War Blue Water Navy serves as a precautionary tale of precisely how the US government should not act when it comes to granting presumptive care and compensation to those it has put in harm's way. Although they were eventually granted presumption of exposure, fifty-seven years is too long for an aging, ill, and disabled population to wait for care and compensation. When it comes to assessing the collateral damage of the US government's decision to use Agent Orange in the Vietnam War, there is still a long way for the country to go. Many groups are still waiting and fighting for their rightful care and compensation from the US government. The tragedy of the Blue Water Navy is a prime example of that fact that the US government's frugal, biased perspective on which groups should be granted presumptive exposure to Agent Orange is not any sort of concrete reflection on which groups *actually* deserve presumptive exposure.

Fifty-three years after the United States Military ceased its herbicide spraying missions in the Vietnam War, the soldiers of the war, the Vietnamese citizens, the offspring of the Agent Orange-exposed, and the Vietnamese landscape itself still feel the effects of the American herbicides. The history of the Blue Water Navy veterans does not exist in a vacuum, but rather

---

<sup>169</sup> Foster, interview.

serves as a lesson for how the United States needs to proactively provide care for the victims of its war strategies and tactics. The United States needs to give the benefit of doubt to the successive familial generations of its own Vietnam veterans who were exposed to Agent Orange. The United States needs to give the benefit of the doubt to the Vietnamese veterans, civilians, and their successive familial generations who were exposed to Agent Orange. The United States needs to learn from its mistakes during and after the Vietnam War to proactively extend the benefit of the doubt in the future to those who claim disability from the weapons and toxins the United States uses or emits.

## Conclusion

This thesis has grappled with the ongoing nature of the Vietnam War and how to bring attention to voices who have fallen through the cracks of historiography. The first chapter offered a general history of the Vietnam War and how herbicidal warfare developed from the beginning of American involvement in the conflict to when American troops left Vietnam in 1973. The second chapter discussed a specific group impacted by herbicidal warfare, the American Blue Water Navy veterans. It also offered a comprehensive legislative history of their battle for a presumptive service connection to Agent Orange exposure, arguing that the United States needs to actually lead by granting its soldiers the benefit of the doubt when it comes to presumptive exposure. The third chapter provided a new and original oral history, focusing on quality over quantity in detailing the stories of American Veterans affected by Agent Orange.

All of these chapters seek to add a neglected history of compensation for veterans in a historiographical field dominated by military, diplomatic, and political history. They also seek to surface and highlight the stories of Blue Water Navy veterans within the literature that focuses on veterans compensation. Lastly, this paper seeks to assert the notion that the Vietnam War will continue as long as many of its victims are not compensated or unjustly compensated by the US government because of the use of Agent Orange in the war.

In terms of groups that the US government has yet to rightfully compensate for the effects that Agent Orange has had on their physical and mental health, one of the most glaringly neglected is the Vietnamese civilians and soldiers. The US government actively sprayed 19 million gallons of Agent Orange over the Vietnam area, affecting both the Vietnamese landscape and its people.<sup>170</sup> In the 2022 Asian Economic Journal article “Long-Term Effects of Vietnam

---

<sup>170</sup> Institute of Medicine, “The U.S. Military and the Herbicide Program in Vietnam,” 74.

War: Agent Orange and the Health of Vietnamese People After 30 Years,” written by Nobuaki Yamashita and Trong-Anh Trinh, the two authors point out the foundational reasons for why the Vietnamese landscape and people are so continually susceptible to the effects of Agent Orange generations after the war. Yamashita and Trinh write:

However, although sprayed only temporarily, due to its unique chemical structure, Agent Orange (dioxin) is known to linger in the ecosystem. Even long after the end of the war, scientific tests still detect hazardous levels of dioxin contamination in soils and sediments at the bottom of drainage canals, where it attaches to organic matter and ascends food chains, extending to fish and wild animal species (Banout et al., 2014; Olson and Morton, 2019). Ultimately, the compound is absorbed by human bodies.<sup>171</sup>

Because of its persistence in the environment and through the food chain, Agent Orange poses an intergenerational threat to the Vietnamese people, especially those who live in areas highly concentrated with US-spread dioxin. The United States has yet to acknowledge any legal liability or responsibility for the human health effects of Agent Orange on the Vietnamese population. Its main assistance to the Vietnamese has been in the form of organized dioxin clean ups and the ambiguous allocation of aid payments.

In the 2003 photo essay book titled *Agent Orange: Collateral Damage in Viet Nam* photographer Philip Jones Griffiths provides a graphically raw and telling emotional journey through this transgenerational effect of Agent Orange on the Vietnamese people.<sup>172</sup> Griffiths has published his Agent Orange photographs on many different platforms and mediums. The collection portrays how Vietnamese citizens experienced the pervasion of Agent Orange and

---

<sup>171</sup> Nobuaki Yamashita and Trong-Anh Trinh, “Long-Term Effects of Vietnam War: Agent Orange and the Health of Vietnamese People After 30 Years,” *Asian economic journal* 36, no. 2 (2022): 181.

<sup>172</sup> “Agent Orange: Collateral Damage in Vietnam,” Philip Jones Griffiths, <https://philipjonesgriffiths.org/photography/publications/agent-orange-collateral-damage-in-vietnam/>.

dioxin in their population, up to when Griffiths's photography in Vietnam concluded 30 years after the end of the war.<sup>173</sup> In his 2006 photo essay "Agent Orange In Viet Nam" published in *Routledge Critical Asian Studies*, Griffiths argues that "apart from its cataclysmic effect on the verdant foliage of Viet Nam" Agent Orange "sowed the seeds of a genetic time bomb that affects children to this day."<sup>174</sup> His collection shows the children and grandchildren of Vietnamese farmers exposed to Agent Orange. The photographed children and young adults suffer from various birth defects. Some of the children were born with Spina Bifida, some were born with two heads, some were born without arms or eyes, and others were born with deformities such as craniofacial dysostosis or hydrocephalitis.<sup>175</sup> Though disturbing to look at, these images are a sobering reality of the intergenerational, horrific consequences of the American decision to use Agent Orange in Vietnam. In his synopsis of *Agent Orange: Collateral Damage in Viet Nam*, Griffiths writes:

Historians will find it sufficient to say that there will always be collateral damage, that useful PR phrase, in war and that Philip Jones Griffiths should understand the consequences of martial endeavours. He most certainly does. He has catalogued here a pitiless series of photographs, and there can be no doubt that they should and will be recognised.<sup>176</sup>

This synopsis is essentially the crux of what is guiding my thesis project. Historians, as Griffiths puts it, and the United States government need to completely reframe their mindsets of how they view those affected by Agent Orange. The children and grandchildren of Agent Orange-exposed

---

<sup>173</sup> "Agent Orange," Photography, Philip Jones Griffiths, <https://philipjonesgriffiths.org/photography/selected-work/vietnam-agent-orange/>.

<sup>174</sup> Philip Jones Griffiths, "Agent Orange in Viet Nam," *Critical Asian studies* 37, no. 1 (2005), 141.

<sup>175</sup> Griffiths, Philip Jones. "Agent Orange in Viet Nam." *Critical Asian studies* 37, no. 1 (2005), 150–160.

<sup>176</sup> "Agent Orange: Collateral Damage in Vietnam," Philip Jones Griffiths, <https://philipjonesgriffiths.org/photography/publications/agent-orange-collateral-damage-in-vietnam/>.

Vietnamese farmers born with deadly deformities cannot be reduced to “collateral damage” of war. The children and grandchildren of American Vietnam soldiers born with spina bifida and other birth defects cannot be reduced to “collateral damage” of war. These groups deserve a full, overall benefit of doubt from the American government when it comes to their claims for compensation and care. As Frances Hendrickson said, it should be as simple as: “when people said that they were exposed, they should have believed them.”<sup>177</sup> The descendants of veterans and Vietnamese citizens exposed to Agent Orange should not be seen as peripheral to the Vietnam war or as “collateral damage” of the war when it comes to the priorities of the US government. The US government actively chose to drop Agent Orange, a substance containing the poison of dioxin, and the victims caught in the path of that poison should be prioritized in terms of their compensation and health care.

In a May 15, 2008 US congressional hearing titled “Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?” Deputy Assistant Secretary, Bureau of East Asian and Pacific Affairs for the US Department of State Scot Marciel essentially outlined the American government’s sanctimonious outlook on the topic of Vietnamese victims of Agent Orange. The House Committee on Foreign Affairs called Marciel to testify as a witness to the Subcommittee on Asia, the Pacific, and the Global Environment in a hearing to examine how congress could assist victims of Agent Orange. Marciel stated before the committee:

United States assistance is provided in the spirit of cooperation, with the hope of strengthening the scientific capacity and infrastructure of Vietnam’s research institutions and improving the ability of the Government of Vietnam to protect the environment and promote public health for future generations. The United States does not recognize any legal liability for damages alleged to be related to Agent Orange.<sup>178</sup>

---

<sup>177</sup> Hendrickson, interview.

<sup>178</sup> House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs, “Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?,” 110th Cong., 2nd Session, 10.

His firm position is consistent with that of the US governments when it comes to Vietnamese victims and Agent Orange. Marciel condescendingly makes it seem as if the United States does not need to be aiding the Vietnamese in their clean up of Agent Orange, and they are instead doing it superfluously in the spirit of positive foreign relations. He later doubles down on the idea that the US is not legally liable for the damages of Agent Orange, stating in writing:

The consistent position of the United States has been that the U.S. military's use of herbicides in Vietnam was consistent with international law. In the view of the United States, any categorical ban on the use of poisons under international law is limited to weapons used for the primary and intended effect of causing injury or death. The United States use of herbicides during the Vietnam War for the purposes of defoliating military bases, transportation corridors, and other crucial territory, and destroying enemy crops, therefore did not contravene the ban on poisons. A number of U.S. court decisions, including the recent Second Circuit decision in the case of Vietnam Association for Victims of Agent Orange v. Dow Chemical Company, 517 F.3d 104 (2d Cir. 2008), support the validity of this position.<sup>179</sup>

Marciel asserts that because the primary intention of the US military's defoliation missions were neither injury nor death, that the US has no legal liability for the effects of Agent Orange on the Vietnamese population. However, I would argue that since the US intentionally sprayed Agent Orange to defoliate trees in order to increase arial visibility of enemy ground troops and to destroy crops that bolstered enemy food supplies, both injury and death go hand in hand with those aims. No matter if that argument would hold up in a courtroom, the American government's herbicide missions *did* cause injury and death, whether the military intended those causes or not, and it should be held legally liable and morally accountable for its actions.

Within this same hearing, Dr. Nguyen Thi Ngoc Phuong, Director General of Ngoc Tam

---

<sup>179</sup> House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs, "Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?," 14.



Hospital in Ho Chi Minh City, gave a starkly different witness testimony to that of Marciel.

Nguyen discussed her experiences as a doctor in a hospital where two percent of all babies born in a year are deformed. She gave a chilling account of the moment when she first delivered a severely born baby in 1968:

It had no brain, no limbs. It was too horrible for me. I was nauseous, vomiting, shaking. How was the scared young mother? She was in shock when she saw her baby. Then she cried for many hours, many days. She thought that she had committed some unforgivable mistake and was being punished by God. You can imagine how much she suffered. Since then, every day or two, I have witnessed such birth defects and mother sufferings, but, for many years, I did not know what caused these tragic events.<sup>180</sup>

Nguyen continues her testimony, sharing that as more and more American Veterans visited the hospital with dioxin poisoning concerns, she began researching the issue of Agent Orange with her colleagues. She noted the potential for dioxin to persist in the Vietnamese environment and to persist through “many generations of Vietnamese people” because of its long half-life in the human body.<sup>181</sup> Nguyen testified:

The spraying of Agent Orange and other toxic chemicals covered not only land and mangrove forests but also croplands and people in villages. More than 20 million gallons of toxic chemicals containing more than 366 kilograms of dioxin were spread over the land and people of Vietnam. Only one-billionth of a gram of dioxin can cause cancers, birth defects, miscarriages. Dioxin is the most toxic, man-made chemical substance in terms of its effects on human beings. The spraying of these toxic chemicals destroyed the environment and biodiversity, causing annual natural catastrophes such as flooding. It is a cruel destroyer of all life in my country.<sup>182</sup>

---

<sup>180</sup> House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs, “Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?,” 24.

<sup>181</sup> House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs, “Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?,” 25.

<sup>182</sup> House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs, “Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?,” 24.

Nguyen closes her opening statement calling for swift action to help all victims of Agent Orange, noting how crucial reconciling the fundamental issue of dioxin exposure is to building a bridge between the two present day nations. Though Dr. Nguyen's perspective is somewhat filtered as her testimony was handpicked by American lawmakers to be presented in an American congressional hearing, firsthand Vietnamese stories like Dr. Nguyen's are incredibly important in order to fully understand the impact of Agent Orange. The story that Dr. Nguyen told, when she watched a mother in shock at the sight of her likely dioxin-poisoned newborn, shows just how essential the Vietnamese and intergenerational victims of Agent Orange are to the history of the Vietnam War. These victims are not "collateral damage" of the Vietnam War, they are the historical legacy of the Vietnam War, and it is time the United States government takes legal liability for putting them in that position by spraying them with Agent Orange.

When examining the realities of what the United States has accomplished in terms of providing aid, care, and compensation to the Vietnamese victims of Agent Orange exposure, there is a glaringly obvious flaw in my ability to do so as a researcher. I do not speak, read, or understand Vietnamese. Therefore, every readily accessible source that I can understand is either originally written in English or translated into English, which, either way, likely opens the source up to American biases. For example, detailed secondary sources chronicling the ways in which the United States government has provided support for Vietnamese victims of Agent Orange often come from American sources. For example, the two secondary sources that I saw as most connected to this were the August 2012 Congressional Research Service report titled "Vietnamese Victims of Agent Orange and U.S.-Vietnam Relations" and the September 2023 United States Institute of Peace special report titled "Agent Orange Victims in Vietnam: Their

Numbers, Experiences, Needs, and Sources of Support.”<sup>183, 184</sup> Though both of these sources are helpful in terms of deciphering which American congressional and governmental actions have passed with the intent of helping the Vietnamese victims of Agent Orange, both are clouded by the reality that their publishing platforms are connected to the US government. Michael F. Martin, the author of “Vietnamese Victims of Agent Orange and U.S.-Vietnam Relations,” is the Specialist in Asian Affairs for the Congressional Research Service, a public policy research institute of the Library of Congress, for which he compiled this 2012 report. The report is in part so detailed because the author has readily-available access to all congressional materials related to Agent Orange and Vietnam. However, historians need to analyze the report with scrutiny because it does come from a source so close to the powers that control American aid to Vietnam. Furthermore, research officer at the Vietnam Studies Program at the ISEAS-Yusof Ishak Institute in Singapore Phan Xuân Dũng’s special report titled “Agent Orange Victims in Vietnam: Their Numbers, Experiences, Needs, and Sources of Support,” is also published through the United States Institute of Peace, an organization founded by the US Congress. Though both reports are extremely detailed and likely written with the intent of impartiality, both reports are published through organizations tied to the US government. Neither source is fundamentally Vietnamese or from a third party, neutral nation; both sources are inherently tied to an American perspective.

Just as this type of scrutiny is vital in making informed sourcing decisions on sourcing, it also tells a lot about historical and historiographical biases regarding the Vietnam War in general. There is a desperate need for a louder Vietnamese voice in the American teachings of

---

<sup>183</sup> Michael F. Martin, “Vietnamese Victims of Agent Orange and U.S.-Vietnam Relations,” *Congressional Research Service*, August 29, 2012.

<sup>184</sup> Phan Xuân Dũng, “Agent Orange Victims in Vietnam: Their Numbers, Experiences, Needs, and Sources of Support,” *United States Institute of Peace*, Special Report, No. 552, September 2023.

the Vietnam War. Though there is no perfectly unbiased or impartial way to teach or learn history, lifting up the voices of marginalized people makes for a more holistic and comprehensive historical study. The more research that is done from bilingual historians attempting to weave a more authentic, grassroots Vietnamese history into the American teachings of the Vietnam War, the more American history students will understand a more accurate, holistic history of the conflict. A comprehensive, grassroots historical teaching of these military conflicts has the potential to mitigate the dangerous belittlement of some groups as simply “collateral damage” of war. This holistic understanding of the history of the Vietnam War can help future policy makers grant *all* those who deserve compensation the benefit of the doubt in terms of not only this conflict, but others in the future.

## Bibliography

- “About VA Health Benefits.” Health Care, U.S. Department of Veterans’ Affairs. Last modified November 15, 2023. <https://www.va.gov/health-care/about-va-health-benefits/>.
- Agent Orange Act of 1991. Pub. L. No. 102-4 (1991).
- Agent Orange Benefits Act of 1996. H.R.3927. 104th Cong. § 1801 (1996).
- “Agent Orange exposure and VA disability compensation.” Disability Benefits, U.S. Department of Veterans’ Affairs. Last updated August 10, 2023. <https://www.va.gov/disability/eligibility/hazardous-materials-exposure/agent-orange/#full-eligibility-requirements>.
- “Agreement on the Cessation of Hostilities in Viet-Nam.” Geneva Agreements, July 20, 1954, 1. [https://peacemaker.un.org/sites/peacemaker.un.org/files/KH-LA-VN\\_540720\\_GenevaAgreements.pdf](https://peacemaker.un.org/sites/peacemaker.un.org/files/KH-LA-VN_540720_GenevaAgreements.pdf).
- Alan Cranston letter to Max Cleland, January 11, 1980; Correspondence Files Relating to Radiation and Agent Orange of the Committee on Veterans’ Affairs from the 96th Congress; Committee Papers of the Committee on Veterans’ Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.
- Amsterdam, Rick (Vietnam Army Veteran). Interview by Molly Parks. January 21, 2023, Holmdel, NJ.
- “Birth Defects in Children of Women Vietnam Veterans.” Public Health, U.S. Department of Veterans’ Affairs. Last updated September 20, 2023. <https://www.publichealth.va.gov/exposures/agentorange/birth-defects/children-women-vietnam-vets.asp>.
- “Birth Defects Linked to Agent Orange.” Disability Benefits, U.S. Department of Veterans’ Affairs. Last updated January 4, 2024. <https://www.va.gov/disability/eligibility/special-claims/birth-defects/>.
- Chamberlin, Paul Thomas. *The Cold War’s Killing Fields: Rethinking the Long Peace*. New York: HarperCollins Publishers, 2018.
- Congressional Record, Extension of Remarks, E1428, August 1, 1996. <https://www.congress.gov/104/crec/1996/08/01/142/116/CREC-1996-08-01-pt1-PgE1428-3.pdf>.
- Congressional Record, Senate, S9969-S9970, September 5, 1996. <https://www.congress.gov/104/crec/1996/09/05/142/120/CREC-1996-09-05-pt1-PgS9968-3.pdf>.
- Congressional Record – Senate, S 10477, July 20, 1983; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on Veterans’ Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.
- C-SPAN. “House Session.” January 29, 1991. <https://www.c-span.org/video/?16064-1/house-session&start=1505>.
- C-SPAN. “House Session, Part 2.” June 25, 2018.

- <https://www.c-span.org/video/?447476-3/house-session-part-2&start=5394&transcriptSpeaker=2737>.
- C-SPAN. "House Session, Part 2." May 14, 2019.
- <https://www.c-span.org/video/?460682-4/house-session-part-2&start=106&transcriptSpeaker=2737>.
- C-SPAN. "Senate Session." January 30, 1991.
- <https://www.c-span.org/video/?16087-1/senate-session>.
- Daughton, James Patrick. *An Empire Divided: Religion, Republicanism, and the Making of French Colonialism, 1880-1914*. Oxford: Oxford University Press, 2006.
- "Definitions." *US House Code*, Title 38 § 101 (29) (A).
- <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title38-section101&num=0&edition=prelim>.
- Departments of Veterans' Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1997. Pub. L. No. 104-204 (1996).
- "Elections Balked." *The New York Times*. July 5, 1971.
- <https://timesmachine.nytimes.com/timesmachine/1971/07/05/79402538.html?pageNumber=14>.
- Foster, Joseph. Interview by Molly Parks. August 9, 2023, Holmdel, NJ.
- Haas v. Nicholson*, 2006. (Ct. Vet. App.)
- Hendrickson, Frances. Telephone interview by Molly Parks. March 1, 2024.
- Herring, George C. *America's Longest War: The United States and Vietnam, 1950-1975*. New York: McGraw-Hill Higher Education, 2002.
- Ho, Chi Minh and Bernard B. Fall, *On Revolution: Selected Writings, 1920-66*. New York: Frederick A. Praeger, Publishers, 1967.
- House of Representatives Subcommittee on Asia, the Pacific, and the Global Environment of the Committee on Foreign Affairs. "Our Forgotten Responsibility: What Can We Do To Help Victims Of Agent Orange?" 110th Cong., 2nd Session.
- "H.R. 299, Congressional Chronicle." C-SPAN.
- <https://www.c-span.org/congress/bills/bill/?115/hr299>.
- "H.R.3499 - 97th Congress (1981-1982): Veterans' Health Care, Training, and Small Business Loan Act of 1981." Legislation. Congress.gov, November 3, 1981.
- <https://www.congress.gov/bill/97th-congress/house-bill/3499/summary/00>.
- "H.R.3892 - 96th Congress (1979-1980): Veterans Health Programs Extension and Improvement Act of 1979." Bill. Congress.gov, December 20, 1979.
- <https://www.congress.gov/bill/96th-congress/house-bill/3892>.
- "H.R.3927 - 104th Congress (1995-1996): Agent Orange Benefits Act of 1996." Legislation. Congress.gov, September 26, 1996. <https://www.congress.gov/bill/104th-congress/house-bill/3927/all-actions>.
- "H.R. 556 (1991-1992): Agent Orange Act of 1991." Legislation. Congress.gov, February 6, 1991. <https://www.congress.gov/bill/102nd-congress/house-bill/556/all-actions>.
- Institute of Medicine, Board on the Health of Select Populations, and Committee on Blue Water Navy Vietnam Veterans and Agent Orange Exposure. *Blue Water Navy Vietnam Veterans*

- and Agent Orange Exposure*. Washington, D.C.: National Academies Press, 2011.
- Institute of Medicine (US) Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. *Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam*. Washington DC: National Academies Press US, 1994.
- Jacobs, Seth. *America's Miracle Man in Vietnam: Ngo Dinh Diem, Religion, Race and U.S. Intervention in Southeast Asia*. Durham: Duke University Press, 2004.
- John J. Helble, American Consul, to Robert T. Burke, Second Secretary, Hue, Vietnam, June 3, 1964; Entry A 170 MACV J3, Box 1, Folder 3, Crop Target #2-8, Quang Tri, Thua Thien, Quang Tin, I-1964; Military Assistance Command Vietnam (MACV), Assistant Chief of Staff for Operations (J3), Chemical Operations Division (MACJ3-09), Herbicide Operations Plans, 2-2 thru 2-20; Records of the United States Forces in Southeast Asia; Record Group 472; National Archives, College Park, MD.
- Jones Griffiths, Philip. "Agent Orange."  
<https://philipjonesgriffiths.org/photography/selected-work/vietnam-agent-orange/>.
- Jones Griffiths, Philip. "Agent Orange: Collateral Damage in Vietnam."  
<https://philipjonesgriffiths.org/photography/publications/agent-orange-collateral-damage-in-viet-nam/>.
- Jones Griffiths, Philip. "Agent Orange in Viet Nam." *Critical Asian Studies* 37, no. 1 (2005): 141-160.
- Kelsey, Karl T., Matthew Rytel, Edward Dere, Rondi Butler, Melissa Eliot, Susan M. Huse, E. Andres Houseman, Devin C. Koestler, and Kim Boekelheide. "Serum Dioxin and DNA Methylation in the Sperm of Operation Ranch Hand Veterans Exposed to Agent Orange." *Environmental Health* 18, no. 1 (2019): 91-11.
- Kennedy, John F. "Inaugural Address, Kennedy." Inaugural Address, United States Capitol, Washington D.C., January 20, 1961.
- Logevall, Fredrik. *Embers of War: The Fall of an Empire and the Making of America's Vietnam*. New York: Random House, 2012.
- Martin, Michael F. "Vietnamese Victims of Agent Orange and U.S.-Vietnam Relations." *Congressional Research Service*, August 29, 2012.
- Martini, Edwin A. *Agent Orange: History, Science, and the Politics of Uncertainty*. Amherst: University of Massachusetts Press, 2012.
- McNulty, Robert. Interview by Molly Parks. August 14, 2023, Egg Harbor Township, NJ.
- Müller, Jochen, Caroline Gaus, Vincent Alberts, and Michael Moore. "Examination of the potential exposure of Royal Australian Navy (RAN) personnel to polychlorinated dibenzodioxins and polychlorinated dibenzofurans via drinking water." Department of Veterans' Affairs. Canberra, Australia: January 2002.
- Olson, Kenneth R., and David R. Speidel. "Agent Orange Chemical Plant Locations in the United States and Canada: Environmental and Human Health Impacts." *Open Journal of Soil Science* 12 (2022): 363-426. <https://doi.org/10.4236/ojss.2022.128016>.
- Olson, Theodore B., et al. "Brief for the Respondent in Opposition." No 03-439. U.S. Supreme Court, 2003.

- Panangala, Sidath Viranga, and Daniel T. Shedd. "Veterans Exposed to Agent Orange: Legislative History, Litigation, and Current Issues." *Congressional Research Service*, November 18, 2014.
- "Presumptive service connection for chronic, tropical, or prisoner-of-war related disease, disease associated with exposure to certain herbicide agents, or disease associated with exposure to contaminants in the water supply at Camp Lejeune; wartime and service on or after January 1, 1947." 38 C.F.R. § 3.307(a)(6).
- Procopio v. Wilkie*, 2019 (Fed. Cir.)
- "Reasonable doubt." *Code of Federal Regulations*. Title 38, Chapter 1, Part 3, Subpart A §3.102.
- "S. 1651 - 98th Congress (1983-1984): Veterans' Dioxin and Radiation Exposure Compensation Standards Act." Legislation. Congress.gov, May 22, 1984.  
<https://www.congress.gov/bill/98th-congress/senate-bill/1651/all-actions>.
- Sills, Peter. *Toxic War: The Story of Agent Orange*. Nashville: Vanderbilt University Press, 2014.
- "Synopsis of Congressional Initiatives Under Senator Alan Cranston's Leadership to Help Vietnam-Era Veterans, 1969-1981"; Correspondence Files of the Committee on Veterans Affairs from the 98th Congress; Committee Papers of the Committee on Veterans' Affairs, 1971-2017; Records of the US Senate, 1789-2023, Record Group 46; Center for Legislative Archives, Washington DC.
- The American Legion. "VA approves claims for more than 22,500 Blue Water Navy veterans." *American Legion*, October 8, 2020. <https://www.legion.org/veteransbenefits/250665/va-approves-claims-more-22500-blue-water-navy-veterans>.
- The Harmlessness of Defoliant Chemicals; Entry A 170 MACV J3, Box 1, Folder 4, Crop Target #2-4, Phuoc Tuy – Completed, III-1965; Military Assistance Command Vietnam (MACV), Assistant Chief of Staff for Operations (J3), Chemical Operations Division (MACJ3-09), Herbicide Operations Plans, 2-2 thru 2-20; Records of the United States Forces in Southeast Asia; Record Group 472; National Archives, College Park, MD.
- "The PACT Act and your VA benefits." Resources, U.S. Department of Veterans' Affairs. Last updated March 5, 2024. <https://www.va.gov/resources/the-pact-act-and-your-va-benefits/>.
- "This Day in History: Sept. 2, 1945: Vietnam Declared Independence from France." Zinn Education Project. <https://www.zinnedproject.org/news/tdih/vietnam-declared-independence/>.
- Three Air Force C-123's spray defoliation chemicals over the A Shau Valley of South Vietnam. In the background cluster bomb units dropped by escorting F-4C's explode in the jungle. 9 May 1967; Vietnam Defoliation VN-034A, Box 1771, Folder 342. B; Prints: U.S. Air Force Activities, Facilities and Personnel, Domestic and Foreign 1954 – 1980; Records of Air Force Commands, Activities, and Organizations, Record Group 342-B; National Archives, College Park, MD.
- United States-Vietnam Relations, 1945-1967, 1970*. Prepared by the Department of Defense for the use of the House Committee on Armed Services. Book 10. Washington, DC: U.S. Government Printing Office, 1971.
- USAF – PROJECT RANCH HAND... Dr. James W. Brown, second from left, and Air Force officers check the effects of arial defoliation, January 1962; Vietnam Crews Defoliation VN-068, Box 1652, Folder 342. B; Prints: U.S. Air Force Activities, Facilities and Personnel, Domestic and Foreign 1954 – 1980; Records of Air Force Commands,



- Activities, and Organizations, Record Group 342-B; National Archives, College Park, MD.
- VA General Counsel (022). “VAOPGCPREC 27-97.” July 23, 1997.  
<https://www.va.gov/ogc/docs/1997/Prc27-97.pdf>.
- “Veterans’ Affairs.” Issues. Mark Takano. <https://takano.house.gov/issues/veterans-affairs>.
- “Veterans’ Diseases Associated with Agent Orange.” Public Health, U.S. Department of Veterans’ Affairs. Last updated January 24, 2024.  
<https://www.publichealth.va.gov/exposures/agentorange/conditions/>.
- Veterans’ Dioxin and Radiation Exposure Compensation Standards Act. Pub. L. No. 98-542 (1984).
- Veterans Health Programs Extension and Improvement Act of 1979. Pub. L. No. 96-151 (1979).
- Veterans' Health Care, Training, and Small Business Loan Act of 1981. Pub. L. No. 97-72 (1981).
- Vietnam Veterans of America. “The VVA Self-Help Guide to Service-Connected Disability Compensation for exposure to Agent Orange for Veterans and their Families.” June 2023.  
[https://vva.org/wp-content/uploads/2023/06/AgentOrangeGuide2023\\_2.pdf](https://vva.org/wp-content/uploads/2023/06/AgentOrangeGuide2023_2.pdf).
- Xuân Dũng, Phan. “Agent Orange Victims in Vietnam: Their Numbers, Experiences, Needs, and Sources of Support.” *United States Institute of Peace*, Special Report, No. 552, September 2023.
- Yamashita, Nobuaki, and Trong-Anh Trinh. “Long-Term Effects of Vietnam War: Agent Orange and the Health of Vietnamese People After 30 Years.” *Asian Economic Journal* 36, no. 2 (2022): 180-202.
- Yost, Paula. “Agent Orange Study Called Botched or Rigged.” *The Washington Post*, July 11, 1989. <https://www.washingtonpost.com/archive/politics/1989/07/12/agent-orange-study-called-botched-or-rigged/6e34800b-0901-4b70-ad89-5468df4332af/>.